ENVIRONMENTAL PROTECTION

LAND USE MANAGEMENT

Coastal Zone Management Rules

Freshwater Wetlands Protection Act Rules

Flood Hazard Area Control Act Rules

Proposed Amendments: N.J.A.C. 7:7-1.4, 1.5, 2.2, 2.3, 2.4, 4.2, 4.13, 4.14, 4.16, 4.17, 4.18, 4.21, 4.22, 6.2, 6.3, 6.4, 6.5, 6.13, 6.17, 6.22, 6.23, 6.30, 6.32, 8.2, 9.2, 9.3, 9.5, 9.6, 9.8, 9.11, 9.12, 9.13, 9.14, 9.16 through 9.20, 9.23, 9.25, 9.28, 9.30, 9.32, 9.33, 9.38, 9.40, 9.43, 9.44, 9.45, 9.46, 9.47, 10.2, 10.3, 10.4, 10.5, 11.1, 11.2, 11.3, 11.4, 12.2, 12.5, 12.9, 12.15, 12.16, 12.20, 12.21, 13.1, 13.3 through 13.19, 14.1, 14.2, 15.2 through 15.7, 15.9, 15.10, 15.11, 16.2, 16.3, 16.5, 16.6, 16.7, 16.8, 16.10, 16.12, 16.13, 17.5, 19.2, 22.2, 23.2, 23.6, 24.1, 24.3, 25.1, 26.5, and 27.3; 7:7A-5.17, 5.17A, and 10.2; and 7:13-1.2, 9.13, 12.5, 12.6, 13.12, 18.2, 18.4, and 19.3

Proposed New Rules: N.J.A.C. 7:7-4.23, 5.3, 6.33, and 6.34; 7:7A-5.28; and 7:13-7.64, 8.16,9.14, and 9.15

Proposed Repeal: N.J.A.C. 7:7-15.14

Authorized By: Bob Martin, Commissioner, Department of Environmental Protection.

Authority: <u>As to N.J.A.C. 7:7:</u> N.J.S.A. 12:3-1 et seq., 12:5-3, 13:1D-1 et seq., 13:1D-9 et seq., 13:1D-29 et seq., and 13:9A-1 et seq.;

As to N.J.A.C. 7:7A: N.J.S.A. 13:9B-1 et seq., and 58:10A-1 et seq.; and

<u>As to N.J.A.C. 7:13:</u> N.J.S.A. 13:1D-1 et seq., 13:1D-29 et seq., 13:20-1 et seq.,

58:10A et seq., 58:11A-1 et seq., and 58:16A-50 et seq.

Calendar Reference: See Summary below for explanation of exception to calendar requirement.

DEP Docket Number: 11-17-06.

Proposal Number: PRN 2017-136.

Public hearings concerning this proposal will be held as follows:

Thursday, August 10, 2017, at 6:00 P.M. at:

City of Long Branch Municipal Building

Council Chambers, 2nd Floor

344 Broadway

Long Branch, NJ 07740

Tuesday, August 15, 2017, at 10:00 A.M.

Campus Center Theater

Stockton University

101 Vera King Farris Drive

Galloway, NJ 08205

Written comments may also be submitted at the public hearings. It is requested (but not required) that anyone providing testimony at the public hearing submit a copy of any prepared text to the stenographer at the hearing.

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Submit comments by September 15, 2017, electronically at:

http://www.nj.gov/dep/rules/comments.

The Department of Environmental Protection (Department or DEP) encourages electronic submittal of comments. In the alternative, comments may be submitted on paper to:

Gary J. Brower, Esq.

Attn.: DEP Docket No. 11-17-06

Department of Environmental Protection

Office of Legal Affairs

Mail Code 401-04L

PO Box 402

401 East State Street, 7th Floor

Trenton, NJ 08625-0402

This rule proposal may be viewed or downloaded from the Department's website at http://www.nj.gov/dep/rules.

The agency proposal follows:

Summary

As the Department is providing a 60-day comment period on this notice of proposal, this notice is excepted from the rulemaking calendar requirements, pursuant to N.J.A.C. 1:30-3.3(a)5.

The Department is proposing amendments and new rules in the Coastal Zone

Management (CZM) Rules in response to issues identified through stakeholder outreach and to

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address other issues that have arisen since the July 6, 2015, adoption of the consolidated coastal rules (see 47 N.J.R. 1392(a)). Amendments and new rules are additionally proposed in the Freshwater Wetlands Protection Act (FWPA) Rules, N.J.A.C. 7:7A, and Flood Hazard Area Control Act (FHACA) Rules, N.J.A.C. 7:13, as part of the Department's continuing effort to align the three land use permitting programs to the extent possible.

This rulemaking includes amendments related to shellfish aquaculture, filled water's edge, dune walkovers and other beach and dune development, CAFRA findings, V zones, scenic resources and high-rise structures, permits to apply herbicide, trails, construction of driveways in flood hazard areas, and application requirements. Amendments to the CZM Rules also include updating existing rule rationales and publishing rationales for rules that currently do not have rationales. Finally, the Department is proposing a number of "clean up" changes throughout the CZM Rules to correct typographical and grammatical errors, update information, and correct errors from the June 2015 adoption. No further summary will be provided for very minor corrections, such as adding a comma or correcting a typographical error.

A detailed summary of the proposed substantive changes is provided below, organized by topic. Most changes apply to the CZM Rules only; the summary will clearly indicate where changes are proposed to other rules.

Stakeholder Outreach

On September 8, 2014, the Department held a stakeholder meeting on the coastal rules to engage interested stakeholders. Based on the comments submitted on the 2014-2015 rulemaking consolidating the coastal rules into a single chapter with amendments (see 46 N.J.R. 1051(a); 47

N.J.R. 1392(a)), the Department sought input on the following topics: Coordination with the State Plan, Filled Water's Edge, Threatened and Endangered Species Habitat, Critical Wildlife Habitat, and the Dredging Technical Manual. As a result of the September 8, 2014, stakeholder meeting, seven stakeholder subcommittees were formed to address the following topics: Coordination with the State Plan, Filled Water's Edge, Threatened and Endangered Species Habitat, Critical Wildlife Habitat, the Dredging Technical Manual, Coastal hazard adaptation strategies and V-zones, the Long Branch Redevelopment Zone Permit, and docks. The stakeholder subcommittees consisted of representatives from the development and environmental communities. The Department posted on its website audio recordings of all stakeholder subcommittee meetings (see http://www.nj.gov/dep/workgroups/past.html). An additional subcommittee was formed on September 19, 2016, to discuss the effectiveness of the CZM Rules' high-rise structures rule. The proposed amendments to the filled water's edge, coastal high hazard, high-rise structures, and scenic resources and design rules reflect suggestions and recommendations of their respective stakeholder subcommittees.

Shellfish Aquaculture

Shellfish aquaculture is a growing industry in New Jersey. As of July 2016, there were 319 shellfish leaseholders farming shellfish on 35,226 acres in Delaware Bay and in Atlantic coastal bays and rivers. However, if not appropriately conducted, shellfish aquaculture can have negative impacts on wildlife populations and other environmental resources that are also important to the economy and ecology of the State. The Department seeks to promote aquaculture as an environmentally beneficial industry while ensuring that activities do not

adversely impact the coastal zone. As part of this effort, several amendments are proposed to protect wildlife and reduce conflicts with navigation.

Additional protections for threatened and endangered species and critical wildlife habitat (N.J.A.C. 7:7-4.16, 4.17, 4.18, 6.30, 12.2)

Since December 2014, the rufa red knot (*Calidris canutus rufa*) has been listed as a threatened species under the Endangered Species Act of 1973, 16 U.S.C. §§ 1531 et seq. (see 79 FR 73706). Red knots are found in New Jersey in especially high numbers along the Delaware Bay, where they stop over during migration to rest and feed on horseshoe crab eggs to fuel the last leg of their long migration. Red knot areas and shorebird concentration sites are mapped as two separate data layers within the Department's Landscape Maps of Habitat for Endangered, Threatened and Other Priority Wildlife (Landscape Maps). The Landscape Maps are available on the Department's interactive mapping website at http://www.nj.gov/dep/gis. The Red Knot areas are used in the application of the CZM Rules' threatened and endangered wildlife and plant species habitat rule, N.J.A.C. 7:7-9.36, and the shorebird concentration sites are used in the application of the CZM Rules' critical wildlife habitat rule, N.J.A.C. 7:7-9.37. The Delaware Bay is also an important area for shellfish aquaculture.

In April 2016, the United States Fish and Wildlife Service (USFWS) published a programmatic biological opinion entitled "Biological Opinion on the Effects of Existing and Expanded Structural Aquaculture of Native Bivalves in Delaware Bay, Middle and Lower Townships, Cape May County, New Jersey on the Federally Listed Red Knot (*Calidris canutus rufa*)." In this document, USFWS established different measures related to aquaculture in the

Delaware Bay, Middle Township, and Lower Township that must be implemented to ensure compliance with the Federal Endangered Species Act. These include timing restrictions for various activities that may disturb red knots, development of vehicle access plans to ensure use of motorized vehicles does not disturb feeding red knots or harm horseshoe crabs, and phasing out aquaculture operations in the areas used most by red knots. Compliance with the programmatic biological opinion will ensure no adverse impact on these species.

The programmatic biological opinion applies only to a limited area of Delaware Bay. Endangered and threatened species habitat and critical wildlife habitat exist outside the defined "action area" of the biological opinion, but warrant specific protections to ensure that aquaculture activities do not have an adverse impact. Therefore, the Department is proposing to amend permit-by-rule 16 for the placement of land-based upwellers and raceways for aquaculture activities (proposed N.J.A.C. 7:7-4.16(a)4), permit-by-rule 17 for the placement of predator screens and oyster spat attraction devices within a shellfish lease area (proposed N.J.A.C. 7:7-4.17(a)3), permit-by-rule 18 for the placement of shellfish cages within a shellfish lease area (proposed N.J.A.C. 7:7-4.18(a)5), and general permit 30 for commercial shellfish aquaculture activities (proposed N.J.A.C. 7:7-6.30(a)9). Particularly, the Department is proposing to require activities under these permits to comply with any applicable management plan for protection of State and Federally listed threatened and endangered species approved by both the Department and USFWS, comply with the endangered or threatened wildlife or vegetation species habitat rule at N.J.A.C. 7:7-9.36, and/or comply with the critical wildlife habitat rule at N.J.A.C. 7:7-9.37, as applicable. The Department is also proposing to add the requirement to comply with any applicable management plan for protection of State and

Federally listed threatened and endangered species approved by both the Department and USFWS to the standards for shellfish aquaculture at N.J.A.C. 7:7-12.6(b). Because these standards are applicable to activities under an individual permit, the requirement to comply with N.J.A.C. 7:7-9.36 and/or 9.37 is not necessary to restate. Applications for individual permits are required to demonstrate compliance with all applicable requirements of the CZM Rules.

The requirement to comply with any applicable management plan is consistent with State and Federal regulations and ensures that species are protected. The term "management plan" encompasses any plan for the protection of a State-listed and Federally listed species that are approved by the Department and by the USFWS, which would include, for example, the Programmatic Biological Opinion discussed above. Where a management plan exists, the applicant will also need to comply with N.J.A.C. 7:7-9.36, and, if the site is also critical wildlife habitat in addition to threatened or endangered species habitat, with N.J.A.C. 7:7-9.37. If no management plan exists but the site is a habitat for a threatened or endangered species, the applicant must demonstrate compliance with N.J.A.C. 7:7-9.36 and, if applicable, N.J.A.C. 7:7-9.37. If the site is not threatened or endangered species habitat, but serves as critical wildlife habitat (such as a shorebird migration stopover area, even if none of the species using the site are listed as threatened or endangered), the applicant must only demonstrate compliance with N.J.A.C. 7:7-9.37. This variety of combinations of plans and CZM Rules that may be applicable to a site is intended to be captured by requiring compliance with a management plan, N.J.A.C. 7:7-9.36, and/or 9.37.

By requiring compliance with both N.J.A.C. 7:7-9.36 and 9.37, if a threatened or endangered species is removed from the Federal or State endangered species list, but is still critically dependent on certain areas of the coastal zone, the critical wildlife habitat rule will continue to apply even if a State or Federal management plan and the endangered or threatened wildlife or vegetation species habitat rule will not. The critical wildlife habitat rule applies to areas that are essential to the maintenance of wildlife, including areas necessary for wintering, breeding, and migrating, independent of the status of wildlife as threatened or endangered. Considering the example of the Rufa red knot, if the species were to be "delisted" as a threatened species, its critical migration stopover sites on the Delaware Bay would still be protected under the critical wildlife habitat rule.

Compliance with management plans and/or the special area rules in question ensures that aquaculture operations remain environmentally beneficial and do not adversely affect threatened or endangered species or areas essential to wildlife populations.

Additional amendments to general permit 30 (N.J.A.C. 7:7-6.30)

Because aquaculture occurs within tidal waterways, there is a potential for conflicts with navigation and recreational boating. The existing general permit at N.J.A.C. 7:7-6.30(a)3 requires that structures cannot be placed within 50 feet of any navigation channel unless it is demonstrated that the structure will not hinder navigation. This requirement, however, does not address situations where equipment further from navigation channels may still pose a risk to navigation particularly in low light or evening hours when the currently required boundary markings at N.J.A.C. 7:7-6.30(a)4 may not be sufficient to ensure that water traffic remains safe

and the aquaculture structures are undisturbed. Therefore, the Department is proposing, at N.J.A.C. 7:7-6.30(a)5, to require that any floating structures be marked with lights or reflectors such that they are visible to boaters and jet skiers at night and in low-light conditions. The requirement to mark each structure, in addition to the overall area, will ensure that potential hazards to safe navigation are identified and can be avoided. Requiring lights or reflectors will ensure that safe water recreation can occur even at night or in other low-light conditions.

Recreational Docks and Piers (N.J.A.C. 7:7-12.5)

Existing N.J.A.C. 7:7-12.5 sets forth standards for the construction of docks and piers in general water areas. For the purposes of safety, proposed new N.J.A.C. 7:7-12.5(b)10 requires that photocell lights and reflectors be placed along the dock and on mooring piles starting from a point that is 50 feet outshore of the mean high water line to the end of the dock at 10-foot intervals. The lights and reflectors must be installed and operational within 72 hours of completion of construction. This provision is intended to alert boaters to the presence of a structure when travelling at night or in low light conditions.

Filled Water's Edge (N.J.A.C. 7:7-9.23)

The filled water's edge special area rule, at N.J.A.C. 7:7-9.23, seeks to preserve waterfront areas that were previously created by filling open water areas for water dependent uses, such as marina development. However, through implementation of this rule, the Department has become aware that some provisions of the rule do not always have the intended result and, in some cases, may prevent owners of a water dependent development from further

developing their property to keep the water dependent use viable. In addition, some filled water's edge sites may not be suitable for a water dependent development due to the size, configuration, or some other unique aspect of the particular site. However, the rule does not include a mechanism to address such unique circumstances. Therefore, the Department is proposing several amendments to this rule as described below.

At N.J.A.C. 7:7-9.23(d), the Department is proposing amendments to acknowledge that there may be filled water's edge sites with water access on which a water dependent use is not feasible and to reference the factors that the Department will take into account in determining if the applicant has demonstrated that such a use is not feasible. Most filled water's edge sites with water access must continue to comply with existing N.J.A.C. 7:7-9.23(d)1, 2, and 3 and, if the site is already developed with a water dependent development, with recodified N.J.A.C. 7:7-9.23(g). However, if the applicant demonstrates that water dependent development is not feasible in accordance with proposed new N.J.A.C. 7:7-9.23(e), non-water dependent development may be permitted by the Department.

Proposed new N.J.A.C. 7:7-9.23(e) sets forth the factors the Department will consider when determining the feasibility of water dependent development on a filled water's edge site. The first factor is the length of water frontage on the site and the corresponding area of upland to support a water dependent use on the site. This proposed factor recognizes that there may be situations, such as a generally pie-shaped (triangular) site or other oddly shaped parcel, which results in a large upland area, but too little water frontage to support a water dependent use. Correspondingly, there could be situations where a site with extensive water frontage is too narrow to allow for parking and other amenities necessary to support a water dependent use.

Second, the Department will consider the presence of special areas between the upland and navigable water that would preclude approval of a water dependent development. For example, if the waterfront portion of the site abuts shellfish habitat, the Department may determine that a water dependent use, like marina development, is not appropriate and will consider approving non-water dependent development.

Third, the Department will consider if water dependent development is compatible with the surrounding development.

Fourth, if land or water is contaminated such that a water dependent use would pose an ecological risk or endanger public health, the Department will consider that fact in determining if water dependent development is infeasible.

Finally, the Department will also consider conditions unique to the property that result in peculiar and exceptional practical difficulties in the development of a water dependent use which could include the depth of water adjacent to the site, unusual current or other natural conditions, or the ability to obtain authority from the State to use tidelands necessary to support a water dependent use on the site. These new and amended provisions allow the Department to make common sense determinations of the suitability of a site for water dependent development and allow other types of development on filled water's edge sites as appropriate.

It is important to note that N.J.A.C. 7:7-9.23(e) is only meant to apply to development or redevelopment on a site where there is not an existing water dependent use. The Department will not determine that water dependent use is not feasible in accordance with proposed N.J.A.C. 7:7-9.23(d) and (e), if there is already a water dependent use on the site. The presence of a water dependent development demonstrates that water dependent development is feasible on the site.

Development on a filled water's edge site with existing water dependent development must continue to comply with recodified N.J.A.C. 7:7-9.23(g).

The Department is also proposing to amend N.J.A.C. 7:7-9.23(d)3, which allows for a mix of water dependent and water oriented uses with other types of development on "large" filled water's edge sites "of about 10 acres or more upland acres" where a greater mix of uses may be acceptable and allows for a reduced waterfront portion on such properties, as long as the non-water related uses do not adversely affect access to or use of the waterfront portion of the site. The Department is proposing to amend this provision to apply to any filled water's edge site, rather than just "large" sites. Size is just one factor in determining if a mix of uses is appropriate for a site. Removing the size requirement for this provision provides flexibility for owners of water dependent development, such as marinas, to complement their operations with other uses and ensure year-round economic viability of water dependent development as long as other uses do not interfere with access to and use of the water dependent development.

The Department is proposing to amend the rule rationale at recodified N.J.A.C. 7:7-9.23(n) in light of the above-described amendments. Specifically, the Department is proposing to add a paragraph to explain the situations in which a water dependent use may not be feasible, in which case, a non-water dependent use may be permitted.

Scenic Resources and High-Rise Structures (N.J.A.C. 7:7-15.14, and 16.10 and related definitions at N.J.A.C. 7:7-1.5)

The Department is proposing to repeal N.J.A.C. 7:7-15.14, High-rise structures. Provisions for high-rise structures and scenic resources and design are proposed to be

consolidated into the existing scenic resources and design rule with amendments at proposed N.J.A.C. 7:7-16.10. The proposed amendments represent the Department's efforts to address key coastal goals while not inhibiting economic development. "Safe, healthy and well-planned coastal communities" are a goal of the New Jersey Coastal Management Program (CMP) (see N.J.A.C. 7:7-1.1(c) for all goals of the New Jersey CMP). This goal includes promoting concentrated patterns of development as well as sustaining coastal economies. "Meaningful public access to and use of tidal waterways and their shores" is another coastal goal which includes "preserving and enhancing views of the coastal landscape to enrich aesthetic and cultural values and vital communities." The modified scenic resources and design rule, summarized in detail below, balances these goals.

To facilitate the consolidation of these two rules, the Department is proposing a definition for "high-rise structure" at N.J.A.C. 7:7-1.5. The proposed definition is the same as the existing definition of high-rise structure at N.J.A.C. 7:7-15.14(a).

Because both the high-rise structures and scenic resources and design rules address visual impacts, the Department determined it was appropriate to consolidate the rules into one single rule. Further, the Department has determined that some standards in both existing rules that are applied across the coastal zone in a "one size fits all" approach are not appropriate in all circumstances. Therefore, the Department is proposing general provisions that apply throughout the coastal zone, as well as provisions that apply only to the Hudson River Waterfront Area, provisions that only apply to oceanfront or bayfront sites, and provisions that apply to development along tidal waterways other than the Hudson River, the Atlantic Ocean, and the State's bays, such as other tidal riverfront sites.

Existing N.J.A.C. 7:7-16.10(a) and (b) define scenic resources and design elements to clearly identify the scope of the rule and are not proposed to be amended. New N.J.A.C. 7:7-16.10(c) sets forth standards that apply to all proposed development in the coastal zone and incorporates standards from existing N.J.A.C. 7:7-15.14 and 16.10. First, N.J.A.C. 7:7-16.10(c)1 encourages new coastal development that is "visually compatible with its surroundings in terms of building and site design, and enhances scenic resources" and discourages development that is incompatible with its surroundings. This provision is recodified from existing N.J.A.C. 7:7-16.10(c). Proposed N.J.A.C. 7:7-16.10(c)2 requires proposed development to be in character with surrounding transitional heights and residential densities or otherwise be in character with a municipal comprehensive development scheme requiring an increase in height and density, which is consistent with all applicable sections of the CZM Rules. This requirement is taken from existing N.J.A.C. 7:7-15.14(b)6 and is proposed to apply to any development, not just highrise development, because even development that does not meet the definition of "high-rise structure" can have an undesirable impact on the character and scenic resources of a community. Proposed N.J.A.C. 7:7-16.10(c)3 sets forth standards that apply to a high-rise structure throughout the coastal zone. Existing N.J.A.C. 7:7-15.14(b)1 and 2 are relocated as proposed N.J.A.C. 7:7-16.10(c)3i and ii. In general, high-rise structures are encouraged to be located in areas that are already densely developed with high-rises or other intense development. Throughout the coastal zone, except as provided in the Hudson River Waterfront Area rule, N.J.A.C. 7:7-9.46, high-rise structures must be set back by one public road or at least 50 feet from coastal waters to provide physical and visual public access to the water.

Proposed N.J.A.C. 7:7-16.10(d) establishes additional standards for development within the Hudson River waterfront area, which are taken from existing N.J.A.C. 7:7-15.14(b)3 and 4. These standards are intended to preserve viewsheds while supporting the continuing economic growth of the Hudson River waterfront area. Development in this area must comply with these specific standards, as well as the general provisions at proposed N.J.A.C. 7:7-16.10(c).

Proposed N.J.A.C. 7:7-16.10(e) establishes standards for development along oceanfront and bayfront areas. Proposed N.J.A.C. 7:7-16.10(e)1 recodifies existing N.J.A.C. 7:7-16.10(d). These requirements are intended to preserve ocean and bay views and public enjoyment of coastal waters. Proposed N.J.A.C. 7:7-16.10(e)2 is adapted from existing N.J.A.C. 7:7-15.14(b)4 and clearly identifies the views that must be considered when designing oceanfront or bayfront development. While the existing rule excepts Atlantic City, the Northern Waterfront Region, and the Delaware River Region from the requirements of this section, the Department is proposing to except only Atlantic City from this section. Oceanfront and Bayfront portions of the other currently-excepted regions will need to comply with the requirements of proposed N.J.A.C. 7:7-16.10(e) in order to ensure visual access to the water for residents of urban areas. Areas along tidal riverfronts, such as the Delaware River, must comply with proposed N.J.A.C. 7:7-16.10(f), summarized below.

Proposed N.J.A.C. 7:7-16.10(f) establishes that high-rise structures along waterways other than the Hudson River, the ocean, or bays must not degrade views of the river, horizon, or any skylines currently enjoyed from residential structures, public roads, or pathways to the maximum extent practicable. This provision is also taken from existing N.J.A.C. 7:7-15.14(b)4 and altered to specifically apply to other tidal waterways, but not oceanfront and bayfront sites.

Existing N.J.A.C. 7:7-16.10(e) and (f), which address coastal development that modifies historic structures and Federal, State, county, or municipal development projects located adjacent to bay or ocean, or bayfront or oceanfront, beach, dune, or boardwalk, respectively, are recodified as N.J.A.C. 7:7-16.10(g) and (h). Recodified N.J.A.C. 7:7-16.10(i) sets forth the rationale for the rule, combining concepts from existing N.J.A.C. 7:7-15.14(d) and 16.10(g) with new text to explain the goals and intentions of the Department in applying the scenic resources and design rule.

V Zones (coastal high hazard areas) (N.J.A.C. 7:7-9.18 and related definitions at N.J.A.C. 7:7-1.5 and 7:13-1.2)

V zones are areas subject to flooding that are potentially subject to breaking wave heights three feet or more above the tidal stillwater elevation during a 100-year flood. The "100-year flood" refers to a flood that statistically has a one percent chance of being equaled or exceeded in any given year. Development in V zones is particularly vulnerable to damage from flooding and waves during coastal storms. V zones, therefore, require stringent building standards to protect the public from the impacts of flooding and coastal storms. For this reason, the Federal Emergency Management Agency (FEMA) and the New Jersey Department of Community Affairs have incorporated additional standards for buildings located in these areas to ensure that such buildings are suitably resistant to displacement, buoyancy, and structural damage during flood events. Additionally, the Department's FHACA Rules include lowest floor elevation requirements designed to protect public health and safety, with amendments previously proposed to further align the requirements of the FHACA Rules with equivalent FEMA and Department of

Community Affairs Uniform Construction Code (UCC) requirements. The Department is proposing several amendments to the CZM Rules to align with the FHACA Rules, FEMA, and the UCC to promote wise use of the coast and protect coastal residents and their property from harm, and is proposing to amend a definition in the FHACA Rules to harmonize with the CZM Rules as proposed to be amended.

The Department is proposing a new definition at N.J.A.C. 7:7-1.5 for the term "FEMA" flood mapping." This term is replacing the term "FIRM," which the Department is proposing to delete. The proposed new definition is consistent with the definition of the term in the FHACA Rules as it is proposed to be amended in this rulemaking and includes effective FEMA Flood Insurance Studies (which include community FIRMs), as well as preliminary or advisory FEMA mapping, if the more recent advisory or proposed (preliminary) mapping results in higher flood elevations, wider floodway limits, greater flow rates, or a greater area included in the V zone than depicted in the most recent effective FEMA Flood Insurance Study. The Department has determined that, considering the detailed analysis conducted by FEMA, advisory or preliminary mapping constitutes the best available flood data. As such, the Department determined that it is the most protective of public health, safety, and welfare to allow for the use of advisory or preliminary maps to determine which activities are appropriate on a given site. The Department is proposing to replace "the FIRM" with "applicable FEMA flood mapping" wherever the term "FIRM" occurs in the CZM Rules. The amendments require the best available data to be used to determine different flood zone boundaries for the purposes of several CZM Rule provisions (see proposed N.J.A.C. 7:7-6.4(e)2i and iv, 6.5(d)2i and iv, 9.18(a), 15.2(e)3ii(1) and (4), and

15.2(f)2ii(1) and (4)), which will better protect people and property from the negative impacts of flooding and coastal storms.

As mentioned above, the Department is proposing to amend the definition of "FEMA flood mapping" in the FHACA Rules at N.J.A.C. 7:13-1.2 to require the use of preliminary or advisory FEMA mapping if the more recent advisory or proposed (preliminary) mapping results in a change from an A zone to a V zone or coastal A zone. The Department has interpreted "higher flood elevations" in the existing definition to encompass changing V zone and coastal A zone boundaries, but is proposing this change in language to clarify current practice and align with the proposed definition in the CZM Rules.

The Department is also proposing several additional amendments to N.J.A.C. 7:7-9.18, coastal high hazard area rule, to further promote consistency between the CZM Rules and other State and Federal standards. Existing N.J.A.C. 7:7-9.18(b), which prohibits residential development, including hotels and motels, except for certain infill development and development in Atlantic City, and existing N.J.A.C. 7:7-9.18(c), which generally discourages commercial development, are proposed to be deleted and replaced with new N.J.A.C. 7:7-9.18(b), (c), (d), and (e). While some of the proposed requirements are similar to the existing provisions, the proposed standards are intended to ensure consistency with the FHACA Rules, the UCC, and Federal flood reduction requirements.

New N.J.A.C. 7:7-9.18(b) prohibits residential and commercial development in coastal high hazard areas unless it is provided for under proposed N.J.A.C. 7:7-9.18(c), (d), (e), or (f). Proposed new N.J.A.C. 7:7-9.18(c) establishes the conditions that must be met for residential development, landward of the mean high water line, to be approved in coastal high hazard areas.

As in the existing rules, proposed N.J.A.C. 7:7-9.18(c)1 allows single-family or duplex infill development if it complies with N.J.A.C. 7:7-15.2(e) or (f) and if it complies with Federal flood reduction standards at 44 CFR Part 60 and the Uniform Construction Code. New N.J.A.C. 7:7-9.18(c)2 allows residential development in Atlantic City or in a special urban area within the Hudson River Waterfront Area that complies with the Federal flood reduction standards at 44 CFR Part 60; and the Uniform Construction Code at N.J.A.C. 5:23. Development in a special urban area within the Hudson River Waterfront Area must additionally comply with the special urban area rule at N.J.A.C. 7:7-9.41, and the Hudson River Waterfront rules, N.J.A.C. 7:7-9.46. The existing rules allow development in Atlantic City in coastal high hazard areas in accordance with N.J.A.C. 7:7-9.18(g), which is limited to development on existing piers or the boardwalk. This new paragraph, in combination with proposed N.J.A.C. 7:7-9.18(d) concerning commercial developments, summarized below, expands the existing Atlantic City exception to more generally refer to development that complies with the Federal flood reduction standards and the UCC. The Department is also proposing to allow residential development within special urban areas within the Hudson River Waterfront Area to allow residential development in already densely-developed areas while protecting people and property from flooding by requiring compliance with State construction standards and Federal flood reduction standards.

Proposed new N.J.A.C. 7:7-9.18(d) establishes that hotel and commercial development is acceptable in coastal high hazard areas if it is located in Atlantic City or in a special urban area within the Hudson River Waterfront Area, complies with the applicable special area rules for those locations, and complies with the Federal flood reduction standards at 44 CFR Part 60 and the UCC. This provision is intended to steer development to already densely developed areas,

allow reasonable hotel and commercial development essential to the tourism economy in key areas of the State, and protect people and property from flooding and coastal storms through compliance with the UCC and Federal standards.

N.J.A.C. 7:7-9.18(e) is a new provision that conditionally allows water dependent development and amusements in coastal high hazard areas throughout the State provided the development complies with the Federal flood reduction standards and the UCC. Water dependent development, such as marinas, is essential to the economy and lifestyle of many coastal communities. If constructed in accordance with applicable standards, these developments are acceptable in coastal high hazard areas and are preferable to permanent residences in order to reduce the number of people in harm's way during storms and flood events. Amusements are an essential component to the State's coastal tourism economy and are similarly preferable to residential development in coastal high hazard areas. If constructed in accordance with the UCC and Federal standards, such development does not pose a significant risk to communities during storms and flood events.

Existing N.J.A.C. 7:7-9.18(d) through (f) are proposed to be recodified as (g) through (i) to accommodate the above-described amendments. The requirement that development comply with impervious and vegetative cover requirements at recodified N.J.A.C. 7:7-9.18(g) is expanded to include residential development within Atlantic City and within special urban areas in the Hudson River waterfront area by referring to N.J.A.C. 7:7-9.18(c)2. As in the existing rule, infill single family home or duplex development is not required to comply with impervious cover and vegetative cover requirements, in accordance with N.J.A.C. 7:7-13. Existing N.J.A.C. 7:7-9.18(g), which describes acceptable development in coastal high hazard areas in Atlantic City, is

proposed for deletion as proposed new N.J.A.C. 7:7-9.18(c), (d), and (e) clearly establish what development is acceptable in such areas.

The rule rationale at recodified N.J.A.C. 7:7-9.18(i) is proposed to be updated to reflect the above-described amendments and to reflect FEMA's change in terminology in referring to V zones on FEMA flood maps as zone V or VE, rather than the previous label of "zone V1-30." FEMA's current flood mapping procedures designate areas as "zone VE" when a base flood elevation is provided and as "zone V" when a base flood elevation is not provided. Older maps number V zones from 1 through 30 based on the base flood elevation in relation to NGVD, while newer maps simply label a zone "zone VE" for every V zone where a base flood elevation is provided. To reflect this simplification, which is reflected in currently-available FEMA mapping, the Department is deleting the reference to the numbered V zones and instead referring to "zone V" and zone "VE."

Finally, the Department is proposing to add a definition of "UCC" which means "the Uniform Construction Code, N.J.A.C. 5:23" to facilitate the above-described amendments.

Dune Walkovers and Other Beach and Dune Developments

The Department is proposing several amendments and new rules to clarify the regulation of dune walkover structures, update design standards applicable to these structures, and streamline permitting. Dune walkovers create a single path for people to cross over dunes to reach the beach and ocean. Their presence helps prevent degradation of dunes that could otherwise occur if people routinely walked across the dunes at random locations. They also promote public access and use of the shore.

Dune walkovers

Clarification of "similar structures" exempt from CAFRA permit (N.J.A.C. 7:7-2.2 and 10.4)

The Coastal Area Facility Review Act (CAFRA) exempts from regulation "the construction of a patio, deck or similar structure at a residential development." The Department sets forth what will be interpreted as "similar structures" for the purposes of the CZM Rules at N.J.A.C. 7:7-2.2(c)5i through v. Existing N.J.A.C. 7:7-2.2(c)5iv identifies timber dune walkover structures constructed in accordance with the specifications at N.J.A.C. 7:7-10.4, Dune creation and maintenance, as similar structures when they are constructed at a single-family home or duplex. The Department is proposing to add at-grade dune walkover structures to the list of similar structures that do not require a CAFRA permit, and is proposing to amend the existing reference to timber dune walkover structures to add the term "elevated" for consistency with the description of these same structures at existing N.J.A.C. 7:7-10.4(d) and to differentiate between these walkovers and at-grade walkovers. The Department is also proposing to more directly refer to where in N.J.A.C. 7:7-10 the standards for these structures are located by citing N.J.A.C. 7:7-10.4(d) for elevated timber dune walkovers and proposed N.J.A.C. 7:7-10.4(e)1, 2, and 3 for at-grade dune walkovers.

New permit-by-rule (N.J.A.C. 7:7-4.23)

The Department is proposing new permit-by-rule 23 at N.J.A.C. 7:7-4.23 to authorize the installation of an at-grade dune walkover, such as a stabilization mat, at a residential, commercial, or public development other than a single-family home or duplex. This activity is

exempt from the requirement to obtain a permit when conducted at a single-family home or duplex lot in accordance with N.J.A.C. 7:7-2.2(c)5iv as summarized above.

Permits-by-rule authorize activities with very minimal environmental impact and do not require the submittal of a written application or application fee to the Department. New permit-by-rule 23 establishes design and installation standards to ensure minimal impacts on the dune upon which the walkover is installed. First, the permit-by-rule limits installation to one walkover per site, unless New Jersey 2012 High Resolution Orthophotography reflects that more than one walkover was present on the site on the date of the applicable image. In this case, the permittee may construct up to the number of walkovers existing on the site as shown on this imagery. New Jersey 2012 High Resolution Orthophotography is available for download at http://njgin.state.nj.us/NJ_NJGINExplorer/DataDownloads.jsp. The Department chose this imagery because the resolution allows walkovers to be clearly identified and because it was taken before Superstorm Sandy hit the Jersey Shore and destroyed many beach and dune structures.

Proposed permit-by-rule 23 sets several design and construction parameters to ensure the installation of an at-grade walkover has only a *de minimis* impact on the dune. This permit does not authorize grading or excavation of a beach or dune. Any grading or excavation may adversely affect the dune and, therefore, must be reviewed directly by Department staff as part of an application for general permit 2 for activities on a beach or dune, or through an individual permit.

The permit-by-rule then establishes width limits for walkovers at different types of development. Walkovers at non-commercial properties cannot exceed six feet in width. The total

width of the walkover structure plus any fencing or edging is limited to eight feet. Commercial properties may have a walkover as wide as 10 feet (12 with any edging or fencing). At any location, a walkover constructed under this permit must be fenced using sand fencing, split-rail fencing, or open handrails to prevent pedestrians from walking on the dune outside of the designated walkover area, unless fencing the walkover is prohibited by the municipality. The activity must also comply with any applicable management plan for the protection of State and Federally-listed threatened or endangered species, and/or N.J.A.C. 7:7-9.36, endangered or threatened wildlife or vegetation species habitat. For example, all cost-sharing agreements between the Department and municipalities for shore protection or beach nourishment require beach management plans where threatened or endangered species are present. Any walkovers constructed within a shore protection or beach nourishment project area that received State funding would, therefore, need to comply with the terms of the applicable management plan. This requirement matches existing N.J.A.C. 7:7-10.1(b). Any project that occurs in threatened or endangered species habitat must comply with N.J.A.C. 7:7-9.26, regardless of whether a management plan exists. Dunes provide habitat for several threatened or endangered species whose protection must not be jeopardized by the installation of a walkover.

New general permit-by-certification; application fees (N.J.A.C. 7:7-5.3 and 25.1)

The Department is proposing a new general permit-by-certification to authorize the installation of an elevated timber dune walkover at residential, commercial, or public development other than a single-family home or duplex. This activity does not require a permit when conducted at a single-family home or duplex in accordance with N.J.A.C. 7:7-2.2(c)5iv, as

noted above. The existing general permits-by-certification at N.J.A.C. 7:7-5.1 and 5.2 are numbered general permit-by-certification 10 and general permit-by-certification 15 because they represent a more tightly circumscribed subset of activities authorized under general permits 10 and 15. Because the proposed new general permit-by-certification is not linked to an existing general permit, the Department is designating it general permit-by-certification 1A.

The standards for elevated timber walkovers under proposed general permit-by-certification 1A are similar to those for at-grade walkovers under proposed permit-by-rule 23. The permit authorizes one walkover per site, unless New Jersey 2012 High Resolution Orthophotography reflects that more than one walkover was present on the site on the date of the applicable image. In this case, the permittee may construct up to the number of walkovers existing on the site on this imagery. This general permit-by-certification also does not permit grading or excavation of a beach or dune which, as explained above, must be directly reviewed by the Department.

Elevated timber walkovers must be constructed in accordance with the standards and specifications described in Beach Dune Walkover Structures (Florida Sea Grant, 1981). This requirement is consistent with the design and construction requirements for walkovers under existing N.J.A.C. 7:7-10.4(d). This publication provides different designs for walkovers in areas of heavy foot traffic (such as a condominium or community public access ramp) versus walkovers in areas of light foot traffic (such as an individual home). The publication provides lists of suitable materials, piling depths, piling placement guidelines (for example, pilings should not be encased in concrete), and other design guidance. This document is available from the Department at the address provided in N.J.A.C. 7:7-1.6.

The width limits and threatened and endangered species protection requirements are identical to those proposed in permit-by-rule 23 as summarized above. While the limits regarding width of the access path, threatened and endangered species protections and other aspects of the proposed general permit-by-certification are the same as proposed permit-by-rule 23 for at-grade dune walkovers, the Department is proposing that the elevated structures be authorized through a general permit-by-certification in order to ensure that applicants are aware of and certify that they are complying with the standards and specifications for construction of these structures, which necessarily involve placement of supports into the dune and, therefore, could have greater adverse impacts on the dune if not designed and constructed in accordance with the requirements of the general permit-by-certification.

The Department seeks to encourage responsibly constructed and located elevated dune walkovers to facilitate public access and use of the waterfront while preserving the integrity of vegetated dune systems. The Department is, thus, proposing to add this permit to the list of permits that do not require an application fee at N.J.A.C. 7:7-25.1(b)4.

Amendments to general permit 2 (N.J.A.C. 7:7-6.2)

Existing general permit 2 at N.J.A.C. 7:7-6.2 authorizes "beach and dune maintenance activities." The Department is proposing to rename this general permit and clarify that it authorizes a number of activities on a beach and dune subject to the requirements in Subchapter 10, not just beach and dune maintenance activities. Specifically, the general permit authorizes routine beach maintenance activities performed in accordance with N.J.A.C. 7:7-10.2, emergency post-storm beach restoration in accordance with N.J.A.C. 7:7-10.3, dune creation and

maintenance activities in accordance with N.J.A.C. 7:7-10.4, and the construction of dune walkovers in accordance with N.J.A.C. 7:7-10.4(e) and (f) (summarized in the next section of this Summary). As is required by the existing general permit, activities cannot be conducted in any wetlands and public access to the beach must be provided in accordance with N.J.A.C. 7:7-9.48 and 16.9.

Proposed new N.J.A.C. 7:7-6.2(d) requires that any activity authorized under general permit 2 must be conducted in accordance with the Operation and Maintenance Manual associated with the Federal or State project or, if such a manual does not exist, the activity cannot jeopardize the design template for the engineered beach or dune. An Operation and Maintenance Manual is developed as part of a Federal- or State-funded beach replenishment project and specifies the roles, responsibilities, and requirements for conducting and maintaining an engineered beach project partially funded by the U.S. Army Corps. of Engineers (USACE). Engineered beaches and dunes are specifically designed for shore protection; activities that do not comply with the procedures for operation and maintenance developed by the project engineers or that would otherwise affect the design template are not authorized under this permit and, in general, will not be authorized by the Department under any circumstances.

Proposed new N.J.A.C. 7:7-6.2(e) requires that the activity complies with any applicable management plan for protection of State-listed and Federally listed threatened or endangered species and/or the endangered or threatened wildlife or vegetation species habitat rule, N.J.A.C. 7:7-9.36, thereby ensuring protection of these species and their habitats.

The existing provision that the Department will not approve authorizations under this general permit to any municipality that does not have a Department-approved municipal public access plan is recodified from N.J.A.C. 7:7-6.2(b) to (f) with no change in text.

Standards for dune walkovers (N.J.A.C. 7:7-10.4(e) and (f))

As described above, general permit 2 refers to N.J.A.C. 7:7-10.4(e) and (f) for the standards for construction of at-grade dune walkovers. The Department is proposing amendments and new requirements for at-grade walkovers at single-family home or duplex development and at other types of development as described below.

The Department is proposing to update the standards for at-grade dune walkovers at single-family homes or duplexes. First, the fencing options are proposed to be expanded to include split rail fencing and open handrails as acceptable means of fencing a walkover, in addition to sand fencing. Fencing requirements are also proposed for amendment to allow a walkover to remain unfenced if the municipality in which it is constructed specifically prohibits the fencing of walkovers. The Department is also proposing new N.J.A.C. 7:7-10.4(e)4 to make clear that any grading or excavation associated with installing the walkover does not lower the beach or dune below design specifications. Preserving the correct beach and dune elevations is essential to maintain the protective functions of engineered beaches and dunes. The existing preference for the use of unrolled sand fencing as a base for the at-grade walkover is proposed to be deleted. Newer materials, such as stabilization mats, are relatively easy to place and remove seasonally and are Americans with Disabilities Act-compliant. While the existing rule cites sand fencing as the preferred option because it allows growth of beach grass, frequently-used

walkovers do not support the growth of beach grass. A small area designated as a walkover need not support the growth of dune grass.

The Department is also proposing to delete the requirement that solid boardwalk type walkovers be elevated at least one foot above the dune. This requirement was intended to allow sand transfer and vegetation growth under the walkover. However, elevation requirements are out of place in a section on at-grade walkovers. The proposed deletion instead leads applicants seeking to construct any kind of elevated dune walkover to comply with the requirements in N.J.A.C. 7:7-10.4(d) for elevated timber dune walkovers. Additionally, in the Department's experience, requiring a one foot elevation does not aid in sand transfer, as the slight elevation above the dune allows sand to collect under the walkover. At-grade walkovers allow sand transfer over the walkover itself. The requirement to elevate a solid boardwalk-type walkover one foot above the dune is, therefore, unnecessary.

The Department is proposing new requirements for at-grade walkovers at development other than a single-family home or duplex. The existing rules do not contain standards or best management practices for these types of projects. The first requirement concerns the number of walkovers permitted per site. Each site is limited to one walkover unless the New Jersey 2012 High Resolution Orthophotography reflects that more than one walkover was present on the site as of the date of the image, in which case up to the number of walkovers depicted in the image may be constructed. This is the same requirement as in proposed permit-by-rule 23 and general permit-by-certification 1A, summarized above. However, because these standards apply to developments larger than a single-family home or duplex, where it may be appropriate and beneficial for additional dune walkovers to be allowed to adequately address anticipated foot

traffic in a manner that ensures the dune is not negatively impacted, the Department is proposing an additional alternative for applicants who seek to construct more than one walkover. If an applicant can demonstrate than more than one walkover is necessary to provide access to the beach from the development, more than one walkover can be permitted. The Department will consider several factors in determining whether more than one walkover is necessary. First, the Department will consider the number of people that are served by the development during normal and peak usage times. The length of dune and beach frontage on the site is also a consideration. Sites with a smaller area of beach frontage are less likely to require additional walkovers to meet the needs of their development. The Department will also consider the distribution of development on the site. The proposed rule offers an example for a site with 1,000 feet of beach frontage. The example presents a situation where there is one centrally located structure with a central entrance in contrast to an alternate arrangement where there are several buildings with multiple entrances on the beach side of the structures. In the first option, more than one walkover is not likely to be necessary to serve the access needs of the users of the development, while the second option represents a situation where the Department may determine that more than one walkover is necessary.

The width requirements for walkovers and any associated edging are identical to the width requirements proposed in permit-by-rule 23 and general permit-by-certification 1A. As is proposed for the construction of at-grade walkovers at a single-family home or duplex development, any grading or excavation associated with installing the walkover cannot lower the beach or dune below design specifications. Finally, the Department is proposing to require the installation of sand fencing, split rail fencing, or open handrails on both sides of the walkover in

most cases. This provision requires fencing to prevent degradation of the dune caused by people walking over at multiple, unofficial access points. However, some municipalities do not permit walkovers to be fenced and in those cases, fencing will not be required.

A new rationale is proposed at N.J.A.C. 7:7-10.4(h) to explain the importance of dunes in the protection of landward development from storm damage, as summarized in the discussion of proposed rationales below.

Amendments to General Permit 22 (N.J.A.C. 7:7-6.22)

The Department is proposing to amend general permit 22 at N.J.A.C. 7:7-6.22, which authorizes the construction of certain structures related to the tourism industry at hotels and motels, commercial developments, and multi-family residential developments over 75 units.

The Department is proposing to require at N.J.A.C. 7:7-6.22(a)6i that development under this general permit is limited to the most landward one-third of the useable beach berm area. The existing permit allows a structure to occupy a maximum of 33 percent of the total width of the beach berm area, and requires that the structure be at least 50 feet landward of the mean high water line unless the development is on the most landward portion of the beach where the width of the beach does not allow the 50-foot minimum to be met. The rule also requires that the structure does not conflict with ocean views or other beach uses. In order to preserve the most waterward portion of the beach berm for public access to the beach and ocean, the Department is proposing that applicants locate development under this general permit within the "upper," most landward one-third of the beach berm in all cases. This amendment allows for the placement of

certain tourism developments on beaches while maintaining beach areas closest to the water for use by the public.

Trails, Paths, and Footbridges

The CZM, FWPA, and FHACA Rules all contain different provisions and permits for the construction of trails and boardwalks and other linear development not intended for use by cars. However, neither the requirements nor types of access allowed (for example, the FHACA Rules general permit provides for a trail that may be used by golf carts and lawn tractors, while the FWPA Rules general permit authorizes a trail that may only be used by pedestrians and non-motorized methods of transport) are consistent across the three permitting programs, creating confusion and difficulty for applicants. The Department is proposing to establish two general permits in each of the three land use rules that create a logical and consistent framework for regulating this type of development in the coastal zone, in freshwater wetlands, and in riparian zones and flood hazard areas. One general permit authorizes trails and boardwalks for use by pedestrians only, which have minimal environmental impact, are very limited in width, and use natural materials. The other general permit authorizes multiple-use paths, which may be paved and can convey light vehicles, such as bicycles and golf carts.

Among other things, the two proposed general permits seek to simplify and standardize the width of trails authorized under the three sets of rules. The existing general permits in the FWPA Rules and FHACA Rules for trails or boardwalks (freshwater wetlands general permit 17 and flood hazard general permit 13) limit the width of a trail or boardwalk qualifying for the general permit to a maximum of six feet. Both general permits allow additional width for a trail

if the applicant demonstrates that an increase in width is necessary to provide barrier-free access (with the freshwater wetlands general permit referencing the Barrier Free Subcode of the Standard Uniform Construction Code, N.J.A.C. 5:23-7, and the flood hazard general permit more generally referencing State and Federal barrier-free access requirements). In the case of flood hazard general permit 13, if the applicant makes the required demonstration, the width of the trail or boardwalk will be increased to a maximum width of 10 feet while freshwater wetlands general permit does not specify a maximum width.

Rather than require an applicant to make this demonstration and Department staff to assess if the demonstration made is adequate to support that the proposed width is "necessary," the Department is proposing an absolute maximum width of 10 feet for any reason. The proposed creation of two separate general permits will allow the Department to tailor width and construction requirements to the intended use of the trail, boardwalk, or path to be constructed, so that any impacts will be the minimum necessary for the particular use. Accordingly, while the proposed general permits for trails to be used purely by pedestrians require that only specific types of materials be used in construction, not including pavement, multiple-use paths that may be used by pedestrians and light vehicles, such as bicycles, golf carts, or lawn tractors are not subject to a similar limitation with paved trails with a larger 10-foot maximum width allowed.

Further detail regarding requirements applicable to the proposed general permits in each set of rules follows.

<u>Coastal General Permits</u> (N.J.A.C. 7:7-6.13, 6.33, and 6.34, and related definition at N.J.A.C. 7:7-1.5)

The existing general permit for the construction of recreational facilities at publicly owned or controlled parks at N.J.A.C. 7:7-6.13 authorizes pathways, bicycle paths, trails, and boardwalks in coastal wetlands. However, not all trail or path construction is limited to public parks nor is it limited to projects located in coastal wetlands. For example, land acquired by a non-profit organization may be suitable for trail development. The Department is proposing to delete trail-related provisions from existing general permit 13, specifically deleting language from N.J.A.C. 7:7-6.13(a)1, all of (a)1iv, and all of (a)3. Some of the existing requirements are incorporated into the proposed new general permits.

Proposed new general permit 33 at N.J.A.C. 7:7-6.33 authorizes the construction of trails and boardwalks for use by pedestrians in the coastal zone, provided the trail or boardwalk is not located on a beach or dune. The Department is proposing language identical to the language in existing freshwater wetlands general permits at N.J.A.C. 7:7A-5.17 and 17A, which provide that the general permit does not authorize the construction of a restroom, gazebo, rain shelter, or other covered enclosed structure and that it does not authorize the construction of a roadway for use by automobiles or other motor vehicles. The requirements at N.J.A.C. 7:7-6.33(a)1 through 8 combine requirements from existing N.J.A.C. 7:7-6.13(a)3 and existing N.J.A.C. 7:7A-5.17 and 17A. Trails or boardwalks under proposed new coastal general permit 33 must: be no more than six feet wide; constructed of local native sediment (that is, on-site mineral soil or stone), woodchips, mulch, timber, or crushed rock; be elevated at least four feet over coastal wetlands; not interfere with the hydrology of the area; be located and configured so as to minimize adverse environmental impact; not encroach upon or adversely affect the habitat of any threatened or endangered species; include public access in accordance with N.J.A.C. 7:7-9.48 and 16.9; and, if

open to the public, incorporate educational features, such as signage to inform users about coastal ecosystems, resources, or phenomena. Proposed N.J.A.C. 7:7-6.33(b) sets forth additional requirements applicable to trails and boardwalks within riparian zones. These requirements match those proposed in general permit 13 in the FHACA Rules, summarized below. Because these requirements include the requirement to obtain an engineering certification if the trail or boardwalk is proposed within 25 feet of a top of bank, the Department is adding a definition of "engineering certification" at N.J.A.C. 7:7-1.5, which is identical to the definition of the term in the FHACA Rules at N.J.A.C. 7:13-1.2.

Proposed new general permit 34 at N.J.A.C. 7:7-6.34 authorizes the construction of a multiple-use path for use for use by pedestrians, livestock, and/or light vehicles, such as bicycles, golf carts, or lawn tractors. This scope of uses is taken from the existing FHACA Rules' general permit for trails and boardwalks at N.J.A.C. 7:13-9.13. Again, this general permit does not authorize construction of a restroom, gazebo, rain shelter, or any covered enclosed structure. Additionally, the construction of a roadway for use by automobiles, motorcycles, all-terrain vehicles or similar motor vehicles is not authorized under this general permit.

N.J.A.C. 7:7-6.34(a)1 through 7 set forth conditions similar to the conditions proposed at N.J.A.C. 7:7-6.33, with differences to reflect the potentially more intense development authorized under general permit 34. First, the width of the path cannot exceed 10 feet. Ten feet is the maximum width permitted under existing flood hazard area general permit 13, which similarly addresses trails that may accommodate pedestrians and light vehicles, such as bicycles and golf carts. This is wide enough to accommodate barrier-free access, if necessary. As required for a trail or boardwalk, a multiple-use path must be elevated at least four feet over

coastal wetlands, not interfere with the hydrology of the area, be located and configured as to minimize adverse environmental impact, not encroach upon or adversely affect the habitat of any threatened or endangered species, include public access in accordance with N.J.A.C. 7:7-9.48 and 16.9, and, if open to the public, incorporate educational features, such as signage to inform users about coastal ecosystems, resources, or phenomena. Multiple-use paths are not required to be constructed of specific materials and, thus, may be paved. Proposed N.J.A.C. 7:7-6.34(b) sets forth additional requirements applicable to multiple-use paths within riparian zones. These requirements match those proposed in new general permit 14 in the FHACA Rules, summarized below.

Freshwater wetlands general permits (N.J.A.C. 7:7A-5.17 and 5.17A)

Existing freshwater wetlands general permits 17 and 17A at N.J.A.C. 7:7A-5.17 and 5.17A are proposed to be amended to align with proposed coastal general permits 33 and 34 (described above).

The Department is proposing to amend N.J.A.C. 7:7A-5.17(a) to specify that general permit 17 authorizes activities in freshwater wetlands, transition areas, and/or State open waters necessary for the construction of a trail and/or boardwalk for use by pedestrians *only*. The conditions for approval under this permit at proposed N.J.A.C. 7:7A-5.17(a) and (b)1 through 6 are similar to those proposed in coastal general permit 33 described above, with several differences reflecting differences in the resources sought to be protected under the different chapters and other chapter-specific organizational differences.

First, there is no provision for elevating boardwalks above wetlands in the proposed freshwater wetlands permit. Coastal wetlands and freshwater wetlands, while both wetlands, are distinct systems with distinct vegetative communities and environmental considerations. Coastal wetlands plants tend to be shade-intolerant, while some freshwater wetlands plants are part of a shaded understory. Other freshwater wetlands systems have no understory at all and consist mainly of trees, which can be avoided by constructing a trail around individual trees. Coastal wetland systems are also in high energy environments where it is essential to avoid jeopardizing plant structures and underground root systems in order to avoid exposing the wetland to additional vulnerability to erosion. Freshwater wetlands are not in such high-energy environments, which allows more flexibility in trail or boardwalk design.

Next, there is no affirmative reference to public access in the FWPA or in this general permit because the overall purpose of the act is focused on protection of freshwater wetland resources. However, in certain circumstances and consistent with appropriate natural resource protection, wetlands permits that authorized public access may be permissible. The requirement that a trail or boardwalk does not encroach upon or adversely affect the habitat of any threatened or endangered species is not included in the freshwater wetlands or flood hazard are general permits because these rules each contain a section of conditions that apply to all general permits, which include this condition. Finally, the freshwater wetlands general permits do not include riparian zone requirements because riparian zone impacts are not directly assessed when the Department reviews an application for a freshwater wetlands permit, while the CZM Rules include riparian zones as a special area. If a trail is to be constructed in freshwater wetlands that

overlap with a riparian zone, both a freshwater wetlands permit and a flood hazard area permit will be required.

While the existing rules specify a quarter-acre limit unless the site is publicly owned, the proposed general permit allows up to one acre of disturbance. The other requirements proposed, such as a strict six-foot width limit, the requirement to use only local native sediment, wood chips, mulch, timber, or crushed rock, and the requirement to minimize environmental impact and avoid altering hydrology, ensure that potential impacts to freshwater wetlands, transition areas, and/or State open waters are minimal, regardless of whether the site is publicly or privately owned. Therefore, the Department has determined that extending the one-acre disturbance limit to all projects under this general permit is appropriate. Existing requirements at N.J.A.C. 7:7A-5.17(b) through (f) are proposed to be deleted, with select content relocated into proposed N.J.A.C. 7:7A-5.17(a) and (b)1 through 6, as discussed above.

Existing freshwater wetlands general permit 17A, at N.J.A.C. 7:7A-5.17A is proposed to be renamed "multiple-use paths" rather than "non-motorized multiple-use paths," with further amendments to align the three land use rules regarding multiple-use path construction. Instead of limiting the scope of this general permit to paths for use by "bicycles, skate boards, rollerblades and other non-motorized methods of transport," as in the existing permit, the Department is instead proposing to allow the construction of a multiple use path for use by "pedestrians and/or light vehicles such as bicycles, golf carts, or lawn tractors." This amendment aligns the scope of this general permit with the scope of proposed coastal general permit 34 and proposed flood hazard general permit 14, except that this general permit does not specifically mention use by livestock to avoid confusion with the various agricultural activities that are

exempt from the requirement to obtain a permit under the FWPA Rules. The statement of what is not permitted under general permit 17A is proposed to be amended to specify that the general permit does not authorize construction of a roadway for use by automobiles, motorcycles, all-terrain vehicles, or similar motor vehicles. The proposed new permit sets a 10-foot maximum width for multiple-use paths to appropriately limit impacts to freshwater wetlands and transition areas, provide for barrier-free access, and allow passage of light vehicles. The Department is not proposing to continue to require designs to be prepared in accordance with the American Association of State Highway and Transportation Officials (AASHTO) "guide for the development of bicycle facilities," published 1999, as amended and supplemented. The 10-foot width limit is enough to allow passage of bicycles or other light vehicles and the other design criteria in this permit are sufficient to ensure protection of freshwater wetlands, transition areas, and State open waters.

The conditions of general permit 17A proposed at N.J.A.C. 7:7A-5.17A(a) and (b)1 through 5 are similar to those proposed in general permit 17 at N.J.A.C. 7:7A-5.17(a) and (b)1 through 6, with three exceptions. First, proposed general permit 17A does not require the use of natural materials. Second, proposed general permit 17A allows the path to be up to 10 feet wide, rather than six feet wide. Finally, at N.J.A.C. 7:7A-5.17A, a multiple-use path authorized under general permit 17A cannot disturb more than one-quarter acre of freshwater wetlands, transition areas, and/or State open waters. This disturbance limit is the same as the limit in existing general permit 17A and is necessary to ensure impacts are minimized when a wider path constructed of unnatural materials (such as pavement) is constructed in wetlands.

Flood Hazard Area/Riparian Zone General Permits (N.J.A.C. 7:13-9.13 and 9.14)

Existing flood hazard area general permit 13 at N.J.A.C. 7:13-9.13 authorizes the construction of a trail or boardwalk in a flood hazard area and/or riparian zone. The Department is proposing to amend this general permit to align with proposed coastal general permit 33 and align with proposed freshwater wetlands general permit 17. First, at N.J.A.C. 7:13-9.13(a) the Department is proposing to specify that general permit 13 authorizes the construction of a trail or boardwalk used exclusively to carry pedestrians, to state that the general permit does not authorize construction of a restroom, gazebo, rain shelter, or any covered or enclosed structure, and to specify that this general permit does not authorize construction of a roadway for use by automobiles, golf carts, motorcycles, motorized trail bikes, all-terrain vehicles, or other motor vehicles. The scope of this general permit, as proposed to be amended, is the same as that of proposed coastal general permit 33 and freshwater wetlands general permit 17 (as proposed for amendment). To recognize this change in scope, the Department is proposing to delete existing N.J.A.C. 7:13-9.13(a)1.

The Department is proposing to incorporate new and existing conditions into N.J.A.C. 7:13-9.13(a)1 through 10. The Department is proposing conditions to align with proposed coastal general permit 33 and freshwater wetlands general permit 17 and to ensure minimal impacts on flooding and the environment; specifically, a trail or boardwalk authorized under proposed flood hazard general permit 13 is limited to a maximum of six feet wide, clearing, cutting, or removal of riparian vegetation must be the minimum necessary and cannot exceed one acre, and the trail or boardwalk must be constructed of local native sediment, woodchips, mulch, timber, or crushed rock. While existing general permit 13 only allows for 0.5 acres of disturbance, the

additional conditions proposed and the limiting of the permit to only authorize narrow pedestrian trails serve to reduce the impact on riparian zone functions and values such that allowing for up to one acre of riparian disturbance is appropriate. Additionally, existing requirements at N.J.A.C. 7:13-9.13(a)5 and 8 are proposed to be recodified as (a)2 and 6 to consolidate similar environmental conditions within the list of conditions of the permit. Existing requirements at N.J.A.C. 7:13-9.13(a)3, 4, and 6 are recodified as N.J.A.C. 7:13-9.13(a)7, 8, 9, and 10 with no substantive changes (requirements currently codified at N.J.A.C. 7:13-9.13(a)3 are proposed to be divided into two paragraphs at N.J.A.C. 7:13-9.13(a)7 and 8 to separate requirements applicable to a boardwalk from those related to changes to existing ground elevation, but the rule text is otherwise not modified). The Department is proposing to delete existing N.J.A.C. 7:13-9.13(a)2, which establishes a six-foot width limit for a pedestrian trail or boardwalk unless a wider path is needed to comply with State and Federal barrier free access requirements, in which case a maximum width of 10 feet would be permitted. As explained above, the Department is instead limiting pedestrian trails or boardwalks to six-feet wide and limiting multiple-use paths (which may include barrier-free access for pedestrians) to 10-feet wide.

The Department is proposing a new general permit at N.J.A.C. 7:13-9.14 to authorize the construction of a multiple-use path. The scope of new general permit 14 is the same as existing general permit 13, that is, this general permit authorizes the construction of a multiple-use path for use by pedestrians, livestock, and/or light vehicles such as bicycles, golf carts, or lawn tractors. The conditions proposed at N.J.A.C. 7:13-9.14(a)1 through 9 match those proposed at N.J.A.C. 7:13-9.13(a)1 through 10 with two exceptions. First, proposed N.J.A.C. 7:13-9.13(a)1 establishes a width limit of 10 feet for multiple-use paths under this general permit. Second,

N.J.A.C. 7:13-9.14(a)2 requires that no more than one-quarter acre of riparian zone vegetation is cleared, cut, and/or removed. This condition is consistent with the proposed limits of disturbance to the areas under the jurisdiction of the CZM and FWPA rules in proposed coastal general permit 34 and freshwater wetlands general permit 17A and ensures that the potentially more intensive development under this permit (including materials like pavement and a maximum width of 10 feet) do not adversely impact riparian ecosystems and regulated waters.

General Permit-By-Certification for Footbridges (N.J.A.C. 7:13-8.16)

The existing FHACA Rules contain a permit-by-rule for the construction of a footbridge at N.J.A.C. 7:13-7.23 and general permit for the construction of a footbridge at N.J.A.C. 7:13-9.12. However, discussions with trail-building and stewardship practitioners indicate that some aspects of these existing permits are inadvertently restrictive for small footbridge projects designed to maintain connectivity between backcountry trails. The Department evaluated the existing permits and the designs and practices commonly employed to build these backcountry footbridges and consulted the Green Acres Program within the Department, as well as the New York/New Jersey Trails Conference to develop new general permit-by-certification 16 proposed at N.J.A.C. 7:13-8.16.

The proposed new general permit-by-certification authorizes the construction of a footbridge designed for use by pedestrians only. The construction of the footbridge must comply with the conditions that apply to all permits-by-rule, general permits-by-certification, and general permits at N.J.A.C. 7:13-6.7. The width of the footbridge is limited to four feet wide, which is sufficient for hiking trails meant for only pedestrians and is narrower than the width in either the

permit-by-rule or the general permit. However, while permit-by-rule 23 limits the thickness of a footbridge to six inches and general permit 12 limits the thickness to eight inches between the low chord and the top of the footbridge deck, proposed general permit-by-certification 16 allows up to 14 inches of thickness from the top of the deck to the bottom of the stringer. The Department is proposing several specific conditions that ensure this thickness will not lead to offsite flooding impacts without requiring the submittal of engineering calculations.

First, the topographic elevation of any property boundaries within 500 feet upstream of the footbridge and 500 feet on either side of the footbridge must be equal to or higher than the elevation of the top of the deck plus the thickness of the footbridge. The proposed rule contains the example of a footbridge that is 12 inches (one foot) thick and where the elevation of the top of the deck is 100 feet NGVD (the national geodetic vertical datum of 1929, which is the reference datum for all surveying, topography and elevations described in the FHACA Rules). Any adjacent property boundary within 500 feet upstream and/or 500 feet to either side of the proposed footbridge must be at an elevation of at least 101 feet NGVD. This requirement is intended to ensure that the footbridge will not obstruct floodwaters, such that flooding would be exacerbated on an adjacent property. The thickness of the footbridge represents the maximum amount of flood waters that may be displaced by the structure. By requiring the elevation at property boundaries upstream and to either side of the footbridge to be at least the thickness of the footbridge higher than the height of the deck, the Department is ensuring that there will be no offsite flooding impacts without the need to review flood storage displacement calculations. This requirement only applies within 500 feet of the footbridge because, beyond that point, the footbridge will likely have no effect on flooding.

Next, as is required in permit-by-rule 23, any pinning or anchoring of the footbridge cannot involve construction in the channel. Construction in a channel could have potentially significant environmental impacts, which must be directly reviewed by Department staff and, therefore, cannot occur under a general permit-by-certification. Next, the areas above and below the footbridge must remain open to the passage of floodwaters and any handrails must have openings large enough to avoid catching debris during a flood. These requirements ensure that the footbridge and any handrails do not obstruct floodwaters, which could exacerbate flooding upstream.

The Department is also proposing to require that the existing ground elevation is not raised to accommodate or provide access to the footbridge, which could displace flood storage on the site, except for an earthen access ramp of no more than three feet in length. The strictly limited addition of fill for a small approach ramp will not exacerbate flooding and will allow pedestrians to safely utilize the bridge.

Finally, the proposed general permit-by-certification prohibits the clearing, cutting, and/or removal of trees in a riparian zone. If trees must be removed in order to construct a footbridge, the Department must directly review the potential impacts to the riparian zone and regulated water via an application for an authorization under a general permit or an individual permit application.

Herbicide Application to Control Invasive Species (N.J.A.C. 7:7-4.21 and 6.32; 7:7A-5.28; and 7:13-6.24 and 9.15)

"Invasive plant species" is defined in the CZM Rules as "a plant species that is nonnative (or alien) to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health." Controlling invasive plant species is essential to maintaining healthy vegetative communities. The CZM Rules authorize the application of pesticides in coastal wetlands to control invasive plant species through permit-byrule 21 at N.J.A.C. 7:7-4.21 (for application up to one-quarter acre) and general permit 32 at N.J.A.C. 7:7-6.32 (for application greater than one-quarter acre). Both permits require activities to be conducted pursuant to an aquatic use permit issued by the Department's Bureau of Licensing and Pesticide Operations when conducted within waters of the State or waters of the United States and prohibit adverse impacts to threatened or endangered wildlife species habitat. General permit 32 also does not authorize application of pesticide on areas containing significant stands of high vigor Saltmarsh cordgrass, Wildrice, Cattail, and common threesquare to protect native coastal wetlands species. The Department is proposing to amend permit-by-rule 21 and general permit 32 to replace each occurrence of the term "pesticide" with "herbicide" to more accurately reflect the scope of these permits. Only herbicide application with the purpose of controlling invasive plant species is authorized under these permits; application of pesticides for other purposes require an individual permit.

Because controlling invasive species is important to maintaining the health of various ecosystems, the Department is also proposing a new freshwater wetlands general permit, a new flood hazard permit-by-rule, and a new flood hazard general permit to authorize application of herbicide in freshwater wetlands and riparian zones for invasive species control. Currently, an individual permit is required for these activities.

Proposed new freshwater wetlands general permit 28 at N.J.A.C. 7:7A-5.28 authorizes the application of herbicide in freshwater wetlands to control invasive plant species. This general permit limits application of herbicide to one acre or less and requires the activities to be conducted pursuant to an aquatic use permit issued by the Department's Bureau of Licensing and Pesticide Operations. The Department is not proposing threatened and endangered species requirements because a similar requirement already exists at N.J.A.C. 7:7A-4.3, conditions that apply to all general permit authorizations.

The Department is proposing both a new permit-by-rule and a general permit to authorize herbicide application to control invasive species in riparian zones under the FHACA Rules. Proposed permit-by-rule 64, at N.J.A.C. 7:13-7.64, authorizes up to one-quarter acre of herbicide application within riparian zones provided the conditions at N.J.A.C. 7:13-6.7 are met, the activities are conducted pursuant to an aquatic use permit issued by the Department's Bureau of Licensing and Pesticide Operations, and the activities do not occur within a 300-foot riparian zone. A 300-foot riparian zone exists along all Category One waters, which are the most pristine waters in the State. Therefore, any herbicide application adjacent to Category One waters must be reviewed by the Department via an individual permit application to ensure that the activities will not adversely affect water quality or aquatic life. Proposed general permit 15 at N.J.A.C. 7:13-9.15 has identical requirements to proposed permit-by-rule 64, but allows up to an acre of herbicide application since Department staff will be reviewing the proposed herbicide use.

CZM Rule Rationales

Various stakeholders and members of the general public have expressed interest in the rule rationales that are part of several sections of the CZM Rules. The rationales provide background information, supporting scientific literature, and justification for the provisions of the CZM Rules. This rulemaking updates rule rationales and includes new rationales for rules that currently do not have rationales to foster a greater understanding of the rules. For several rules, the Department is proposing to combine rationales of various subsections of the rule into one overall rationale per section to create a uniform format.

Existing Rationales not incorporated into the Rules in 2015 (N.J.A.C. 7:7-9.12, 9.32, 9.38, 15.4, 16.3, 16.8, and 16.12)

Prior to the July 6, 2015 adoption of the consolidation of the Coastal Permit Program rules and Coastal Zone Management Rules, with amendments, rule rationales for various sections of the CZM Rules were referenced in the rules, but the rationale itself did not appear in the Administrative Code. Instead, the Code referenced the process for review of the rationale. As part of the rulemaking to consolidate the prior two coastal chapters into one chapter, most of the existing rule rationales were updated and the complete rationale incorporated into the Code version of the rules. However, several rationales were not ready for update at that time. Rather than incorporating the out-of-date rationales into the rules, those sections continued to include reference to the existence of the rationale and the process to be followed to review the rationale (see, for example, existing N.J.A.C. 7:7-9.12(c)). These rationale statements have since been updated and are proposed for publication in the Administrative Code as part of this rulemaking, as summarized below.

The Department is proposing a rationale for the submerged infrastructure routes rule at N.J.A.C. 7:7-9.12(c). The proposed rationale explains the economic investment in, and importance of, submerged infrastructure and notes that any accidental breakage of submerged infrastructure, such as oil or gas pipelines, negatively impacts both human and natural systems. Therefore, the rule excludes activities that increase this risk.

A rationale for the steep slopes rule is proposed at N.J.A.C. 7:7-9.32(d). This proposed rationale explains the benefits of preserving steep slopes, including soil erosion control, flood reduction, and minimization of surface water pollution and how removal of vegetation from steep slopes leads to erosion of the slope, increased runoff and flooding, and increased turbidity in downstream waters. The rationale explains that development on both man-made and natural steep slopes can have these adverse effects.

The proposed rationale for the public open space rule at N.J.A.C. 7:7-9.38(h) juxtaposes the decreasing supply of available open space under growing development pressure with the need of an expanding population to have public open space to satisfy its needs. The rationale describes the many benefits of public open space including serving as sites for recreational development, shaping urban growth, providing buffers between incompatible uses, preserving farmland and wildlife corridors, increasing adjacent property values, and preserving distinct architectural, historic, or geological sites. These many benefits are the basis for this rules' protection of public open space from incompatible development.

N.J.A.C. 7:7-15.4(d) contains standards for Outer Continental Shelf (OCS) oil and gas exploration and development. The Department is proposing a rationale at N.J.A.C. 7:7-15.4(d)2 to explain the purpose of the existing standards and the historical context behind the rule.

Offshore exploratory activity began off New Jersey in 1978, but did not result in well production. The rules discourage exploration of offshore areas while there continue to be viable alternatives to offshore production that result in less potential environmental impacts, including implementation of conservation measures. However, should development of these resources occur in the future, the subsection, as referenced in the rationale, makes clear that the development must comply with all energy facility requirements specified in N.J.A.C. 7:7-15.4. The standards for OCS development, by requiring compliance with the other subsections of this rule, are intended to concentrate industrial development in the coastal zone should any exploratory drilling be successful in the future.

The proposed rationale for N.J.A.C. 7:7-16.3, Water quality, at N.J.A.C. 7:7-16.3(c) links the varied uses of the coastal zone to the quality of coastal waters. The rationale lists various water quality problems in the coastal zone to illustrate the many ways in which water quality could suffer from inappropriate development. The rationale also explains the relationship mandated by the Federal Coastal Zone Management Act between the CZM Rules, State water quality rules and laws, and the Federal Clean Water Act.

The Department is proposing a rationale for the air quality rule at N.J.A.C. 7:7-16.8(d). This rationale explains the historical effect of development and industry on air quality and summarizes Federal air quality requirements under the Federal Coastal Zone Management Act and the Clean Air Act. The Department's Air Quality Regulation Group is identified as the lead in administering the State's air quality program to meet the requirements of the New Jersey Air Pollution Control Act and the Federal Clean Air Act, including determining compliance with coastal air quality policies. The rationale also contains a summary of how the Federal

government implements the Clean Air Act, which pollutants are of most concern in New Jersey's coastal zone, sources of these pollutants, and how the air quality rule seeks to minimize air pollution.

The rationale for the traffic rule, at N.J.A.C. 7:7-16.12(f), very succinctly summarizes the reasoning behind the requirements specified in N.J.A.C. 7:7-16.12. Inappropriately located development and/or a lack of adequate parking can exacerbate existing traffic issues or produce new traffic issues and should therefore be avoided by complying with the requirements of N.J.A.C. 7:7-16.12.

<u>Use Rules: Merged Rationales</u> (N.J.A.C. 7:7-15.2, 15.3, 15.4, 15.6, and 15.10)

Part of the Department's analysis of proposed development in the coastal zone includes analysis of appropriate uses of coastal resources. The use rules, N.J.A.C. 7:7-15, establish conditions applicable to particular kinds of uses.

Several use rules include standards for different types of development that fall within one overall category of use within a single section of the rules. For example, the transportation rule at N.J.A.C. 7:7-15.5 contains subsections concerning roads, public transportation, bicycle and foot paths, and parking facilities. Where different types of development are addressed in different subsections within one section of the use rules, each subsection currently has its own small rationale statement. With one exception, where this occurs in the rules, the Department is proposing to combine and update each smaller rationale statement to create one rationale statement for the entire section. The exception to this proposed approach is N.J.A.C. 7:7-15.4, Energy facilities. Because of the range of topics covered in the energy facilities rule and the

length of this section, combining rationales would reduce clarity. The Department is proposing new, combined rationales for the following rules: N.J.A.C. 7:7-15.2, Housing; N.J.A.C. 7:7-15.3, Resort/recreational; N.J.A.C. 7:7-15.5, Transportation; N.J.A.C. 7:7-15.6, Public facility; and N.J.A.C. 7:7-15.10, Commercial facility.

The housing rule, N.J.A.C. 7:7-15.2, contains requirements and limitations applicable to a wide range of housing types, including single-family detached homes, apartment complexes, high-rise buildings, and mixed use developments. Proposed N.J.A.C. 7:7-15.2(h) combines the content of existing N.J.A.C. 7:7-15.2(b)7, (c)2, (d)2, (e)14, (f)13, and (g)4 to explain the reasons behind the requirements for various types of housing development. The Department is proposing additional explanation for the distinction between floating homes and boats, which are used primarily for navigation and serve a secondary function as houses (which are not considered floating homes). Key to this distinction is that a boat's main purpose is to provide transportation on the water, which is clearly a water-dependent purpose. Next, the Department is proposing an additional sentence to describe the potential negative impacts of floating homes on water dependent and recreational uses of coastal waters, the aquatic environment, and nearshore habitats as further explanation for their prohibition. Finally, the Department is proposing to not include a portion of the existing rationale in N.J.A.C. 7:7-15.2(f)3 that describes the construction of single-family homes and duplexes in certain special areas. The discussion of development in these special areas is better suited to the rationale statements for each special area rule and, therefore, is not proposed to be included in the new rationale for N.J.A.C. 7:7-15.2.

Proposed N.J.A.C. 7:7-15.3(f) combines existing N.J.A.C. 7:7-15.3(b)3, (d)10, and (e)3, with additional content to explain standards relevant to recreation areas within developments at

N.J.A.C. 7:7-15.3(c), which is not currently included in the Administrative Code. This explanation describes how recreation is essential to mental and physical wellbeing and offers statistics from the 2013-2017 New Jersey Statewide Comprehensive Outdoor Recreation Plan summarizing past successes in preserving open space for public use and projecting future population and need for recreational opportunities. This portion of the rational concludes that development increases the demand for recreation opportunities yet consumes land necessary to provide such opportunities, which necessitates the establishment of recreation areas within developments subject to the standards at N.J.A.C. 7:7-15.3(c).

The portion of the existing rationale for marina standards at N.J.A.C. 7:7-15.3(d)10 that describes the importance of the Navesink, Shrewsbury, and Manasquan Rivers, and St. George's Thorofare, to State shellfisheries, as well as historical efforts to improve water quality in these water bodies and standards for development in these water bodies is not proposed to be continued in the proposed combined rationale at N.J.A.C. 7:7-15.3(f). Rather than update the information, which is repetitive with existing and proposed language in the rationale of the shellfish habitat rule at N.J.A.C. 7:7-9.2(m), the Department is proposing a brief recognition of the requirements for boat mooring facilities in these waters because of their importance to shellfish populations and a reference to the shellfish habitat rule rationale at N.J.A.C. 7:7-9.2(m).

The existing rationales at N.J.A.C. 7:7-15.5(a)2, (b)3, (c)4, and (d)3 are proposed to be combined into one overall rationale at N.J.A.C. 7:7-15.5(e) to support the various standards related to transportation. Language is added to facilitate the consolidation of the existing rationales without changing meaning.

The Department is proposing to combine the existing rationales at N.J.A.C. 7:7-15.6(b)2 and (c)4 with additional language to provide a rationale for the Department's requirements for various public facilities, such as solid waste facilities and water treatment systems. The proposed additional language recognizes that constructing new public facilities allows for more new development and, therefore, must be carefully considered.

Finally, proposed new N.J.A.C. 7:7-15.10(d) provides a rationale for the standards for commercial facilities by consolidating existing N.J.A.C. 7:7-15.10(a)6, (b)5, and (c)4. Commercial facilities include hotels and motels, retail services, and convention centers and arenas, which all have a particular place in coastal economies and communities. The Department is proposing an introductory sentence to facilitate the consolidation of the existing rationales, and is proposing to consolidate the last sentence of each existing rationale into one sentence at the end of the proposed rationale in order to reduce repetition without changing meaning.

New Rationales

While the Department has provided rationales for most rules in N.J.A.C. 7:7-9, 12, 15, and 16, several subchapters or sections that would benefit from further background and information do not currently include any rule rationales. To facilitate understanding of the CZM Rules, the Department is proposing a number of new rule rationales. The rationales were developed by consulting past rule proposal summaries and Department staff.

N.J.A.C. 7:7-9.46, Hudson River Waterfront Area

N.J.A.C. 7:7-9.46 establishes standards for development in the Hudson River waterfront area. The new proposed rationale at N.J.A.C. 7:7-9.46(g) explains the development history of the area and the importance of restoring public access to the waterfront in a previously industrial area of the coastal zone.

N.J.A.C. 7:7-9.47, Atlantic City

N.J.A.C. 7:7-9.47 establishes specific standards for development in Atlantic City. The proposed new rationale at N.J.A.C. 7:7-9.47(m) provides a regulatory history of the rule and states the goals for the implementation of the rule's standards.

N.J.A.C. 7:7-10, Standards for beach and dune activities

The Department is proposing rationales for each section in Subchapter 10, except for N.J.A.C. 7:7-10.1, Purpose and scope.

N.J.A.C. 7:7-10.2 contains standards for routine beach maintenance. The Department is proposing a rationale for these standards at N.J.A.C. 7:7-10.2(c). The rationale acknowledges the importance of beach maintenance activities to restore beach and dune width and contours and to facilitate public access to and enjoyment of the beach. Maintained beaches support the State's tourism economy and protect coastal development from storms. However, any beach maintenance actions must minimize impacts to ecological communities and maintain the protective functions of the beach and dune system.

The rationale describes how beach management activities may adversely affect threatened and endangered shorebirds and their habitats, which necessitates that some activities

only be allowed within specific timeframes. As stated in the rationale, the timeframes established in the rule to protect shorebirds, as well as threatened or endangered plant species, are consistent with the recommendations of the USFWS. The Division of Fish and Wildlife publishes an annually updated list of areas in which timing restrictions on beach maintenance apply. If an area not listed is found to contain a threatened or endangered species, beach maintenance activities must halt until the timing restriction is over.

The final paragraph of the rationale explains that the provisions in the section concerning maintenance of engineered beaches and dunes are necessary to ensure the protective functions of these beach and dune systems. The proposed rationale cites a paper by Barone, McKenna, and Farrell, which assessed the performance of Federally designed shore protection projects that contained dunes during Superstorm Sandy. The presence of dunes protected landward structures from the worst effects of the storm. Therefore, activities to maintain engineered beach and dune systems to the design template are vitally important to protect coastal communities.

N.J.A.C. 7:7-10.3 contains standards for emergency post-storm beach restoration. In this rationale, at N.J.A.C. 7:7-10.3(h), the Department is proposing to again emphasize the importance of dune systems in protecting coastal communities from storms. The standards in N.J.A.C. 7:7-10.3 are intended to facilitate emergency restoration activities to address erosion from storms and maintain the protective functions of dunes. The rule addresses a number of potential restoration activities, including bulldozing of sand from the lower beach profile, placement of sand-filled geotextile bags, and the generally temporary placement of materials including gravel, rock or other inert material. The rationale recognizes that which method is best in a particular situation depends upon the extent of damage, the urgency of the situation, and the

potential permanent solutions available to address the particular storm damage issues present at that location. For example, generally concrete, rubble, or rock placed on a beach as part of an emergency post-storm beach restoration plan must be removed within 90 calendar days.

Accordingly, in many situations, the temporary nature of use of those materials may make other alternatives more attractive. However, if those materials are part of a plan to permanently address the erosion caused by storms, an application may be filed seeking Department approval of an engineered design for permanent shore protection, which could make their utilization more beneficial in that circumstance. Finally, the rationale highlights that the rule also promotes the policy of the beneficial reuse of dredged material by allowing dredged material to be used as fill material for geotextile bags or geotubes.

N.J.A.C. 7:7-10.4 contains standards for dune creation and maintenance, as well as standards for dune walkover structures. The proposed rationale, at N.J.A.C. 7:7-10.4(h), references the Barone, McKenna, and Farrell study, previously referenced in the proposed rationale at N.J.A.C. 7:7-10.2, which concluded that the presence of maintained Federally designed beach nourishment projects, including engineered dunes played a significant role in protecting landward structures and infrastructure as the projects absorbed the impacts of the storm waters. The Department, therefore, seeks to facilitate the creation and maintenance of dunes for shore protection and ecological benefit. The rationale also contains context for the existing and proposed standards for dune walkovers. While walkovers are important to facilitate public access to the beach, they must be constructed and sited in a way that preserves the integrity of the dune system.

N.J.A.C. 7:7-10.5 contains standards for boardwalk construction. The proposed rationale at N.J.A.C. 7:7-10.5(b) recognizes the importance of boardwalks to the State's coastal landscape while acknowledging that boardwalks must be constructed to withstand the conditions of the dynamic coastal environment.

N.J.A.C. 7:7-11, Standards for conducting and reporting the results of an endangered or threatened wildlife or plant species habitat impact assessment and/or endangered or threatened wildlife species habitat evaluation

The Department is proposing rationales for each section in Subchapter 11. First, the Department is proposing a rationale for N.J.A.C. 7:7-11.1, Purpose and scope, to explain that the preparation of an impact assessment and/or a habitat evaluation, the standards for which are specified in Subchapter 11, is necessary to demonstrate compliance with the endangered and threatened wildlife and plant species habitat rule when activities are proposed in endangered or threatened species habitat.

N.J.A.C. 7:7-11.2 contains standards for conducting an endangered or threatened wildlife or plant species habitat impact assessment. The Department is proposing a rationale for these standards at N.J.A.C. 7:7-11.2(d). As explained in the proposed rationale, these requirements come into play when an applicant proposes a regulated activity on a site that contains or abuts areas mapped as endangered or threatened wildlife species habitat on the Landscape Maps, or in an area that otherwise meets the definition of endangered or threatened wildlife or plant species habitat as set forth in N.J.A.C. 7:7-9.26(a), and the applicant does not dispute the designation of

a site as endangered or threatened species habitat. The impact assessment must consider both direct and indirect impacts and be supported by scientific evidence.

N.J.A.C. 7:7-11.3 contains standards for conducting an endangered or threatened wildlife species habitat evaluation. As explained in the proposed rationale at N.J.A.C. 7:7-11.3(d), these requirements apply when an applicant disputes the designation of a site as endangered or threatened species habitat. There are cases where the Department's designation may no longer be accurate, but an applicant must provide a rigorous habitat evaluation to demonstrate that the habitat is not suitable for the species in question.

N.J.A.C. 7:7-11.4 sets forth standards for reporting the results of impact assessments and habitat evaluations. Proposed N.J.A.C. 7:7-11.4(d) provides the Department's rationale for this section. Standard report requirements facilitate the Department's evaluation of whether a proposed activity would impact an endangered or threatened species and of whether a particular area is actually suitable habitat for a particular species. The rationale also explains the reasoning behind the differing requirements for an animal species versus a plant species and explains that the names and qualifications of all investigators involved in the assessment or evaluation must be provided to ensure only information from qualified professionals is considered in determining if an activity will impact a species or if a site is suitable habitat.

N.J.A.C. 7:7-13, Requirements for impervious cover and vegetative cover for general land areas and certain special areas

Subchapter 13 sets forth the process and requirements for determining the amount of impervious cover that may be placed on a site and the amount of vegetative cover that must be

preserved or planted on a site. The Department is proposing a rationale for each section of this subchapter, except for N.J.A.C. 7:7-13.2, Definitions, which is self-explanatory.

The proposed rationale for the introductory section, N.J.A.C. 7:7-13.1, Purpose and scope, proposed at N.J.A.C. 7:7-13.1(k), explains the importance of limiting impervious cover and requiring a certain amount of vegetative cover. Healthy vegetative communities allow rainwater infiltration and groundwater recharge, and absorb and slow runoff during storms, which maintains water quality. Conversely, placement of impervious surface seals the ground and allows more stormwater runoff to enter waterways, potentially carrying pollutants. The rationale goes on to explain why certain developments are not subject to the impervious cover percentages and vegetative cover requirements. The rationale provides the legal history for why electrical substations are exempt from the requirements of Subchapter 13 (see the January 2006 Administrative Consent Order filed in the *Matter of Atlantic City Electric Company, Conectiv* and PEPCO Holdings, Inc., Docket Number A-1156-03). Regarding the development of one or two single-family homes or duplexes, impervious cover is limited at these developments due to lot size, presence of special areas, and local zoning, and if constructed under a general permit, the development is subject to separate stormwater management requirements. Wind turbines are exempt from the requirements in Subchapter 13 in order to facilitate renewable energy development and because energy development serves a public need. Similarly, mining operations, sanitary landfills, wastewater treatment plants, and water treatment plants serve a public need and are, therefore, exempt from the requirements of Subchapter 13. Public parks and aquaculture development both have minimal impacts and are, thus, exempt from this subchapter

as well. N.J.A.C. 7:7-13.1(k) concludes by explaining how the requirements of Subchapter 13 interact with municipal master plans and with other requirements within N.J.A.C. 7:7.

N.J.A.C. 7:7-13.3 sets forth general impervious cover requirements that apply to sites both in the upland waterfront development and CAFRA areas. The rationale for this section, proposed at N.J.A.C. 7:7-13.3(g), first explains why it is necessary to limit impervious cover. The Department is next proposing to explain that stormwater management facilities are not counted toward the impervious cover limit because they are specifically designed to collect and manage stormwater runoff that results from the placement of impervious cover, and because many stormwater management basins are vegetated. The rationale also provides a statutory citation to explain why solar panels are not included in the calculation of impervious cover, except for the foundation or base. Next, the rationale explains that special water's edge areas are subtracted from the total land area on a site because impervious surface cannot be plants on those areas. The total land area used in subsequent calculations represents the total usable land area. Finally, the Department is proposing to explain why certain site remediation projects may involve more impervious cover than normally allowed under the subchapter. In some cases, the environmental benefit of remediating a site supersedes the potential environmental impacts of placing a larger amount of impervious surface on the site. However, such an increase will only be allowed if required under the Department's Technical Requirements for Site Remediation, N.J.A.C. 7:26E.

N.J.A.C. 7:7-13.4 sets forth general vegetative cover requirements that apply to sites both in the upland waterfront development and CAFRA areas. The proposed rationale at N.J.A.C. 7:7-13.4(h) first describes the beneficial functions of vegetation. Next, the reasoning behind allowing

a mix of trees and herb/shrub vegetation in certain areas of the State is provided. These areas are densely developed and flexible requirements allow for landscaping that is appropriate to an urban setting. Next, the requirements related to planting or preserving trees in clusters are explained. There is some flexibility for residential developments of 24 units or fewer to recognize the limitations of lot size and orientation.

N.J.A.C. 7:7-13.5 sets forth the procedure for determining if a site is forested or unforested. Whether a site is classified as forested or unforested affects the percentage vegetative cover and tree planting requirements that apply to the site. The proposed rationale, at N.J.A.C. 7:7-13.5(f), discusses the Department's selection of the Highlands method to determine if a site is forested or unforested for the purposes of the CZM Rules and summarizes the steps in using the method.

N.J.A.C. 7:7-13.6 contains provisions for determining upland waterfront development area regions and growth ratings. In the rationale proposed at N.J.A.C. 7:7-13.6(f), the Department explains that assigning growth ratings for different waterfront development area regions promotes the concentrate of development in areas that are already developed to reduce potential environmental impacts and steer development away from regions with large environmentally sensitive areas.

N.J.A.C. 7:7-13.7 contains the process for determining the environmental sensitivity of a site. As explained in the rationale proposed at N.J.A.C. 7:7-13.7(e), this determination is based on soil type and the depth to seasonal high water table, which both affect how vulnerable an area is to adverse impacts associated with development. The rationale provides descriptions of each environmental sensitivity ranking (high, medium, and low) to explain how development may

affect different areas and provide context for limiting development based on environmental sensitivity.

N.J.A.C. 7:7-13.8 sets forth how to determine the development potential of a site in the upland waterfront development area. In the proposed rationale at N.J.A.C. 7:7-13.8(f), the Department explains that the development potential of a site is a ranking that reflects whether there is infrastructure necessary to support a development, and whether there is other development nearby. The rationale explains that the Department wants to direct new development to areas with existing development-oriented elements to support it, including roads and wastewater treatment. As emphasized in existing N.J.A.C. 7:7-13.8(b) and proposed to be stated in the rationale, if a development is proposed that is inconsistent with the applicable Areawide Water Quality Management Plan, adopted in accordance with the Water Quality Management Planning rules, N.J.A.C. 7:15, it is prohibited and the site will not be assigned a development potential. Finally, the proposed rationale explains how development potential for a site differs depending on the type of development proposed, as illustrated by an example.

N.J.A.C. 7:7-13.9, 13.10, and 13.11 set forth how to determine the development potential in the upland waterfront development area for a residential or minor commercial development, major commercial or industrial development, and campground development, respectively. The proposed rationales for these sections explain why certain aspects of a site result in a high or low development potential for these different types of developments. The rationales overall reflect the Department's policy of concentrating development.

N.J.A.C. 7:7-13.12 sets forth the process to determine the development intensity of a site in the upland waterfront development area. As explained in the proposed rationale at N.J.A.C.

7:7-13.12(c), development intensity considers the growth rating of the region in which a site is located, environmental sensitivity of the site, and the development potential, and which in turn decides the impervious cover and vegetation requirements for the site.

N.J.A.C. 7:7-13.13 assigns an impervious cover limit for a site in the upland waterfront development area based on the development intensity calculated under N.J.A.C. 7:7-13.12. The rationale proposed at N.J.A.C. 7:7-13.13(d) summarizes how to calculate impervious cover limits for different sites and explains why different sites have different impervious cover limits while reiterating the potential adverse impacts of impervious surfaces.

N.J.A.C. 7:7-13.14 assigns vegetative cover percentages for sites in the upland waterfront development area. The rationale proposed at N.J.A.C. 7:7-13.14(d) summarizes how to calculate vegetative cover percentages and explains why vegetative cover on a site is important.

N.J.A.C. 7:7-13.15 describes the different Coastal Planning Areas in the CAFRA area. The proposed rationale, at N.J.A.C. 7:7-13.15(g) explains how designating planning areas allows the Department to preserve ecologically sensitive areas and steer development towards densely developed areas and areas with existing infrastructure.

N.J.A.C. 7:7-13.16 describes which planning area boundaries will be considered in permit decisions under the CZM Rules and establishes the process for incorporating State Planning Commission boundaries into the CZM Rules or rejecting changes in boundaries. The rationale proposed at N.J.A.C. 7:7-13.16(j) provides the history of the original Planning Area boundaries and the logic behind incorporating these original boundaries. The rationale then explains the distinction between the State Planning Commission boundaries and the CAFRA

Planning Map boundaries, and summarizes the current process for the Department to evaluate new or revised State Planning Commission boundaries.

N.J.A.C. 7:7-13.17 sets forth how to determine impervious cover limits for a site in the CAFRA area, which is based upon the classification under the CZM Rules of the area within which the site is located (for example, the coastal planning area within which the site is located and whether it is within a CAFRA center, core, or node). The rationale proposed at N.J.A.C. 7:7-13.17(h) explains how the impervious cover percentages are determined for different areas and explains how the resulting percentages relate to the existing development and infrastructure on and around the site in question. The rationale explains how the impervious cover limits are intended to concentrate development.

N.J.A.C. 7:7-13.18 provides the process for determining vegetative cover percentages for a site in the CAFRA area. As explained in the rationale at proposed N.J.A.C. 7:7-13.18(d), vegetative coverage requirements are based on whether the site is forested or unforested and its location and existing development patterns. The rationale explains the calculations in the section, their implications for tree planting requirements in N.J.A.C. 7:7-13.4, and how these limits are intended to concentrate development.

N.J.A.C. 7:7-13.19 describes mainland coastal centers in the CAFRA area. The section, and its proposed rationale at N.J.A.C. 7:7-13.19(g), provide the history for the incorporation of mainland coastal centers in the CZM Rules and a timeline of their extensions and expirations. The rationale also explains why certain areas are not included within coastal center boundaries.

N.J.A.C. 7:7-14, General location rules

The Department is proposing rationales for N.J.A.C. 7:7-14.1 and 14.2, which do not currently have rationales.

The proposed new rationale at N.J.A.C. 7:7-14.1(b) explains the commonsense approach reflected by the rule on location of linear development. Flexibility is provided in certain cases only where a suite of requirements are met to protect the coastal environment while allowing development that serves a public need.

The proposed new rationale at N.J.A.C. 7:7-14.2(b) describes how the basic location rule affords the Department appropriate discretion for the Department to address unusual circumstances but sets forth parameters for Department staff in these circumstances.

N.J.A.C. 7:7-15.4, Energy facility

As indicated above, because of the range of topics covered by the energy facility rule, the Department is not merging rationale statements in this section into one subsection of the rule. While most of the subsections in N.J.A.C. 7:7-15.4 contain rationale statements, the standards for siting new energy facilities at N.J.A.C. 7:7-15.4(b) currently do not. The proposed rationale at N.J.A.C. 7:7-15.4(b)6 explains how the siting standards are intended to preserve waterfront areas for water-dependent development, ensure that energy facilities that are allowed are subject to siting standards that preserve coastal values present in the coastal zone, and recognize the differing impacts of different types of energy facilities.

N.J.A.C. 7:7-16.6, Stormwater management

N.J.A.C. 7:7-16.6 requires projects or activities conducted under the CZM Rules to comply with the Department's Stormwater Management Rules at N.J.A.C. 7:8 if they meet the definition of major development at N.J.A.C. 7:8-1.2. The proposed rationale at N.J.A.C. 7:7-16.6(b) provides context on the Stormwater Management Rules and explains that, because development contributes to the types and amounts of pollutants in stormwater runoff, and to the overall amount of runoff, major development in the coastal zone must comply with the requirements of these rules.

Rationale Updates

In addition to minor grammar edits and updates of statistical information, the Department is proposing to amend several existing rationales to incorporate additional information regarding the particular rule provision. These changes are summarized below.

Shellfish habitat (N.J.A.C. 7:7-9.2)

The Department is proposing several amendments to the rationale of the shellfish habitat rule at N.J.A.C. 7:7-9.2(m). The Department is proposing to add a paragraph to this rationale to describe mitigation for impacts to shellfish habitat associated with the construction of a dock, pier, mooring, or marina. Mitigation for impacts to shellfish habitat includes recording a conservation restriction to mitigate for the impacts to the marine ecosystem, which prohibits the construction of a shoreline protection structure other than stone rip-rap or other sloped revetments on an unbulkheaded lot, or the replacement, reconstruction, or rehabilitation of an existing bulkhead with anything other than non-polluting materials. Mitigation also includes a

monetary contribution to the Department's dedicated account for shellfish habitat mitigation, the amount of which is based on the area of shellfish habitat covered by proposed structures and mooring areas, the documented shellfish density supported by the local habitat, and the commercial value of the shellfish resource. The Assistant Commissioners of Land Use Management and Natural and Historic Resources recently signed a Memorandum of Understanding to formalize a framework for the use and management of funds from the dedicated account. In general, funds are used for a variety activities to support research, monitoring of shellfish stocks, and shellfish habitat enhancement activities.

The existing rationale includes discussion of requirements applicable to replacement, reconstruction, or renovation of existing waters classified as prohibited for the harvest of shellfish, including the reason that replacement or reconstruction offshore of an existing bulkhead is allowed under N.J.A.C. 7:7-9.2(i) provided certain conditions are met. The Department is proposing to clarify that this allowance, which is intended to encourage the elimination of polluting materials in shellfish habitat, is only applicable to waters containing shellfish habitat where the water has been classified as prohibited for harvesting shellfish and not to shellfish habitat in general.

The Department is also proposing to update information in the rationale related to the Navesink River, Shrewsbury River, Manasquan River, and St. George's Thorofare. The description of the past moratorium on construction of docks in St. George's Thorofare and continued recommendation to deny permit applications for new docks in St. George's Thorofare is proposed to be deleted. The Department no longer denies applications for docks in St. George's Thorofare provided the requirements of the shellfish habitat rule are met. Instead, the

Department is proposing to state that compliance with specific standards for boat mooring facilities with five or more slips within the listed watercourses is required, in reference to the requirements at N.J.A.C. 7:7-15.3(d)9. The final paragraph is proposed to be updated to reflect the current conditions of the Navesink, Shrewsbury, and Manasquan Rivers, including the designation of the Manasquan River as a No Discharge Zone.

Shipwreck and artificial reef habitats (N.J.A.C. 7:7-9.13)

The Department is proposing to amend the rationale of the shipwrecks and artificial reef habitats rule at N.J.A.C. 7:7-9.13(d) to add additional information on the current status of the State's artificial reef program. The Department is proposing to update the rationale to indicate that Federal funding for artificial reefs was restored in 2016 and that as many as 10 additional vessels may be deployed to create artificial reef habitats in New Jersey.

Dunes (N.J.A.C. 7:7-9.16)

The Department is proposing to supplement the rationale of the dunes rule at N.J.A.C. 7:7-9.16 with a discussion of the 2014 paper "Hurricane Sandy: Beach-dune performance at New Jersey Beach Profile Network sites" to support the protective requirements of the rule. This paper concluded that Federally designed shore protection projects that included engineered dunes provided protection to landward structures during Superstorm Sandy. The communities that suffered the greatest damages from Superstorm Sandy were those where dunes were nonexistent, or where the elevations of dunes and beach berms were low or beach widths were narrow.

Erosion hazard areas (N.J.A.C. 7:7-9.19)

The Department is proposing to update the rationale at N.J.A.C. 7:7-9.19 to replace the reference to the computer program "Metric Mapping Analysis of New Jersey's Historical Shoreline Data" with the program "Digital Shoreline Analysis System," developed by United States Geological Survey. This program is the currently utilized program for determining shoreline change trends.

Grammar Edits and Minor Updates

Rationales for the following rules are edited for grammar or clarity and/or updated with new information, such as updated statistics or contact information: N.J.A.C. 7:7-9.6, Submerged vegetation habitat; 9.8, Canals; 9.14, Wet borrow pits; 9.17, Overwash areas; 9.20, Barrier island corridor; 9.28, Wetlands buffers; 9.30, Intermittent stream corridors; 9.33, Dry borrow pits; 9.40, Excluded Federal lands; 9.45, Geodetic control reference marks; 12.5, Recreational docks and piers; 12.15, Submerged pipelines; 12.16, Overhead transmission lines; 12.20, Vertical wake or wave attenuation structures; 15.4(i), (n), (o), (r), (s), Energy facilities; 15.7, Industry; 15.9, Port; 15.11, Coastal engineering; 16.2, Marine fish and fisheries; 16.7, Vegetation; and 16.13, Subsurface sewage disposal systems. Unless otherwise discussed in this Summary, the changes proposed to these rationales do not significantly affect organization or meaning.

CAFRA Findings (N.J.A.C. 7:7-1.4)

P.L. 2015, c. 260 confirmed the Department's authority to require public access as a condition of a permit. The law amended the findings that must be made for the Department to issue a CAFRA permit to add the following:

"Provides, pursuant to standards established by rule or regulation adopted pursuant to the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.), on-site public access to the waterfront and adjacent shoreline, or off-site public access to the waterfront and adjacent shoreline if on-site public access is not feasible as determined by the department."

Under this rulemaking, the Department is amending N.J.A.C. 7:7-1.4(b), which identifies the findings the Department must make concerning a proposed development in order to approve a CAFRA permit to reflect this statutory change.

Building Access in Flood Hazard Areas

The Department is proposing a number of changes to the FHACA Rules concerning building access. The proposed changes will simplify and consolidate provisions and promote responsible development.

Requirements for a railroad, roadway, and parking area (N.J.A.C. 7:13-12.6)

Several amendments are proposed to existing N.J.A.C. 7:13-12.6, which establishes requirements for railroads, roadways, and parking areas in areas regulated under the FHACA Rules. The existing rules establish several different requirements applicable to roadways and parking areas depending upon whether the roadway or parking area is associated with a public or

private use, the type of structure the roadway or parking area serves (for example, a single-family home or duplex, a critical building or multi-residence, or a building not falling into one of those two categories) and whether it is to be located in a fluvial or tidal flood hazard area. These separate requirements have proven confusing to applicants and in some cases prevented development that would have been appropriate from being approved.

As indicated above, the existing rules, at N.J.A.C. 7:13-12.6(c), (d), and (e), establish requirements applicable to a private roadway and any associated parking area serving one single-family home or duplex, requirements applicable to a private roadway that serves a critical building or multi-residence building, and requirements applicable to a private roadway that does not fall within one of the first two groups. The Department is proposing to delete existing N.J.A.C. 7:13-12.6(c), which establishes the requirements for driveways serving a single-family home or duplex that is not part of a residential subdivision. These provisions have had the effect of requiring a hardship exception for any driveway in a tidal flood hazard area, since most of these properties are the result of subdivisions.

In place of the requirements proposed for deletion, the Department is proposing to incorporate driveways that serve single-family homes or duplexes into amended requirements of recodified N.J.A.C. 7:13-12.6(d). The Department is also adding a new provision to N.J.A.C. 7:13-12.5 to explain how subdivisions may affect approval of an application to construct a single-family home or duplex, as discussed in the "Requirements for a building" section of this summary, below.

Where the Department determines that it is appropriate to allow construction of a driveway at a single-family home or duplex with a travel surface that is less than one foot above

the flood hazard area design flood elevation, existing N.J.A.C. 7:13-12.6(c)3ii and iii require that the applicant modify the deed of the property to notify future potential property owners of the likelihood of flooding and explain to future owners the extent of flooding of the driveway areas during the FEMA 100-year flood or the flood hazard area design flood, with the modified deed required to be recorded with the applicable County Clerk or registrar of deeds and mortgages. These requirements are proposed to be recodified to new N.J.A.C. 7:13-12.6(f) and expanded so that these requirements apply not only to driveways serving single-family homes or duplexes, but also to any private roadway or parking area that is constructed less than one foot above the flood hazard area design flood elevation. The Department has determined that future purchasers, lessees, or renters of any property, not just purchasers of a single-family home or duplex, should be made aware of the likelihood that access to a building may be compromised by floodwaters and the extent of the flooding that would occur during the specified flood event (that is, the FEMA 100-year flood, if available, or the flood hazard area design flood).

The Department is proposing to recodify existing N.J.A.C. 7:13-12.6(d) to N.J.A.C. 7:13-12.6(c) with amendments. While the existing subsection applies to private roadways serving a critical building or any multi-residence building, the Department is proposing for the amended section to apply to roadways and parking areas serving critical buildings in fluvial flood hazard areas and those serving multi-residence buildings that are not part of a redevelopment project. This section requires a proposed private roadway or parking area to be constructed at least one foot above the flood hazard area design flood elevation, unless the building is already served by one or more roadways and/or parking areas, in which case the additional roadway and/or parking area may be constructed at a lower elevation as close as feasible to one foot above the flood

hazard area design flood elevation. While this subsection allows for the possibility that new roadways and parking areas may be allowed to be constructed less than one foot above the flood hazard area design flood elevation, in all cases a critical building or a multi-residence building that is not part of a redevelopment project must have at least one roadway with a travel surface at least one foot above the flood hazard area design flood elevation. The existing provision for roadways in tidal areas at N.J.A.C. 7:13-12.6(d)3 is proposed to be deleted because roadways and parking areas serving critical and multi-residence buildings in tidal flood hazard areas are addressed by proposed N.J.A.C. 7:13-12.6(d), summarized below.

As referenced above in the discussion of the proposed deletion of existing N.J.A.C. 7:13-12.6(c), existing N.J.A.C. 7:13-12.6(e) is proposed to be recodified as N.J.A.C. 7:13-12.6(d) with amendments. As amended, this subsection sets forth requirements for private roadways or parking areas serving buildings not addressed by proposed N.J.A.C. 7:13-12.6(c). The Department is proposing to delete the list of examples in the existing subsection because it is not exhaustive and could be misleading. As previously discussed, the proposed amendments expand the existing subsection to also apply to private roadways or parking areas serving single-family homes or duplexes, critical buildings and multi-residence buildings in a tidal flood hazard area, and multi-residence buildings in a fluvial flood hazard area that are part of a redevelopment project as these buildings are not covered under proposed N.J.A.C. 7:13-12.6(c).

Similar to proposed N.J.A.C. 7:13-12.6(c), proposed N.J.A.C. 7:13-12.6(d) provides that an individual permit to construct or reconstruct a private roadway or parking area will be issued if the travel surface of a private roadway or parking area is constructed at least one foot above the flood hazard area design flood elevation or if an existing roadway and/or parking area that

Department recognizes that this is not always feasible and therefore allows the roadway or parking area to instead be constructed as close to this elevation as is feasible if the applicant is able to demonstrate strict compliance is not feasible in accordance with proposed N.J.A.C. 7:13-12.6(e) (existing N.J.A.C. 7:13-12.6(g)).

Existing N.J.A.C. 7:13-12.6(f), which sets forth requirements to construct or reconstruct a parking area, is proposed to be deleted because requirements for parking areas are proposed to be included with requirements for roadways at subsections (c) and (d).

Existing N.J.A.C. 7:13-12.6(g) is proposed to be recodified as N.J.A.C. 7:13-12.6(e) with amendments. This subsection sets forth what must be provided to demonstrate that is not feasible to construct the travel surface of a railroad, roadway, or parking area at least one foot above the flood hazard area design flood elevation. The existing requirements are continued and clarified with amendments. The demonstration in existing N.J.A.C. 7:13-12.6(g)1iv that strict compliance with the elevation requirement would result in a design that would cause increases in the flood hazard area design flood elevation is proposed to be amended to refer more generally to any increases in flooding. The existing requirement does not reflect situations where raising a roadway to meet the elevation requirements may cause increases in flooding but not rise to the level of significantly increasing the flood hazard area design flood elevation. Designs that would exacerbate flooding even under smaller-scale flood events are not conducive to the goal of protecting people and property from the impacts of flooding. The proposed requirement takes into account activities that may be smaller in scope or impact but would still have very real adverse effects, such as exacerbating "nuisance" flooding under more common storm events. The

Department is also proposing to list railroads in addition to roadways and parking areas in N.J.A.C. 7:13-12.6(e)2 and 3 for consistency with the scope of this section.

Existing N.J.A.C. 7:13-12.6(g)3 requires an applicant proposing to construct a railroad, roadway, or parking area less than one foot above the flood hazard area design flood elevation to demonstrate that no extraordinary risk is posed to any person using each access or parking area. The Department is proposing to add requirements for what this demonstration shall include. First, the applicant must provide an analysis of the depth and frequency of floodwaters that will inundate the railroad, roadway, or parking area. A roadway or parking area serving a multiresidence building in a fluvial flood hazard area cannot be situated greater than 12 inches below the flood hazard area design flood elevation in order to allow emergency vehicles to reach the building. Second, the applicant must identify the number of people that will be adversely impacted when the railroad, roadway, or parking area is inundated. The greater the number of people potentially impacted during a flooding event and the corresponding increase in stress placed on emergency services, the less likely it is that the request for a waiver of strict compliance with the elevation standard would be approved. Finally, the applicant must identify measures proposed to ameliorate the probably adverse impacts. These measures may include evacuation plans, provisions for emergency electrical service during a power outage, and floodproofing measures. These measures will allow public safety to be protected even when the railroad, roadway, or parking area is constructed below the desired elevation.

The signage requirements in existing N.J.A.C. 7:13-12.6(g)4 are proposed to be continued without change as N.J.A.C. 7:13-12.6(e)4.

Requirements for a Building (N.J.A.C. 7:13-12.5)

The Department is proposing amendments to N.J.A.C. 7:13-12.5, Requirements for a building, in concert with the amendments to N.J.A.C. 7:13-12.6 summarized above. The Department is proposing to simplify existing N.J.A.C. 7:12-12.5(o), which sets forth requirements to construct a critical or multi-residence building, or convert an existing building to one of these uses. Rather than repeat requirements that are duplicative of the requirements for private roadways at N.J.A.C. 7:13-12.6, as the existing subsection does, the Department is proposing to instead refer to the applicable requirements in that section. In order to construct a critical building or multi-residence building, or convert an existing building to one of those uses, an applicant must either demonstrate that the building is served by an existing roadway with a travel surface constructed at least one foot above the flood hazard area design flood elevation, or propose to construct a roadway compliant with the FHACA Rules. If there is no existing roadway, then different requirements apply depending upon whether the building is proposed to be located in a fluvial flood hazard area or in a tidal flood hazard area. In a fluvial flood hazard area, the applicant must propose to construct or reconstruct a roadway in accordance with proposed N.J.A.C. 7:13-12.6(c) or (d). If the building is located in a tidal flood hazard area, the applicant may demonstrate that the required access is not feasible in accordance with proposed N.J.A.C. 7:13-12.6(e). Requirements differ based on whether fluvial or tidal flooding is a concern due to the different timescales involved in these flood events. Tidal flooding generally occurs as part of a coastal storm, for which there is warning days in advance. Coastal communities have time to evacuate in advance of the flood event. However, fluvial flooding may come with very little warning, which makes evacuation prior to the flood event infeasible.

Maintaining access to critical buildings, which provide essential emergency services during flood events, and to multi-residence buildings, which house a relatively larger number of people who could otherwise be trapped during a flood, is of paramount importance to public safety in fluvial flood hazard areas and, therefore, is necessary for the Department to approve either type of building.

The Department is proposing a new subsection at N.J.A.C. 7:13-12.5(q) to clarify how subdivisions in flood hazard areas affect approvals of single-family homes or duplexes. In order for the Department to issue an individual permit for a single-family home or duplex on a lot in a fluvial flood hazard area that was created or subdivided after November 5, 2007 (the date the revised FHACA Rules were first adopted), the applicant must demonstrate that none of the other lots created in the subdivision contain a habitable building or an authorization from the Department to construct a habitable building in the flood hazard area. This requirement is similar to the requirement that applies to subdivisions in the riparian zone at N.J.A.C. 7:13-11.2(m)2 and is intended to guide development away from environmentally sensitive and flood-prone areas. While the existing requirements for private roadways serving single-family homes or duplexes had the effect of restricting construction to one home or duplex per lot as it existed before November 5, 2007, the Department is proposing to clearly and concisely state these requirements in the requirements for a building to improve understanding and promote responsible development.

To accommodate new subsection (q), existing N.J.A.C. 7:13-12.5(q) through (t) are proposed to be recodified as N.J.A.C. 7:13-12.5(r) through (u) with amendments only to citation cross-references impacted by the amendments described above.

Riparian Zone Preservation (N.J.A.C. 7:13-13.12)

The Department is proposing to amend N.J.A.C. 7:13-13.12, Riparian zone preservation, to adjust success criteria for riparian zone mitigation provided via preservation. The existing rules at N.J.A.C. 7:13-13.12(e) require both the recording of a conservation restriction on the area to be preserved and require the mitigator to transfer the property to a government agency or Department-approved charitable conservancy in order for the mitigation to be considered successful and complete. The Department is proposing to remove the requirement to transfer the preserved riparian zone for the reasons described below.

This transfer requirement has proven difficult to implement due to the size and orientation of preserved riparian zones. First, many municipalities will not approve the subdivision of a lot if one or more of the resulting lots will not have frontage on a public roadway. If the regulated water is far from the nearest roadway, the preserved portion of the lot may not be able to be subdivided to allow the preserved riparian zone to be transferred to a new owner. Additionally, preserved riparian zone parcels are generally small and linear. Many agencies and conservancies are not interested in obtaining these types of properties, making it difficult for mitigators to successfully complete their mitigation.

In addition, the FHACA Rules require riparian zone mitigation to occur as close as possible to the location of the impacts and, for impacts to a 300-foot riparian zone, along the same regulated water as the impacts. If riparian zone preservation is the required mitigation alternative, the requirement to transfer the preserved area to a conservancy or government agency can have the opposite effect. A site that is closer to the impacts and suitable for

preservation may, for the reasons described above, not be suitable to transfer to an agency or conservancy. The mitigator would then need to find a preservation area further from the impacts in order to satisfy the transfer requirement.

Because transfer of the preserved portion of riparian zone is in many cases not practical, and because the requirement to record a conservation restriction already ensures the preserved riparian zone will not be disturbed by future development, the Department is proposing to delete the transfer requirement.

Application Requirements

The Department is proposing several amendments to clarify application requirements.

Amendments are proposed in the CZM Rules, FHACA Rules, and FWPA Rules to create predictability and consistency.

Applicants (N.J.A.C. 7:7-23.2 and 7:13-18.2)

The Department is proposing to amend N.J.A.C. 7:7-23.2 in the CZM Rules and N.J.A.C. 7:13-18.2 in the FHACA Rules to clarify who may submit an application under the respective rules. The proposed changes will align this requirement with the existing FWPA Rules at N.J.A.C. 7:7A-10.1(e). Specifically, the Department is proposing to add, at N.J.A.C. 7:7-23.2(c)4 and 7:13-18.2(c)4, that a person that has the legal authority to perform the activities proposed in the application on the site, and to carry out all requirements of the CZM or FHACA Rules, respectively, may submit an application for a permit, authorization, or verification. This language is intended to more explicitly address situations where applicants are undertaking development

on their own behalf with owner consent or pursuant to an order overriding municipal objections that are not clearly included under existing N.J.A.C. 7:7-23.2(c)2 or 7:13-18.2(c)2.

<u>Consent for Activities in a Municipally Owned Right-of-Way</u> (N.J.A.C. 7:7-23.2, 7:7A-10.2, and 7:13-18.2)

Amendments are proposed to N.J.A.C. 7:7-23.2(g) and 7:13-18.2(g) and a new subsection proposed at N.J.A.C. 7:7A-10.2(e) to clarify what constitutes consent for activities located within a right-of-way or easement. Proposed N.J.A.C. 7:7A-10.2(e) requires an application for activities in a right-of-way or easement to include written consent from the holder(s) of the right-of-way or easement. This language is identical to existing language in the CZM and FHACA Rules and is necessary to ensure that the person proposing to conduct an activity is legally able to do so.

Proposed N.J.A.C. 7:7A-10.2(e)1, 7:7-23.2(g)1, and 7:13-18.2(g)1 address the situation where the proposed project is a gas pipeline located within a municipally owned right-of-way. The proposed provisions, which are identical across the CZM, FHACA, and FWPA Rules, identify three options that constitute written consent for such activities to demonstrate the applicant's legal right to construct in the municipal right-of-way. First, similar to other applications filed by an applicant with the consent of a private property owner, consent may consist of written consent from the municipality. Proof of such consent may be provided either through a resolution of the governing body of the municipality or through a municipal ordinance. However, there are two other options proposed that are specific to gas pipelines due to the statutory provisions of N.J.S.A. 48:9-25.4. First, a municipal designation of the route in

accordance with N.J.S.A. 48:9-25.4 will be accepted as consent from the holder of the right-of-way. Where a municipality has designated the route sought to be approved in the permit application, the Department views that designation as sufficient to demonstrate consent for the activity sought to be authorized. However, the Legislature has also authorized the Board of Public Utilities (BPU) to designate a route where a municipality fails or refuses to designate a practicable route. Where the BPU has made such a designation, the Department views that designation as overriding any municipal objection to the pipeline's location. Such a designation is, thus, sufficient for the Department to undertake review of the permit application. Any project authorized where written consent is in the form of a BPU-designation will remain subject to any other required approvals, including, but not limited to, municipal road opening permits.

<u>Coordination with New Jersey Pinelands Commission</u> (N.J.A.C. 7:7-23.6 and 24.3; and 7:13-18.4 and 19.3)

The CZM Rules at N.J.A.C. 7:7-23.6(c) and 24.3(e) and FHACA Rules at N.J.A.C. 7:13-18.4(b) and 19.3(f) address coordination with the New Jersey Pinelands Commission for activities regulated under the CZM and FHACA Rules and proposed within the Pinelands Area. To align the requirement in these rules, the Department is amending the above provisions to refer to the Pinelands Area as the "Pinelands Area as designated under the Pinelands Protection Act at N.J.S.A. 13:18A11(a)." While the existing description of areas addressed by N.J.A.C. 7:7-23.6(c) and 24.3(e) are slightly different, the intent of the provisions is to ensure proper coordination with the Pinelands Commission where activities in the coastal zone fall within an area of their jurisdiction. The proposed change eliminates any potential confusion by aligning the

language between the two provisions and with similar provisions in the FHACA Rules.

In addition, at N.J.A.C. 7:7-23.6(c), the reference to the "Notice of Filing" is proposed to be deleted since this notice is no longer issued by the Pinelands Commission.

Cleanup/Consistency

Since the adoption of the rulemaking consolidating the two prior coastal chapters into the CZM Rules at N.J.A.C. 7:7, effective July 6, 2015, the Department has discovered some errors that are proposed to be corrected in this rulemaking. First, there are a number of typographical and grammatical errors throughout the rules that are proposed to be corrected. The Department is also proposing to update outdated information on species names, links to publications, and Department organization. In addition to these very minor changes, the Department is proposing several more substantive changes to correct errors, provide clarification, and improve the consistency between the CZM, FWPA, and FHACA Rules, described below.

Shellfish Habitat

The Department is proposing to delete the reference to "the "Inventory of Delaware Bays Estuarine Shellfish Resources" (Division of Fish, Game and Wildlife, Bureau of Shellfisheries, 1993)" from N.J.A.C. 7:7-9.2(a)2. The inventory of Delaware Bay estuarine shellfish resources is included within the publication, "Inventory of New Jersey's Estuarine Shellfish Resources" (Division of Fish, Game and Wildlife, Bureau of Shellfisheries, 1983-present), which remains referenced in this rule.

<u>Timeframes for a Request for Reconsideration</u>

The Department is proposing to clarify the timeframes set forth in N.J.A.C. 7:7-19.2, Reconsideration of the application of a rule(s) in this chapter. At N.J.A.C. 7:7-19.2(i)3 and (j), the Department is proposing to specify that the 15-day and 30-day timeframes set forth are counted by "calendar day." Calendar days are distinct from "working days," which only include those days on which the Department is open for business.

Permit-by-Rule 14 (N.J.A.C. 7:7-4.14)

Permit-by-rule 14, in the CZM Rules at N.J.A.C. 7:7-4.14, authorizes the reconfiguration of any legally existing dock, wharf, or pier at a legally existing marina. In addition to two very minor grammatical changes, the Department is proposing to clarify the scope of this permit. At N.J.A.C. 7:7-4.14(a), the Department is proposing to add that the authorized reconfiguration of a legally existing dock, wharf, or pier at a legally existing marina includes the reconfiguration of any associated pilings. Reconfiguration of pilings must comply with the same limits as reconfiguration of the dock, wharf, or pier, as provided by N.J.A.C. 7:7-4.14(c).

Permit-by-Rule 22 (N.J.A.C. 7:7-4.22)

Permit-by-rule 22 at N.J.A.C. 7:7-4.22, which authorizes the construction of a swimming pool, spa, or hot tub and associated decking on a bulkheaded lot without wetlands, is proposed to be amended. The intention of this permit-by-rule was to authorize this type of activity where there would be minimal potential for environmental impacts. Therefore, at new N.J.A.C. 7:7-

4.22(a)8, the Department is proposing to add the requirement that the swimming pool, spa, or hot tub and associated decking cannot be constructed on a coastal bluff. As described in the coastal bluff rule at N.J.A.C. 7:7-9.29(d), disturbance of coastal bluffs, which undermines their natural resistance to wind and rain erosion increases the risk of their collapse and causes cuts in the bluffs, which is dangerous for structures at the top of the bluff and reduces the bluff's ability to buffer upland areas from coastal storms. Construction on a coastal bluff must be carefully evaluated by the Department and is not appropriate to be authorized under a permit-by-rule.

General Permit 4 (N.J.A.C. 7:7-6.4)

The Department is proposing a correction to general permit 4 at N.J.A.C. 7:7-6.4. The existing general permit authorizes the construction of one or two single-family homes or duplexes and/or accessory development provided all development occurs landward of the mean high water line and provided the single-family homes or duplexes are not located on a bulkheaded lagoon lot. The requirement that the homes or duplexes are not located on a bulkheaded lagoon lot was inadvertently included in this general permit when it was amended effective July 6, 2015, and is a relic of a previous version of the rules. Before the Department expanded this general permit to authorize up to two single-family homes or duplexes, the distinction between permit-by-rule 2 and general permit 4 was mainly that permit-by-rule 2 authorized the construction of a single-family home or duplex on a bulkheaded lagoon lot and that general permit 4 authorized construction of a home on properties other than bulkheaded lagoon lots. The requirement that a single-family home or duplex is not located on a bulkheaded lagoon lot to be authorized under the general permit was intended to steer applicants to the

permit-by-rule for an activity that, because of its scope and location, has a *de minimis* impact on the coastal zone.

Duration of an Individual Coastal Wetlands Permit (N.J.A.C. 7:7-8.2 and 27.3)

The July 6, 2015 adoption of the consolidation of the Coastal Permit Program Rules and Coastal Zone Management Rules with amendments established the ability to extend the duration of an individual permit for activities waterward of the mean high water line one time for an additional five-year period. While it was the Department's intention to exclude coastal wetlands individual permits from the permits that may be extended, the rules as adopted do not clearly communicate this intention. For clarity, the Department is proposing to amend N.J.A.C. 7:7-8.2, Duration of an individual permit, and N.J.A.C. 7:7-27.3, Extension of an authorization under a general permit or of a waterfront development individual permit for activities waterward of the mean high water line. The Department is first proposing to clearly state at new N.J.A.C. 7:7-8.2(b) that an individual coastal wetlands permit cannot be extended. The Department is also proposing to add clarifying language at N.J.A.C. 7:7-27.3(a) to specify that a five-year extension of an individual permit can only be requested for individual waterfront development permits that authorize activities waterward of the mean high water line.

Meadowlands (N.J.A.C. 7:7-9.43)

The "Hackensack Meadowlands Agency Consolidation Act," N.J.S.A. 5:10A-1 et seq., consolidated the New Jersey Meadowlands Commission and the New Jersey Sports and Exposition Authority into the New Jersey Sports and Exposition Authority, reestablished the

Hackensack Meadowlands Transportation Planning District, and adjusted the funding method for the Intermunicipal Tax Sharing Program in the New Jersey Meadowlands. To reflect the merging of the New Jersey Meadowlands Commission into the New Jersey Sports and Exposition Authority, the Department is proposing to replace all instances of "New Jersey Meadowlands Commission" in N.J.A.C. 7:7-9.43 with "New Jersey Sports and Exposition Authority." The Department is also proposing to rename the section as "Meadowlands District" rather than "Hackensack Meadowlands District." The Department is not proposing to change any substantive standards in this section.

Flood Hazard Areas (N.J.A.C. 7:7-9.25)

The Department is proposing a clarifying amendment to the flood hazard areas rule, which is part of the CZM Rules at N.J.A.C. 7:7-9.25(d). The Department is proposing to specify that the prohibition on most development within 100 feet of a navigable water body does not apply to development adjacent to the Atlantic Ocean. The 100-foot setback is intended to protect sites adjacent to the water for water-dependent uses, such as marinas. The land within 100 feet from the Atlantic Ocean, however, is generally beach or dune, or is otherwise developed with tourism-related development. The CZM Rules allow for temporary seasonal tourism-related development, amusement piers, and other limited development adjacent to the Atlantic Ocean. Therefore, the 100-foot setback in N.J.A.C. 7:7-9.25(d) is inappropriate to apply to the Atlantic Ocean.

Consistency Between Land Use Application Rules

Application fees (N.J.A.C. 7:7-25.1)

An amendment to align the CZM Rules with other land use rules is proposed at N.J.A.C. 7:7-25.1(g), Table A. The Department is proposing to change the fee for a general permit-by-certification application from \$600.00 to \$1,000 to align with the fee for general permits-by-certification in the FHACA Rules. While Department staff does not directly review these electronic permit applications, the Department has invested in the creation of the online permitting system and must continue to fund the maintenance and improvement of the system. In addition, staff of the Bureau of Coastal and Land Use Enforcement may audit activities to ensure compliance with all permit conditions. The proposed new fee ensures consistency across the land use permitting programs and appropriately reflects the resources involved in administering the general permit-by-certification online system.

Solar panels on landfills (N.J.A.C. 7:7-2.2 and 2.4)

The Department is also proposing to amend N.J.A.C. 7:7-2.2(b)13ii(4) and 2.4(d)5iv, which identify solar panels installed on a sanitary landfill as exempt from the requirement to obtain a CAFRA or Waterfront Development permit, respectively. The Department is proposing to amend the requirement that such solar panels "be 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" to instead require the solar panels to be "authorized under a solid waste landfill closure and post-closure plan or disruption approval issued by the Department pursuant to N.J.A.C. 7:26-2A.8 or 2A.9." This amendment updates terminology and more specifically cites the mechanism by

which such activity can be authorized by the Department's Division of Solid and Hazardous Waste.

Mitigation and Green Acres (N.J.A.C. 7:7-17.5)

The Department is proposing to specify, at N.J.A.C. 7:7-17.5(c)3 that the requirement for the Green Acres Program to approve the use of an area for mitigation applies to areas encumbered with Green Acres restrictions, not only to areas acquired using Green Acres funding. This requirement is consistent with the FHACA Rules at N.J.A.C. 7:13-13.4(c)2.

Other Minor Changes

Several provisions in the CZM Rules, outside of the rationales described previously in this rulemaking Summary, are proposed to be amended for grammar and/or to be updated with new information such as updated statistics, contact information, or corrected terminology or rule citations, with no change in meaning. The following rules are proposed to be so amended:

N.J.A.C. 7:7-2.3, Coastal wetlands; 9.5, Finfish migratory pathways; 9.44, Wild and scenic river corridors; 12.9, Dredged material disposal; 12.21, Submerged cables; and 15.11, Coastal Engineering.

Social Impact

The proposed amendments address issues that have arisen since the July 2015, adoption of the consolidated coastal rules and continue the Department's efforts to align the land use

permitting rules. While the majority of amendments proposed are very minor and will have little social impact, several changes are anticipated to have a positive social impact.

The proposed consolidation of the high-rise structures and scenic resources and design rules will allow responsible redevelopment in urban waterfronts and promote concentration of development while ensuring scenic resources and current viewsheds are preserved. The amended scenic resources and design rule will allow more flexibility for the specific scenic resources of local importance to be addressed rather than prescribe a one-size-fits-all approach that does not always have the intended effect. The amendments promote responsible development and redevelopment that preserves the character of a community while providing economic opportunity.

The proposed new and amended permits to authorize trails and boardwalks and multipleuse paths promote low-impact activities in the coastal zone, in riparian zones and flood hazard
areas, and in freshwater wetlands and transition areas. The proposed new and amended permits
provide flexibility for different types of trails and paths to meet a variety of community needs for
passive and active recreation. The proposed permits will serve to promote access to natural areas
and will improve consistency between the different land use rules to streamline review for these
beneficial projects. The proposed new and amended permits will, therefore, have a positive
social impact.

Water dependent development is an integral component of the culture of many coastal communities. The proposed amendments to the filled water's edge rule serve to protect coastal ecosystems and existing water dependent development while allowing greater flexibility for the use of filled water's edge sites. The proposed amendments that allow more flexibility for a mix

of water dependent and non-water dependent uses on a filled water's edge site will help maintain the economic viability of water dependent development, much of which operates seasonally.

This added flexibility will help to maintain the water dependent uses that are essential to coastal communities' lifestyles.

Economic Impact

This rulemaking is intended to continue the Department's efforts to align the land use rules and create a streamlined permitting program. While the majority of changes are minor and are expected to have little to no economic impact, several changes are expected to have more significant positive economic effects.

The Department is proposing to consolidate the high-rise structures and scenic resources and design rules with amendments into a single rule, the scenic resources and design rule at N.J.A.C. 7:7-16.10. Both existing rules address effects of development on visual access to the water and the character of a community. The proposed amendments consolidate similar provisions while establishing standards specific to different regions of the coastal zone in order to address the needs of different communities. This rule seeks not to ban high rise structures, but to provide criteria for their development at suitable locations and in appropriate orientations to protect the scenic resources that make the coastal zone a desirable place for people to live, work, and recreate. The proposed rule does apply standards to development along the ocean and bays in two areas previously exempt from the requirements of the scenic resources and design rule (the Northern Waterfront Area and the Delaware River Region), which may have a limited negative economic impact on individuals seeking to develop in these areas as there are additional

requirements to address in an application. However, the Department does not anticipate that this amendment will have an overall negative economic impact or impede appropriate development from proceeding. Rather, preserving the character and important scenic resources of these communities helps to maintain the value of properties.

The Department also anticipates that the proposed amendments to the filled water's edge rule at N.J.A.C. 7:7-9.23 will have a positive economic impact by allowing more flexibility for development of filled water's edge sites without sacrificing the protection of the environment or the preservation of water dependent uses. The Department is proposing amendments to allow in appropriate cases a mix of water dependent development, such as marinas, and non-water dependent development, such as retail establishments. Such development would no longer be limited to larger sites and could serve to provide off-season income to supplement the seasonal economies of water dependent development.

Additional amendments to the filled water's edge rule allow for non-water dependent development of filled water's edge sites if water dependent development is not feasible. In some cases, the development of the site with a water dependent use is not suitable. In these cases, the proposed rule allows reasonable development of the site with commercial or residential development, which will have a positive economic impact on property owners, businesses, and coastal communities.

The proposed amendments concerning dune walkovers in Subchapters 5, 6, and 10 will also have a small positive economic impact. The proposed new permit-by-rule for at-grade dune walkovers and general permit-by-certification for elevated timber dune walkovers save applicants the time and expense of preparing application materials and fees. These permits will

also save the Department time and resources that would otherwise be spent reviewing these routine activities that have minimal environmental impacts.

The Department recognizes that the proposed amendments in Subchapters 4 and 6, to permits-by-rule and general permits for shellfish aquaculture activities, and to Subchapter 12 for shellfish aquaculture activities under an individual permit, which require compliance with threatened and endangered species and critical wildlife habitat protections, may impact individuals who wish to pursue shellfish aquaculture in the State. Additional costs may be involved in applying for permits to demonstrate compliance with the proposed requirements. However, with proper planning, siting, and operation of shellfish aquaculture activities, there should be no significant adverse impact on individual growers or the shellfish aquaculture industry as a whole. In addition, the proposed amendment to require the marking of floating structures with lights or reflectors is expected to preserve the capital investment of the grower by preventing destruction by boats and other watercraft while also promoting safe water recreation.

For the reasons summarized above, the Department believes the amendments and new rules in this rulemaking will have an overall positive economic impact.

Federal Standards Statement

Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq., require State agencies that adopt, readopt, or amend State rules that exceed any Federal standards or requirements to include in the rulemaking document a Federal standards analysis. The Federal Coastal Zone Management Act, 16 U.S.C. §§ 1451 et seq., (Federal CZMA) does not set specific regulatory standards or requirements for development in the coastal zone; rather, it provides broad

guidelines for states developing coastal management programs. The general requirements for what a state coastal management program must include are found at 15 CFR Part 923. The requirements do not specifically address the review standards that should be applied to new coastal development in order to preserve and protect coastal resources and to concentrate the pattern of coastal development. The guidelines simply provide a planning and management process, without establishing development standards for development in the coastal area. Therefore, the proposed new rules and amendments do not exceed any Federal standards or requirements of the Federal CZMA.

In regards to proposed amendments to the FHACA Rules, the Department's authority for regulating development within flood hazard areas and riparian zones comes solely from State statute, specifically N.J.S.A. 58:16A-50 et seq., 58:10A-1 et seq., 58:11A-1 et seq., and 13:1D-1 et seq. The FHACA Rules are not promulgated under the authority of, or in order to implement, comply with, or participate in any program established under Federal law or under a State statute that incorporates or refers to Federal laws, Federal standards, or Federal requirements. The Federal Emergency Management Agency (FEMA) delineates flood hazard areas in the State for the purposes of the National Flood Insurance Program (NFIP). However, there is no Federal agency or program that directly regulates activities in flood prone areas based on their potential flooding impacts. The Code of Federal Regulations, at 44 CFR Part 60, enables FEMA to require municipalities who participate in the NFIP to adopt certain flood hazard reduction standards for construction and development in 100-year flood plains. However, a community's participation in the NFIP is voluntary, and FEMA does not otherwise regulate land uses in flood hazard areas. Furthermore, the Federal flood reduction standards at 44 CFR Part 60 are administered by local

governments. The proposed amendments and new rules do not derive authority from any Federal law or under any State statute that incorporates or refers to Federal laws, standards, or requirements, but the proposed rules do serve to ensure consistency with Federal and other State requirements.

Regarding proposed amendments to the FWPA Rules, the Department's authority for regulating development within freshwater wetlands and State open waters is derived from Federal and State law. The Freshwater Wetlands Protect Act, N.J.S.A. 13:9B-1 et seq., requires rules to be promulgated to govern the removal, excavation, dredging, drainage, or disturbance of water level or water table, dumping, discharging or filling with any materials, driving of pilings, and placing obstructions in a freshwater wetland, and the destruction of vegetation that would alter the character of a freshwater wetland. The FWPA Rules, N.J.AC. 7:7A, fulfill this purpose and also regulate the discharge of dredge and fill material in State open waters, as well as govern activities in transition areas. New Jersey's freshwater wetlands program operates in place of the Federal 404 program (Section 404 of the Federal Clean Water Act, 33 U.S.C. §§ 1251 et seq.). The Department, under Section 404(g), has assumed the Federal permitting authority. The United States Environmental Protection Agency (EPA) oversees the Department's wetlands program in accordance with the Federal Clean Water Act and a Memorandum of Agreement between the Department and EPA. The requirement imposed by the Federal Clean Water Act on a state assuming the Federal permitting authority is that the state implements regulatory standards at least equally stringent as those currently in place for the Federal 404 program for the protection of waters of the United States, including wetlands. The proposed changes retain the appropriate level of stringency to ensure compliance with Federal law.

Environmental Impact

Many of the amendments proposed in this rulemaking will have no impact on the environment because they are intended to correct errors, clarify provisions, or align land use rules while maintaining existing environmental protections. However, several amendments are expected to have a positive environmental impact.

The proposed amendments and new rules to the permits-by-rule and the general permit for shellfish aquaculture activities will have a positive environmental impact by ensuring protection of threatened and endangered species. By requiring activities under the applicable permits to comply with any applicable management plan for protection of State and Federally listed threatened and endangered species approved by the Department and USFWS and/or comply with the endangered or threatened wildlife or vegetation species habitat rule at N.J.A.C. 7:7-9.36 and the critical wildlife habitat rule at N.J.A.C. 7:7-9.37, the Department ensures that shellfish aquaculture remains an environmentally beneficial industry and that vulnerable wildlife populations are not affected.

The proposed flood hazard area permit-by-rule and freshwater wetlands and flood hazard general permits for herbicide application will also have a positive environmental impact. While improper application of herbicide can have detrimental effects on aquatic ecosystems, the proposed permits, which mirror existing permits in the CZM Rules, authorize herbicide application to control invasive species only and require that the activities do not impact threatened or endangered species. Invasive species can have a devastating impact on native riparian and wetland ecosystems, but invasive species control via herbicide in these areas is

presently only able to be authorized under a freshwater wetlands or flood hazard area individual permit. The proposed new permits streamline the process for obtaining authorization for these activities and will, therefore, encourage invasive species control in important ecosystems across the State and promote the restoration of native plant communities.

Jobs Impact

The Department anticipates a small positive impact on jobs in certain industries should the proposed rules be adopted. First, the proposed amendments to the filled water's edge rule will have a positive impact on jobs in water dependent fields because the rule will help maintain the viability of water dependent development. Allowing a mix of different uses on a filled water's edge site will preserve jobs in water dependent industries and create new jobs in other industries co-located with existing or new water dependent development.

The Department also anticipates a slight positive impact on jobs in construction and architecture from the proposed amendments to the scenic resources and design rule. The proposed amendments seek to address the scenic resources important to different areas of the coastal zone while promoting compatible development that complements or enhances the existing character of a community. The proposed amendments allow more flexibility, which may promote redevelopment of blighted urban areas and, therefore, create a small number of jobs in related fields.

The proposed amendments concerning shellfish aquaculture are anticipated to have a neutral impact on jobs in this industry. While the proposed amendments require compliance with

additional conditions to protect threatened and endangered species, the Department does not expect these amendments to curtail the current growth of the shellfish aquaculture industry.

Agriculture Industry Impact

Agriculture located in areas regulated by the CZM, FHACA, and/or FWPA will be subject to the proposed rules and amendments if conducting a development activity that requires a permit. Shellfish aquaculture activities occurring waterward of the mean high water line generally require a waterfront development permit. Aquaculture activities occurring upland of the mean high water line are regulated as industrial development within the entire CAFRA area and up to 500 feet inland when outside the CAFRA area. The proposed amendments have no impact on land-based agriculture crops. The proposed amendments to shellfish aquaculture permits to add threatened and endangered species and critical wildlife habitat protections may impact individuals who wish to pursue aquaculture in the State. However, with proper planning, siting, and operation of aquaculture activities, there should be no adverse impact on individual growers or the shellfish aquaculture industry as a whole. The additional requirement in the general permit for commercial aquaculture to make equipment at the surface visible via lights or reflectors does not pose a burden to individuals or the industry as a whole and serves to reduce conflicts with marine recreation. The Department has, therefore, determined that the proposed amendments will have a neutral impact on the agriculture industry.

No agricultural impacts from other proposed changes are anticipated.

Regulatory Flexibility Analysis

In accordance with the New Jersey Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq., the Department has determined that a number of contractors, builders, and property owners that will be affected by the proposed amendments are "small businesses" as defined by the Regulatory Flexibility Act at N.J.S.A. 52:14B-17.

Many proposed amendments serve to continue the Department's efforts to align its land use permitting rules, which will benefit any land use permit applicant, including small businesses. The proposed amendments establishing permit-by-rule 23 for commercial at-grade dune walkovers may benefit coastal and seasonal small businesses through their ability to provide easy access to the beach to customers without needing to submit an application or fee to the Department. Proposed amendments to aquaculture permits, as discussed fully in the Agriculture Industry Impact above, will ultimately have a neutral impact on shellfish aquaculture operations, many of which are small businesses. While compliance with the endangered or threatened wildlife or plant species habitat rule may involve additional reporting, this requirement is applied equally to any applicant who seeks to conduct shellfish aquaculture activities and is necessary to ensure the protection of vulnerable species. Additional reporting will not be required for applicants proposing activities outside of documented or current threatened or endangered species habitat and/or critical wildlife habitat.

Housing Affordability Impact Analysis

Proposed amendments concerning development in V zones will align the CZM Rules with the FHACA Rules, the Uniform Construction Code, and Federal flood reduction standards, which may have a slight positive economic impact in some cases by creating a permitting

process that is more predictable and consistent with other State and Federal standards. In addition, amendments to the FHACA Rules concerning the construction of driveways will simplify the process for constructing a driveway in a flood hazard area to ensure requirements are straightforward and not unreasonably burdensome while maintaining flood protections and public safety. However, the Department believes that it is unlikely that the economic impacts associated with the proposed amendments and new rules would evoke a change in the average costs associated with housing or have any effect on the affordability of housing.

Smart Growth Development Impact Analysis

In accordance with N.J.S.A. 52:14B-4, as amended effective July 17, 2008, by P.L. 2008, c. 46, the Department has evaluated the proposed amendments to determine the impact, if any, on housing production in Planning Areas 1 or 2, or within designated centers, under the State Development and Redevelopment Plan (State Plan). Proposed amendments to the CZM Rules ensure consistency with the FHACA Rules, the Uniform Construction Code, and Federal flood reduction standards concerning construction in V zones, which will streamline the permitting process for such development. Additionally, as stated above, amendments to the FHACA Rules concerning the construction of driveways will simplify the process for constructing a driveway in a flood hazard area to ensure requirements are straightforward and not unreasonably burdensome while maintaining flood protections and public safety. However, these process improvements are minor and are not likely to result in any change on housing production in Planning Areas 1 or 2, or within designated centers, under the State Plan.

Full text of the rules proposed for repeal may be found in the New Jersey Administrative Code at N.J.A.C. 7:7-15.4.

Full text of the proposed amendments, recodifications, and new rules follows (additions indicated in boldface **thus**; deletions indicated in brackets [thus]):

CHAPTER 7

COASTAL ZONE MANAGEMENT RULES

SUBCHAPTER 1. GENERAL PROVISIONS

- 7:7-1.4 Standards for evaluating permit applications
 - (a) (No change.)
- (b) The Department shall issue a permit pursuant to CAFRA only upon a finding as required by N.J.S.A. 13:19-10 that the development:
 - 1.-5. (No change.)
- 6. Is located or constructed so as to neither endanger human life or property nor otherwise impair the public health, safety and welfare; [and]
- 7. Would result in minimal practicable degradation of unique or irreplaceable land types, historical or archaeological areas and existing public scenic attributes at the site and within the surrounding region[.]; and

8. Provides, pursuant to standards established in this chapter, onsite public access to the waterfront and adjacent shoreline, or offsite public access to the waterfront and adjacent shoreline if on-site public access is not feasible as determined by the Department.

7:7-1.5 Definitions

The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise. Additional definitions specifically applicable to N.J.A.C. 7:7-13, Requirements for Impervious Cover and Vegetative Cover for General Land Areas and Certain Special Areas, are set forth at N.J.A.C. 7:7-13.2. Additional definitions specifically applicable to N.J.A.C. 7:7-17, Mitigation, are set forth at N.J.A.C. 7:7-17.1.

. . .

"Engineering certification" means a document, signed and sealed by a New Jersey licensed professional engineer, which confirms that one or more requirements of this chapter are met, and which is accompanied by all supporting documentation, calculations, and other information upon which the certification is based. Upon clear and compelling evidence of a threat to public health, safety, welfare, and the environment, a New Jersey licensed professional engineer employed by the Department can reject an engineering certification submitted under this chapter.

. . .

"FEMA flood mapping" means information published or publicly released by FEMA regarding the frequency, location, and/or extent of flooding in a community, such as flood elevations, flood profiles, flow rates, and floodway limits, and FEMA 100-year flood elevation as defined in the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-1.2. For the purposes of this chapter, such information shall include only that information adopted as part of the most recent effective FEMA Flood Insurance Study, dated on or after January 31, 1980, or any more recent advisory or proposed (preliminary) flood mapping, if the more recent advisory or proposed (preliminary) mapping results in higher flood elevations, wider floodway limits, and greater flow rates, than depicted in the most recent effective FEMA Flood Insurance Study, or indicates a change from an A zone to a V zone or coastal A zone. Effective and proposed (preliminary) FEMA flood mapping can be viewed at https://msc.fema.gov and advisory flood mapping for coastal areas, where available, can be viewed at http://www.region2coastal.com. Questions regarding the availability, use, derivation, or modification of FEMA flood mapping should be directed to FEMA at (800) 358-9616.

["FIRM" means the Federal Insurance Rate Map, as defined at 44 CFR 59.1, established by FEMA for a particular community for purposes of the National Flood Insurance Program on

which the Federal Insurance Administrator has delineated, among other things, flood hazard areas.]

. . .

"High-rise structure" means a structure more than six stories or more than 60 feet in height as measured from existing preconstruction ground level.

. . .

"UCC" means the Uniform Construction Code, N.J.A.C. 5:23.

...

SUBCHAPTER 2. APPLICABILITY AND ACTIVITIES FOR WHICH A PERMIT IS REQUIRED

7:7-2.2 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 development, 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. 12. (No change.)
- 13. Development is not the following:
- i. (No change.)
- ii. The installation of a solar panel(s) provided the solar panel(s) is:
- (1) (3) (No change.)
- (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] authorized under a solid waste landfill closure and post-closure plan or disruption approval issued by the Department pursuant to N.J.A.C. 7:26-2A.8 or 2A.9; or
 - iii. (No change.)
 - (c) A CAFRA permit shall not be required for:
 - 1. 4. (No change.)
- 5. The construction of a patio, deck, or similar structure at a residential development, provided such construction does not result in the grading, excavation, or filling of a beach or dune.
 - i. iii. (No change.)

iv. For the purposes of this paragraph, the construction of **elevated** timber **or at-grade** dune walkover structures constructed in accordance with Department specifications found at N.J.A.C. 7:7-10.4(**d**) and (e)1, 2, and 3, respectively, shall be considered a "similar structure" at a residential development.

- v. (No change.)
- 6. 8. (No change.)
- (d) (f) (No change.)
- 7:7-2.3 Coastal wetlands
 - (a) (No change.)
 - (b) The following activities are prohibited on regulated wetlands:
 - 1. 2. (No change.)
- 3. Applying any pesticide on areas containing significant stands of high vigor [Spartina alterniflora] *Spartina alterniflora* (Saltmarsh cordgrass), [Zizania aquatica] *Zizania aquatica* (Wildrice), [Typha sp.] *Typha sp.* (Cattail), and [Scirpus americanus] *Scirpus americanus* (common threesquare) as shown generally on wetlands maps;
 - 4. 5. (No change.)
 - (c) (No change.)

7:7-2.4 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. 4. (No change.)
- 5. In the waterfront area defined in (a)3 above, the installation of solar panels provided the solar panels are:
 - i. iii. (No change.)
- 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] authorized under a solid waste landfill closure and post-closure plan or disruption approval issued by the Department pursuant to N.J.A.C. 7:26-2A.8 or 2A.9;
 - 6. 8. (No change.)
 - (e) (h) (No change.)

SUBCHAPTER 4. PERMITS-BY-RULE

- 7:7-4.2 Permit-by-rule 2 development of a single-family home or duplex and/or accessory development on a bulkheaded lagoon lot
- (a) This permit-by-rule authorizes the development (including expansion or reconstruction and expansion) of a single-family home or duplex and/or accessory development (such as

garages, sheds, pools driveways, grading, excavation, and clearing excluding shore protection structures) provided the single family home or duplex and accessory development are located on a bulkheaded lagoon lot and provided the proposed single-family home or duplex and/or accessory structures comply with all of the following:

- 1. 4. (No change.)
- 5. The proposed single family home or duplex and accessory structures, excluding decks, are set back a minimum of 15 feet from the waterward face of the bulkhead. If there is no alternative to locating the proposed single family home or duplex and accessory structures at least 15 feet landward of the bulkhead, the [set back] **setback** shall be reduced if an engineering certification is provided demonstrating that, after the proposed development has been constructed, the shore protection structure can be replaced within 18 inches of the existing bulkhead and a conservation restriction is recorded for the property which states that any reconstruction of a bulkhead shall be within 18 inches of the existing bulkhead;
 - 6. 10. (No change.)
- 7:7-4.13 Permit-by-rule 13 installation of solar panels on a maintained lawn or landscaped area at a single-family home or duplex lot
- (a) This permit-by-rule authorizes the installation of solar panels on a maintained lawn or landscaped area at a single-family home or duplex lot, provided:
 - 1. (No change.)
- 2. The solar panel development shall be [setback] **set back** a minimum of 50 feet from the inland limit of any wetlands, beach, or dune;

3. - 4. (No change.)

7:7-4.14 Permit-by-rule 14 – reconfiguration of any legally existing dock, wharf, or pier at a legally existing marina

- (a) This permit-by-rule authorizes the reconfiguration of any legally existing dock, wharf, or pier, **including pilings**, located at a legally existing marina, provided the marina is not located within shellfish habitat, submerged vegetation habitat, or a wetland.
 - (b) (No change.)
 - (c) The proposed reconfiguration shall:
 - 1. 4. (No change.)
 - 5. Minimize the water area covered by structures by:
 - i. (No change.)

and

ii. 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;

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

- 7:7-4.16 Permit—by-rule 16 placement of land-based upwellers and raceways for aquaculture activities
- (a) This permit-by-rule authorizes 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:
 - 1. (No change.)
- 2. No grading, excavation, filling, or placement of a structure(s) is undertaken on a beach, dune, or wetland; [and]
- 3. The discharge from the aquaculture activities is to a water body and not directly into a wetland[.]; and
- 4. The aquaculture activities comply with any applicable management plan for protection of State and Federally listed threatened and endangered species, as approved by the Department and the USFWS, the endangered or threatened wildlife or vegetation species habitats rule, N.J.A.C. 7:7-9.36, and/or the critical wildlife habitat rule, N.J.A.C. 7:7-9.37, as applicable.
- 7:7-4.17 Permit-by-rule 17 placement of predator screens and oyster spat attraction devices within a shellfish lease area
- (a) This permit-by-rule authorizes 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 permitby-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:

- 1. 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]
- 2. 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[.]; and
- 3. The activities undertaken pursuant to this permit-by-rule 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 USFWS, the endangered or threatened wildlife or vegetation species habitats rule, N.J.A.C. 7:7-9.36, and/or the critical wildlife habitat rule, N.J.A.C. 7:7-9.37, as applicable.
- 7:7-4.18 Permit-by-rule 18 placement of shellfish cages within a shellfish lease area
- (a) This permit-by-rule authorizes 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:

- 1. 2. (No change.)
- 3. The cages shall be constructed of non-polluting materials; [and]
- 4. 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[.]; and
- 5. The activities undertaken pursuant to the permit-by-rule 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 USFWS, the endangered or threatened wildlife or vegetation species habitat rule, N.J.A.C. 7:7-9.36, and/or the critical wildlife habitat rule, N.J.A.C. 7:7-9.37, as applicable.
- 7:7-4.21 Permit-by-rule 21 application of [pesticide] **herbicide** within coastal wetlands to control invasive plant species
- (a) This permit-by-rule authorizes the application of [pesticide] **herbicide** within coastal wetlands to control invasive plant species, provided:
- 1. The area to which the [pesticides are] **herbicide is** applied shall not exceed a total area of one-quarter acre on a site;

- 2. 3. (No change.)
- 7:7-4.22 Permit-by-rule 22 construction of a swimming pool, spa, or hot tub and associated decking on a bulkheaded lot without wetlands
- (a) This permit-by-rule authorizes the construction of a swimming pool, spa, or hot tub and associated decking (for example, wood or recycled plastic planking, concrete, or paver blocks) on a lot with a legally existing, functioning bulkhead along the entire waterfront portion of the site and no wetlands landward of the bulkhead, provided:
 - 1.-5. (No change.)
- 6. Prior to construction, a silt fence is erected landward of the bulkhead with a 10-foot landward return on each end. The silt fence shall be maintained and remain in place until all construction and landscaping activities are completed; [and]
 - 7. All subgravel liners are made of filter cloth or other permeable material[.]; and
- 8. The swimming pool, spa, or hot tub and associated decking are not constructed on a coastal bluff.
- 7:7-4.23 Permit-by-rule 23 installation of an at-grade dune walkover at a residential, commercial, or public development other than a single-family home or duplex
- (a) This permit-by-rule authorizes the installation of an at-grade dune walkover, such as a stabilization mat, at a residential, commercial, or public development other than a single-family home or duplex, provided:

1. Only one walkover is installed at the site unless New Jersey 2012 High Resolution Orthophotography (available for download at

http://njgin.state.nj.us/NJ NJGINExplorer/DataDownloads.jsp) reflects that more than one walkover was present on the site on the date depicted in the image. In such case, the maximum number of walkovers that may be installed shall be equal to the number of walkovers reflected on the 2012 orthophotography;

- 2. The installation does not require the grading or excavation of a beach or dune;
- 3. For non-commercial properties, the width of the at-grade walkover structure does not exceed six feet and the total width of the at-grade walkover, fencing, and/or edging does not exceed eight feet;
- 4. For commercial properties, the width of the at-grade walkover structure does not exceed 10 feet and the total width of the at-grade walkover, fencing, and/or edging does not exceed 12 feet;
- 5. The walkover is fenced on both sides using sand fencing, split rail fencing, or open handrails, unless prohibited by the municipality; and
- 6. The activity complies with any applicable management plan for protection of State or Federally listed threatened or endangered species, as approved by the Department and the USFWS, and/or the endangered or threatened wildlife or vegetation species habitat rule, N.J.A.C. 7:7-9.36.

SUBCHAPTER 5. GENERAL PERMITS-BY-CERTIFICATION

7:7-5.3 General permit-by-certification 1A – installation of an elevated timber dune walkover at a residential, commercial, or public development other than a single-family home or duplex

- (a) This general permit-by-certification authorizes the installation of an elevated timber dune walkover at a residential, commercial, or public development other than a singlefamily home or duplex, provided:
- 1. Only one walkover is installed at the site unless New Jersey 2012 High Resolution Orthophotography (available for download

http://njgin.state.nj.us/NJ NJGINExplorer/DataDownloads.jsp) reflects that more than one walkover was present on the site on the date depicted in the image. In such case, the maximum number of walkovers that may be installed shall be equal to the number of walkovers reflected on the 2012 orthophotography;

- 2. The construction of elevated timber dune walkover is in accordance with the standards and specifications described in Beach Dune Walkover Structures (Florida Sea Grant, 1981) available from the Department at the address set forth at N.J.A.C. 7:7-1.6;
- 3. For non-commercial properties, the width of the walkover structure does not exceed six feet and the total width of the elevated timber walkover, fencing, and/or edging not to exceed eight feet;
- 4. For commercial properties, the width of the walkover structure does not exceed 10 feet and the total width of the walkover, fencing, and/or edging not to exceed 12 feet; and

5. The activity complies with any applicable management plan for protection of State and Federally listed threatened or endangered species, as approved by the Department and the USFWS, and/or the endangered or threatened wildlife or vegetation species habitat rule, N.J.A.C. 7:7-9.36.

SUBCHAPTER 6. GENERAL PERMITS

- 7:7-6.2 General permit 2 activities on a beach and dune [maintenance activities]
- (a) This general permit authorizes **the following activities on a** beach and dune [maintenance activities provided]:
- [1. The beach and dune maintenance activities are conducted in accordance with Best Management Practices set forth at N.J.A.C. 7:7-10.2, Standards applicable to routine beach maintenance; 7:7-10.3, Standards applicable to emergency post-storm beach restoration; and 7:7-10.4, Standards applicable to dune creation and maintenance;]
- 1. Routine beach maintenance activities performed in accordance with N.J.A.C. 7:7-10.2;
- 2. Emergency post-storm beach restoration performed in accordance with N.J.A.C. 7:7-10.3;
 - 3. Dune creation and maintenance performed in accordance with N.J.A.C. 7:7-10.4; and
- 4. The construction of dune walkovers constructed in accordance with N.J.A.C. 7:7-10.4(e) and(f).

- [2.] **(b)** The [beach and dune maintenance activities] **activity** shall not be conducted in any wetlands[; and].
 - [3.] **(c)** (No change in text.)
- (d) The activity is conducted in accordance with the Operation and Maintenance

 Manual associated with the Federal or State project, or where such manual does not exist,

 the activity does not compromise the design template of the engineered beach and/or dune.
- (e) The activity complies with any applicable management plan for protection of State and Federally listed threatened or endangered species, as approved by the Department and the USFWS, and/or the endangered or threatened wildlife or vegetation species habitat rule, N.J.A.C. 7:7-9.36.
 - [(b)] (f) (No change in text.)
- 7:7-6.3 General permit 3 voluntary reconstruction of certain residential or commercial development
- (a) This general permit authorizes the voluntary reconstruction of a non-damaged legally constructed, currently habitable residential or commercial development landward of the existing footprint of development provided:
 - 1. 3. (No change.)

- 4. In the case of commercial reconstruction[;]:
- i. ii. (No change.)
- 5. 8. (No change.)
- (b) (No change.)
- 7:7-6.4 General permit 4 development of one or two single-family homes or duplexes
- (a) This general permit authorizes the development of one or two single-family homes or duplexes and/or accessory development (such as garages, sheds, pools, driveways, grading, filling, and clearing, excluding shore protection structures), provided the one or two single-family homes or duplexes and accessory development are located landward of the mean high water line[, and provided the single-family homes or duplexes are not located on a bulkheaded lagoon lot].
 - (b) (c) (No change.)
- (d) In addition to meeting the requirements at (c) above, the development of two single-family homes or duplexes under this general permit on filled water's edge sites that have included a water dependent use at any time since July of 1977, shall comply with N.J.A.C. 7:7-9.23[(e)](g) of the filled water's edge rule.

- (e) Development under this general permit shall comply with N.J.A.C. 7:7-9.16, Dunes, except as provided under (e)1 or 2 below:
 - 1. (No change.)
- 2. Development that is located on a dune which is isolated from a beach and dune system by a paved public road, public seawall or public bulkhead, existing on July 19, 1993, need not comply with the dunes rule, N.J.A.C. 7:7-9.16, if the site and the development meet all of the following criteria:
- i. The road, seawall, or bulkhead is of sufficient size to be designated as the V zone boundary on [the FIRM] applicable FEMA flood mapping;
 - ii. iii. (No change.)
- iv. The area of proposed construction is designated as an A zone, B zone, or C zone on [the FIRM] applicable FEMA flood mapping;
 - v. vi. (No change.)
 - (f) (n) (No change.)
- 7:7-6.5 General permit 5 expansion, or reconstruction (with or without expansion), of a single-family home or duplex
 - (a) (c) (No change.)
- (d) Development under this general permit shall comply with N.J.A.C. 7:7-9.16, Dunes, except as provided under (d)1 through 4 below:
 - 1. (No change.)

- 2. Development that is located on a dune which is isolated from a beach and dune system by a paved public road, public seawall, or public bulkhead, existing on July 19, 1993, need not comply with the dunes rule, N.J.A.C. 7:7-9.16, if the site and the development meet all of the following criteria:
- i. The road, sea wall, or bulkhead is of sufficient size to be designated as the V zone boundary on [the FIRM] applicable FEMA flood mapping;
 - ii. iii. (No change.)
- iv. The area of proposed construction is designated as an A zone, B zone, or C zone on [the FIRM] applicable FEMA flood mapping;
 - v. vi. (No change.)
 - 3. 4. (No change.)
 - (e) (m) (No change.)
- 7:7-6.13 General permit 13 construction of recreational facilities at public parks
- (a) This general permit authorizes the construction of the following recreational facilities at parks which are publicly owned or controlled for the purposes of public access. Construction of the facilities listed below is acceptable provided that the construction has no adverse impact on any special areas defined at N.J.A.C. 7:7-9 and provided that the facility complies with the specific conditions listed below for each facility.
- 1. Construction of the following facilities provided they are not located on a dune or in a wetland[, except as noted at (a)3 below]:

i. – ii. (No change.)

iii. Gazebos, rain shelters and sheds provided they do not exceed a footprint 200 square feet;

and

[iv. Pathways, bicycle paths and jogging and nature trails and associated fitness equipment provided they are not located on a beach; and]

[v.] iv. (No change in text.)

- 2. (No change.)
- [3. Trail or boardwalk construction in wetlands is acceptable provided that:
- i. The width of the trail or boardwalk does not exceed six feet, except for barrier free trails or boardwalks designed in accordance with the Barrier Free Subcode of the Standard Uniform Construction Code, N.J.A.C. 5:23-7. The construction of restrooms, gazebos, rain shelters, or any covered or enclosed structure is not authorized on the boardwalk or trail;
- ii. The height of the structure over wetlands, other than wetlands regulated under the Freshwater Wetlands Protection Act and implementing rules at N.J.A.C. 7:7A, shall be a minimum of four feet regardless of width;
 - iii. The project does not interfere with the natural hydrology of the area; and
- iv. The project does not encroach upon or adversely affect the habitat of any threatened or endangered species.]
 - (b) (No change.)

7:7-6.17 General permit 17 – stabilization of eroded shorelines

- (a) This general permit authorizes the stabilization of eroded shorelines along tidal waterways, excluding the Atlantic Ocean, provided that the proposed method complies with all of the following:
- 1. The stabilization materials are limited to live branch cuttings, live facings, live stakes, vegetative cuttings, vegetated earth buttresses, [choir] **coir** fiber products, fiber plugs, plants and clusters, selected plant materials, fiber pallets, fiber carpet, and wood stake anchor systems.

 Materials shall be installed in accordance with the construction guidelines of Chapter 16-"Streambank and Shoreline Stabilization Protection," of the National Engineering Handbook (NEH), Part 650, 1996, published by the United States Department of Agriculture, incorporated herein by reference, as amended and supplemented. This coastal general permit does not authorize the use of geotubes, stone, concrete, gabions, wood sheathing, pvc pipe, used tires, discarded Christmas trees, or other material not specifically stated in this paragraph;
 - 2. 10. (No change.)
- 7:7-6.22 General permit 22 –construction of certain structures related to the tourism industry at hotels and motels, commercial developments, and multi-family residential developments over 75 units
- (a) This general permit authorizes the construction of structures such as equipment storage containers and sheds, stage platforms, bleachers, portable restrooms, food concession stands, gazebos, lockers, canopied shelters, and wooden walkways, related to the tourism industry, at hotels and motels, commercial developments, and multi-family residential developments over 75 units provided that:

- 1.-5. (No change.)
- 6. The structure is located a minimum of 50 feet landward of the mean high water line, except on beaches where the development is located on the most landward portion of the beach. Development on beaches shall additionally be subject to the following:
- i. The development shall occupy a maximum of 33 percent of the total width of the beach berm area within the limits of the project and is limited to the most landward one-third of the useable beach berm area; and
 - ii. (No change.)
 - 7. 11. (No change.)
 - (b) (No change.)

7:7-6.23 General permit 23 –geotechnical survey borings

- (a) This general permit authorizes geotechnical survey borings including survey borings or excavations constructed for the purpose of obtaining information on subsurface conditions, for the purpose of determining the presence or extent of contamination in subsurface soils or groundwater, and for obtaining seismic information, provided the following conditions are met.
 - 1. 3. (No change.)
- 4. Disturbance shall be limited to that which is necessary to access and conduct the geotechnical borings.
 - i. Disturbance to vegetation shall[,] be limited to a maximum width of five feet for access.
 - 5. 6. (No change.)

- 7:7-6.30 General permit 30 commercial shellfish aquaculture activities
- (a) This 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. 3. (No change.)
- 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] http://uscgboating.org/regulations/navigation-rules.php). Specifically, the corners of the footprint of the area where the structures are placed must be marked with buoys or stakes;
- 5. Floating structures must be marked with lights or reflectors, such that they are visible to boaters and jet skiers at night. The lights or reflectors shall be installed and operational within 72 hours of placement of the structures;
 - [5.] **6.** (No change in text.)
 - [6.] 7. The structures are properly secured; [and]
- [7.] **8.** 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[.]; and
- 9. Activities undertaken pursuant to this general permit 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 USFWS, the endangered or

threatened wildlife or vegetation species habitats rule, N.J.A.C. 7:7-9.36, and/or the critical wildlife habitat rule, N.J.A.C. 7:7-9.37, as applicable.

- (b) (d) (No change.)
- 7:7-6.32 General permit 32 application of [pesticide] **herbicide** within coastal wetlands to control invasive plant species
- (a) This general permit authorizes the application of [pesticide] **herbicide** within an area of coastal wetlands greater than 0.25 acres in size to control invasive plant species, provided the activities:
 - 1. (No change.)
- 2. Do not require the application of any [pesticide] **herbicide** on areas containing significant stands of high vigor Saltmarsh cordgrass (*Spartina alterniflora*), Wildrice (*Zizania [aquatic]* aquatica), Cattail (*Typha sp.*), and Common threesquare (*Scirpus americanus*) as shown generally on wetlands maps, see chapter Appendix D; and
 - 3. (No change.)

7:7-6.33 General permit 33—construction of trails and boardwalks

(a) This general permit authorizes the construction of a trail or boardwalk for use by pedestrians only, provided the proposed trail or boardwalk is not located on a beach or dune and it complies with (a)1 through 8 and (b) below. This general permit does not

authorize construction of a restroom, gazebo, rain shelter, any covered or enclosed structure, or construction of a roadway for use by automobiles, golf carts, motorcycles, motorized trail bikes, all-terrain vehicles, or other motor vehicles.

- 1. The width of the trail or boardwalk shall not exceed six feet;
- 2. Any trail or boardwalk shall be constructed of woodchips, mulch, timber, crushed stone, or local native sediment unless crossing a coastal wetland, where a boardwalk shall be constructed in accordance with (a)3 below;
- 3. Where crossing a coastal wetland, the height of the boardwalk shall be a minimum of four feet measured from the ground elevation to the bottom of the stringers;
- 4. Measures shall be implemented to ensure that the activities do not interfere with the natural hydrology of the area. Examples of such measures are the installation of the trail or boardwalk at-grade or the use of cross drains to allow the passage of water;
- 5. The trail or boardwalk shall be located and configured, so as to minimize adverse environmental impact;
- 6. The trail or boardwalk shall not encroach upon or adversely affect the habitat of any threatened or endangered wildlife or plant species;
- 7. Public access shall be provided in accordance with the lands and waters subject to public trust rights rule, N.J.A.C. 7:7-9.48, and the public access rule, N.J.A.C. 7:7-16.9; and
- 8. Any public trail or boardwalk shall incorporate features designed to educate the user about the importance of the coastal zone, coastal wetlands, or riparian zones; for example, through signs identifying plants and animals or explaining hydrology, ecology, or other significant environmental features or phenomena.

- (b) In addition to (a)1 through 8 above, trails or boardwalks constructed through riparian zones shall comply with the following:
- 1. Clearing, cutting, or removal of riparian zone vegetation is the minimum necessary to implement the project, is limited to actively disturbed areas where possible, and shall not exceed one acre;
- 2. The existing ground elevation shall not be raised in any floodway or fluvial flood hazard area;
- 3. A boardwalk constructed in a flood hazard area shall be constructed at or below the existing ground elevation or elevated so that the area underneath the boardwalk remains open to the passage of floodwaters;
- 4. The setbacks at (b)4i, ii, and iii below are met, except in the immediate vicinity of a footbridge or a dock or pier connected to the trail or boardwalk, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water:
 - i. No disturbance is located within 10 feet of any top of bank;
 - ii. No trees are cleared, cut, and/or removed within 25 feet of any top of bank; and
- iii. Where disturbance within 25 feet of any top of bank is proposed, the applicant provides an engineering certification confirming that the location of the project is stable and suitable for the proposed activities, and not subject to erosion or undermining due to its proximity to the top of bank; and

5. No more than six square feet of trees is cleared, cut, and/or removed per linear foot of trail or boardwalk in a riparian zone, including the total area of canopy affected by activities under this general permit. For example, the construction of a trail or boardwalk that is 1,000 feet long can impact no more than 6,000 square feet of canopy.

7:7-6.34 General permit 34 - construction of multiple-use paths

- (a) This general permit authorizes the construction of a multiple-use path for use by pedestrians, livestock, and/or light vehicles such as bicycles, golf carts, or lawn tractors, provided the proposed path is not located on a beach or dune and it complies with (a)1 through 7 and (b) below. This general permit does not authorize construction of a restroom, gazebo, rain shelter, any covered or enclosed structure, or construction of a roadway for use by automobiles, motorcycles, all-terrain vehicles, or similar motor vehicles.
 - 1. The width of the path shall not exceed 10 feet;
- 2. Where crossing a coastal wetland, the height of the path shall be a minimum of four feet measured from the ground elevation to the bottom of the stringers;
- 3. Measures shall be implemented to ensure that the activities do not interfere with the natural hydrology of the area. Examples of such measures are the installation of the path at grade or the use of cross drains to allow the passage of water;
- 4. The path shall be located and configured, so as to minimize adverse environmental impact;

- 5. The path shall not encroach upon or adversely affect the habitat of any threatened or endangered wildlife or plant species;
- 6. Public access shall be provided in accordance with the lands and waters subject to public trust rights rule, N.J.A.C. 7:7-9.48, and the public access rule, N.J.A.C. 7:7-16; and
- 7. Any public path shall incorporate features designed to educate the user about the importance of the coastal zone, coastal wetlands, or riparian zones; for example, through signs identifying plants and animals or explaining hydrology, ecology, or other significant environmental features or phenomena.
- (b) In addition to (a)1 through 7 above, multiple-use paths through riparian zones shall comply with the following:
- 1. Clearing, cutting, or removal of riparian zone vegetation is the minimum necessary to implement the project, is limited to actively disturbed areas where possible, and shall not exceed 0.25 acres of riparian zone vegetation;
- 2. The existing ground elevation shall not be raised in any floodway or fluvial flood hazard area;
- 3. A path constructed in a flood hazard area shall be constructed at or below the existing ground elevation or elevated, so that the area underneath the boardwalk remains open to the passage of floodwaters; and
- 4. The setbacks at (b)4i, ii, and iii below are met, except in the immediate vicinity of a footbridge or a dock or pier connected to the path, unless the project lies adjacent to a

lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water:

- i. No disturbance is located within 10 feet of any top of bank;
- ii. No trees are cleared, cut, and/or removed within 25 feet of any top of bank; and
- iii. Where disturbance within 25 feet of any top of bank is proposed, the applicant provides an engineering certification confirming that the location of the project is stable and suitable for the proposed activities, and not subject to erosion or undermining due to its proximity to the top of bank; and

iv. No more than six square feet of trees is cleared, cut, and/or removed per linear foot of path in a riparian zone, including the total area of canopy affected by activities under this general permit. For example, the construction of a path that is 1,000 feet long can impact no more than 6,000 square feet of canopy.

SUBCHAPTER 8. INDIVIDUAL PERMITS

7:7-8.2 Duration of an individual permit

- (a) (No change.)
- (b) An individual coastal wetlands permit cannot be extended.
- [(b)] (c) Except as provided in [(c),] (d), [and] (e), and (f) below, an individual permit for any activity landward of the *mean high water line* is valid for five years from the date of issuance.

[(c)] (d) (No change in text.)

- [(d)] (e) If construction under an individual permit for an activity landward of the mean high water line does not commence within five years from the date of issuance due to circumstances that are beyond the permittee's control or has commenced but will cease for a cumulative period of one year or longer due to circumstances that are beyond the permittee's control, then the permit shall be valid for 10 years from the original permit issuance date, provided:
 - 1. (No change.)
- 2. Where construction has commenced within five years from the date of issuance of the permit and the permit continues valid under [(c)] (d) above, the permittee submits a written request for approval to cease construction and re-commence construction before the end of the period that is 10 years from the original permit issuance date and to continue construction thereafter to completion. The request must be received by the Department no less than 20 working days prior to the date that the cumulative one-year period in [(c)3] (d)3 above would be exceeded. Construction may continue while the request is under review; and

3. (No change.)

[(e)] **(f)** The individual permit for an activity landward of the mean high water line for which the Department issued approval under [(d)] **(e)** above shall expire if construction either does not commence or does not re-commence after cessation, whichever is contemplated by the approval, before the end of the period that is 10 years from the original permit issuance date. However, if

construction does commence or re-commence before the end of that 10-year period and construction must continue beyond that 10-year period, then the permit shall be valid until the project is completed, provided:

1. - 3. (No change.)

[(f)] **(g)** (No change in text.)

SUBCHAPTER 9. SPECIAL AREAS

7:7-9.2 Shellfish habitat

- (a) Shellfish habitat is defined as an estuarine bay or river bottom which currently supports or has a history of production for hard clams (*Mercenaria mercenaria*), soft clams (*Mya arenaria*), eastern oysters (*Crassostrea virginica*), bay scallops (*Argopecten irradians*), or blue mussels (*Mytilus edulis*), or otherwise listed below in this section. A shellfish habitat area is defined as an area which meets one or more of the following criteria:
 - 1. (No change.)
- 2. The area has a history of natural shellfish production according to data available to the New Jersey Bureau of Shellfisheries, or is depicted as having high or moderate commercial value in the Distribution of Shellfish Resources in Relation to the New Jersey Intracoastal Waterway (U.S. Department of the Interior, 1963)[,] and/or "Inventory of New Jersey's Estuarine Shellfish Resources" (Division of Fish, Game and Wildlife, Bureau of Shellfisheries, 1983-present)[;

and/or the "Inventory of Delaware Bays Estuarine Shellfish Resources" (Division of Fish, Game and Wildlife, Bureau of Shellfisheries, 1993)];

- 3. 4. (No change.)
- (b) (l) (No change.)
- (m) Rationale: Estuarine shellfish are harvested by both commercial and recreational shellfishermen. Hard clams are the most sought after species harvested as they occur in all estuarine waters. Oysters, bay scallops, and soft clams are predominantly harvested by commercial fishermen. 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.

In addition to being a harvestable resource, shellfish play an important role in the overall ecology of the estuary and are an important forage food source for a variety of finfish species, crabs, and migratory waterfowl. Shellfish themselves are filter feeders and are, therefore, important for maintaining or improving water quality.

There is an inherent conflict between **the protection of** shellfish habitat and water quality [protection] and boating related activities, such as mooring and dredging, though both are important [water-dependent] **water dependent** activities in New Jersey. Boating related activities may affect shellfish habitat and the harvestability of shellfish. Mooring facilities can be 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] by the leaching of toxic chemicals and heavy metals from waterfront construction materials and boat-related pollutants, and human waste disposed in close proximity to these marinas and docks. 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, fueling operations, and bilge pumping. The effects of petroleum hydrocarbons on fish and shellfish include direct lethal toxicity, sublethal disruption of physiology[,] and/or behavior, bioaccumulation, and development of an unpleasant taste to edible species. Motor fuels and exhaust [often] can 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 also have adverse impacts to estuarine organisms. Some detergents used to wash boats can be toxic to fish and invertebrates and may contribute to elevated nutrient levels, particularly **of** phosphorous. Toxins from various antifouling paints are harmful to shellfish and other invertebrates.

This rule intends to strike a balance between 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 by allowing new dredging at existing public boat launching facilities and major mooring/docking facilities. 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 pumpout 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 when these better equipped marina facilities are equipped with pumpout facilities. Therefore, maintenance of these facilities is considered acceptable.

Marinas have infrastructure necessary to support recreational boating including pumpout facilities. The State has seen a decrease in the number of marina facilities through their conversion to other non-water dependent uses. The Marine Trades Association of New Jersey has provided a report based on information provided from marine businesses which indicates that

over 500 boat slips and 17 marinas have been lost as of 2011. Not only does this result in a loss of slips available to the public, it results in the loss of jobs, revenue and marina services. To preserve existing marinas and the necessary services they provide, encourage new marinas and ensure there is a sufficient amount of boat slips available to the public, expansion of existing commercial marinas and construction of new "infill" marinas in limited situations is acceptable where mitigation through the minimization of the area covered by structures, the use of non-polluting materials, the prohibition of dredging and the provision of a monetary contribution to the Department's dedicated account for shellfish habitat mitigation is provided.

In accordance with N.J.A.C. 7:7-17.9, mitigation for impacts to shellfish habitat and the marine ecosystem associated with the construction of a dock, pier, mooring, or marina include the recording of a conservation restriction and a monetary contribution to the Department's dedicated account for shellfish habitat mitigation. The conservation restriction is intended to reduce any future impacts to the marine ecosystem by prohibiting the construction of a shoreline protection structure other than stone rip-rap or other sloped revetments on an unbulkheaded lot, or the replacement, reconstruction, or rehabilitation of an existing bulkhead with anything other than non-polluting materials. In addition, the monetary contribution to the Department's dedicated fund for shellfish habitat mitigation and restoration is based on the area of shellfish habitat covered by planned structures and mooring areas, the documented shellfish density supported by the local habitat, and the commercial value of the resource. This contribution is intended to ensure that adverse impacts to the shellfish resource are minimized and habitat improvements are promoted in areas outside of the impacted area through the use of the mitigation funds. In 2016, the

Assistant Commissioners of Land Use Management and Natural and Historic Resources signed a Memorandum of Understanding that establishes a framework for the use and management of funds from the Department's dedicated account for shellfish habitat mitigation.

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 waters classified as prohibited for harvesting shellfish 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 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. 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. In 1985, this 107-acre area was estimated to contain 6.2 million hard clams. 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.] Compliance with specific standards for boat mooring facilities with five or more slips within these watercourses is required so as to not adversely impact this highly productive shellfish habitat.

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 Departments of Environmental Protection and Agriculture, the United States Department of Agriculture, and the USEPA. 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], after 25 years of being closed to shellfish harvest, the shellfish classification of the [river] Lower Navesink River was upgraded to seasonally approved. Other parts of the river are classified as special restricted. 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] was 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. The Alliance requested that the Department ask USEPA to designate the Manasquan River Estuary a No Discharge Zone pursuant to the Federal Clean Water Act.

The Department sought such a designation from USEPA and the Manasquan River Estuary was officially declared a No Discharge Zone by USEPA in June 1998.

7:7-9.3 Surf clam areas

- (a) (No change.)
- (b) Development which would result in the destruction, condemnation, or contamination of surf clam areas is prohibited except for the following:
 - 1. (No change.)
 - 2. Sand and gravel mining to obtain material for beach nourishment provided:
 - i. (No change.)
- ii. There are no prudent and feasible alternative offshore borrow sites that would result in less impact to marine fish and fisheries;
 - iii. iv. (No change.)
 - (c) (No change.)

7:7-9.5 Finfish migratory pathways

(a) Finfish migratory pathways are waterways (rivers, streams, creeks, bays and inlets) which can be determined to serve as passageways for diadromous fish to or from seasonal spawning areas, including juvenile anadromous fish which migrate in autumn and those listed by H.E. Zich

(1977) "New Jersey Anadromous Fish Inventory" NJDEP Miscellaneous Report No. 41, and including those portions of the Hudson and Delaware Rivers within the coastal zone boundary.

1. Species of concern include: alewife or river herring ([Alosa pseudoharengus] *Alosa pseudoharengus*), blueback herring ([Alosa sapidissima] *Alosa aestivalis*), American shad ([Alosa aspidissima] *Alosa sapidissima*), striped bass ([Monroe saxatilis] *Morone saxatilis*), Atlantic sturgeon ([Acipenser oxyrhynchus] *Acipenser oxyrinchus oxyrinchus*), Shortnose sturgeon ([Acipenser brevirostrum] *Acipenser brevirostrum*) and American eel ([Anguilla rostrata] *Anguilla rostrata*).

$$(b) - (e)$$
 (No change.)

7:7-9.6 Submerged vegetation habitat

$$(a) - (d)$$
 (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] detrital food webs in a similar manner to salt marsh emergent [Spartina] *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]. This growth pattern forms a vegetative community [and] which migrates 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 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.

7:7-9.8 Canals

- (a) (c) (No change.)
- (d) Rationale: Canals represent a large capital investment to create boat traffic routes. Of the coastal canals, the Cape May and Manasquan-Bay Head canals are still used extensively for their original purposes. Maintenance of this original function is encouraged. Abandoned canals offer recreational opportunities. The Delaware and Raritan Canal [is being] has been redeveloped as

a State park with recreational boating and continued use as a water supply facility. [This re-use is] **Similar reuses in the coastal zone are** encouraged.

7:7-9.12 Submerged infrastructure routes

- (a) (b) (No change.)
- (c) Rationale: [The Rationale statement for this section is not reproduced in the Code. The Rationale statement may be reviewed by contacting the Division of Land Use Regulation at the address set forth at N.J.A.C. 7:7-1.6.] Submerged infrastructure routes are a large capital investment and much depends on the safe functioning of the infrastructure. Both human and natural systems suffer from accidental breakage, especially of large oil or gas pipelines. Activities that increase hazard for submerged infrastructure must, therefore, be excluded.
- 7:7-9.13 Shipwreck and artificial reef habitats
 - (a) (c) (No change.)
- (d) Rationale: Shipwrecks and other natural or artificial materials can serve as critical habitat for benthic finfish and lobsters, and other invertebrates which prefer shelter in hard substrates otherwise uncommon in New Jersey's marine waters. These areas function as congregation, refuge, feeding, and nursery areas for migratory species and support extensive fisheries. Although artificial reefs have been constructed for angling and diving, their goal is not solely to benefit human-use. A primary goal of an artificial reef is ecosystem and habitat

enhancement. Due to the potential of reefs to serve as marine fish congregating areas, commercial and recreational fishing on artificial reefs may be regulated by the Department's Division of Fish and Wildlife, the Atlantic States Marine Fisheries Commission, and/or the Mid Atlantic Fisheries Management Council. As of [2005] 2015, New Jersey had 15 reef sites [encompassing approximately 26 square miles of sea floor]. With the restoration of Federal funding in 2016, as many as 10 additional vessels are planned to be deployed to enhance these existing artificial reef habitats. The sites are strategically located along the State's 120 mile coastline near navigable inlets. Shipwrecks are also fragile historic and cultural resources. Scuba divers from New Jersey and other states visit artificial reefs extensively.

7:7-9.14 Wet borrow pits

- (a) (i) (No change.)
- (j) Rationale: The special area rules for wet borrow pits are less restrictive than the rules for other lakes, ponds, and reservoirs in that they allow sand and gravel extraction, dredge [spoil disposal] material placement, and filling, under specified conditions. This less restrictive approach is appropriate because they are already disturbed sites[. Also], they are of relatively recent origin, and, typically, vegetative succession is not as far advanced as along natural lakes. Wet borrow pits, therefore, tend to be less important as wildlife habitats than natural lakes. Finally, they are not connected to the wider estuarine system by streams.

On the other hand, their separation from streams means that they are most susceptible to water quality impacts caused by runoff. The water is still, and the only water loss is through

groundwater seepage and evaporation. Sediment collects quickly, enlarging marsh areas, and the eutrophic conditions that lead to sudden oxygen loss are concentrated by evaporation. Low levels of toxicity are quickly biomagnified to fatal levels. In general, these still water areas are much more sensitive to impacts of all kinds than flowing water.

Undisturbed wet borrow pits can become wildlife habitats for aquatic, amphibian, and terrestrial species[,] **by** offering productive edges, shallow waters, wetland areas, and important breeding and migratory habitats. Proposals that include wet borrow pits as wildlife preserves are, therefore, encouraged. Low intensity recreation which takes advantage of the scenic amenities of these lakes is also desirable if wildlife disturbance is minimized.

There is a severe shortage of dredged material management areas in New Jersey. The filling of wet borrow pits is essentially a reverse of the mining operation which created them, and has less negative impact than filling natural depressions, provided that the dredged material is clean and non-toxic and the particle size matches the neighboring natural substrates closely enough so as to not disturb groundwater movement. If the filling of wet borrow pits is designed to retain some surface water area, and to maximize land-water edges, much of the wildlife value can be preserved while providing needed spoil disposal sites.

The value of wet borrow pits as wildlife habitat may be enhanced by limited fingers of fill to enlarge the land-water interface. Filling can also create sites for waterfront housing. Since residential construction sites near surface water are much in demand, it is desirable to allow some residential and related uses, provided that housing is consistent with location and use rules, water quality is maintained, and a water quality buffer is preserved along the water's edge. The buffer would not block visual or physical access to the water, but would preserve water quality

and provide wildlife habitat. Medford Lakes provides an example of an attractive residential community built around wet borrow pits, but siltation and eutrophication provide evidence for the need for a water quality buffer area.

The use of dredged material of appropriate grain size and that is clean as fill in the reclamation of wet borrow pits promotes the State's long-standing policy of treating dredged material as a resource and to beneficially use dredged material in appropriate applications rather than relying on disposal of dredged material in confined disposal facilities.

7:7-9.16 Dunes

(a) - (d) (No change.)

(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. A study from the Coastal Research Center at the Richard Stockton College of New Jersey (Barone, D.A., McKenna, K. K., and S.C. Farrell, 2014, Hurricane Sandy: Beach-dune performance at New Jersey Beach Profile Network sites) concluded that Federally designed shore protection projects that included engineered dunes provided protection to landward structures during Superstorm Sandy. The communities that suffered the greatest damages from Superstorm Sandy were those where dunes were nonexistent, or where the elevations of dunes and beach berms were low or beach widths were narrow.

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] windblown 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.

7:7-9.17 Overwash areas

- (a) (e) (No change.)
- (f) Rationale: Overwash areas indicate weakness in natural and man-made shore protection.

 Hazard has been demonstrated, often with extensive property damage. Overwash areas are, therefore, unsuitable locations for further development, and public funds should not be used to rebuild damaged shore protection structures. However, in certain oceanfront communities where

an existing municipal boardwalk (including all adjacent resort-oriented commercial establishments) is already densely developed and is the dominant tourism attraction of the community, low intensity, infill development may be permitted. At these specific locations, the gain in public use and enjoyment of the beach, ocean and boardwalk facilities outweighs the limited additional [and] loss in property damages. Elsewhere the return of these areas to a natural state and the formation of dunes is desirable.

Overwash is a natural shoreline movement process associated with storm and rising sea level and is one of the processes by which barrier islands migrate inland under natural conditions. In New Jersey, migration caused by overwash is usually prevented due to shore protection structures, the highly developed nature of barrier islands and post-storm clean-up practices.

A development proposed in an overwash area may, by incorporating a "design dune" and buffer area, whose dimensions would be determined on a case-by-case basis, mitigate the hazard and change the classification of the site so that it is no longer an overwash area.

7:7-9.18 Coastal high hazard areas

(a) Coastal high hazard areas are flood prone areas subject to high velocity waters (V zones) as delineated on [the FIRM] **FEMA flood mapping**, and areas within 25 feet of oceanfront shore protection structures, which are subject to wave run-up and overtopping. The coastal high hazard area extends from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The inland limit of the V zone is defined as the V zone boundary line as designated on [the

FIRM] **FEMA flood mapping** or the inland limit of the primary frontal dune, whichever is most landward.

- [(b) Residential development, including hotels and motels, is prohibited in coastal high hazard areas except for single family and duplex infill developments that meet the standards of N.J.A.C. 7:7-15.2(e) or (f) or development in Atlantic City in accordance with (g) below.
 - (c) In general, commercial development is discouraged in coastal high hazard areas.]
- (b) Except as provided at (c), (d), (e), and (f) below, residential and commercial development is prohibited in coastal high hazard areas.
- (c) Residential development landward of the mean high water line in coastal high hazard areas is conditionally acceptable provided the development is:
- 1. A single-family home or duplex infill development that meets the standards of N.J.A.C. 7:7-15.2(e) or (f) and complies with Federal flood reduction standards at 44 CFR Part 60 and the UCC; or
- 2. Located in Atlantic City or in a special urban area within the Hudson River Waterfront Area as described at N.J.A.C. 7:7-9.46(a)2, complies with the special urban area rule and Hudson River Waterfront rules, N.J.A.C. 7:7-9.41 and 9.46, as applicable, the Federal flood reduction standards at 44 CFR Part 60, and the UCC.

- (d) Hotel and commercial development in Atlantic City or in a special urban area within the Hudson River Waterfront Area described at N.J.A.C. 7:7-9.46(a) are acceptable in coastal high hazard areas provided such development complies with the Atlantic City rule, N.J.A.C. 7:7-9.47 or special urban area and Hudson River Waterfront rules, N.J.A.C. 7:7-9.41 and 9.46, as applicable, the Federal flood reduction standards at 44 CFR Part 60, and the UCC.
- (e) Water dependent development and amusements are conditionally acceptable within coastal high hazard areas provided the development complies with the Federal flood reduction standards at 44 CFR Part 60 and the UCC.
 - [(d)] (f) (No change in text.)
- [(e)] **(g)** Any development determined to be acceptable at (c)2, [and] (d), and (f) above shall comply with the requirements for impervious cover and vegetative cover that apply to the site under N.J.A.C. 7:7-13.
- [(f)] **(h)** All permanent structures shall be set back a minimum of 25 feet from oceanfront shore protection structures, typically including bulkheads, revetments and seawalls and occasionally jetties and groins if constructed at inlets. This condition is applicable only to shore protection structures that are of sufficient height and strength to provide resistance to storm

waves. This condition does not apply to development in **Atlantic City in** accordance with [(g) below] (c) and (d) above.

- [(g) The following development in Atlantic City is acceptable in coastal high hazard areas provided it meets the standards of N.J.A.C. 7:7-9.47:
- 1. Development on or over existing ocean piers;
- 2. Pilings necessary to support development proposed on or over existing ocean piers; and
- 3. Development on or over the Boardwalk.]
- [(h)] (i) Rationale: V zones are areas subject to high velocity waters and are further defined as areas capable of supporting a three foot high breaking wave. These areas are designated on [FIRMs] FEMA flood maps as zone [VI-30] V or VE. On many [FIRMs] FEMA flood maps, oceanfront bulkheads, revetments or seawalls have been used to delineate the landward limit of the coastal high hazard area. However, wave run-up, which is the rush of water up a structure or beach that occurs on the breaking of a wave, and overtopping may also cause considerable damage behind bulkheads, revetments and seawalls inshore of the V zone limit. Both V zone and wave run-up zone are high hazard areas where structures are vulnerable to severe storm damage. [The only] Most developments allowed [by] under this rule are [ones] those which [are related to beach use and/or tourism and, limited residential infill development.] comply with other State regulations (that is, the Uniform Construction Code (UCC) promulgated by the Department of Community Affairs) and Federal standards (that is, the flood reduction standards at 44 CFR Part 60). [These beach] Beach use and tourism oriented

developments and water dependent developments are not subject to the UCC or 44 CFR Part 60, but are subject to storm damage. [but] However, they enhance the public use and enjoyment of the beach and ocean and accordingly are conditionally acceptable.

Residential development (other than limited infill development) and commercial development in coastal high hazard areas is limited to the Hudson River Waterfront area and Atlantic City allowing reasonable development in already densely-developed areas while protecting people and property from the negative impacts of flooding and coastal storms.

The Uniform Construction Code and Federal flood reduction standards establish specifications for construction that reduce risk to people and property in the event of a flood. The Department has, therefore, determined that certain development in coastal high hazard areas that meets these standards is appropriate.

7:7-9.19 Erosion hazard areas

- (a) (b) (No change.)
- (c) Rationale: As a result of continuing rising sea levels, active storm induced sand movements, and offshore currents (littoral drift), most of the Atlantic coastline of New Jersey is retreating. Coastal erosion also affects the bayshores of New Jersey. The rate of retreat, or erosion, is not uniform, and varies locally depending upon the nature and magnitude of coastal processes operating within individual parts of the shoreline. Certain parts of the shoreline have a higher risk for future erosion.

Development other than shore protection measures and linear development is prohibited in these areas in order to protect public safety and prevent loss of life and property. However, in certain oceanfront communities where an existing municipal boardwalk (including all adjacent resort-oriented commercial establishments) has long been featured as the main attraction of that resort community and is already densely aligned with buildings, low intensity infill may be permitted. At these specific locations, the gain in public use and enjoyment of the beach, ocean and boardwalk facilities outweighs the limited, potential additional loss in property damages.

The annual rate of erosion shall be calculated on a case-by-case basis by using the best available data and scientific methodology. Historical erosion rates of areas need to be analyzed to determine the particular past trend that best reflects the current shoreline processes affecting that area. The appropriate long or short term historical erosion rate of an area is then combined with other information, which may help to explain the erosion rate of an area, to determine a projected erosion rate for the next thirty to sixty years. These factors include, but are not limited to: past or on-going shore protection activities, e.g., beachfills, or groin, revetment, or bulkhead constructions, and past or on-going navigation channel dredging projects and past storm events.

The Department will use a computer program, entitled ["Metric Mapping Analysis of New Jersey's Historical Shoreline Data," developed in 1988 for the Department by Stephen P.

Leatherman, et al, of the University of Maryland Coastal Mapping Group,] "Digital Shoreline Analysis System," developed by USGS, to produce historical shoreline change maps for specific sites along the oceanfront. These maps will be used to establish the appropriate long or short term trend in shoreline changes that will most likely continue in the future for a specific site.

The projected annual erosion rate or historical shoreline change data for a specific site, excluding the Raritan Bay area, may be obtained from the Department by written request accompanied by a site plan which identifies the site by either the "state plane" coordinate system or latitude -longitude coordinates. For sites located along the Raritan Bay, the annual erosion rate can be found in Paul A. Gares, Karl F. Nordstorm and Norbert P. Psuty, Coastal Dunes: Their Function, Delineation and Management, Center for Coastal and Environmental Studies, Rutgers University for NJDEP, 1979. Other appropriate sources including verifiable aerial photography, may also be consulted.

7:7-9.20 Barrier island corridor

- (a) Barrier island corridors are the interior portions of oceanfront barrier islands, spits and peninsulas. Along the New Jersey Coast, headlands are located between Monmouth Beach, Monmouth County and Pt. Pleasant Beach, Ocean County.
- 1. The oceanfront barrier island corridor encompasses that portion of barrier islands, spits and peninsulas (narrow land areas surrounded by both bay and ocean waters and connected to the mainland) that [lies] **are** upland of wetlands, beach and dune systems, filled water's edges, and existing lagoon edges. Barrier island corridor does not include the headlands of northern Ocean County, Monmouth County, and the southern tip of Cape May County, which are part of the mainland.

(b) (No change.)

(c) Rationale: All of New Jersey's barrier islands and spits, except for Pullen Island in the Brigantine National Wildlife Refuge, are developed to varying degree, largely as a result of incremental decisions made beginning more than 100 years ago. Because the public facilities (roads and utilities) necessary to support urban and resort development already exist, and should be protected on New Jersey's barrier islands, and because development pressure is intense on barrier islands, infill projects [and] are conditionally acceptable. [extensions] **Extensions** of development on barrier islands and spits are discouraged.

The [policy] **rule** recognizes the diversity of New Jersey's barrier islands, from [Abescon] **Absecon** Island with the resort city and urban center of Atlantic City to Long Beach [island] **Island** with largely single-family seasonal homes. Implementation of the policy is [excepted] **expected** to reinforce the existing character of New Jersey's developed barrier islands and **not** add appreciably to the public service costs and emergency evacuation (in times of hurricanes) problems of these islands.

7:7-9.23 Filled water's edge

- (a) (c) (No change.)
- (d) On filled water's edge sites with direct water access (that is, those sites without extensive intertidal shallows or wetlands between the upland and navigable water), development shall comply with [the following:] (d)1 through 3 below unless it is demonstrated that a water dependent use is not feasible on the site in accordance with (e) below. Where it is

determined that a water dependent use is not feasible, the site may be developed with a non-water dependent use.

- 1. 2. (No change.)
- 3. On [large] filled water's edge sites[, of about 10 acres or more upland acres,] where [water-dependent] water dependent and water-oriented uses can [co-exist] coexist with other types of development, a greater mix of land uses may be acceptable or even desirable. In these cases, a reduced waterfront portion, that is, less than that provided by a [100 foot] 100-foot setback, may be acceptable provided that non-water related uses do not adversely affect either access to or use of the waterfront portion of the site.
- (e) The Department shall consider the following factors when determining whether a water dependent development is feasible on a filled water's edge site:
- 1. Length of water frontage on the site and the corresponding area of upland to support a water dependent use on the site;
- 2. Presence of special areas, such as shellfish habitat, submerged vegetation habitat, intertidal and subtidal shallows, or wetlands between the upland and navigable water that would preclude approval of a water dependent development;
- 3. Incompatibility of a water dependent development with the surrounding development;
- 4. Land or water contamination such that construction of a water dependent use will pose an ecological risk or endanger public health; and

5. Conditions uniquely affecting the particular property that result in peculiar and exceptional practical difficulties in the development of a water dependent development, such as the depth of water adjacent to the site, unusual current or other natural conditions, or the ability to obtain authority from the State to use tidelands necessary to support a water dependent use on the site.

Recodify existing (e) – (l) as (f) – (m) (No change in text.)

[(m)] (n) Rationale: The water's edge along New Jersey's shore, bays and rivers is a highly valued, yet limited, resource. Waterfront locations offer a rare combination of natural features and opportunities for waterborne commerce and recreational boating. Though an estimated 37 percent of the State's 753 miles of shoreline along navigable waterways is filled water's edge, two-thirds of these locations are already developed. The particular requirements for an average sized marina or port facility further narrow[s] the filled water's edge potentially suitable for such development to approximately 3 percent, or 19 miles, of the State's entire water's edge (NJDEP, Policy Assessment 1983).

Filled water's edge areas, though relatively scarce, are less environmentally sensitive than undisturbed water's edge areas. The buffering functions of the water's edge have already been lost through excavation, filling, and the construction of retaining structures. The filled water's edge, therefore, provides the best opportunity for intense use of the waterfront.

Accordingly, certain kinds of development are allowed up to the limit of fill.

The rule seeks to promote both the marine trades as an important sector of the State's economy and uses that enhance public access to, and use of, the water's edge. Uses that require a waterfront location in order to function (that is, water dependent uses) and uses that serve the general public and derive economic benefits from a waterfront location (that is, water-oriented uses) are favored over non-water related uses such as housing and offices. These non-water related uses can be situated away from the water. The rule permits the construction of decks for a water oriented use such as a restaurant, with appropriate awnings, seating, food and beverage areas because they serve the general public yet are not such substantial structures that would preclude their removal for a water dependent use.

However, there are situations where the development of a filled water's edge site with a water dependent use is not feasible due to proportion of waterfront to non-waterfront portions of the site, the presence of special areas that would preclude approval of a water dependent development, incompatibility of a water dependent use on the site with the surrounding uses, land or water contamination such that the construction of a water dependent use would pose an ecological risk or endanger public health, and/or other site-specific conditions that result in peculiar and exceptional practical difficulties in the development of a water dependent development. In such cases, development of the site with a non-water dependent use is acceptable.

Since many existing water dependent uses are being lost, or more often, constricted by housing and other non-water related uses, and since few excellent sites remain for recreational and commercial boating, it is desirable to restrict redevelopment of sites currently or recently occupied by a water dependent use. Further, preserving slips open to the general public is

necessary to protect the public's common law right to use tidal waters for navigation. Although housing at the water's edge can in some situations ensure the long term viability of a marina, it generates additional boating demand, which further aggravates limited marina space.

Accordingly, in defining "Slip open to the general public," slips leased only to owners of associated housing or only to residents of a certain municipality would be excluded, unless any member of the general public could join by paying a reasonable fee. Marinas warrant special attention for several reasons. They benefit the State by attracting tourists and associated revenues and by serving the residents who go boating in New Jersey's coastal waters. Where consolidation of a marina's land based facilities is justified, the existing marinas services and boat slips must be maintained or, where possible, expanded. Upland boat storage is an exception. Upland storage for most (75 percent) of a marina's large boats, which cannot be easily trailered off-site, must be accommodated. However, space for only a small portion (25 percent) of boats that can be trailered off-site for winter storage must be retained.

Along the Hudson River, Delaware River, Raritan River, and Passaic River, and in other portions of the developed urban waterfront, potential for future water dependent and maritime support services is also of concern. On these sites, economic revitalization must be balanced against the need to preserve and provide for water dependent and water-oriented uses.

7:7-9.25 Flood hazard areas

(a) - (c) (No change.)

- (d) In an undeveloped portion of a flood hazard area that is within 100 feet of a navigable water body **other than the Atlantic Ocean**, development is prohibited unless the development is one or two single-family homes or duplexes in accordance with N.J.A.C. 7:7-15.2(e) or is for a water dependent use. ["Navigable" and "water dependent: are defined at N.J.A.C. 7:7-1.5.] For the purposes of this subsection and (e) below, an "undeveloped" area is an area that has no impervious cover.
 - (e) (j) (No change.)
- 7:7-9.28 Wetlands buffers
 - (a) (d) (No change.)
- (e) Rationale: Development adjacent to wetlands can adversely affect the wetlands through increased runoff, sedimentation, and introduction of pollutants.

The coastal zone includes a diversity of types of wetlands, of varying widths, quality and importance to the ecosystem, from large forested freshwater wetlands, to narrow strips of coastal wetlands. For this reason, the appropriate buffer necessary to protect the wetlands adjacent to proposed land disturbance must be determined on a case-by-case basis, but using a standard that requires no significant impact on, and minimum feasible disturbance to, the wetlands.

The preservation of a transitional area of native vegetation in the portion of the wetlands buffer adjacent to [a] **the** wetlands and the construction of detention basins or berms if necessary

to control runoff, could mitigate impacts and make development permissible in the remainder of the wetlands buffer.

Buffers that support strands of native vegetation perform the following ecological and physical functions:

- 1. Stabilization of soil and prevention of erosion;
- 2. Filtration of suspended solids (silt) to prevent their deposition on wetlands. Siltation onto wetlands can lead to undesirable changes in vegetation, e.g. from cord grass ([Spartina] *Spartina*) to reeds ([Phragmites] *Phragmites*), which contribute less to the estuarine and marine food chain;
 - 3.-5. (No change.)
 - 6. Formation of a barrier to floating debris[,]; and[;]
 - 7. Contribution to estuarine productivity, especially if the buffer is a forested floodplain.

As transition areas between differing vegetation communities (habitat areas), appropriately vegetated wetlands buffers function as ecotones, supporting a diversity of species and uses, and serving as wildlife movement corridors.

Wetlands buffers are used as lookout perches for raptors; nesting sites for [Marsh Hawks, Black Crowned Night Heron, and Osprey] marsh hawks, black crowned night herons, and ospreys; fall migration foraging stopovers for birds, including woodcock; nesting sites for [Wood Ducks, Black Ducks, and Mallards] wood ducks, black ducks, and mallards; and forage routes into and out of wetlands for [Raccoons, Mink, Muskrat, Fox, Deer] raccoons, minks, muskrats, foxes, deer, and others. Grassy wetlands edges serve as feeding sites for Wilson's [Snipe, Ruffled Grouse, Quail] snipe, ruffed grouse, quail and song birds.

Wetland buffer requirements may be less restrictive in areas where proposed development is considered infill, and where a majority of the area adjacent to the wetlands is developed. In these areas, the potential adverse impacts to the wetlands from additional development are generally minor. The Department will establish the required wetland buffers for these areas on a case-by-case basis, based on the existing site conditions, including but not limited to elevation, topography and vegetation.

7:7-9.30 Intermittent stream corridors

- (a) –(d) (No change.)
- (e) Rationale: Intermittent [Stream Corridors] **stream corridors** are the spring areas for coastal streams. They are very susceptible to surface and subsurface disturbance. The water quality of coastal streams and estuaries depends in part on undisturbed spring areas. They are productive areas since water is at or near the surface, and are important wildlife habitats. For these reasons the intention of the rules is preservation.

7:7-9.32 Steep slopes

- (a) (c) (No change.)
- (d) Rationale: [The Rationale statement for this section is not reproduced in the Code. The Rationale statement may be reviewed by contacting the Division of Land Use Regulation at the

address set forth at N.J.A.C. 7:7-1.6.] Preservation of steep slopes controls soil erosion, protects up-slope lands, minimizes pollution of surface waters, reduces flooding, preserves the banks of streams and intermittent streams, and maintains water flow in headwaters. When vegetation is disturbed, rainfall strikes surface soils causing soil particle movement through surface water flow and gravity, which results in increased surface runoff and downstream flooding. When this silty water enters a surface water body, increased turbidity and sedimentation usually follow, which can cause reduction of productivity and flood water storage capacity. Aesthetics are also affected when erosion occurs and topsoil is lost.

In addition to naturally-occurring steep slopes, there are also man-made steep slopes left after such activities as mining and road grading. Development of both natural and man-made steep slopes can have significant detrimental impacts on water quality, species habitat, and flooding, as discussed above.

7:7-9.33 Dry borrow pits

- (a) (i) (No change.)
- (j) Rationale: Dry borrow pits have been used successfully [in] **on** Long Island to recharge [deleted] **depleted** aquifers by channeling surface runoff and tertiary sewage effluent into them. These uses are encouraged in New Jersey's coastal areas, especially where there is a history of saline intrusion. There is a critical shortage in coastal areas of **placement and** disposal sites for [dredge spoil] **dredged material** and solid waste. Dry borrow pits offer opportunities of low-

impact disposal if they are compatible with existing uses, the leachate is carefully controlled and the site reclaimed on conclusion. Dry borrow pits have comparatively low environmental value and so are acceptable sites for development if all other policies are satisfied. The use of dredged material of appropriate grain size and that is clean as fill in the reclamation of dry borrow pits promotes the State's longstanding policy of treating dredged material as a resource and to beneficially use dredged material in appropriate applications rather than relying on disposal of dredged material in dredged material management areas.

7:7-9.38 Public open space

- (a) (g) (No change.)
- (h) Rationale: [The Rationale statement for this section is not reproduced in the Code. The Rationale statement may be reviewed by contacting the Division of Land Use Regulation at the address set forth at N.J.A.C. 7:7-1.6.] As the urbanization of New Jersey continues and leisure time increases, open space will play an increasingly important role in maintaining a desirable living environment for the residents of New Jersey. While the supply of open space has decreased under the growing pressure for development, the State's expanding population will require more public open space to satisfy its needs.

Not only is open space the basic resource for recreation facility development, it also performs other worthwhile functions. Open space can create public spaces in densely settled areas, shape urban growth, provide buffers between incompatible uses, retain contiguous farmland, insure the preservation of wildlife corridors, increase the economic

value of adjacent land, and preserve distinct architectural, historic, and geologic sites. In addition, undeveloped and minimally developed open space can positively affect water quality by, for example, absorbing stormwater runoff.

7:7-9.40 Excluded Federal lands

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

(c) Rationale: Although the Federal Coastal Zone Management Act excludes from the coastal zone those lands, the use of which is solely subject to the discretion of or held in trust by the Federal Government, the Federal Coastal Zone Management Act requires that actions of Federal [Agency's] agencies within or outside of the coastal zone that affect any land or water use or natural resource of the coastal zone be carried out in a manner that is consistent to the maximum extent with the state's approved coastal management program. Federal consistency is a method of ensuring protection of coastal resources through the coastal management policies of states and by assisting states in managing coastal uses and resources. Federal consistency can help protect entire ecosystems as well as individual resources and uses.

7:7-9.43 [Hackensack] Meadowlands District

(a) (No change.)

(b) A coastal activity or development for which the New Jersey [Meadowlands Commission]

Sports and Exposition Authority requires a zoning certificate shall be consistent with the New

Jersey Meadowlands Master Plan, as evidenced by receipt of a zoning certificate from the New Jersey [Meadowlands Commission] **Sports and Exposition Authority**.

- (c) In addition to (b) above, a coastal activity or development identified at (c)1 through 3 below shall be consistent with the New Jersey Meadowlands Master Plan as evidenced by receipt of a resolution or statement of consistency from the New Jersey [Meadowlands Commission]

 Sports and Exposition Authority.
- 1. Municipal or county projects necessitating the expenditure of any public funds and requiring review and approval through a resolution from the New Jersey [Meadowlands Commission] **Sports and Exposition Authority** in accordance with the Hackensack Meadowlands Reclamation and Development Act, N.J.S.A. 13:17-12(b);
- 2. Municipal projects, located on land owned by a municipality, provided that the following conditions as outlined in the New Jersey Meadowlands Commission District Zoning Regulations, at N.J.A.C. 19:4-3.2(a)5, are met:
- i. The governing body and planning board of the municipality have entered into a memorandum of understanding with the New Jersey Sports and Exposition Authority (formerly the New Jersey Meadowlands Commission), and remain in compliance with the memorandum of understanding, agreeing that municipal projects shall comply with applicable New Jersey Meadowlands Commission District Zoning Regulations and that review of the project by the municipality shall utilize [New Jersey Meadowlands Commission] New Jersey Sports and Exposition Authority standards;

- ii. The municipal project has been reviewed by the planning board of the municipality, which has certified to the **New Jersey Sports and Exposition Authority, or its predecessor, the** New Jersey Meadowlands Commission, that the project is in compliance with all applicable New Jersey Meadowlands Commission District Zoning Regulations; and
- iii. A complete copy of the plans for the municipal project, and a certification of the planning board, have been sent to the New Jersey Sports and Exposition Authority, or its predecessor, the New Jersey Meadowlands Commission, for review, and the New Jersey Sports and Exposition Authority, or its predecessor, the New Jersey Meadowlands Commission, has not notified the municipality within 45 days of the receipt thereof of any objection to the project; and
- 3. Developments and improvements proposed or sponsored by the New Jersey [Meadowlands Commission] **Sports and Exposition Authority**, in accordance with New Jersey Meadowlands Commission District Zoning Regulations at N.J.A.C. 19:4-3.2(a)3.
 - (d) (e) (No change.)
- (f) Coastal activities under the jurisdiction of the New Jersey [Meadowlands Commission]

 Sports and Exposition Authority shall not require a Freshwater Wetlands permit, or be subject to transition area requirements of the Freshwater Wetlands Protection Act, except that discharge of dredged or fill materials may require a permit issued under the provisions of Section 404 of the Federal Water Pollution Control Act of 1972 as amended by the Federal Clean Water Act of 1977, or under an individual or general permit program administered by the State under the provisions of the Federal Act and applicable State laws.

- Exposition Authority (formerly the New Jersey Meadowlands Commission) will coordinate the review of proposed developments and activities within the [Hackensack] Meadowlands District through the process outlined in the November 9, 2005, Memorandum of Agreement between the two agencies and any subsequent amendments to that agreement. A copy of the Memorandum of Agreement may be obtained from the Department's Division of Land Use Regulation at the address or telephone number set forth at N.J.A.C. 7:7-1.6.
- (h) Rationale: The New Jersey [Meadowlands Commission] **Sports and Exposition Authority** is the lead planning and management agency within this special area. Under the Federal Coastal Zone Management Act (16 U.S.C. § 1450), the New Jersey Meadowlands Commission Master Plan is adopted as part of New Jersey's Coastal Management Program. The [Hackensack] Meadowlands District is identified by New Jersey's Coastal Management Program as a Geographic Area of Particular Concern pursuant to 16 U.S.C. § 1455 (see "New Jersey Coastal Management Program and Final Environmental Impact Statement," August 1980, page 263).

In 2004, the New Jersey Meadowlands Commission (now part of the New Jersey Sports and Exposition Authority) adopted a revised Master Plan for the District. The Master Plan is the primary planning document for the New Jersey Meadowlands Commission. It presents a cohesive set of planning principles and standards adopted by the New Jersey Meadowlands Commission to guide future development while protecting the resources of the District. The

policies and principles of the Master Plan are effectuated through the New Jersey Meadowlands Commission District Zoning Regulations, N.J.A.C. 19:4.

7:7-9.44 Wild and scenic river corridors

- (a) (c) (No change.)
- (d) Where the need for shoreline stabilization has been demonstrated, biostabilization of eroding shorelines shall be used where feasible. These systems include live branch cuttings, live facings, live stakes, vegetative cuttings, vegetated earth buttresses, [choir] coir fiber products, fiber plugs, plants, fiber pallets, fiber carpet, and wood stake anchor systems. These materials shall be installed in accordance with the construction guidelines of Chapter 16, "Streambank and Shoreline Stabilization Protection," of the National Resources Conservation Service Engineering Handbook, National Engineering Handbook (NEH), Part 650, 1996, published by the United States Department of Agriculture, herein incorporated by reference as amended and supplemented. This document is available on the web at www.NTIS.gov [for a fee] to download for free with the creation of a public access account (order number PB98114358). Standards for structural shore protection are found at N.J.A.C. 7:7-15.11.
 - (e) (i) (No change.)

7:7-9.45 Geodetic reference control marks

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

(c) Rationale: Geodetic control reference marks provide the horizontal and vertical references used by land surveyors and engineers to determine most accurately location and elevations on the earth's surface. The rapid disappearance of survey marks and monuments necessitates the implementation of notification procedures prior to the removal, alteration, or destruction of such marks or monuments. This policy was instituted because of the monuments' relative geographic scarcity, their importance to the surveying and engineering community, and the high cost of relocation or referencing a removed, altered, or destroyed mark or monument.

7:7-9.46 Hudson River waterfront area

- (a) (f) (No change.)
- (g) Rationale: The Hudson River waterfront area has historically been, and is currently, heavily populated and extensively developed. Development pressures are intense in this area. Given its preexisting density of development, this rule seeks to encourage further development if constructed to ensure the safety of people and property in order to steer development towards actively disturbed areas and away from undisturbed areas of the coast. Further, this rule serves to encourage redevelopment efforts in several cities in the Hudson River waterfront area to increase the economic and social vitality of these areas while making wise use of existing footprints of development and infrastructure. Building height requirements are different for buildings in this special area than for other areas of

the coast in order to facilitate this redevelopment and are balanced by requiring public open space and visual access to the water through other means.

The public access requirements for development in the Hudson River waterfront area are intended to balance the public trust rights of people to access the water with site-specific safety needs. The rule facilitates the completion of the Hudson River Waterfront Walkway, which is intended to provide contiguous access to the waterfront for the public in accordance with the Public Trust Doctrine. However, it is not unreasonable to limit night access or to limit access in cases where there is a documented threat to public safety due to unique circumstances on the property, such as hazardous operations.

7:7-9.47 Atlantic City

(a) - (1) (No change.)

(m) Rationale: The Department first established the Atlantic City special area on February 7, 2000, to encourage redevelopment of Atlantic City and its beach and oceanfront facilities in recognition of Atlantic City's unique situation based on the 1976 referendum approving casino gambling in the city. The rule was developed with extensive cooperation between the Department and the Atlantic City Mayor's office and Planning Department.

The goals of this rule are to: (1) provide a predictable permitting process for proposed developments in Atlantic City; (2) promote tourism; (3) maintain, enhance, and promote continued public access to the Atlantic Ocean and Absecon Inlet waterfront and adjacent

beach areas; (4) allow Atlantic City to compete in the future with other gaming resorts throughout the nation; and (5) enable the city to reach its stated goals of becoming a world-class resort. The rule reflects the existing intensity of development in Atlantic City and the importance of the gaming industry to the continued enhancement of the tourist-oriented resort economy, and recognizes the need to promote continued public-use and tourism-related development. This is consistent with the goals of the Coastal Area Facility Review Act to promote multiple uses that support diversity and are in the best long-term, social, economic, aesthetic, and recreational interests of all the people of the State.

SUBCHAPTER 10. STANDARDS FOR BEACH AND DUNE ACTIVITIES

7:7-10.2 Standards applicable to routine beach maintenance

- (a) (b) (No change.)
- (c) Rationale: Beach maintenance activities are sometimes necessary to reestablish the width and contours of the beach and dune system, and to repair structures that facilitate public access to and enjoyment of the shore. Maintenance of beaches is essential to New Jersey's shore tourism and to protecting people and property from storms and wave action. These rules address actions by municipal or county agencies on property owned by that governing body, as well as actions on privately owned property and State owned property. While these actions are necessary, they must minimize impacts to threatened and endangered wildlife and plant species that rely on beaches for habitat, and must not undermine the protective qualities of the beach and dune system.

The Department's Division of Fish and Wildlife, the United States Fish and Wildlife Service, the National Marine Fisheries Service, and the Army Corps of Engineers have determined that beach raking and other mechanical manipulation of beaches has the potential to adversely affect threatened or endangered beach nesting shorebirds and their habitat. These adverse impacts can occur in several ways. First, mechanical vehicles (such as beach rakes and tractors) crush the eggs, as well as chicks and adult birds. Second, these vehicles create ruts in the beach/berm, which restrict the ability of juvenile birds to move between the upper berm nest areas to the feeding habitats along the wrack line. Third, the mechanical sifting of beach sand removes the birds' natural wrack line feeding habitat, which is the primary food source for these beach nesters. Requiring activities to only take place within certain timeframes in areas documented as habitat for threatened or endangered nesting shorebirds or areas documented as habitat for endangered or threatened plant species will minimize impacts to such species by restricting beach maintenance activities to times of year where the species are not likely to be utilizing the beach area. These timeframes are consistent with USFWS recommendations and accommodate piping plovers, least terns, black skimmers, and other migrating shorebirds. The Division of Fish and Wildlife publishes an annually updated list of areas in which these timing restrictions apply. If a particular area is not listed but is subsequently found to contain such a species, the activities must halt until the restricted time period has passed. Restricting beach raking and sand transfers to active recreation beach areas in locations not documented as threatened or endangered species habitat enables permittees to

mechanically clean heavily used recreational beach areas while preserving shorebird feeding habitat.

In the wake of Superstorm Sandy, the Department determined that provisions to allow for the maintenance of engineered beaches and dunes to the design template, allow for the removal of sand from beneath a boardwalk, and allow for the placement of temporary sand fencing during winter months are necessary to facilitate the maintenance of engineered beach and dune systems. Barone, McKenna, and Farrell in their paper "Hurricane Sandy: Beach-dune performance at New Jersey Beach Profile Network Sites" (2014) concluded that Federally designed shore protection projects that included engineered dunes protected landward structures. In the face of future storms, these provisions will allow communities to maintain protective beach and dune systems.

- 7:7-10.3 Standards applicable to emergency post-storm beach restoration
 - (a) (g) (No change.)
- (h) Rationale: Damage to beach and dune systems during storm events has the potential to leave communities vulnerable to subsequent storms. The above standards are intended to facilitate emergency beach restoration activities to stabilize beaches eroded by storm damage. The best method depends upon the extent of damage, the urgency of the situation, and the likely permanent solution. Different materials are appropriate for different locations. This rule promotes the Department's longstanding policy of the beneficial reuse

of dredged material by allowing dredged material to be used as fill material in appropriate circumstances.

- 7:7-10.4 Standards applicable to dune creation and maintenance
 - (a) (d) (No change.)
- (e) The construction of at-grade dune walkovers [is acceptable only] at single-family **homes** and duplexes [residential dwellings, subject to the following conditions] **shall comply with the following**:
 - 1. Only one walkover per [residential building] **site** is allowed;
 - 2. The width of the walkover [must] **does** not exceed four feet;
- 3. The walkover [shall be] is fenced on both sides through the use of sand fencing, split rail fencing, or open handrails, unless prohibited by the municipality; and
- [4. The use of unrolled sand fencing as a base for the walkover is preferred to the use of planks and boards. Sand fence based walkovers allow for easier seasonal removal and placement, and allow for greater growth of beachgrass, while still providing an adequate base for pedestrian traffic; and
- 5. Solid boardwalk type walkovers shall be elevated at least one foot above the dune, to allow for movement of sand and vegetative growth under the boardwalk structure.]
- 4. Any grading or excavation associated with the installation of the walkover does not result in the lowering of the beach or dune below design specifications.

- (f) The construction of at-grade dune walkovers at developments other than a single-family home and duplex shall comply with the following:
 - 1. Only one walkover per site, unless:

i The New Jersey 2012 High Resolution Orthophotography available for download http://njgin.state.nj.us/NJ NJGINExplorer/DataDownloads.jsp, reflects that more than one walkover was present on the site on the date depicted in the image. In such case, the maximum number of walkovers that may be installed shall be equal to the number of walkovers reflected on the 2012 photo-imagery; or

- ii. It is demonstrated that more than one walkover is necessary to adequately provide access from the development. In determining whether more than one walkover is necessary, factors considered by the Department will include the following:
- (1) The number of persons to be served by the development during normal and peak usage times;
 - (2) The length of the dune/beach frontage on the site;
- (3) The distribution of the development on the site (for example, for a site with 1,000 feet of dune/beach frontage, is there one centrally located structure with a central entrance from which residents/patrons will be accessing the walkover, or are there several buildings spread along the beach frontage with multiple entrances on the beach side of the structures); and
 - (4) The proximity of the nearest alternative public access to the beach;

- 2. For non-commercial properties, the width of the at-grade walkover structure does not exceed six feet and the total width of the at-grade walkover, fencing, and/or edging not to exceed eight feet;
- 3. For commercial properties, the width of the at-grade walkover structure does not exceed 10 feet and the total width of the at-grade walkover, fencing, and/or edging not to exceed 12 feet;
- 4. Any grading or excavation associated with the installation of the walkover does not result in the lowering of the beach or dune below design specifications; and
- 5. The walkover is fenced on both sides through the use of sand fencing, split rail fencing, or open handrails, unless prohibited by the municipality.
 - [(f)] (g) (No change in text.)
- (h) Rationale: Barone, McKenna, and Farrell in their paper Hurricane Sandy: Beachdune performance at New Jersey Beach Profile Network sites (2014) concluded that the presence of maintained Federally designed beach nourishment projects including engineered dunes played a significant role in protecting landward structures and infrastructure as the projects absorbed the impacts of the storm waters. This rule is intended to facilitate the creation and maintenance of dunes for shore protection and ecological benefit. This rule is intended to facilitate the creation and maintenance of dunes for shore protection and ecological benefit, while continuing to allow and encourage appropriate public access to the State's beaches. To achieve these goals, the rule provides

predictable, science-based standards for dune creation and maintenance, as well as dune walkover design. The rule also identifies appropriate dune vegetation; planting dunes with a diversity of native vegetation increases stability, reduces dune erosion, and provides high-quality habitat for wildlife. While the use of natural Christmas trees for dune stabilization is discouraged, in order to provide appropriate flexibility in dune creation and maintenance activities, the rule allows their use in certain circumstances provided stringent standards are met.

Dune walkovers create designated areas for people to cross over dunes to reach the beach and ocean. Their presence helps prevent degradation of dunes that could otherwise occur if people routinely walked across the dunes at random locations and also promotes public access to the shore. However, these walkovers must be properly designed and constructed to minimize any impact to the dunes themselves. The number of walkovers in any given area must also be limited to preserve the integrity of the vegetated dune system.

- 7:7-10.5 Standards applicable to the construction of boardwalks
 - (a) (No change.)
- (b) Rationale: Boardwalks are an important feature of New Jersey's coastal landscape and provide the public with opportunities to visually access the waterfront. The rule conditionally allows boardwalks to be constructed if such construction meets specific requirements to ensure the structure can withstand the conditions of the site on which it is constructed.

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

7:7-11.1 Purpose and scope

- (a) (d) (No change.)
- (e) Rationale: Endangered and threatened wildlife and plant species habitat is considered a special area under N.J.A.C. 7:7-9.36. Applicants, therefore, must demonstrate compliance with the standards in N.J.A.C. 7:7-9.36 through the preparation of an impact assessment and/or a habitat evaluation to ensure essential habitat for endangered and threatened wildlife and plant species is not negatively impacted by a proposed regulated activity.
- 7:7-11.2 Standards for conducting endangered or threatened wildlife or plant species habitat impact assessment
 - (a) (b) (No change.)
- (c) Impact assessments shall be conducted for each endangered or threatened wildlife or plant species described in (a) and/or (b) above. The impact assessment shall consider the likely [affects] effects of the proposed development on the local populations of the particular species

on or abutting the site. The impacts shall be assessed using accepted ecological principles and scientific literature on each species and both direct and indirect impacts of the proposed development shall be considered. This assessment shall be based on habitat requirements and life history of each species, and the manner in which the proposed development may alter habitat, including, but not limited to, vegetation, soils, substrate, bathymetry, salinity, hydrology, wildlife movement corridors, human disturbance, and effects on competitor, parasite, or predator species.

(d) Rationale: When an applicant proposes a regulated activity on a site that contains or abuts areas mapped as endangered or threatened wildlife species habitat on the Landscape Maps, or in an area that otherwise meets the definition of endangered or threatened wildlife or plant species habitat as set forth in N.J.A.C. 7:7-9.26(a), the applicant must demonstrate that the proposed activity will comply with N.J.AC. 7:7-9.36, Endangered or threatened wildlife or plant species habitat. An impact assessment is prepared in cases where the applicant does not dispute the Department's designation of the site as endangered or threatened wildlife or plant species habitat. Scientific evidence must be provided to demonstrate that the proposed development would not negatively impact the population(s) of each endangered or threatened wildlife and/or plant species documented on the site. Direct and indirect impacts must be considered in order to ensure compliance with N.J.A.C. 7:7-9.36.

7:7-11.3 Standards for conducting endangered or threatened wildlife species habitat evaluation
(a) – (c) (No change.)

- (d) Rationale: While the Landscape Maps and other Department tools used to designate endangered or threatened wildlife or plant species habitat are backed by sound science, in certain cases the Department's designation of an area as habitat for an endangered or threatened wildlife or plant species is erroneous. For example, site conditions may have changed in a way that can no longer support the species in question. Thus, the Department permits applicants who dispute the Department's designation of a site as threatened or endangered species habitat to submit a habitat evaluation supporting that assertion.

 Requiring a rigorous habitat evaluation allows the Department to reconsider its designation of the site using the most up-to-date information.
- 7:7-11.4 Standards for reporting the results of impact assessments and habitat evaluations (a) (b) (No change.)
- (c) Impact assessments shall include a narrative-with supporting documentation, such as maps and photographs, which contains the following:
- 1. A description for each species, of how the proposed development will alter habitat, including vegetation, soils, hydrology, human disturbance, and effects on competitor, parasite, or predator species. The impact assessment shall describe the likely [affects] **effects** of the proposed development on the local populations of the particular species on or abutting the site and why the development would not directly or through secondary impacts adversely affect each endangered or threatened species habitat; and

2. (No change.)

(d) Rationale: Standard reporting requirements ensure that the Department can accurately determine whether a proposed activity would impact threatened or endangered wildlife or plant species and allow the Department to determine if an area regulated as threatened or endangered wildlife or plant species habitat should continue to be regulated as such. Certain specific requirements apply depending on whether the species in question is an animal or plant species because endangered and threatened wildlife species habitat is identified on Landscape Maps while endangered or threatened plant species habitat is identified using the Natural Heritage Database. Requiring the names and qualifications of all investigators involved ensures that only information from qualified professionals will be considered by the Department.

SUBCHAPTER 12. GENERAL WATER AREAS RULES

7:7-12.2 Shellfish aquaculture

(a) (No change.)

- (b) Shellfish aquaculture is encouraged in all general water areas as defined at N.J.A.C. 7:7-
- 12.1, provided the activity:
 - 1. (No change.)
 - 2. Does not cause adverse environmental impacts; [and]
 - 3. (No change.)

- 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[.]; and
- 6. Complies with any applicable management plan for protection of State and Federally listed threatened and endangered species, as approved by the Department and the USFWS; and/or complies with the endangered or threatened wildlife or vegetation species habitats rule, N.J.A.C. 7:7-9.36, and the critical wildlife habitat rule, N.J.A.C. 7:7-9.37.
 - (c) (d) (No change.)
- 7:7-12.5 Recreational docks and piers
 - (a) (No change.)
- (b) Recreational docks and piers, including jet ski ramps, and mooring piles, are conditionally acceptable provided:
 - 1. 7. (No change.)
- 8. In man-made lagoons only, the structure extends no more than 20 percent of the width of the lagoon from bank to bank; [and]
- 9. The proposed structure and associated mooring piles do not hinder navigation or access to adjacent water areas. A hazard to navigation will apply to all potential impediments to navigation, including access to adjacent moorings, water areas and docks and piers[.]; and

- 10. Photocell lights and reflectors shall be placed along the dock and on mooring piles starting from a point that is 50 feet outshore of the mean high water line to the end of the dock at 10-foot intervals. The lights shall be installed and operational within 72 hours of completion of construction.
 - (c)-(f) (No change.)
- (g) Rationale: Docks and piers constructed through filling would permanently destroy most ecological value of the area filled and are consequently discouraged. Docks and piers constructed in water with insufficient water depth causes increased turbidity resulting in an adverse impact to special areas and water quality. Docks and piers that maximize sunlight penetration into the water and onto the bottom[,] allow the continuation of photosynthesis by plants underneath the structure. "Spaced planking helps protect loosening of boards during high water levels and wave slap from underneath. In cases where it is demonstrated that the width of the dock must exceed eight feet (for example, fishing piers), the dock or pier shall be sized so as to accommodate anticipated use, while minimizing impacts to special areas by reducing the width of the structure over intertidal and subtidal shallows and wetlands, and by increasing the height of the structure over these special areas consistent with the requirements for public safety.

Docks and piers built on pilings will undergo ice heaving, frequently leading to structural damage, during thick ice conditions in areas with significant tidal action. Normal length pilings need to be resunk annually due to ice raising unless some type of water circulation system is installed or ice is broken up daily. Floating docks need to be removed before winter and bottom floatation needs to be serviced annually. Cantilevered docks at a height above winter ice and

tidal action levels do not have these problems but have limits in load bearing capacity and must be fastened to a bulkhead.

Jet skis have been gaining popularity among New Jersey's boating public. Jet ski ramps which can accommodate the "dry" docking of these vehicles can be designed to satisfy the needs of the public while minimizing adverse impacts to the environment.

7:7-12.9 Dredged material disposal

- (a) (No change.)
- (b) The standards relevant to dredged material disposal in water areas are as follows:
- 1. 3. (No change.)
- 4. Overboard disposal (also known as aquatic, open water, side casting, subaqueous, or wet) of uncontaminated sediments into unconfined disposal sites in existing anoxic dredge holes[,] shall comply with the following:
 - i.— iii. (No change.)
 - 5. 6. (No change.)
 - (c) (d) (No change.)

7:7-12.15 Submerged pipelines

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

(c) Rationale: The installation of submerged pipelines has the potential to disrupt the ecosystem in which [it is] **they are** placed and so is discouraged in environmentally sensitive areas. Due to the potential for disrupting the ecosystem, directional drilling is the preferred method for installing submerged pipelines.

Burial and backfilling must be sufficient to minimize damage to pipelines by currents, storm waves, sea clam dredges, anchors and other marine equipment. If a pipeline is not buried deep enough to avoid uncovering by erosion, it will be susceptible to breakage when left uncovered. Pipeline damage or breakage may result in the release of the transport substances into the ocean water with potentially adverse effects to the marine environment. Bottom contours must be reestablished following trenching and backfilling to maintain a stable bottom for the marine life found there.

7:7-12.16 Overhead transmission lines

- (a) (c) (No change.)
- (d) Rationale: Overhead transmission lines produce a negative environmental impact because they are aesthetically unattractive. They are prohibited or discouraged because the visual impact is so great that it counters the scenic resources and design rule at N.J.A.C. 7:7-16.10. The use of underground transmission lines, however, minimizes the visual impacts. Siting overhead transmission lines over such narrow water bodies as rivers, streams, creeks, and tidal guts[,] is conditionally acceptable where there is no alternative to crossing the water body

because the aesthetic impacts would not be as severe as the impacts of siting transmission lines over wider water bodies.

7:7-12.20 Vertical wake or wave attenuation structures

- (a) (d) (No change.)
- (e) Rationale: Vertical wake or wave attenuation structures are designed to protect boat moorings, including those at marinas. These structures may be fixed or floating, attached or detached, depending on the water depth, tidal range, and wave climate. The design of a vertical wake or wave attenuation structure must consider location, height, and porosity[,] in order for the structure to function without adversely affecting the movement of sediment and marine organisms and water circulation patterns.

7:7-12.21 Submerged cables

- (a) (b) (No change.)
- (c) Submerged cables, or portions thereof, which are sited in the Atlantic Ocean shall meet the following conditions:
 - 1. 7. (No change.)
- 8. After the submerged cable has been installed, a long-term inspection and maintenance plan, approved by the Department, shall be implemented both within surf clam areas, N.J.A.C. 7:7-9.3, and within areas where marine fish, as defined at N.J.A.C. 7:7-16.2, are commercially

harvested using mobile bottom tending gear, to [insure] **ensure** that the cable remains at the authorized depth and location. The plan shall provide for the following:

i. - v. (No change.)

9. - 12. (No change.)

(d) (No change.)

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

7:7-13.1 Purpose and scope

(a) - (j) (No change.)

(k) Rationale: Impervious cover limits and vegetation requirements are important to reduce the negative impacts of development in coastal areas. Land without impervious cover and with healthy vegetative communities allows rainfall infiltration and natural groundwater recharge. Placement of impervious cover effectively seals the ground, preventing the absorption of water, which increases the amount of stormwater runoff that can enter waterways. Conversely, healthy vegetative communities absorb and slow runoff from storm events, which maintains water quality. Impervious surface also raises air temperatures and reduces oxygen uptake by tree roots beneath. (See Schueler, Thomas R. "The Importance of Imperviousness." Reprinted in The Practice of Watershed Protection. 2000. Center for Watershed Protection. Ellicott City, MD.)

Impervious cover percentages and vegetative cover requirements are not applicable to all activities. Many of the types of development to which impervious cover percentages and vegetative cover requirements do not apply are compact, and most serve a public need. For example, linear development that is not wholly within or solely serving a development need not comply with impervious cover limits because doing so would reduce the public benefit provided by the project.

The development of one or two single-family homes or duplexes is exempt from the requirements of this subchapter because most development that falls into this category takes place on small bulkheaded infill lots on back bays within existing residential areas and on sites that have been disturbed and have existing impervious cover present. The amount of impervious cover on such sites is limited by lot size, presence of special areas, and local zoning requirements. The general permit for the construction of one or two single-family homes or duplexes at N.J.A.C. 7:7-6.4 and the housing use rule at N.J.A.C. 7:7-15.2(e) contain standards to address stormwater runoff associated with dwellings. Wind energy is a renewable energy source that does not result in greenhouse gas emissions. Wind turbines are therefore exempt from the impervious cover and vegetative cover requirements in order to facilitate the construction of these renewable energy facilities. Mining operations, sanitary landfills, wastewater treatment plants, and water treatment plants serve a public need and are therefore exempt from the requirements of N.J.A.C. 7:7-13. The impacts associated with public parks are minimal and are offset by the public benefit of improved outdoor recreational opportunities. While aquaculture is undertaken

outside of areas of concentrated development, it is not associated with the adverse environmental impacts that result from residential, commercial, or industrial development.

Within the CAFRA area, it is not the intent of this subchapter that the extent to which a municipality has or has not conformed its ordinances or development master plan to this subchapter be considered by any department, agency, or instrumentality of State government in certain actions. The applicable provisions in this rule are intended to clearly differentiate CAFRA regulations used in the review of individual permit applications from the State Development and Redevelopment Plan, which is intended to provide a vision for accommodating future growth of the State.

Compliance with impervious cover and vegetative requirements does not exempt any development from compliance with special area or resource rules or with any provision of this chapter. Impervious cover and vegetation are just two factors considered in reviewing applications to perform regulated activities under this chapter and do not supersede other provisions.

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

- (a) (d) (No change.)
- (e) To determine the acreage of the net land area on a site:
- 1. 2. (No change.)
- 3. Sum the acreage of the land areas identified in [(d)2] (e)2 above;

- 4. Subtract [(d)3] (e)3 above from [(d)1] (e)1 above; and
- 5. (No change.)
- (f) (No change.)
- (g) Rationale: Limiting impervious cover is necessary in the CAFRA area and upland waterfront development area to prevent adverse impacts caused by polluted runoff and other negative effects. Stormwater management facilities area not counted towards the impervious cover limit because they are specifically designed to collect and manage runoff. Many stormwater management basins contain herb/shrub vegetation and are thus not impervious cover. As specified in N.J.S.A. 13:19-5.4, the Department cannot include solar panels in any calculation of impervious surface or impervious cover as part of the analysis of an application for development. However, the amendments to the Waterfront Development Law and CAFRA specifically exclude the base or foundation of a solar panel, canopy, or array from the definition of solar panel. These base structures are therefore included in calculations of impervious cover, while the rest of the solar panel, canopy, or array is not.

Special water's edge areas are subtracted from the total land area on a site because impervious cover cannot be placed in these areas. Subtracting these areas from the total land area results in determination of the usable area of the site with which an applicant will calculate the allowed amount of impervious cover. For unforested sites, impervious cover must be placed on the area of the site that is currently covered by legally existing buildings

or pavement, rather than removing the existing impervious surface and placing the new impervious surface in a different location.

In some cases, more impervious cover is needed to properly remediate a contaminated site than would be allowed under this section. In such cases, the impervious cover limit for the site may be increased as the environmental benefit of remediating a contaminated site supersedes the potential adverse impacts of placing a larger amount of impervious cover on the site.

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

- (a) (c) (No change.)
- (d) For sites other than those that meet (b) or (c) above, when trees are required to be planted or preserved under N.J.A.C. 7:7-13.14 or 13.18, the trees shall be planted and/or preserved in a tree cluster as follows:
 - 1. 3. (No change.)
- 4. For a residential development of 25 units or more, the recorded conservation restriction required under (d)3 above[,] shall be enforceable by the Department and:
 - i. iii. (No change.)
 - 5. (No change.)

- (e) Trees planted to meet the tree cluster requirement of (d) above shall be planted in accordance with the following:
- 1. The trees shall be spaced approximately 10 feet apart[,] and shall be planted in a staggered, non-linear[,] pattern;
 - 2. 6. (No change.)
 - (f) (g) (No change.)
- (h) Rationale: Vegetation stabilizes soil, slows erosion and runoff, promotes infiltration of surface water, reduces the force of wind, provides food, shelter, and breeding sites for wildlife, and adds to aesthetic values for recreation and domestic life. Trees release oxygen, sequester carbon dioxide, filter particulate pollutants, and provide habitat and food for a variety of wildlife, among other benefits. The rules provide for the planting and/or preservation of trees depending upon the location and type of development in order to recognize existing patterns of development and maximize the benefits of tree planting. Sites located in the urban area region or northern waterfront region of the upland waterfront development area, or located in a CAFRA center, CAFRA core, or CAFRA node, or sites on which the area of trees required to be planted or preserved is less than one acre, have flexibility which allows a mix of tress and herb/shrub vegetation to be planted and/or preserved that is adapted to the substrate and other conditions of the site. It is appropriate to modify the tree planting requirements for these sites because they are located in densely

developed areas. The flexible requirements allow for landscaping that is appropriate to an urban setting.

Planting trees in clusters provides a greater environmental benefit than spreading trees throughout an area by creating quality habitat for forest species. For residential developments of 24 units or fewer, however, protecting a forest-like cluster of trees may not be feasible. In such cases, trees need not be clustered, as long as the total acreage of trees required is provided. On an unforested small residential development site, a mix of trees and/or herb/shrub vegetation may be planted and/or preserved that is adapted to the substrate and other environmental conditions of the site to allow for landscaping that is appropriate for the size of the site and existing development pattern of the area.

All other developments require trees to be planted in a cluster that, where possible, is adjacent to existing on- or off-site forests or other resources and clearly marked. Tree planting requirements preserve or create a block of forest that will provide better and more varied wildlife habitat than the same number of trees in a long, narrow band or spaced far apart. Conservation restrictions required for the areas on which trees are planted or preserved ensure the trees planted or preserved are not destroyed by future development.

Care must be taken in choosing what herb/shrub vegetation should be planted, as many common inland plants are not suited to coastal soils.

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

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

- (c) To determine if a site or portion of a site is forested:
- 1. The limit of the forest shall be identified using aerial photographs obtained from the Department at [www.state.nj.us/dep/gis/] www.nj.gov/dep/gis; and
 - 2. (No change.)
 - (d) (e) (No change.)
- (f) Rationale: The Department has previously field tested three methods of forest identification to determine the most accurate method of determining if a site is considered forested or unforested. This designation affects the percentage vegetative cover and tree planting requirements that apply to the site. The Department determined that the Highlands method (see N.J.A.C. 7:38-3.9) was the most consistent in identifying a forest. The procedures set forth above are thus consistent with the Highlands method.

Aerial photography is an appropriate first step in identifying a forest since it is easier and less costly than doing extensive sampling. If an area includes areas of sporadic coverage that an applicant believes do not constitute forest area, the applicant must overlay a grid system (available from the Department's website) on the photographs to determine whether areas with sporadic coverage contain sufficient coverage to be identified as forest. The use of the grid to identify forest cover is consistent with the New Jersey No Net Loss Reforestation Act, N.J.S.A 13:1L-14.1 et seq.

The on-the-ground methodology for determining a forest on a site by measuring the trees and their density on the ground reflects the Highlands methodology. Onsite sampling

is only necessary if the Department identifies additional areas of potential forest that were not identified by the applicant using aerial photography. Diameters and corresponding point values are based on data from the U.S. Forest Inventory Field Procedures Manual (U.S. Forest Service), Forest Statistics for New Jersey 1987 and 1999 (Griffith and Widmann, 2001), and Forests of the Garden State Resource Bulletin NE163 (Widmann, 2005) and are consistent with the Highlands method.

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

- (a) (e) (No change.)
- (f) Rationale: By assigning growth ratings to different upland waterfront development area regions, the Department intends to concentrate development in areas that are already developed and, thus, would have minimal environmental impact. Development should be steered away from regions with large environmentally sensitive areas to preserve groundwater quality.
- 7:7-13.7 Determining the environmental sensitivity of a site in the upland waterfront development area
 - (a) (d) (No change.)
- (e) Rationale: Environmental sensitivity is based on soil type and the depth to seasonal high water table, which are two characteristics that affect a site's vulnerability to adverse

impacts associated with development. A site may be assigned on environmental sensitivity distinction, or portions of the same site may have different environmental sensitivities, in which case the portions of the site may ultimately have different impervious cover limits. High, medium, and low environmental sensitivity are described below.

1. High environmental sensitivity

This ranking is given to land areas where they are particularly sensitive to impacts. These areas are valuable as open space, for screening, for ground and surface water purification, and as wildlife habitats. Areas of high soil percolation and shallow depth to water table are especially sensitive to ground water impacts because the rapid percolation offers little pollutant filtration and the distance to groundwater is small. The degradation of groundwater that occurs when these areas are developed increases the importance of protecting these areas from overdevelopment. Therefore, these areas should be left undeveloped or developed at a lower density than lands that are not of high environmental sensitivity.

2. Medium environmental sensitivity

These are land areas that are neither especially sensitive nor insensitive to development.

3. Low environmental sensitivity

This ranking is given to areas where there is a relatively large distance to groundwater and, therefore, little potential for transferring adverse impacts from the surface to groundwater.

Paved areas and structures are included because most of the adverse impacts associated with development have already occurred as a result of the original paving or construction. Further development will have a minimal impact.

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

- (a) (e) (No change.)
- (f) Rationale: The development potential of a site is a ranking that reflects whether there is infrastructure necessary to support a development, and whether there is other development nearby. The Department intends to steer development to areas with existing development-oriented elements to support that development, including roads for access and wastewater treatment and disposal, and areas with existing development. Siting development near existing development and infrastructure is more efficient and results in decreased impacts to the environment as compared to locating development in such a way that new development-oriented elements need to be constructed to access or use the development. If a development is proposed that is inconsistent with the applicable Areawide Water Quality Management Plan, adopted in accordance with N.J.A.C. 7:15, it is prohibited and the site will not be assigned a development potential.

Sites have different development potentials depending upon the type of development proposed. Areas suitable for campgrounds, for example, are more isolated from existing development and provide access to water, beaches, forests, or other natural features. Such an area would not likely be suitable for a major commercial or industrial development,

which would be more suited towards an area in proximity to existing development and separated from beaches, forests, and other natural areas.

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

- (a) (d) (No change.)
- (e) Rationale: Residential and minor commercial developments require a method of access and a method of wastewater treatment. Sites that are located in close proximity to public roadways are easily accessed and allow residents of the proposed development to enter and exit the property without the impacts associated with construction of a new roadway. A site that abuts the conveyance component of an existing offsite wastewater conveyance, treatment, and disposal system that has the capacity to manage the sewage from the proposed development ensures that wastewater will be properly managed and not cause adverse impacts to the environment or public health. Sites that are surrounded by existing development constitute an "infill" situation and, thus, have a high development potential. Different requirements for a site to have a medium development potential for residential or minor commercial development depend upon the growth rating of the region in which the site is located. These requirements recognize the comparatively lower impact in regions with a development growth rating as compared to regions with a limited or extension growth rating and intend to steer new residential or minor commercial

development to regions that are already extensively developed and away from relatively undeveloped areas.

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

(a) - (d) (No change.)

(e) Rationale: Major commercial and industrial developments require access and wastewater management. The criteria for high development potential in this category is intended to steer major commercial and industrial developments, which have greater potential adverse environmental impacts than other types of development, to areas abutted by existing major commercial and industrial development in order to concentrate intense development in certain areas. In regions with a development growth rating, a site has a high development potential for major commercial or industrial development if the site is in close proximity to any type of commercial development, which recognizes the extensively developed character of these regions.

Different requirements for a site to have a medium development potential for major commercial or industrial development depend upon the growth rating of the region in which the site is located. These requirements recognize the comparatively lower impact in regions with a development growth rating as compared to regions with a limited or extension growth rating and intend to steer new major commercial or industrial

development to regions that are already extensively developed in a similar fashion and away from relatively undeveloped areas and areas without existing industrial development.

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

- (a) (d) (No change.)
- (e) Rationale: Sites most suitable for campground development are in close proximity to existing public roadways and existing wastewater management infrastructure to reduce the environmental impact of constructing new roadways and waste management conveyance, treatment, and disposal systems. In contrast to residential, commercial, and industrial development, sites surrounded by undeveloped natural areas have the highest campground development potential. Sites abutted by other types of development are generally not suitable for campground development.
- 7:7-13.12 Determining the development intensity of a site in the upland waterfront development area
 - (a) (b) (No change.)
- (c) Rationale: Development intensity considers the growth rating of the region in which a site is located, environmental sensitivity of the site, and the development potential. These

three factors determine the development intensity which in turn decides the impervious cover and vegetation requirements for the site.

- 7:7-13.13 Impervious cover limits for a site in the upland waterfront development area (a) (c) (No change.)
- (d) Rationale: The amount of impervious cover permitted is based upon the development intensity calculated under N.J.A.C. 7:7-13.12 considering growth rating, environmental sensitivity, and development potential, or on the amount of existing impervious cover on the site (for unforested sites only).

The amount of impervious cover allowed for a forested site or the forested portions of a site is calculated by multiplying the net land area on the site or portion by the impervious cover percentage that corresponds to the development intensity that applies to the site or portion. While the method for calculating the impervious cover limit for an unforested site varies based upon factors discussed below, no alternative method of calculating impervious cover for forested sites is allowed as it is the Department's intention to preserve valuable forest habitats equally in all parts of the State.

To achieve differing goals, the amount of impervious cover limit for an unforested site is calculated in two ways, with the calculation resulting in the greatest area providing the impervious cover limit for the unforested site or portion of a site. First, the net acreage is multiplied by the impervious cover limit specified in Table E. The amount of impervious cover allowed for unforested sites in the northern waterfront region or urban area region

can alternatively be the amount of existing impervious cover on the site in order to encourage redevelopment in these regions. In other regions, the amount of impervious cover allowed on an unforested site may alternatively be the acreage covered by building and/or asphalt or concrete pavement legally existing on the site at the time the application is submitted.

Sites in the urban area region are afforded more impervious cover because these regions are already intensively developed. These impervious cover amounts serve to protect undeveloped land, prevent inappropriate development, and concentrate development in areas that are already developed and have the infrastructure to support additional development. Limiting impervious cover minimizes the negative impacts associated with impervious cover, such as an increase in polluted runoff.

Sites in the urban area region are afforded more impervious cover because these regions are already intensively developed. These impervious cover amounts serve to protect undeveloped land, prevent inappropriate development, and concentrate development in areas that are already developed and have the infrastructure to support additional development. Limiting impervious cover minimizes the negative impacts associated with impervious cover, such as an increase in polluted runoff.

7:7-13.14 Vegetative cover percentages for a site in the upland waterfront development area (a) - (c) (No change.)

- (d) Rationale: Vegetative cover percentages are based on whether the site or portion of the site is forested or unforested and on the development intensity of the site or site portion. There are two components to vegetative cover requirements; tree preservation and/or planting, and herb/shrub preservation and/or planting. The acreage of herb/shrub vegetation that must be planted is the remaining acreage of net land area after the amount of impervious cover and tree planting/preservation area is subtracted from the total net land area. If the acreage of required tree planting plus the acreage of existing legal impervious cover or the acreage covered by buildings and/or asphalt or concrete pavement exceeds the total acreage of the net land area, then trees must be planted in the area remaining after the acreage of existing impervious cover or acreage covered by buildings and/or pavement is subtracted from the acreage of the net land area. These vegetative cover requirements take into account the existing conditions on the site and on the surrounding patterns of development in order to promote the benefits of trees and other vegetation while recognizing development needs of the area.
- 7:7-13.15 Coastal Planning Areas in the CAFRA area
 - (a) (f) (No change.)
- (g) Rationale: The designation of planning areas allows the Department to preserve the most ecologically sensitive parts of the CAFRA area by encouraging development in compact growth areas and limiting it in outlying and environmentally sensitive areas.

 These broad planning area criteria are applied to the CAFRA permit decision-making

process. Development is encouraged or concentrated in areas where development already exists and where infrastructure is already in place to reduce sprawl and preserve remaining open space.

- 7:7-13.16 Boundaries for Coastal Planning Areas, CAFRA centers, CAFRA cores, and CAFRA nodes; non-mainland coastal centers
 - (a) (j) (No change.)
- (k) Rationale: The boundaries of Planning Areas, community development boundaries of centers, and the boundaries of cores and nodes formally approved by the State Planning Commission as of August 1, 1999, were drawn after a lengthy public process that involved the participation of municipal, county, and State officials and the submittal of thousands of documents from public officials and private organizations and individuals. The Department determined that the boundaries drawn by the State Planning Commission in the CAFRA area are in keeping with the purposes of the CAFRA statute to "encourage the development of compatible land uses in order to improve the overall economic position of the inhabitants of {the CAFRA} area within the framework of a comprehensive environmental design strategy which preserves the most ecologically sensitive and fragile area from inappropriate development and provides adequate environmental safeguards for the construction of any developments in the coastal area." These State Planning Commission boundaries are, therefore, an appropriate starting point for the boundaries depicted in the CAFRA Planning Map, which are used for the purposes of determining

Map boundaries for Coastal Planning Areas, CAFRA centers, CAFRA cores, and CAFRA nodes will not necessarily always be the same as the boundaries formally approved by the State Planning Commission. The Department evaluates any new or revised boundaries approved by the State Planning Commission in order to determine if the changes are consistent with the purposes of CAFRA and this chapter. If the changes are not consistent with CAFRA and the CZM rules, the Department can choose not to incorporate the changes and may propose modifications to boundaries approved by the State Planning Commission through rulemaking, which allows public input.

- 7:7-13.17 Impervious cover limits for a site in the CAFRA area
 - (a) (g) (No change.)
- (h) Rationale: The impervious cover percentage for sites located in a CAFRA center, CAFRA core, or CAFRA node is determined by multiplying the total land area, rather than the net land area, by the applicable impervious cover percentage, and comparing the resulting amount to the amount of existing legal impervious cover on the site, with the impervious cover limit being whichever is higher. If a site in a CAFRA center, CAFRA core, or CAFRA node is also in the Coastal Metropolitan Planning Area, in addition to the above two factors, the net land area is multiplied by the impervious cover percentage applicable to the Coastal Metropolitan Planning Area, with the impervious cover limit being the highest of the three resulting amounts. Development in these areas furthers the

goal of encouraging the concentration of development and discouraging sprawl.

Accordingly, more impervious cover is afforded to these areas.

Impervious cover limits for sites in the Coastal Metropolitan Planning Area or in a coastal center are based either on the acreage of net land area multiplied by the applicable impervious cover percentage, or are equal to the amount of existing impervious cover on the site, whichever is higher. Again, it is likely that there is already impervious cover existing on the site. Sites in this planning area or in coastal centers are often already developed and surrounded by development; these rules seek to concentrate development around existing development and infrastructure.

For other sites, the maximum amount of impervious cover allowed is the acreage of net land area multiplied by the applicable impervious cover percentage or the acreage covered by buildings, asphalt, and/or concrete pavement, whichever is higher. Impervious cover for marina support facilities may also equal the amount of legal existing impervious cover on the site if it results in a larger amount of impervious cover than the first two alternatives. This flexibility for marinas is intended to facilitate marina development in order to promote boating in New Jersey and specifically promote the concentration of boating-related development in marinas rather than individual docks.

Military installations are allowed impervious cover equal to the net land area multiplied by 70 percent, or equal to the existing amount of impervious cover, whichever is larger. Military installations are important for national security and require the placement of impervious surface for buildings, pavement, and other structures in order to serve their intended purpose.

Impervious cover percentages set forth in Table H serve to concentrate development in areas with existing development, infrastructure, and capacity for growth. For example, for sites in the Coastal Suburban Planning Area that are within a sewer service area, impervious cover can be up to 30 percent of the net land area of the site. In the same planning area but outside of a sewer service area, impervious cover can only equal five percent of the net land area. This distinction steers suburban development towards areas with adequate infrastructure to support growth.

- 7:7-13.18 Vegetative cover percentages for a site in the CAFRA area
 - (a) (c) (No change.)
- (d) Rationale: Vegetative cover percentages are based upon whether the site or portion of the site is forested or unforested, as well as location and existing development patterns. The area of trees required to be preserved and/or planted is calculated by multiplying the net land area by the applicable percent. The acreage of the site remaining after subtracting the impervious cover acreage and acreage of tree planting/preservation from the acreage of the net land area must be planted with herb/shrub vegetation. If the sum of the acreage of tree planting and the existing area of impervious cover or existing area covered by buildings, asphalt, and/or concrete pavement exceeds the net land area acreage, then only the area remaining after the area of impervious cover/buildings/pavement is subtracted from the net land area must be planted with trees. This requirement balances tree planting with existing site conditions and serves to facilitate the redevelopment of sites already

covered with impervious surfaces. A higher percentage of the net land area must be preserved trees in forested than in unforested sites or portions of sites in order to protect existing forest habitat. It is important to note that, while Table I includes tree preservation/planting percentages for CAFRA centers, CAFRA cores, and CAFRA nodes, these areas are not subject to the standard tree requirements but instead to the more flexible requirements described at N.J.A.C. 7:7-13.4(b). However, the area subject to those requirements is determined by using Table I, so these areas are included in the table.

As reflected in the other policies within this subchapter, the vegetative cover requirements are intended to concentrate development in areas where infrastructure and services already exist and limit development in outlying and environmentally sensitive areas.

7:7-13.19 Mainland coastal centers

- (a) (No change.)
- (b) The boundaries of the mainland coastal centers established in accordance with (a) above shall expire in accordance with P.L. 2012, c. 48 on December 31, 2015. On and after the expiration of the mainland coastal centers, the impervious cover limits and vegetative cover percentages for all sites in the CAFRA area, except for sites in the non-mainland coastal centers in Appendix H of this chapter, shall be determined in accordance with N.J.A.C. 7:7[13.7(c)]13.17(c), (e), or (f).
 - (c) (No change.)

- (d) The areas identified at (d)1 through 6 below shall not be considered part of a mainland coastal center, except for purposes of (f) below:
- 1. Areas mapped as endangered or threatened wildlife species habitat on the Department's Landscape Maps of Habitat for Endangered, Threatened or Other Priority Species. The data are available as a download at the [CAFRA Planning Map layers] **following** webpage:

 [www.nj.gov/dep/gis/CAFRAlayers.htm] http://www.nj.gov/dep/gis/listall.html;
- 2. Areas mapped as Natural Heritage Program priority sites, excluding those lands within the boundaries of these sites mapped in the URBAN lands layer extracted from the most recent NJDEP Land Use/Land Cover GIS data set. Both the Natural Heritage Program priority site data and the URBAN lands data are available as a download at the [CAFRA Planning Map layers] following webpage: [www.nj.gov/dep/gis/CAFRAlayers.htm]

http://www.nj.gov/dep/gis/listall.html;

- 3. 5. (No change.)
- 6. Areas identified as Coastal Critical Environmental Sites. The data are available as a download at the [CAFRA Planning Map layers] **following** webpage:

[www.nj.gov/dep/gis/CAFRAlayers.htm] http://www.nj.gov/dep/gis/listall.html.

- (e) (f) (No change.)
- (g) Rationale: The 1993 amendments to CAFRA required that the rules adopted to implement those amendments be closely coordinated with the State Development and Redevelopment Plan. In response to these statutory amendments, the Department adopted

new rules for determining impervious cover limits and vegetative cover percentages for sites in the CAFRA area based on the site's location in a CAFRA center, core or node, Coastal Planning Area or coastal center (see 32 N.J.R. 503(a)) with higher impervious cover allowed in a coastal or CAFRA center. A five-year term was established for the boundaries of coastal centers located on the less developed mainland (mainland coastal centers), with the five-year term expiring February 5, 2005. This five-year term was intended to provide sufficient time for municipalities to obtain center designation through the State Planning process and ultimately achieve CAFRA center status. In consideration that some local governments had committed substantial time and money on diligent efforts to obtain plan endorsement from the State Planning Commission, the Department determined it appropriate to re-establish the boundaries of mainland coastal centers that expired on February 7, 2005, for a limited term and in limited circumstances. Reestablished mainland coastal centers remained effective until March 15, 2007, or until the municipality's petition for plan endorsement was approved by the State Planning Commission and the Department determined the appropriateness of the State Planning Commission approved center boundary as a CAFRA center boundary, whichever occurs first (38 N.J.R. 928(c)). In September 2008, the Permit Extension Act of 2008 was enacted. This Act re-established certain mainland coastal centers. The Act initially extended the expiration of approvals covered by the Act, including mainland coastal centers, to July 1, 2010. The Permit Extension Act of 2008 was subsequently extended on January 18, 2010. As a result of the 2010 amendments to the Permit Extension Act of 2008, the boundaries of certain mainland coastal centers were extended through March 15, 2013.

On September 19, 2012, the Permit Extension Act of 2008 at N.J.S.A. 40:55D-136.2 through 136.6 was further amended by P.L. 2012, c. 48. This Act further extended center designations in municipalities that had submitted an application for plan endorsement to the State Planning Commission as of March 15, 2007, and were in compliance with the provisions of existing N.J.A.C. 7:7E-5B.6. In accordance with P.L. 2012, c. 48, these centers expired December 31, 2015. P.L. 2016, c. 14, extended the Permit Extension Act for Sandy-impacted counties until December 31, 2016. All mainland coastal centers have now expired. The impervious cover and vegetative cover requirements for the expired mainland coastal centers in the CAFRA area are subject to N.J.A.C. 7:7-13.17(c), (e), or (f).

Certain areas are not included in mainland coastal centers. These areas include mapped endangered or threatened wildlife habitat, Natural Heritage Program priority sites, land dedicated to recreation, conservation, or wildlife protection/management, wetlands, and Coastal Critical Environmental Sites. In order for the impervious cover and vegetative cover requirements for a coastal center to apply, the entire proposed development must be located within the area of the coastal center. These provisions ensure that coastal centers do not expand inappropriately or contribute to sprawl.

The State Planning Commission's approved boundaries of Critical Environmental Sites are incorporated into the CZM Rules as Coastal Critical Environmental Sites. When the State Planning Commission approves any new or changed Critical Environmental Site boundary, the Department will evaluate the change for consistency with the purposes of CAFRA and the CZM Rules, and will accept, reject, or reject and revise the boundary of

the Coastal Critical Environmental Site for the purposes of this chapter accordingly. These procedures remain relevant even since the expiration of the mainland coastal centers.

SUBCHAPTER 14. GENERAL LOCATION RULES.

7:7-14.1 Rule on location of linear development

- (a) (No change.)
- (b) Rationale: Linear development, including public roads and utilities, serve a public need. Appropriate flexibility is afforded to such development in strictly circumscribed cases. This flexibility ensures that appropriate linear development projects can proceed in cases where the project does not meet all requirements of a specific location rule but nonetheless has no alternative design, does not permanently destroy unique or irreplaceable areas, includes appropriate mitigation of adverse environmental impacts, and is collocated with existing transportation corridors and alignments as much as possible. This common sense approach appropriately balances linear development needs with the protection of the coastal environment.
- 7:7-14.2 Basic location rule
 - (a) (No change.)
- (b) Rationale: This rule is intended to afford appropriate discretion to the Department to reject or conditionally approve projects that otherwise meet the applicable rules but may

pose a threat to the public, natural resources, property, or the environment. This common sense approach recognizes that unusual circumstances may result in a project meeting the letter of the rules but not their intent and provides necessary parameters for the Department's review of such projects.

SUBCHAPTER 15. USE RULES

7:7-15.2 Housing

- (a) (No change.)
- (b) Standards relevant to water area and water's edge housing are as follows:
- 1. -6 (No change.)
- [7. Rationale: Housing is not water dependent on water access, and does not generally qualify for exemption to the rule of restricting non-water dependent development along water's edge. In addition to this general restriction, most of the Special Area rules contain specific restrictions that have the practical effect of discouraging or prohibiting new development, including housing, from sensitive areas.]
 - (c) Standards relevant to floating homes are as follows:
 - 1. (No change.)
- [2. Rationale: The primary focus of a floating home is as a residence. Floating homes, therefore, are not water-dependent, and should not be permitted to pre-empt limited land's edge

locations from water dependent uses such as boating. Boats which are used for navigation and serve a secondary function as houses are not considered floating homes and are not prohibited.

Floating homes have an adverse impact on water quality through grey water discharges. The proliferation of houseboats in New Jersey would have a cumulative adverse effect on water quality, navigation and aesthetics.]

- (d) Standards relevant to cluster development are as follows:
- 1. (No change.)
- [2. Rationale: The open space that is produced by clustering can be returned to the community as common open space. The location policies define certain sensitive areas where development is limited. When such areas are present on site, the acceptable gross density may have to be reduced, unless the net density can be increased by clustering. Where municipal zoning requires minimum lot sizes that preclude clustering, applicants are encouraged to seek local approval, through new ordinances and/or variances, to maintain the permissible gross density by clustering. The Department will aid this endeavor by providing a rationale and testimony, as appropriate, especially for the protection of sensitive areas. Cluster developments lessen the impact of construction by preserving valued soil, open space, vegetation, and aquifer recharge resources. Some cluster developments also increase insulation and reduce energy consumption due to shared walls between units.]
- (e) Standards relevant to the development of one or two single-family homes or duplexes and/or accessory development (such as garages, sheds, pools, driveways, grading, excavation,

filling, and clearing, excluding shore protection structures) which does not result in the development of more than two single family homes or duplexes either solely or in conjunction with a previous development as defined at N.J.A.C. 7:7-2.2(b)8, and provided the single-family home(s) or duplex(es) and accessory development are located landward of the mean high water line are as follows:

- 1. 2. (No change.)
- 3. Development shall comply with N.J.A.C. 7:7-9.16, Dunes, except as provided under (e)3i or ii below.
 - i. (No change.)
- ii. Development that is located on a dune which is isolated from a beach and dune system by a paved public road, public seawall or public bulkhead, existing on July 19, 1993, need not comply with the dunes rule at N.J.A.C. 7:7-9.16, if the site and the development meet all of the following criteria:
- (1) The road, seawall or bulkhead is of sufficient size to be designated as the V zone boundary on the [FIRM] applicable FEMA flood mapping;
 - (2) (3) (No change.)
- (4) The area of proposed construction is designated as an A zone, B zone, or C zone on the [FIRM] applicable FEMA flood mapping;
 - (5) (6) (No change.)
 - 4. 11. (No change.)
 - 12. Development shall comply with the following setbacks:
 - i.-ii. (No change.)

- iii. On a non-oceanfront site with existing or proposed shore protection structures, the [single family] single-family home or duplex and/or accessory structures (except decks) shall be set back at least 15 feet from existing or proposed shore protection structures. If there is no alternative to locating the proposed development at least 15 feet landward of the shore protection structure, the Department shall reduce the required setback if an engineering certification is submitted demonstrating that, after the proposed development has been constructed, the shore protection structure can be replaced within 18 inches of the existing shore protection structure and a conservation restriction that complies with N.J.A.C. 7:7-18 is recorded for the property which states that any reconstruction of a shore protection structure shall be within 18 inches of the existing shore protection structure. A site with coastal bluffs shall instead comply with (e)12i above; and
- 13. The standards for the expansion or reconstruction (with or without expansion) of a single family home or duplex are found at N.J.A.C. 7:7-15.2(f)[;].
- [14. Rationale: Single-family homes and duplexes are the most prevalent type of development along the developed oceanfront communities of the Jersey Coast. This rule recognizes the importance of protecting the safety of local residents from the natural shoreline changes and hazard areas, especially in the event of a storm. However, in view of the extensive development that has occurred along the coast and the minimal impacts associated with the development of one or two single-family homes or duplexes, construction of these developments on dunes and coastal bluffs, and within coastal high hazard areas and erosion hazard areas, is acceptable in certain situations.

Development of one or two single-family homes or duplexes on a dune may be acceptable in cases where the development is proposed on the landward slope of a secondary or tertiary dune or the dune is isolated from a beach and dune system by a paved public road, public seawall, or public bulkhead. One or two single-family homes or duplexes may be constructed on the landward slope of the secondary or tertiary dune where the intervening dune is of sufficient volume to provide protection during a 100-year storm, without the construction having a significant adverse long-term impact on the natural functioning of the beach and dune system.

Similarly, the development of one or two single-family homes or duplexes on a dune that is isolated from a beach and dune system by an existing paved public road, public seawall, or public bulkhead that is of a sufficient size to eliminate the protective functioning of the isolated dune is acceptable, since the development will not have a significant adverse impact on the natural functioning of the beach and dune system. Single-family homes and duplexes may be developed in some coastal high hazard areas and erosion hazard areas where extensive developments have already occurred. Infill single family homes or duplexes are found to be acceptable because such development will not alter the existing need for public expenditure in shore protection at these locations, the risk involved is reduced to a minimum in terms of the quantity and intensity of developments that will be permitted and it would allow the infill sites to be developed to the degree currently existing in that area. With regards to coastal bluffs, since the disturbance associated with the development of one or two single-family homes or duplexes is minimal and, therefore, will not adversely affect the stability of the coastal bluff, the construction of single-family homes or duplexes is allowed within 10 feet of the crest of the

coastal bluff, except along high-energy shorelines of the Atlantic Ocean, Delaware Bay, Raritan Bay, or Sandy Hook Bay and where excavation is proposed.]

- (f) Standards relevant to the expansion, or reconstruction (with or without expansion) of a legally constructed habitable single-family home or duplex and/or accessory development (such as garages, sheds, pools, driveways, grading, excavation, filling, and clearing, excluding shore protection structures) which does not result in the development of more than one single-family home or duplex either solely or in conjunction with a previous development as defined at N.J.A.C. 7:7-2.2(b)8, and provided the single-family home or duplex and accessory development are located landward of the mean high water line are as follows:
 - 1. (No change.)
- 2. Development shall comply with N.J.A.C. 7:7-9.16, Dunes, except as provided under (f)2i [through], ii, and iii below.
 - i. (No change.)
- ii. Development that is located on a dune which is isolated from a beach and dune system by a paved public road, public seawall, or public bulkhead, existing on July 19, 1993, need not comply with the dunes rule at N.J.A.C. 7:7-9.16, if the site and the development meet all of the following criteria:
- (1) The road, seawall, or bulkhead is of sufficient size to be designated as the V zone boundary on the [FIRM] applicable FEMA flood mapping;
 - (2) (3) (No change.)

- (4) The area of proposed construction is designated as an A zone, B zone or C zone on the [FIRM] applicable FEMA flood mapping;
 - (5) (6) (No change.)
 - iii. –iv. (No change.)
 - 3. 10. (No change.)
 - 11. Development shall comply with the following setbacks:
- i. On a site with coastal bluffs that is not located on the Atlantic Ocean, Delaware Bay, Raritan Bay, or Sandy Hook Bay, the [single family] **single-family** home or duplex and/or accessory structures shall be set back a minimum of 10 feet from the crest of the bluff provided that the development will not result in a loss of stability of the bluff or vegetation on the bluff face. Any structure that requires excavation shall be set back one foot beyond the [10 foot] **10-foot** setback for every foot of excavation below existing grade;
- ii. On an oceanfront site with existing or proposed shore protection structures, the [single family] single-family home or duplex and/or accessory structures (except decks) shall be set back at least 25 feet from existing or proposed oceanfront shore protection structures. This distance shall be measured from the waterward face of a bulkhead or seawall and from the top of slope on the waterward face of the revetment. This setback shall not apply to below grade structures; and
- iii. On a non-oceanfront site with existing or proposed shore protection structures, the single-family home or duplex and accessory structures (except decks) shall be set back at least 15 feet from existing or proposed shore protection structures. If there is no alternative to locating the proposed development at least 15 feet landward of the shore protection structure, the Department

shall reduce the required setback if an engineering certification is submitted demonstrating that, after the proposed development has been constructed, the shore protection structure can be replaced within 18 inches of the existing shore protection structure and a conservation restriction that complies with N.J.A.C. 7:7-18 is recorded for the property which states that any reconstruction of a shore protection structure shall be within 18 inches of the existing shore protection structure. A site with coastal bluffs shall instead comply with (f)11i above; and

- 12. The standards for the development of one or two single-family homes or duplexes are found at N.J.A.C. 7:7-15.2(e)[;].
- [13. Rationale: Prior to the 1993 amendments, single-family homes and duplexes were not regulated under CAFRA. This rule allows for the limited expansion or reconstruction with or without expansion of a single-family home or duplex located on a dune that existed prior to July 19, 1993 (date of CAFRA amendments), in recognition of the impact of the CAFRA amendments on these developments. The limited expansion of an existing single-family home or duplex will not have a significant long-term, adverse impact on the natural functioning of the beach and dune system since they are limited in size and cannot be located on the waterward side of the dwelling. Further, the rule requires that the dune waterward of the existing dwelling be enhanced through the placement of sand and the planting of native dune vegetation thus improving the functioning of the existing dune.

Single-family homes and duplexes may be developed in some coastal high hazard areas and erosion hazard areas where extensive developments have already occurred. Infill single-family homes or duplexes are found to be acceptable, because their development will not alter the existing need for public expenditure in shore protection at these locations, the risk involved is

reduced to a minimum in terms of the quantity and intensity of developments that will be permitted and it would allow the infill sites to be developed to the degree currently existing in that area. With regards to coastal bluffs, since the disturbance associated with the development of a single-family home or duplex is minimal and, therefore, will not adversely affect the stability of the coastal bluff, the rule allows the construction of single-family homes or duplexes within 10 feet of the crest of the coastal bluff, except along high-energy shorelines of the Atlantic Ocean, Delaware Bay, Raritan Bay, or Sandy Hook Bay and where excavation is proposed.]

- (g) The standards relevant to housing and transportation are as follows:
- 1. 3. (No change.)
- [4. Rationale: Public health and welfare concerns about air quality, as well as the necessity to limit energy consumption, require that public policies and decisions encourage alternatives to reliance on private automobiles.]
- (h) Rationale: Housing is not dependent on water access, and does not generally qualify for exemption to the rule of restricting non-water dependent development along the water's edge. In addition to this general restriction, most of the special area rules contain specific restrictions that have the practical effect of discouraging or prohibiting new development, including housing, from sensitive areas.

Housing provided by a floating home is no different than land-based housing.

Floating homes, therefore, are not water dependent, and should not be permitted to preempt limited land's edge locations from water dependent uses such as boating. Boats

that are used for navigation and serve a secondary function as houses are not considered floating homes and are not prohibited, as their main purpose is dependent on access to the water. Their main purpose is to provide transportation on the water and they are, therefore, water dependent; they are considered vessels and not housing for the purposes of this rule. Floating homes have an adverse impact on water quality through grey water discharges. The proliferation of houseboats in New Jersey would have a cumulative adverse effect on water quality, navigation, and aesthetics. Floating homes conflict with water dependent and recreational uses, can impact localized sedimentation patterns, and can have an adverse effect on nearshore fish, aquatic, and avian habitats. Therefore, floating homes are prohibited.

In cases where housing development is conditionally acceptable, clustering is encouraged. The open space that is produced by clustering can be returned to the community as common open space. The location policies define certain sensitive areas where development is limited. When such areas are present on site, the acceptable gross density may have to be reduced, unless the net density can be increased by clustering. Where municipal zoning requires minimum lot sizes that preclude clustering, applicants are encouraged to seek local approval, through new ordinances and/or variances, to maintain the permissible gross density by clustering. The Department will aid this endeavor by providing a rationale and testimony, as appropriate, especially for the protection of sensitive areas. Cluster developments lessen the impact of construction by preserving valued soil, open space, vegetation, and aquifer recharge resources. Some

cluster developments also increase insulation and reduce energy consumption due to shared walls between units.

While planned cluster developments are often preferred, single-family homes and duplexes are the most prevalent type of development along the developed oceanfront communities of the Jersey Coast. This rule recognizes the importance of protecting the safety of local residents from the natural shoreline changes and hazard areas, especially in the event of a storm. However, in view of the extensive development that has occurred along the coast and the minimal impacts associated with the development of one or two single-family homes or duplexes, construction of these developments on dunes and coastal bluffs, and within coastal high hazard areas and erosion hazard areas, is acceptable in certain situations.

Development of one or two single-family homes or duplexes on a dune may be acceptable in cases where the development is proposed on the landward slope of a secondary or tertiary dune or the dune is isolated from a beach and dune system by a paved public road, public seawall, or public bulkhead. One or two single-family homes or duplexes may be constructed on the landward slope of the secondary or tertiary dune where the intervening dune is of sufficient volume to provide protection during a 100-year storm, without the construction having a significant adverse long-term impact on the natural functioning of the beach and dune system. Similarly, the development of one or two single-family homes or duplexes on a dune that is isolated from a beach and dune system by an existing paved public road, public seawall, or public bulkhead that is of a sufficient size to eliminate the protective functioning of the isolated dune is acceptable,

since the development will not have a significant adverse impact on the natural functioning of the beach and dune system. Single-family homes and duplexes may be developed in some coastal high hazard areas and erosion hazard areas where extensive developments have already occurred. Infill single family homes or duplexes are found to be acceptable because such development will not alter the existing need for public expenditure in shore protection at these locations, the risk involved is reduced to a minimum in terms of the quantity and intensity of developments that will be permitted and it would allow the infill sites to be developed to the degree currently existing in that area. With regards to coastal bluffs, since the disturbance associated with the development of one or two single-family homes or duplexes is minimal and, therefore, will not adversely affect the stability of the coastal bluff, the construction of single-family homes or duplexes is allowed within 10 feet of the crest of the coastal bluff, except along high-energy shorelines of the Atlantic Ocean, Delaware Bay, Raritan Bay, or Sandy Hook Bay and where excavation is proposed.

Prior to the 1993 amendments, single-family homes and duplexes were not regulated under CAFRA. This rule allows for the limited expansion or reconstruction with or without expansion of a single-family home or duplex located on a dune that existed prior to July 19, 1993 (date of CAFRA amendments), in recognition of the impact of the CAFRA amendments on these developments. The limited expansion of an existing single-family home or duplex will not have a significant long-term, adverse impact on the natural functioning of the beach and dune system since they are limited in size and cannot be located on the waterward side of the dwelling. Further, the rule requires that the dune

waterward of the existing dwelling be enhanced through the placement of sand and the planting of native dune vegetation thus improving the functioning of the existing dune.

Development that is conducive to use of public transportation and has features that promote bicycling and walking as modes of transportation are encouraged. Public health and welfare concerns about air quality, as well as the necessity to limit energy consumption, require that public policies and decisions encourage alternatives to reliance on private automobiles.

7:7-15.3 Resort/recreational

- (a) (No change.)
- (b) Standards relevant to recreation priority are as follows:
- 1. 2. (No change.)
- [3. Rationale: The national and state interests in recreation are clearly indicated in the coastal economy and are essential for the quality of life. The coastal environmental provides numerous opportunities for recreation which should be expanded by public policy and action, including priority setting.]
 - (c) Standards relevant to recreation areas within developments are as follows:
 - 1. 2. (No change.)
 - [3. Rationale: The Rationale statement for this subsection is not reproduced in the Code. The

Rationale statement may be reviewed by contacting the Division of Land Use Regulation at the address set forth at N.J.A.C. 7:7-1.6.]

- (d) Standards relevant to marinas are as follows:
- 1. 8. (No change.)
- 9. 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)[8i] 9i 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. ii. (No change.)
- 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] **property owner**. Results of the monitoring shall be provided to the Department and the [property-owner] **property owner** in writing by the laboratory within 10 calendar days after the date of sampling.

- (1) The State-certified laboratory shall determine the pre-construction median level of fecal coliform in the water at each of the Department selected test sites at the applicant's expense, and advise the Department and the applicant in writing of these results within 10 calender days after the date of sampling. If any post-construction test at any single site yields fecal coliform levels which exceed the pre-construction reading at that site by 100 percent, the property owner shall allow Department personnel access to the property during [day-light] **daylight** hours to assess whether the operation of the project is causing or contributing to the elevated reading.
 - (2) (4) (No change.)
- [10. Rationale: Marinas are located on land at the water's edge which exists only in limited supply and which, in its natural state, is indispensable to many land and water-related activities. The rules are intended to ensure that the area devoted to marinas is efficiently utilized to keep the size of the area required to a minimum to maintain the environmental integrity of the water and water's edge areas and to preserve the scenic and natural characteristics of the area. Facilities for sail and oar boating are encouraged because such boats consume less energy, are less disturbing to wildlife and pollute less than motor boats. Facilities offering rental boats and rental slips are encouraged because they reduce the need for construction of additional mooring facilities, serve a greater number of people, and afford the casual boater access to water-related recreation.

 Marina development which is permissible under these rules is encouraged to take place on filled water's edge lands because they are of low environmental sensitivity.

As a water-dependent use, marinas are an essential component of the State's waterfront communities, providing necessary infrastructure and services to the boating public. However, over the last several years the State has seen a decrease in the money spent on recreational

boating as well as a decrease in the number of boat registrations. This in turn has resulted in a loss of jobs, revenue, and services at marina facilities, as well as the conversion of some marinas to non-water dependent uses. To preserve existing marinas and the services they provide, while minimizing their impacts to coastal resources, the expansion of existing marinas or construction of new marinas in limited situations in shellfish habitat is conditionally acceptable.

New Jersey's waterfront communities are diverse, active lands, where people come to enjoy being in close proximity to the water and where the economy thrives. Restaurants located along tidal waterways allow the public to enjoy this resource and provide the community with an economic benefit. Allowing for the construction of a restaurant at a new or existing marina facility that provides dockage for 25 or more dockage units consisting of either dry dock storage or wet slips will expand the public's opportunity for both visual and physical access and will provide marina facilities with a year-round use making them more economically viable, while assuring that marina functions continue to be provided.

The Navesink River, Shrewsbury River, and Manasquan River (upstream of the Route 35 Bridge), and St. George's Thorofare are particularly important shellfish habitats. The Navesink and Shrewsbury Rivers are unique in that they are the only two estuaries within the State which have soft clams in commercially viable densities. St. Georges Thorofare contains high densities of hard clams according to the 1985 Shellfish inventory conducted by the Division of Fish, Game and Wildlife, containing approximately 6.2 million hard clams in a 107-acre area. The high abundance of hard clams, together with the fact that this water body is poorly flushed, makes St. George's Thorofare critical to the shellfish industry and extremely sensitive to any potential pollution producing activity.

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 such as the Navesink River Shellfish Protection Program have been implemented to protect and enhance water quality. On August 21, 1986, a Memorandum of Understanding was signed by the New Jersey Department of Environmental Protection and Energy, the New Jersey Department of Agriculture and the United States Department of Agriculture and the USEPA. 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 on the Navesink River, to the point where the potential now exists for upgrading the shellfish classification of the river from "special restricted" to "seasonally approved."

The Shrewsbury River has been included in the "Navesink River Shellfish Protection Program" since it is hydrologically connected to the Navesink River and is one of only two estuaries in New Jersey with commercially viable densities of soft clams. Concern over deterioration of the water quality in the Manasquan River and its effects upon shellfish compelled Monmouth and Ocean Counties, together with the Department, to form the "Monmouth/Ocean Alliance to Enhance the Manasquan River." This Alliance seeks to identify causes of shellfish water degradation and plan uses which would protect and enhance water quality in the Manasquan by requiring water quality monitoring at project sites located on the above listed waterways. The Department is honoring its commitment to maintain and eventually

upgrade the water quality of these rivers. Monitoring affords the Department the opportunity for early intervention and thorough investigations should the water quality be adversely affected by the operation of projects permitted under this rule.]

- (e) Standards relevant to amusement piers, parks, and boardwalks are as follows:
- 1. 2. (No change.)
- [3. Rationale: Amusement piers, amusement parks, and boardwalks form an essential element of the resort and recreational character of some of the communities fronting on the Atlantic Ocean. The carnival atmosphere of these areas provides fun and excitement annually for hundreds of thousands of people. However, new piers for amusement purposes are an inappropriate use of scarce coastal resources, due to the natural hazard of the desired ocean location and the importance of maintaining the visual quality of the oceanfront. Also, amusement parks are not a water dependent use; these facilities may be located inland on less sensitive land and water features.]
- (f) Rationale: The national and State interests in recreation are clearly indicated in the coastal economy and are essential for the quality of life. The coastal environment provides numerous opportunities for recreation which should be expanded by public policy and action, including priority setting.

Recreation is increasingly being considered vital to a person's mental and physical well-being. The 2013-2017 New Jersey Statewide Comprehensive Outdoor Recreation Plan (SCORP), published September 2014, recognizes the success of State and Federal agencies,

local governments, and nonprofit conservation organizations in preserving open space in the State. As of July 1, 2013, there were 1,323,374 acres of land Statewide being used for public conservation and recreation purposes. However, the SCORP also recognizes the increasing population and urbanization of New Jersey, and anticipates the State's population to exceed nine million people by 2020. The continually increasing population will create further demand for recreational opportunities.

Development, especially residential development, increases the local demand for close to home recreation opportunities yet consumes open space necessary for such opportunities. In the absence of adequate existing or planned recreation resources, suitable on-site open space needs to be incorporated in the design and development to assure that sufficient opportunities will be available to the future residents or workforce, as addressed by the standards for recreational areas within developments in this rule.

Water-dependent recreation, such as boating, is an integral part of New Jersey's economy and culture. Marinas are located on land at the water's edge, which exists only in limited supply and which, in its natural state, is indispensable to many land and water-related activities. The rules are intended to ensure that the area devoted to marinas is efficiently utilized to keep the size of the area required to a minimum to maintain the environmental integrity of the water and water's edge areas and to preserve the scenic and natural characteristics of the area. Facilities for sail and oar boating are encouraged because such boats consume less energy, are less disturbing to wildlife, and pollute less than motor boats. Facilities offering rental boats and rental slips are encouraged because they reduce the need for construction of additional mooring facilities, serve a greater

number of people, and afford the casual boater access to water-related recreation. Marina development that is permissible under these rules is encouraged to take place on filled water's edge lands because they are of low environmental sensitivity.

As a water-dependent use, marinas are an essential component of the State's waterfront communities, providing necessary infrastructure and services to the boating public. However, over the last several years the State has seen a decrease in the money spent on recreational boating, as well as a decrease in the number of boat registrations. This in turn has resulted in a loss of jobs, revenue, and services at marina facilities, as well as the conversion of some marinas to non-water dependent uses. To preserve existing marinas and the services they provide, while minimizing their impacts to coastal resources, the expansion of existing marinas or construction of new marinas in limited situations in shellfish habitat is conditionally acceptable. Specific requirements apply to boat mooring facilities of with five or more slips in the Navesink River, Shrewsbury River, or Manasquan River (upstream of the Route 35 Bridge) or the St. George's Thorofare in recognition of importance of these waters to shellfish populations. For more information, see N.J.A.C. 7:7-9.2(m).

New Jersey's waterfront communities are diverse, active lands, where people come to enjoy being in close proximity to the water and where the economy thrives. Restaurants located along tidal waterways allow the public to enjoy this resource and provide the community with an economic benefit. Allowing for the construction of a restaurant at a new or existing marina facility that provides dockage for 25 or more dockage units consisting of either dry dock storage or wet slips will expand the public's opportunity for

both visual and physical access and will provide marina facilities with a year-round use making them more economically viable, while assuring that marina functions continue to be provided.

Amusement piers, amusement parks, and boardwalks form an essential element of the resort and recreational character of some of the communities fronting on the Atlantic Ocean. The carnival atmosphere of these areas provides fun and excitement annually for hundreds of thousands of people. However, new piers for amusement purposes are an inappropriate use of scarce coastal resources, due to the natural hazard of the desired ocean location and the importance of maintaining the visual quality of the oceanfront. Also, amusement parks are not a water dependent use; these facilities may be located inland on less sensitive land and water features.

- 7:7-15.4 Energy facility
 - (a) (No change.)
- (b) Standards relevant to siting of new energy facilities, including all associated development activities, are as follows:
 - 1–5. (No change.)
- 6. Rationale: New energy facility construction has the potential to cause significant impacts to coastal ecosystems, natural resources, public access, and scenic and visual qualities in coastal areas. The standards for energy facility siting and requirements for specific types of energy facilities are intended to steer non-water dependent development

away from the coast and to preserve coastal values. Wind and solar energy are renewable resources that do not involve the refining or burning of fossil fuels. These types of energy facilities often result in fewer adverse impacts and, thus, have less stringent setback requirements.

- (c) (No change.)
- (d) Standards relevant to Outer Continental Shelf (OCS) oil and gas exploration and development are as follows:
 - 1. (No change.)
- 2. Rationale: [The Rationale statement for this subsection is not reproduced in the Code. The Rationale statement may be reviewed by contacting the Division of Land Use Regulation at the address set forth at N.J.A.C. 7:7-1.6.] Offshore exploratory activity began off New Jersey in the Baltimore Canyon on March 29, 1978, but did not result in well production. If the exploratory drilling is successful in the future, the offshore oil and gas industry is likely to seek onshore support bases closer to the offshore tracts than the present temporary bases established by the major oil, gas, and offshore service and supply companies at Davisville, Rhode Island. Because of the presence of shallow inlets throughout New Jersey's coastal zone, few locations in New Jersey meet industry siting requirements. This rule recognizes that the New Jersey coast is favored by proximity to the offshore tracts as a site for onshore staging bases, and, by requiring any production and development to comply with all energy facility provisions in this section, including N.J.A.C. 7:7-15.4(e), which encourages onshore

support facilities to be located in areas of existing industrial development, carries out the basic policy to concentrate rather than disperse industrial development in the coastal zone.

- (e) (h) (No change.)
- (i) Standards relevant to pipelines and associated facilities are as follows:
- 1. 4. (No change.)
- 5. Rationale: New Jersey recognizes that pipelines, rather than other modes of surface transportation such as tankers and barges, are the preferred and more environmentally sound method of bringing crude oil and natural gas ashore from offshore wells. The impacts of pipelines are most evident during the construction phase. These effects, and the visual, noise, and odor impacts which may be created by facilities associated with DCS pipelines, require that New Jersey proceed cautiously and prudently in selecting pipeline corridors, specific alignments, and locations for ancillary facilities.
 - (i) (m) (No change.)
 - (n) Standards relevant to other gas related facilities are as follows:
 - 1. (No change.)
- 2. Rationale: Certain ancillary facilities, in addition to pipelines, may be necessary to assure the safe, efficient, and economical transportation of natural gas to shore. The impacts of these facilities will be evaluated in the overall analysis of the gas transportation system.

- (o) Standards relevant to oil refineries and petrochemical facilities are as follows:
- 1. 4. (No change.)
- 5. Rationale: Refineries are large-scale industrial facilities that are neither coastal dependent nor compatible with the character of the Bay and Ocean Shore Region. However, new refineries or additions to existing refineries using advanced technology to control air and water pollution and other hazards could be compatible with existing development in the Delaware River Area or [northern waterfront] Northern Waterfront Area.
 - (p) (q) (No change.)
 - (r) Standards relevant to electric generating stations are as follows:
 - 1. 3. (No change.)
- 4. Rationale: The siting of an electric generating station is an extraordinary event with farreaching impacts, **especially** when compared with the typical day-to-day decisions made under
 the State's coastal zone management program. Such siting decisions, therefore require special
 scrutiny using: (a) the State's authority in its management of state-owned tidelands and
 submerged lands contemplated as sites for all or part of an electric generating station, (b) the
 State's regulatory authority, and (c) the State's influence in Federal proceedings on aspects of the
 siting process.

New Jersey's coastal zone, especially along Barnegat Bay and Delaware Bay, has experienced the consequences of several major siting decisions in the past decade and already

has a diverse mix of existing, proposed, and potential fossil fuel and nuclear generating facilities, both onshore and offshore.

New Jersey recognizes the interstate nature of the electric power system. Some electricity is produced in New Jersey at facilities owned partially by utilities in other states and exported to those states. New Jersey also imports electricity produced in adjacent states. In short, New Jersey is an integral part of the Pennsylvania- New Jersey- Delaware- Maryland interconnecting grid system, importing and exporting electricity from the system at different times of the day, season and year in order to generate electricity efficiently and achieve the lowest achievable cost to electricity users throughout this multi-state region.

New Jersey also recognizes that most electric generating facilities may not be coastal-dependent but do require access to vast quantities of cooling waters, a siting factor that, from the perspective of utilities, increases the attractiveness of coastal locations. This siting rule strikes a balance among various competing national, regional, and [state] **State** interests in coastal resources, and recognizes some of the differences in the siting requirements of fossil fuel and nuclear generating stations.

The rule directs fossil fuel stations toward [built up] **extensively developed** areas in order to preserve and protect particularly scenic and natural areas important to recreation and open space purposes. New Jersey has articulated this policy with a conscious recognition of the [state's] **State's** progress in attaining and maintaining high air quality. Given the use of appropriate control technology, coal-fired generating stations, for example, appear feasible at various coastal locations. The siting of coal-fired power plants in urban areas also promotes efficient energy use due to the proximity of power plants to load centers.

The nuclear siting rule recognizes public concern for the disposal of spent fuel, as mandated in CAFRA by the New Jersey Legislature in 1973 and left unchanged in the 1993 legislative amendments.

- (s) Standards relevant to liquefied natural gas (LNG) facilities are as follows:
- 1. (No change.)
- 2. Rationale: The [pipeline] **Pipeline** Safety Act of 1979, P.L. 96-129, amended the Natural Gas Pipleline Safety Act of 1968 and sets forth requirements for the safe operation of pipelines transporting natural gas and liquefied petroleum gases, and provides standards with respect to the siting, construction, and operation of liquefied natural gas facilities.

The State recognizes the responsibilities of various federal agencies, including the U.S. Coast Guard and Office of Pipeline Safety Operations in the U.S. Department of Transportation, the Economic Regulatory Administration in the U.S. Department of Energy (US DOE), and the independent Federal Energy Regulatory Commission within USDOE, for management of various aspects of the siting and operations of LNG facilities.

Importation facilities for LNG are discouraged in view of the present sources of LNG from politically unstable [counties] **countries**. The use of natural gas for base load electric generation purposes is consistent with the Power Plant and Industrial Fuel Use Act of 1978, P.L. 95-620. The availability of domestic sources of LNG and a demonstrated need that such importation facilities are in the national interest dictate [considering] **the consideration of** applications for such facilities on a [case by case] **case-by-case** basis.

The tankering, transfer, and storage of LNG pose significant risks to [Public] **public** health, safety, and welfare and may cause serious adverse environmental impacts which may not be restricted to one state, given the likely potential locations of LNG terminals along interstate waterways. New Jersey therefore recommends that the siting of LNG facilities be treated as a regional issue on an interstate basis.

7:7-15.5 Transportation

- (a) Standards relevant to roads are as follows:
- 1. (No change.)
- [2. Rationale: This policy is based on two assignments: (i) that the coastal zone, is for the most part adequately served already by the existing road network, and (ii) that further capital investment in transportation facilities for the coastal region should emphasize those kinds of facilities which would minimize environmental damage and energy use. Consequently, new road construction should be undertaken only where the burden of proving need is met after less damaging and more fuel efficient alternatives have been considered. In addition, further investment in road construction should include coordinated investment in low-damage, highly fuel-efficient modes wherever possible.]
 - (b) Standards relevant to public transportation are as follows:
 - 1. 2. (No change.)

- [3. Rationale: The Rationale statement for this subsection is not reproduced in the Code. The Rationale statement may be reviewed by contacting the Division of Land Use Regulation at the address set forth at N.J.A.C. 7:7-1.6.]
 - (c) Standards relevant to bicycle and foot paths are as follows:
 - 1 3. (No change.)
- [4. Rationale: Paths for pedestrians and bicycles provide active outdoor recreation and may lead to reduced dependency on cars, especially if settlement patterns are made more compact.]
 - (d) Standards relevant to parking facilities are as follows:
 - 1. 2. (No change.)
- [3. Rationale: The Rationale statement for this section is not reproduced in the Code. The Rationale statement may be reviewed by contacting the Division of Land Use Regulation at the address set forth at N.J.A.C. 7:7-1.6.]
- (e) Rationale: A basic premise of the coastal management program is concentrating the pattern of development, in part to facilitate public transportation. In the more developed parts of the coastal zone, expansion, improvement, and new construction of all forms of public transportation are the most appropriate ways to meet the new transportation needs generated by goods and people. Parking facilities are a necessary part of a transportation system and are encouraged when they are developed as ancillary facilities to these public transportation systems.

Another encouraged type of transportation-related development is bicycles and foot paths. Paths for pedestrians and bicyclists provide active outdoor recreation and may lead to reduced dependency on cars, especially if settlement patterns are made more compact.

The policy on roads is also influenced by the premise of concentrating development and is based on two conclusions: (1) that the coastal zone is for the most part adequately served already by the existing road network; and (2) that further capital investment in transportation facilities for the coastal region should emphasize those kinds of facilities which would minimize environmental damage and energy use. Consequently, new road construction should be undertaken only where the burden of proving need is met after less damaging and more fuel-efficient alternatives have been considered. In addition, further investment in road construction should include coordinated investment in low-damage, highly fuel-efficient modes wherever possible.

7:7-15.6 Public facility

- (a) (No change.)
- (b) Solid waste facility means any system, site, equipment, or building which is utilized for the storage, collection, processing, transfer, transportation, separation, recycling, recovering, or disposal of solid waste, but shall not include a recycling center, a regulated medical waste collection facility authorized pursuant to N.J.A.C. 7:26-3A.39, or an intermodal container facility authorized pursuant to N.J.A.C. 7:26-3.6.
 - 1. (No change.)

- [2. Rationale: Solid Waste is a resource whose potential for recovery must be evaluated before locating new sanitary landfills. Further regional solutions to solid waste management are mandated under State law. In addition, the development of new landfills is subject to the regulation of the Department's Division of Solid and Hazardous Waste.]
 - (c) Wastewater treatment facilities are conditionally acceptable provided:
 - 1. 3. (No change.)
- [4. Rationale: Wastewater treatment systems range in scale from on-site sewage disposal systems to regional treatment systems with centralized plants, major interceptors, and ocean outfalls. In the past decades considerable wastewater treatment facility construction has taken place or been authorized in developing parts of the coastal zone with corresponding improvements to water quality. New wastewater treatment systems must be carefully evaluated in terms of water quality impacts and secondary impacts.

The Federal Clean Water Act encourages federally funded wastewater treatment facilities to provide for multiple use of the site. The Coastal Zone Management rules support and extend this federal policy by requiring that all new wastewater treatment facilities in the coastal zone consider the feasibility of multiple use.]

(d) (No change.)

(e) Rationale: The development of public facilities responds to the needs created by existing development and may make possible future development. Public facilities should serve a current need and should not have secondary impacts, such as increasing sprawl.

Alternatives to developing new public facilities must be considered. For example, solid waste is a resource whose potential for recovery must be evaluated before locating new sanitary landfills. Recovery/recycling are preferred over utilizing precious coastal land area for a landfill. Further regional solutions to solid waste management are mandated under State law. In addition, the development of new landfills is subject to the regulation of the Department's Division of Solid and Hazardous Waste.

Wastewater treatment systems range in scale from on-site sewage disposal systems to regional treatment systems with centralized plants, major interceptors, and ocean outfalls. In the past decades, considerable wastewater treatment facility construction has taken place or been authorized in developing parts of the coastal zone with corresponding improvements to water quality. New wastewater treatment systems must be carefully evaluated in terms of water quality impacts and secondary impacts.

The Federal Clean Water Act encourages Federally funded wastewater treatment facilities to provide for multiple use of the site. The Coastal Zone Management rules support and extend this Federal policy by requiring that all new wastewater treatment facilities in the coastal zone consider the feasibility of multiple use.

7:7-15.7 Industry

(a) - (f) (No change.)

(g) Rationale: A strong industrial base is vital if an area is to be healthy and vibrant. Many of the developed parts of the coast are suffering from a declining industrial base. Land which had been productive is now vacant and in need of redevelopment. The [Industrial] industry rules encourage industry to locate in the vacant areas of the cities of the Northern and Delaware waterfronts. However, the rules recognize that a healthy waterfront will host a mix of uses. By asking waterfront industries to create public access to the water and make sites they would vacate available to the public, the rules also recognize the waterfront as a valuable public resource.

The [Industrial] **industry** rules address the conflicting demands and effects of industrial waterfront development. The rules recognize several factors which must be considered during the [decision making] **decision-making** process. First, water dependent industry must locate somewhere along the waterfront. Other industry which needs water for operating or processing, some or all of the time, might also require a location near the waterfront, but landward of the water's edge. Second, as a result of environmental degradation, urban areas are suffering from unmet recreation and open space needs. Third, urban areas typically suffer from high unemployment and deteriorating tax bases. Fourth, city dwellers must be supported in their efforts to rejuvenate and revitalize their cities[, making] **to make** them pleasant and economically viable places to live.

7:7-15.9 Port

(a) - (f) (No change.)

(g) Rationale: New Jersey's port areas are a regional, national and international resource. The existing ports, located largely in the Delaware and Northern Waterfront Areas, contain unused and under used areas which can be refurbished to meet increase in demand. The [state] **State** must nevertheless allow for possible unanticipated future needs for port area.

As in the past, port activities will continue to be a vital part of the economy of New Jersey. However, changes in shipping technology have caused once thriving ports, such as Jersey City and Hoboken to become the scene of dilapidated docks and piers and acres of vacant land.

The port policies recognize the changing ship technology and will encourage new or expanded needed [modem] **modern** facilities in areas where port facilities would be compatible with existing uses. The policies recognize [modem] **modern** facilities require large expanses of land to accommodate specialized equipment and host a full array of services. However, the policies seek to avoid construction of a [modem] **modern** facility which meets the needs of today but could become obsolete tomorrow. For this season, facilities are encouraged not to over-specialize. At the time, the policies recognize the need to have large bulk cargo facilities to avoid construction of numerous small port facilities.

Recognizing the value of the water as a public resource and the need for environmental controls, the [policies] **rules** require facilities to be designed with provision for minimum environmental degradation. The policies endorse the concept of multimodalism and encourage port facilities to make use of existing infrastructure. In addition, the policies encourage an integrated port system which uses container ships, where ship channels are deep enough to

accommodate these vessels, but provides for use of smaller barges to move goods to inland waterways or along shallower channels.

Recognizing the value of the waterfront to the public, the [policies] **rules** require port facilities to provide for the maximum public visual and physical access to the waterfront consistent with safety and security concerns. The policies accommodate port usage of the waterfront, where needed and appropriate, while encouraging redevelopment and other uses which would be in the best interest of the public.

7:7-15.10 Commercial facility

- (a) Standards relevant to hotels and motels are as follows:
- 1. 5. (No change.)
- [6. Rationale: Hotels and motels enable New Jersey residents and tourists to visit the coast. They support the tourist economy of the area. The buildings must be located, however, so they do not harm or threaten the resources which attract people to the coast.]
 - (b) Standards relevant to retail trade and services are as follows:
 - 1. 3. (No change.)
- 4. All new retail trade and service establishments, as well as expanded portions of existing retail trade and service establishments located on a non-oceanfront site with existing or proposed shore protection structures, shall be set back at least 15 feet landward from the existing or proposed shore protection structures. Decks attached to the proposed new or expanded existing retail trade and service establishments are not subject to this setback requirement. If there is no

alternative to locating the proposed development at least 15 feet landward of the shore protection structure, the Department shall reduce the required setback if an engineering certification is submitted demonstrating that, after the proposed development has been constructed, the shore protection structure can be replaced within 18 inches of the location of the existing or proposed shore protection structure and a conservation restriction that complies with N.J.A.C. 7:7-18 is recorded for the property which states that any reconstruction of a shore protection structure shall be within 18 inches of the existing shore protection structure.

- [5. Rationale: Commercial development in the urban waterfront area is consistent with the State's economic development policy to target loans and bond assistance for commercial and retail establishment to urban areas. Commercial development, however, must be situated so it does not harm or threaten the resources which attract people to the waterfront.]
 - (c) Standards relevant to convention centers and arenas are as follows:
 - 1. 3. (No change.)
- [4. Rationale: Convention centers and arenas would provide social and cultural benefit to residents and visitors to the waterfront areas. They would also support the economy of the area. However, they can also generate traffic and induce additional development. They must, therefore, be located so that such impacts can be easily absorbed. The buildings must be located, however, so they do not harm or threaten the resources which attract people to the coast.]
- (d) Rationale: Hotels and motels, retail trade and service establishments, and convention centers and arenas are commercial facilities. The economic benefits of these

different types of commercial facilities should be balanced with the potential environmental impacts posed by new or expanded commercial facilities.

Hotels and motels enable New Jersey residents and tourists to visit the coast. They support the tourist economy of the area. The buildings must be located, however, so they do not harm or threaten the resources that attract people to the coast.

Retail and services development in the urban waterfront area is consistent with the State's economic development policy to target loans and bond assistance for commercial and retail establishment to urban areas.

Convention centers and arenas would provide social and cultural benefit to residents and visitors to the waterfront areas. They would also support the economy of the area. However, they can also generate traffic and induce additional development. They must, therefore, be located so that such impacts can be easily absorbed.

While commercial development, including hotels and motels, retail trade and service establishments, and convention centers and arenas, serves an important function in coastal areas, all forms of commercial development must be located so that it does not harm or threaten the resources which attract people to the coast.

7:7-15.11 Coastal engineering

(a) (No change.)

- (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] www.nj.gov/dep/landuse/guidance.html. 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. 3. (No change.)
 - (c) (g) (No change.)
- (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] **are**, 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)] *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.] *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.

7:7-15.14 (Reserved)

SUBCHAPTER 16. RESOURCE RULES

7:7-16.2 Marine fish and fisheries

- (a) (No change.)
- (b) Any activity that would adversely impact [on] the natural functioning of marine fish, including the reproductive, spawning and migratory patterns or species abundance or diversity of marine fish, is discouraged. In addition, any activity that would adversely impact any New Jersey based marine fisheries or access thereto is discouraged, unless it complies with (c) below.
 - (c) (No change.)
- (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 \$1.4 billion per year (U.S. Department of Commerce, National Marine Fisheries Service, 2008). The Department also estimates that 1.2 million people

participated in marine/estuarine recreational fishing in 2010 in New Jersey. (U..S Department of Commerce, National Marine Fisheries Service, 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 2010 were 161,831,909 pounds, valued at \$177 million dockside, according to U.S. Department of Commerce statistics (2011). The total ripple effect on the State economy is estimated at \$2.6 billion, with recreational fishing yielding \$1.6 billion and commercial fishing yielding \$1.06 billion. (U.S. Department of Commerce, National Marine Fisheries Service, 2008 and 2011).

Activities [which] **that** 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 ppm 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] **the harvesting of shellfish** may not be directly or immediately important to human economics although these areas have been used [as] **for** resource recovery programs, relay and depuration, **and as** 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. Measures to minimize and compensate for impacts to marine fish and fisheries 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, 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.

7:7-16.3 Water quality

- (a) (b) (No change.)
- (c) Rationale: [The Rationale statement for this section is not reproduced in the Code. The Rationale statement may be reviewed by contacting the Division of Land Use Regulation at the address set forth at N.J.A.C. 7:7-1.6.] Most of the natural, commercial, recreational, industrial, and aesthetic resources of the coastal zone affect or are affected by surface and groundwater quality. Specific coastal zone water quality problems include pollution by nutrients, pathogenic organisms, toxic and hazardous wastes, thermal discharges, suspended sediments, oxygen demanding wastes, and saline intrusion into freshwater resources. These pollutants can lower water quality sufficiently to prevent desired uses. Pursuant to the Federal Coastal Zone Management Act, Section 307(f), requirements established by a state or local government pursuant to the Federal Clean Air Act and Clean

Water Act "shall be incorporated" into any program developed pursuant to the CZMA.

This rule incorporates State water quality requirements by making clear that development which would violate New Jersey's water quality related statutes and regulations adopted pursuant to the Federal Clean Water Act is not allowed.

7:7-16.5 Groundwater use

- (a) (b) (No change.)
- (c) Rationale: Groundwater is a primary source of water for drinking and industrial use. In some areas of the coastal zone, especially areas in Essex, Middlesex, Monmouth, Salem, Camden, and Cape May Counties, excessive amounts of groundwater are being withdrawn. The problem stems from the overpumping of groundwater, industrial, agricultural and municipal landfill leakage into groundwater and reduction of aquifer recharge caused by increased development and population. This has led to a progressive lowering of the water table or piezometric surface[,]; altered groundwater flow patterns[,]; changed groundwater recharge/discharge relationships, which may in [tum] turn result in increasing salt water intrusion into the groundwater[s, damaging]; damaged the base flow conditions of streams[,]; and caused well closing due to contamination.

7:7-16.6 Stormwater management

(a) If a project or activity meets the definition of "major development" at N.J.A.C. 7:8-1.2, then the project or activity shall comply with the Stormwater Management rules at N.J.A.C. 7:8.

(b) Rationale: The Stormwater Management Rules (N.J.A.C. 7:8) specify standards for State, municipal, and regional stormwater management. These rules provide minimum Statewide runoff techniques, as well as special protection measures for environmentally sensitive water and land areas. Because development and land use activities contribute greatly to the types and amount of pollutants that are found in stormwater runoff, it is appropriate for major development projects in the coastal zone to comply with the Stormwater Management Rules' standards.

7:7-16.7 Vegetation

- (a) (b) (No change.)
- (c) Rationale: The steady loss of vegetation is a nearly inevitable result of urbanization.

 Terrestrial vegetation stabilizes soil, retards erosion and runoff, promotes infiltration of surface water, reduces the force of wind, provides food, shelter and breeding sites for wildlife, and adds to aesthetic values for recreation and domestic life. Trees release life-giving oxygen, filter particulate pollutants, provide foods and fuel, with no energy input necessary by man. Because each site is unique, the degree of vegetation preservation required will depend upon the environmental conditions within and adjacent to the development site. In general, the greater the intensity of development permitted, the less vegetation preservation required.

"Appropriate native coastal species" means that species selection must reflect the natural physiological limitations of species to survive in distinct habitats, which include all

environmental processes (natural and artificial) that operate within a site. Non-suitable species plantings will do poorly or die, or, if preserved through an intensive maintenance program of ['ph'] **pH** adjustment fertilization and irrigation, will cause unacceptable ground and surface water impacts. New vegetative plantings should reflect regional geophysical suitability. Illustrative appropriate species can be grouped into three categories:

(i)-(iv) (No change.)

7:7-16.8 Air quality

(a) - (c) (No change.)

(d) Rationale: [The Rationale statement for this section is not reproduced in the Code. The Rationale statement may be reviewed by contacting the Division of Land Use Regulation at the address set forth at N.J.A.C. 7:7-1.6.] Air quality is adversely affected by the contaminants emitted into the atmosphere as by-products of human activities, especially fuel-burning. Air contaminants not only cause discomfort, damage to materials and vegetation, soiling of surfaces, and deterioration of visibility, but can also adversely affect human health.

Historically, the extent of air pollution has increased with industrialization and urbanization. The Northern Waterfront Area has a long history of air contaminants from these sources. Thus, in most cases, abatement practices are required to restore healthful air quality.

The Federal Coastal Zone Management Act, Section 307(f), requires that the air resource standards of the Coastal Management Program be the local, State, and Federal policies established in fulfillment of the Clean Air Act and its amendments. The Department's Air Quality Regulation Group administers the State's air quality program to meet the requirements of the New Jersey Air Pollution Control Act and the Federal Clean Air Act and determines compliance with coastal policy on air quality.

7:7-16.10 Scenic resources and design

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

- (c) The following standards apply to all proposed development in the coastal area:
- [(c)] 1. New coastal development that is visually compatible with its surroundings in terms of building and site design, and enhances scenic resources is encouraged. New coastal development that is not visually compatible with existing scenic resources in terms of large-scale elements of building and site design is discouraged[.];
- 2. The proposed development must be in character with the surrounding transitional heights and residential densities, or be in character with a municipal comprehensive development scheme requiring an increase in height and density which is consistent with all applicable sections of this chapter; and
 - 3. High rise structures:

- i. Are encouraged to be located in an urban area of existing high density, high-rise, and/or intense settlements; and
- ii. Shall be separated from coastal waters, as defined at N.J.A.C. 7:7-1.2, by at least one public road or an equivalent area (at least 50 feet) physically and visually open to the public except as provided by the Hudson River waterfront area rule, N.J.A.C. 7:7-9.46.
- (d) In addition to the standards at (c) above, coastal development within the Hudson River Waterfront area as defined at N.J.A.C. 7:7-9.48(a) shall comply with the following:
- 1. If the proposed development is a building or complex of buildings that comprises both a low-rise component(s) that is six stories or 60 feet or less in height as measured from preconstruction ground level and a component(s) that is more than six stories or more than 60 feet in height as measured from existing preconstruction ground level, the longest lateral dimension of each component that is more than six stories or more than 60 feet in height as measured from existing preconstruction ground level must be oriented perpendicular to the beach or coastal waters; and
- 2. High-rise structures shall not block or degrade views of the Hudson River, Palisades, New York City skyline, or horizon currently enjoyed from existing residential structures, public roads, or pathways to the maximum extent practicable.
- [(d)] (e) [In all areas, except the Northern Waterfront Region, the Delaware River Region and Atlantic City, new] In addition to the standards at (c) above, coastal development along all oceanfront and bayfront areas, except Atlantic City, shall comply with the following:

- 1. New coastal development adjacent to a bay or ocean or bayfront or oceanfront, beach, dune, or boardwalk and higher than 15 feet in height measured from the existing grade of the site or boardwalk shall comply with the following, unless it meets the requirements at [(e) or (f)] (g) or (h) below:
 - [1.] i. (No change in text.)
- [2.] **ii.** Be separated from either the beach, dune, boardwalk, or waterfront, whichever is further inland, by a distance of equal to two times the height of the structure, except for the following:
- [i.] (1) Infill sites within existing commercial areas along a public boardwalk where the proposed use is commercial and where the set-back requirement is visually incompatible with the existing character of the area; and
 - [ii.] (2) Wind turbines[.]; and
- 2. High-rise structures must not block or degrade views of dunes, beaches, horizons, inlets, bays, or oceans currently enjoyed from existing residential structures, public roads, or pathways to the maximum extent practicable.
- (f) In addition to the standards at (c) above, high-rise structures along all tidal waterways not identified at (d) or (e) shall not block or degrade views of the river, horizon, or any skylines currently enjoyed from existing residential structures, public roads, or pathways to the maximum extent practicable.

[(e)] (g) Coastal development that modifies a historic structure on or eligible for inclusion on the New Jersey or National Register of Historic Places, is adjacent to a bay, ocean, bayfront or oceanfront, beach, dune, or boardwalk, and is higher than 15 feet in height measured from the existing grade of the site or boardwalk need not comply with [(d)](e) above provided the development meets the requirements at [(e)1] (g)1 and 2 below. This exception does not apply to new development proposed to be located outside of the historic structure's footprint of development:

1. - 2. (No change.)

[(f)] (h) Federal, State, county, or municipal development projects [which] that are located adjacent to a bay or ocean, or bayfront or oceanfront, beach, dune, or boardwalk, and are greater than 15 feet in height measured from the existing grade of the site or boardwalk need not comply with the setback requirements in [(d)2] (e)1ii above provided that the development contains design elements that enhance physical or visual public access to the waterfront beyond that which would be afforded by strict compliance with [(d)2] (e)1ii above and the development, as proposed, would remain in compliance with N.J.A.C. 7:7-9.48.

[(g)] (i) Rationale: [A project which] Coastal development that is of a scale and location that has significant effect on the scenic resources of a region is considered to have a regional impact and to be of State concern. [This rule, applies only to developments which by their singular or collective size, location and design could have a significant adverse effect on the scenic resources of the coastal zone.] Restoration of areas of low scenic quality, such as

abandoned port facilities and blighted urban areas, through large-scale new construction and design that is compatible with the surrounding region is also encouraged by this rule. [Specific issues of concern include those addressed by the rules on Historic and Archaeological Resources, High Rise Structure, Public Access, and Buffers and Compatibility of Uses.] This rule also contains specific standards for high-rise development. While conserving land, some high-rise structures represent a visual intrusion. This rule seeks not to ban high-rise structures, but to provide criteria for their development at suitable locations and in appropriate orientations to protect the scenic resources that make the coastal zone a desirable place for people to live, work, and recreate.

New Jersey's coastal zone is diverse with development patterns, scenic resources, and coastal resources varying by region. For the purposes of this rule, the Department has classified the coastal zone into three distinct regions: the Hudson River Waterfront area, other riverfronts, and beach and bayfront communities with the standards for coastal development focusing on the scenic resources of value within that particular region thereby ensuring that appropriate development can occur while protecting those resources.

7:7-16.12 Traffic

- (a) (e) (No change.)
- (f) Rationale: [The Rationale statement for this section is not reproduced in the Code. The Rationale statement may be reviewed by contacting the Division of Land Use Regulation at the address set forth at N.J.A.C. 7:7-1.6.] **The improper location of a development or the lack of**

adequate parking provision at a development may exacerbate existing traffic problems or produce new difficulties for both visitors to and residents of the coastal area.

7:7-16.13 Subsurface sewage disposal systems

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

(c) Rationale: The subsurface sewage disposal system regulations provide standards for the proper location, design, construction, installation, alteration, operation, and maintenance of individual subsurface disposal systems. These regulations serve to protect public health and safety, [and] the environment, and potable water supplies, and to safeguard fish and aquatic life while preserving their ecological values. In areas subject to tidal flooding subsurface sewage disposal systems constructed below the 10-year flood elevation are susceptible to failure during flooding events. Furthermore, construction of subsurface sewage disposal systems within coastal high hazard areas (V zones) is prohibited in accordance with the National Flood Insurance Program Regulations.

SUBCHAPTER 17. MITIGATION

7:7-17.5 Property suitable for mitigation

- (a) (b) (No change.)
- (c) The Department shall approve mitigation on public property if:
- 1. -2. (No change.)

3. If the land was acquired using Green Acres funding **or is encumbered with Green Acres restrictions**, as defined at N.J.A.C. 7:36-2.1, the use of the area for mitigation purposes is approved by the Green Acres Program.

(d) - (h) (No change.)

SUBCHAPTER 19. RELAXATION OF PROCEDURES; RECONSIDERATION OF APPLICATION OF RULES

7:7-19.2 Reconsideration of the application of a rule(s) in this chapter

- (a) (h) (No change.)
- (i) In the case where the Department initiates the reconsideration of the application of a rule(s) in this chapter under (a) above, the Department shall, upon initiation of the reconsideration process follow all steps described in (i)1 through 3 below. In the case where the property owner is requesting a reconsideration of the application of a rule(s), the Department shall, upon initiation of the reconsideration process, follow the steps described in (i)1i, 1iii, 2, and 3 below:
 - 1. 2. (No change.)
- 3. Provide a [15-day] **15-calendar-day** comment period, commencing from the date of publication of the notice in the DEP Bulletin.

- (j) If the Department determines to approve a development upon reconsideration of the application of a rule(s) in this chapter, the Department shall provide notice of the development that the Department proposes to allow under the reconsideration following the same procedure as described in (i)1i above except that the Department shall provide a [30-day] **30-calendar-day** comment period, commencing from the date of publication of the notice in the DEP Bulletin.
- (k) The Department shall complete the written analysis required under (b) above, which shall incorporate its decision on the request for reconsideration of the application of a rule(s) in this chapter as follows:
 - 1. (No change.)
- 2. For a reconsideration initiated by the Department under (a) above, no later than 180 calendar days from the publication of notice in the DEP Bulletin under [(h)] (i) above.
 - (1) (m) (No change.)

SUBCHAPTER 22. PRE-APPLICATION CONFERENCES

- 7:7-22.2 Request for a pre-application conference; scheduling; information required (a) (No change.)
- (b) A request for a pre-application conference for a dredging or dredged material management project shall be directed to **the address set forth at N.J.A.C. 7:7-1.6 to the attention of** "Supervisor, Office of Dredging and Sediment Technology"[, Site Remediation

Program, NJ Department of Environmental Protection, P.O. Box 420, Mail Code 401-06C, 401 East State Street, 6th Floor, Trenton, NJ 08625 (Telephone: (609) 633-6801)].

(c) - (e) (No change.)

SUBCHAPTER 23. APPLICATION REQUIREMENTS

7:7-23.2 General application requirements

- (a) (b) (No change.)
- (c) The following persons may submit an application under this subchapter:
- 1. (No change.)
- 2. An agent designated by the owner(s) of a site to obtain or operate under a permit on behalf of the owner(s); [or]
- 3. A public entity proposing an activity within a right-of-way or easement that is held or controlled by that entity or that will be appropriated by that entity under the power of eminent domain[.]; or
- 4. A person that has the legal authority to perform the activities proposed in the application on the site and to carry out all requirements of this chapter.
 - (d) (f) (No change.)
 - (g) If an application includes activities within a right-of-way or easement, the application

shall include written consent for the activity from the holder(s) of the right-of-way or easement.

- 1. For a gas pipeline located within a municipally owned right-of-way, written consent shall consist of one of the following:
 - i. Written consent from the municipality;
 - ii. A municipal designation of the route pursuant to N.J.S.A. 48:9-25.4; or
 - iii. A Board of Public Utilities designation of route pursuant to N.J.S.A. 48:9-25.4.
 - (h) (l) (No change.)
- 7:7-23.6 Additional requirements specific to an application for an individual permit
 - (a) (b) (No change.)
- (c) An application for an individual permit for development in an area under the [jurisdiction of the Pinelands Commission] **Pinelands Area as designated under the Pinelands Protection Act at N.J.S.A. 13:18A-11.a,** shall also include a Certificate of Filing, [a Notice of Filing,] a

 Certificate of Completeness, or a resolution approving an application for public development, issued by the Pinelands Commission.
 - (d) (f) (No change.)

SUBCHAPTER 24. REQUIREMENTS FOR AN APPLICANT TO PROVIDE PUBLIC NOTICE OF AN APPLICATION

7:7-24.1 Purpose and scope

- (a) (No change.)
- (b) A person who requests a reconsideration of the application of any of the rules in this chapter under N.J.A.C. 7:7-19 shall provide public notice in accordance with N.J.A.C. 7:7-19.2[(i)1ii](h)2.
 - (c) (e) (No change.)
- 7:7-24.3 Contents and recipients of public notice of an application
 - (a) (d) (No change.)
- (e) An applicant for an authorization under a general permit, individual permit, or major technical modification for a project in the Pinelands [Preservation] Area[,] as designated under the Pinelands Protection [Area, or the Pinelands National Reserve] Act at N.J.S.A. 13:18A-11(a), shall provide a copy of the entire application, as submitted to the Department, to the New Jersey Pinelands Commission.
 - (f) (No change.)

SUBCHAPTER 25. APPLICATION FEES

7:7-25.1 Application fees

(a) (No change.)
(b) There is no application fee for:
1. – 2. (No change.)
3. A permit-by-rule pursuant to N.J.A.C. 7:7-4; [or]
4. An authorization under general permit-by-certification 1A for the installation of an
elevated timber dune walkover at N.J.A.C. 7:7-5.3;
Recodify existing 4. and 5. as 5. and 6. (No change in text.)
(c) – (f) (No change.)
(g) The fees for applications under this chapter are set forth in Table A below:
Table A
APPLICATION FEES
Authorization under a general permit by certification [\$600.00] \$1,000
•••

SUBCHAPTER 26. APPLICATION REVIEW

7:7-26.5 CAFRA individual permit application—public hearing

- (a) (No change.)
- (b) The Department shall set the date, place, and time of a public hearing within 15 calendar days after the date that the Department declares a CAFRA individual permit application is complete for public hearing under N.J.A.C. 7:7-26.3(b) or (c), and shall so notify the applicant.
 - 1.-6. (No change.)
- 7. The presiding official at the public hearing shall have broad discretion to place reasonable limits on oral and written presentations to allow every person the opportunity to speak and [insure] **ensure** the maintenance of an orderly forum. At the conclusion of the statements of interested persons, the applicant shall be afforded the opportunity to respond to the statements offered by interested persons.
 - (c) (e) (No change.)

SUBCHAPTER 27. PERMIT CONDITIONS; EXTENSION, MODIFICATION, TRANSFER, SUSPENSION, AND TERMINATION OF AUTHORIZATIONS AND PERMITS 7:7-27.3 Extension of an authorization under a general permit or of a waterfront development individual permit for activities waterward of the mean high water line

(a) A permittee may request one five-year extension of an authorization under a general permit the duration of which is governed by N.J.A.C. 7:7-3.7, or one five-year extension of an individual permit **for activities waterward of the mean high water line** the duration of which is governed by N.J.A.C. 7:7-8.2(a).

(b) - (g) (No change.)

APPENDIX G. THE MANAGEMENT AND REGULATION OF DREDGING ACTIVITIES

AND DREDGED MATERIAL IN NEW JERSEY'S TIDAL WATERS

Chapter I – Chapter VII (No change.)

ATTACHMENT A – ATTACHMENT F (No change.)

ATTACHMENT G

DREDGED MATERIAL ACCEPTABLE USE DETERMINATION PROCESS

All persons producing structural or nonstructural fill, manufactured soil, or using (refer to Chapter 5 of this appendix), processing, or transferring dredged materials in New Jersey must obtain an Acceptable Use Determination (AUD) from the Department as outlined below prior to any use, processing, or transfer of the dredged material or products containing dredged material. The process for obtaining an AUD for dredged material from the tidal waters of the State of New Jersey and adjacent interstate waters is as follows:

I. – III. (No change.)

IV. OPERATING CONDITIONS

A. (No change.)

B. The owner/operator of an acceptable use project shall submit on an annual basis, but not more than 13 months from the issuance of an AUD by the Department and any 13-month anniversary of such issuance, during the operation of the acceptable use project and for the year following the last activity at the project, a report to the Department detailing the amount of all materials used, the date(s) of such use, the location(s) of the use, a summary of all violations if any local, State or Federal requirements including violations of the AUD issued by the Department, and any other information as specified by the Department in the AUD, to the [following] address[:] set forth at N.J.A.C. 7:7-1.6 to the attention of the Office of Dredging and Sediment Technology.

[NJ Department of Environmental Protection

Office of Dredging and Sediment Technology

Site Remediation Program

P.O. Box 420, Mail Code 401-06C

401 East State Street

6th Floor

Trenton, NJ 08625]

C. - P. (No change.)

V. (No change.)

CHAPTER 7A

FRESHWATER WETLANDS PROTECTION ACT RULES

SUBCHAPTER 5. ADOPTED GENERAL PERMITS

7:7A-5.17 General permit 17–Trails and boardwalks

- (a) General permit 17 authorizes activities in freshwater wetlands, transition areas, and/or State open waters necessary for construction of a trail and/or boardwalk for use by pedestrians[, bicycles, and other non-motorized methods of transport] **only**. General permit 17 does not authorize construction of a restroom, gazebo, rain shelter, [or] any covered or enclosed structure[. General permit 17 does not authorize], **or** construction of a roadway for use by automobiles, golf carts, motorcycles, motorized trail bikes, all-terrain vehicles, or other motor vehicles.
- [(b) The total area of freshwater wetlands, transition areas, and/or State open waters disturbed under general permit 17 shall not exceed one-quarter acre, except that this limit shall not apply to a site that is publicly owned.
- (c) The trail or boardwalk shall be no wider than six feet, unless the applicant demonstrates that it must be wider in order to comply with the Barrier Free Subcode of the Standard Uniform Construction Code, N.J.A.C. 5:23-7.
 - (d) The trail or boardwalk shall:
 - 1. Be located and configured so as to minimize adverse environmental impact; and
- 2. Incorporate features designed to educate the user about the importance of freshwater wetlands, transition areas, and State open waters; for example, through signs identifying plants

and animals or explaining hydrology, ecology, or other significant environmental features or phenomena.

- (e) The permittee shall take all measures necessary to ensure that activities under general permit 17 do not interfere with the natural hydrology of the area, such as installation at grade or use of cross drains to allow the passage of water. The permittee shall minimize the impact of the activities on vegetation.
- (f) An application for authorization under general permit 17 for a project on publicly owned land does not require an application fee under N.J.A.C. 7:7A-11.]
- (b) The Department shall issue a general permit 17 authorization only if the activities comply with all of the following:
 - 1. The width of the trail or boardwalk shall not exceed six feet;
- 2. The trail or boardwalk shall be constructed of woodchips, mulch, timber, crushed stone, or local native sediment;
- 3. Measures shall be implemented to ensure that the activities do not interfere with the natural hydrology of the area. Examples of such measures are the installation of the trail or boardwalk at grade or the use of cross drains to allow the passage of water;
- 4. The trail or boardwalk shall be located and configured, so as to minimize adverse environmental impact;

- 5. Any public trail or boardwalk shall incorporate features designed to educate the user about the importance of freshwater wetlands, transition areas, and/or State open waters; for example, through signs identifying plants and animals or explaining hydrology, ecology, or other significant environmental features or phenomena; and
- 6. Total disturbance to freshwater wetlands, transition areas, and/or State open waters shall not exceed one acre.
 - [(g)] (c) (No change in text.)
- 7:7A-5.17A General permit 17A—[Non-motorized,] Multiple-use paths
- (a) General permit 17A authorizes activities in freshwater wetlands, transition areas, and/or State open waters necessary for construction of a [non-motorized,] multiple use path for use by pedestrians and/or light vehicles, such as bicycles, [skate boards, rollerblades and other non-motorized methods of transport] golf carts, or lawn tractors. General permit 17A does not authorize construction of a restroom, gazebo, rain shelter, [or] any covered or enclosed structure[. General permit 17A does not authorize], or construction of a roadway for use by automobiles, [golf carts,] motorcycles, [motorized trail bikes,] all-terrain vehicles, or [other] similar motor vehicles.
- [(b) The total area of freshwater wetlands, transition areas, and/or State open waters disturbed under general permit 17A shall not exceed one-quarter acre.

- (c) The non-motorized, multiple use path shall be designed in accordance with the American Association of State Highway and Transportation Officials (AASHTO) "Guide for the Development of Bicycle Facilities," published 1999, incorporated herein by reference, as amended and supplemented. It is available at www.communitymobility.org/pdf/aashto.pdf.
- (d) The non-motorized, multiple use path shall be aligned to minimize impacts to wetlands, State open waters, and wetlands transition areas.
- (e) The permittee shall take all measures necessary to ensure that activities under general permit 17A do not interfere with the natural hydrology of the area, such as installation at grade or use of cross drains to allow the passage of water. The permittee shall minimize the impact of the activities on vegetation.]
- (b) The Department shall issue a general permit 17A authorization only if the activities comply with all of the following:
 - 1. The width of path shall not exceed 10 feet;
- 2. Measures shall be implemented to ensure that the activities do not interfere with the natural hydrology of the area. Examples of such measures are the installation of the path at grade or the use of cross drains to allow the passage of water;
- 3. The path shall be located and configured, so as to minimize adverse environmental impact;

- 4. Any public path shall incorporate features designed to educate the user about the importance of freshwater wetlands, transition areas, and/or State open waters; for example, through signs identifying plants and animals or explaining hydrology, ecology, or other significant environmental features or phenomena; and
- 5. Total disturbance to freshwater wetlands, transition areas, and/or State open waters shall not exceed 0.25 acres.
 - [(f)] (c) (No change in text.)
- 7:7A-5.28 General permit 28 application of herbicide within freshwater wetlands and transition areas to control invasive plant species
- (a) General permit 28 authorizes the application of herbicide within freshwater wetlands and transition areas to control invasive plant species, provided:
- 1. The area to which the herbicide is applied shall not exceed a total area of one acre on a site; and
- 2. The activities are conducted pursuant to an aquatic use permit issued by the Department's Bureau of Licensing and Pesticide Operations.

SUBCHAPTER 10. APPLICATION CONTENTS AND PURPOSE

7:7A-10.2 Basic content requirements for all applications

(a) - (d) (No change.)

- (e) If an application includes activities within a right-of-way or easement, the application shall include written consent for the activity from the holder(s) of the right-of-way or easement.
- 1. For a gas pipeline located within a municipally owned right-of-way, written consent shall consist of one of the following:
- i. Written consent from the municipality in the form of a resolution of the governing body or an ordinance;
 - ii. A municipal designation of the route pursuant to N.J.S.A. 48:9-25.4; or
 - iii. A Board of Public Utilities designation of route pursuant to N.J.S.A. 48:9-25.4.

[(e)] (f) (No change in text.)

CHAPTER 13

FLOOD HAZARD AREA CONTROL ACT RULES

SUBCHAPTER 1. GENERAL PROVISIONS

7:13-1.2 Definitions

The following words and terms, when used in this chapter, shall have the following meanings unless the context clearly indicates otherwise. Additional definitions specifically applicable to N.J.A.C. 7:13-13, Mitigation, are set forth at N.J.A.C. 7:13-13.1.

"FEMA flood mapping" means information published or publicly released by FEMA regarding the frequency, location, and/or extent of flooding in a community, such as flood elevations, flood profiles, flow rates, and floodway limits, and including FEMA 100-year flood elevation as defined above. For the purposes of this chapter, such information shall include only that information adopted as part of the most recent effective FEMA Flood Insurance Study, dated on or after January 31, 1980, or any more recent advisory or proposed (preliminary) flood mapping, if the more recent advisory or proposed (preliminary) mapping results in higher flood elevations, wider floodway limits, or greater flow rates than depicted in the most recent effective FEMA Flood Insurance Study, or indicates a change from an A zone to a V zone or coastal A zone. Effective and proposed (preliminary) FEMA flood mapping can be viewed at https://msc.fema.gov and advisory flood mapping for coastal areas, where available, can be viewed at https://www.region2coastal.com. Questions regarding the availability, use, derivation, or modification of FEMA flood mapping should be directed to FEMA at (800) 358-9616.

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SUBCHAPTER 7. PERMITS-BY-RULE

- 7:13-7.64 Permit-by-rule 64 application of herbicide within riparian zones to control invasive plant species
- (a) Permit-by-rule 64 authorizes the application of herbicide within riparian zones to control invasive plant species, provided the conditions at N.J.A.C. 7:13-6.7 are met and:
- 1. The area to which the herbicide is applied shall not exceed a total area of one-quarter acre or less on a site; and

- 2. The activities are conducted pursuant to an aquatic pesticide permit issued by the Department's Bureau of Licensing and Pesticide Operations; and
 - 3. No herbicide is applied within a 300-foot riparian zone.

SUBCHAPTER 8. GENERAL PERMITS-BY-CERTIFICATION

- 7:13-8.16 General permit-by-certification 16—construction of a footbridge
- (a) General permit-by-certification 16 authorizes the construction of a footbridge for use by pedestrians only, across a regulated water, provided the conditions at N.J.A.C. 7:13-6.7 are met and:
 - 1. The footbridge is no more than four feet wide;
- 2. The footbridge is no more than 14 inches thick, as measured from the top of the deck to the bottom of the stringer;
- 3. In order to ensure that the footbridge will not increase flooding offsite, the topographic elevation at any property boundaries located within 500 feet upstream of the footbridge and within 500 feet on either side of the footbridge is equal to or higher than the elevation of the top of the deck plus the thickness of the footbridge under (a)2 above. For example, if the elevation of the top of the deck is 100 feet NGVD and the thickness of the footbridge is 12 inches, then the topographic elevation at the adjacent property boundaries must be at least 101 feet NGVD;
- 4. Any pinning or anchoring of the footbridge is accomplished without construction in the channel;

- 5. The areas above and below the footbridge remain open to the passage of floodwaters. Handrails shall have large openings, so as not to catch debris during a flood and thereby obstruct floodwaters;
- 6. The existing ground elevation is not raised to accommodate or provide access to the footbridge, except for the construction of an earthen access ramp of no more than three feet in length; and
 - 7. No trees are cleared, cut, and/or removed in a riparian zone.

SUBCHAPTER 9. GENERAL PERMITS

- 7:13-9.13 General permit 13 construction of trails and boardwalks
- (a) General permit 13 authorizes the construction of a trail and/or boardwalk for use by pedestrians only, provided the conditions at N.J.A.C. 7:13-6.7 and (a)1 through 10 below are met [and:]. This general permit does not authorize construction of a restroom, gazebo, rain shelter, any covered or enclosed structure, or construction of a roadway for use by automobiles, golf carts, motorcycles, motorized trail bikes, all-terrain vehicles, or other motor vehicles.
- [1. The trail or boardwalk is used exclusively to carry pedestrians, livestock, and/or light vehicles such as bicycles, golf carts, or lawn tractors;
- 2. Where the trail or boardwalk is designed solely for pedestrian use, the width of the trail or boardwalk is no more than six feet, unless it is demonstrated that a wider width is necessary in order to comply with all applicable State and Federal barrier-free access requirements. In no case shall the width of the trail or boardwalk exceed 10 feet;]

- 1. The width of the trail or boardwalk does not exceed six feet;
- 2. Clearing, cutting, or removal of riparian zone vegetation is the minimum necessary to implement the project, is limited to actively disturbed areas where possible, and shall not exceed one acre;
- 3. The trail or boardwalk is constructed of local native sediment, woodchips, mulch, timber, or crushed stone;
- 4. Measures shall be implemented to ensure that the path does not interfere with the natural hydrology of the area. Examples of such measures are the installation of the path at grade or the use of cross drains to allow the passage of water;
- 5. The path shall be located and configured, so as to minimize adverse environmental impact;
- 6. Any public trail or boardwalk shall incorporate features designed to educate the user about the importance of riparian zones, flood hazard areas, and stream corridors; for example, through signs identifying plants and animals or explaining hydrology, ecology, or other significant environmental features or phenomena;
- [3.]7. The existing ground elevation is not raised in any floodway or fluvial flood hazard area[.];
- **8.** A boardwalk constructed in a flood hazard area shall be constructed at or below the existing ground elevation or elevated so that the area underneath the boardwalk remains open to the passage of floodwaters;
- [4.] **9.** The setbacks at [(a)4i] (a)9i through iii below are met, except in the immediate vicinity of a footbridge or a dock or pier connected to the trail or boardwalk, unless the project

lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water:

- i. -ii. (No change.)
- iii. Where disturbance within 25 feet of any top of bank is proposed, the applicant provides an engineering certification confirming that the location of the project is stable and suitable for the proposed activities, and not subject to erosion or undermining due to its proximity to the top of bank; and
- [5. Clearing, cutting, and/or removal of riparian zone vegetation is the minimum necessary to successfully implement the project and is limited to actively disturbed areas, where possible;]
- [6.]10. No more than six square feet of trees is cleared, cut, and/or removed per linear foot of trail or boardwalk in a riparian zone, including the total area of canopy affected by activities under this general permit. For example, the construction of a trail or boardwalk that is 1,000 feet long can impact no more than 6,000 square feet of canopy[;].
- [7. No more than one-half of an acre of riparian zone vegetation is cleared, cut, and/or removed; and
- 8. Any public trail or boardwalk incorporates features designed to educate the user on the importance of riparian zones, flood hazard areas, and stream corridors. Such features may include signs identifying plants and animals or explaining hydrology, ecology, or other significant environmental features.]

7:13-9.14 General permit 14—construction of a multiple-use path

- (a) General permit 14 authorizes the construction of a multiple-use path for use by pedestrians, livestock, and/or light vehicles, such as bicycles, golf carts, or lawn tractors, provided the conditions at N.J.A.C. 7:13-6.7 and at (a)1 through 9 below are met. This general permit does not authorize construction of a restroom, gazebo, rain shelter, any covered or enclosed structure, or a roadway for use by automobiles, motorcycles, all-terrain vehicles, or similar motor vehicles.
 - 1. The width of the path does not exceed 10 feet;
- 2. Clearing, cutting, or removal of riparian zone vegetation is the minimum necessary to implement the project, is limited to actively disturbed areas where possible, and shall not exceed 0.25 acres;
- 3. Measures shall be implemented to ensure that the path does not interfere with the natural hydrology of the area. Examples of such measures are the installation of the path at grade or the use of cross drains to allow the passage of water;
- 4. The path shall be located and configured, so as to minimize adverse environmental impact;
- 5. Any public path incorporates features designed to educate the user about the importance of riparian zones, flood hazard areas, and stream corridors; for example, through signs identifying plants and animals or explaining hydrology, ecology, or other significant environmental features or phenomena;
- 6. The existing ground elevation is not raised in any floodway or fluvial flood hazard area;

- 7. A boardwalk constructed in a flood hazard area shall be constructed at or below the existing ground elevation or elevated so that the area underneath the boardwalk remains open to the passage of floodwaters;
- 8. The setbacks at (a)8i through iii below are met, except in the immediate vicinity of a footbridge or a dock or pier connected to the path, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water:
 - i. No disturbance is located within 10 feet of any top of bank;
 - ii. No trees are cleared, cut, and/or removed within 25 feet of any top of bank; and
- iii. Where disturbance within 25 feet of any top of bank is proposed, the applicant provides an engineering certification confirming that the location of the project is stable and suitable for the proposed activities, and not subject to erosion or undermining due to its proximity to the top of bank; and
- 9. No more than six square feet of trees are cleared, cut, and/or removed per linear foot of path in a riparian zone, including the total area of canopy affected by activities under this general permit. For example, the construction of a path that is 1,000 feet long can impact no more than 6,000 square feet of canopy.
- 7:13-9.15 General permit 15 application of herbicide within riparian zones to control invasive plant species
- (a) General permit 15 authorizes the application of herbicide within a riparian zone to control invasive plant species, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

- 1. The area to which the herbicide is applied shall not exceed a total area of one acre on a site;
- 2. The activities are conducted pursuant to an aquatic use permit issued by the Department's Bureau of Licensing and Pesticide Operations; and
 - 3. No herbicide is applied within a 300-foot riparian zone.

SUBCHAPTER 12. ACTIVITY-SPECIFIC REQUIREMENTS FOR INDIVIDUAL PERMITS 7:13-12.5 Requirements for a building

- (a) (n) (No change.)
- (o) The Department shall issue an individual permit to construct a critical building or multiresidence building, or to convert an existing building to one of these uses, only if [the following requirements are satisfied:
- 1. If the building is located in a fluvial flood hazard area,] the applicant demonstrates that the building is served by at least one existing or proposed roadway, the travel surface of which is constructed at least one foot above the flood hazard area design flood elevation, [; and
- 2. If the building is located in a tidal flood hazard area, the applicant demonstrates either that the building is served by at least one existing or proposed roadway, the travel surface of which is constructed at least one foot above the flood hazard area design flood elevation, or that such access is not feasible.] **unless:**

- 1. The building is located in a fluvial flood hazard area and the applicant proposes to construct or reconstruct a roadway in accordance with N.J.A.C. 7:13-12.6(c) or (d), as applicable; or
- 2. The building is located in a tidal flood hazard area and the applicant demonstrates that such access is not feasible in accordance with N.J.A.C. 7:13-12.6(e).
 - (p) (No change.)
- (q) The Department shall issue an individual permit for the construction of a new single-family home or duplex within a fluvial flood hazard area on a lot that was created or subdivided after November 5, 2007, only if the applicant demonstrates that none of the lots created in the subdivision contain a habitable building or possess a valid authorization from the Department to construct a habitable building in the flood hazard area.
- [(q)] **(r)** Except for an enclosure that meets the requirements of (p) above, the Department shall issue an individual permit for a building that is flood-proofed only if one of the following requirements is satisfied:
 - 1. The applicant dry flood-proofs the building in accordance with [(r)] (s) below; or
- 2. The applicant demonstrates that it is not feasible to dry flood-proof the building in accordance with [(r)] (s) below and instead wet flood-proofs the building in accordance with [(s)](t) below.
 - [(r)] (s) The Department shall issue an individual permit to dry flood-proof a building under

- [(q)1] **(r)1** above only if the building is designed and constructed with measures to prevent floodwaters from entering the building during a flood depth of at least one foot above the flood hazard area design flood elevation.
- [(s)] (t) The Department shall issue an individual permit to wet flood-proof a building under [(q)2] (r)2 above only if the building is designed and constructed to be flood-resistant during a flood depth of at least one foot above the flood hazard area design flood elevation, so that floodwaters can enter the building though permanent openings, while not damaging the structural integrity of the building.
- [(t)] (u) The Department shall not issue an individual permit under [(q)] (r) above to flood-proof a single-family home, duplex, or critical building, or any residential portions of a multi-residence building.
- 7:13-12.6 Requirements for a railroad, roadway, and parking area
 - (a) (No change.)
- (b) The Department shall issue an individual permit to construct or reconstruct a railroad or public roadway only if one of the following requirements is satisfied:
 - 1. (No change.)
- 2. The applicant demonstrates that it is not feasible to construct the travel surface of the proposed railroad or public roadway at least one foot above the flood hazard area design flood elevation pursuant to [(g)] (e) below, and instead constructs the travel surface as close to this elevation as feasible.

- [(c) The Department shall issue an individual permit to construct or reconstruct a private roadway that serves as a driveway to one single-family home or duplex, including any associated parking area, only if the following requirements are satisfied:
- 1. For the construction of a new single-family home or duplex on a lot that was created or subdivided after November 5, 2007, the applicant demonstrates that none of the lots created in the subdivision contain a habitable building or possess a valid authorization from the Department to construct a habitable building in the flood hazard area;
- 2. The single-family home or duplex is not being constructed as part of a residential subdivision or multi-unit development; and
- 3. Either the travel surface of the driveway and any associated parking area is constructed at least one foot above the flood hazard area design flood elevation or the following requirements are satisfied:
- i. The applicant demonstrates that it is not feasible to construct the travel surface of the proposed driveway and any associated parking area at least one foot above the flood hazard area design flood elevation pursuant to (g) below, and instead constructs the travel surface as close to this elevation as feasible;
 - ii. The deed for the lot on which the driveway is constructed is modified to:
- (1) Explain that the driveway and any associated parking area is likely to be inundated by floodwaters, which may result in damage and/or inconvenience; and

- (2) Disclose the depth of flooding that the driveway and any associated parking area would experience during the FEMA 100-year flood, if available, and the flood hazard area design flood; and
- iii. The modified deed is recorded in the Office of the County Clerk or the registrar of deeds and mortgages of the county in which the single family home or duplex is located, and proof that the modified deed has been recorded is provided to the Department prior to the sooner of either:
- (1) The start of any site disturbance (including pre-construction earth movement, removal of vegetation or structures, or construction of the project); or
 - (2) The date that is 90 calendar days after the issuance of the individual permit.]
- [(d)] (c) The Department shall issue an individual permit to construct or reconstruct a private roadway [that] or parking area in a fluvial flood hazard area, which serves a critical building or serves a multi-residence building that is not part of a redevelopment project, only if one of the following requirements is satisfied:
- 1. The travel surface of [the] **each** private roadway **and parking area** is constructed at least one foot above the flood hazard area design flood elevation; **or**
- 2. [For a new private roadway in a fluvial flood hazard area, the] **The** applicant demonstrates that the critical building or multi-residence building is already served by one or more roadways **and/or parking areas** having a travel surface at least one foot above the flood hazard area design flood elevation, which is of adequate size and capacity to serve the building, and instead constructs the travel surface of [the] **each additional private** roadway **and parking area** as close to this elevation as feasible[; or].

- [3. For a new private roadway in a tidal flood hazard area, or for any reconstructed private roadway that currently lies below the flood hazard area design flood elevation, the applicant demonstrates that it is not feasible to construct the travel surface of the roadway at least one foot above the flood hazard area design flood elevation pursuant to (g) below, and instead constructs the travel surface of the roadway as close to this elevation as feasible.]
- [(e)] (d) The Department shall issue an individual permit to construct or reconstruct a private roadway [that serves a building, or group of buildings,] or parking area not covered by (c) [or (d)] above, [such as a commercial business, house of worship, office complex, shopping center, or residential subdivision of two or more single-family home or duplexes,] only if one of the following requirements is satisfied:
- 1. The travel surface of [the] **each** private roadway **or parking area** is constructed at least one foot above the flood hazard area design flood elevation; or
- 2. The applicant demonstrates that each building or group of buildings is already served by one or more roadways **and/or parking areas** having a travel surface at least one foot above the flood hazard area design flood elevation, which is of adequate size and capacity to serve the building or group of buildings, or that **it** is not feasible to construct the travel surface of each private roadway **or parking area** at least one foot above the flood hazard area design flood elevation pursuant to [(g)] (e) below, and instead constructs **the** travel surface of each private roadway **and parking area** as close to this elevation as feasible.

- [(f) The Department shall issue an individual permit to construct or reconstruct a parking area that serves any building other than a single family home or duplex under (c) above only if one of the following requirements is satisfied:
- 1. The travel surface of the parking area is constructed at least one foot above the flood hazard area design flood elevation; or
- 2. The applicant demonstrates that it is not feasible to construct the travel surface of the parking area at least one foot above the flood hazard area design flood elevation pursuant to (g) below, and instead constructs the travel surface of the parking area as close to this elevation as feasible.]
- [(g)] (e) An applicant seeking to demonstrate that it is not feasible to construct the travel surface of a railroad, roadway, or parking area at least one foot above the flood hazard area design flood elevation, as is required for various activities in this section, shall:
- 1. Demonstrate that strict compliance with the elevation requirements of this section would result in one or more of the following:
 - i. iii. (No change.)
- iv. A design that causes unavoidable and adverse impacts to the environment (such as to the channel, riparian zone, or fishery resources), or which would cause unavoidable and significant increases in [the flood hazard area design flood elevation] **flooding**;
- 2. Demonstrate that every reasonable effort has been taken to situate portions of each proposed **railroad**, roadway, or parking area at least one foot above the flood hazard area design flood elevation so that vehicles can move to higher ground during a flood;

- 3. Demonstrate that no extraordinary risk is posed to any person using each proposed **railroad**, roadway, or parking area that is constructed at an elevation less than one foot above the flood hazard area design flood elevation[; and]. **This demonstration shall include:**
- i. An analysis of the depth and frequency of floodwaters that will inundate the railroad, roadway, or parking area. In no case shall the travel surface of a private roadway or parking area that serves a multi-residence building in a fluvial flood hazard area be situated greater than 12 inches below the flood hazard area design flood elevation;
- ii. The number of people that will be adversely impacted when the railroad, roadway, or parking area is inundated; and
- iii. Measures being proposed to ameliorate the anticipated adverse impacts described in (e)3i and ii above, such as the establishment of evacuation plans for individuals that would be trapped during a flood, provisions for emergency electrical service during an outage, and flood-proofing measures; and
 - 4. (No change.)
- (f) Where a private roadway or parking area is proposed to be constructed less than one foot above the flood hazard area design flood elevation pursuant to (c), (d), or (e) above, the following requirements shall apply:
- 1. The deed for each lot on which the private roadway or parking area is constructed, as well as any lot served by the private roadway or parking area, and each lease or rental agreement for a unit within a multi-residence building served by a private roadway or

parking area that lies below the flood hazard area design flood elevation, shall be modified to:

- i. Explain that the private roadway or parking area is likely to be inundated by floodwaters, which may result in damage and/or inconvenience; and
- ii. Disclose the depth of flooding that the private roadway or parking area would experience during the FEMA 100-year flood, if available, and the flood hazard area design flood; and
- 2. Each deed modified in accordance with (f)1 above shall be recorded in the Office of the County Clerk or the registrar of deeds and mortgages of the county in which each lot served by the private roadway or parking area is located, and proof that the modified deed has been recorded shall be provided to the Department prior to the sooner of either:
- i. The start of any site disturbance (including pre-construction earth movement, removal of vegetation or structures, or construction of the project); or
 - ii. The date that is 90 calendar days after the issuance of the individual permit.

SUBCHAPTER 13. RIPARIAN ZONE MITIGATION

7:13-13.12 Riparian zone preservation

- (a) (d) (No change.)
- (e) The Department shall determine mitigation through preservation successful upon[:
- 1. Demonstration | **demonstration** that any required conservation restriction has been recorded in accordance with N.J.A.C. 7:13-14[; and].

[2. Documentation that the property has been transferred in fee simple to a government agency or a Department approved charitable conservancy and that the transfer has been recorded with each county in which the preserved land is located.]

SUBCHAPTER 18. APPLICATION REQUIREMENTS

7:13-18.2 General application requirements

- (a) (b) (No change.)
- (c) The following persons may submit an application under this subchapter:
- 1. (No change.)
- 2. An agent designated by the owner(s) of a site to obtain or operate under a verification, an authorization under a general permit or general permit-by-certification, or an individual permit on behalf of the owner(s); [or]
- 3. A public entity proposing an activity within a right-of-way or easement that is held or controlled by that entity or that will be appropriated by that entity under the power of eminent domain[.]; or
- 4. A person that has the legal authority to perform the activities proposed in the application on the site, and to carry out all requirements of this chapter.
 - (d) (f) (No change.)
- (g) If an application includes activities within a right-of-way or easement, the application shall include written consent for the activity from the holder(s) of the right-of-way or easement.

- 1. For a gas pipeline located within a municipally owned right-of-way, written consent shall consist of one of the following:
- i. Written consent from the municipality in the form of a resolution of the governing body or an ordinance;
 - ii. A municipal designation of the route pursuant to N.J.S.A. 48:9-25.4; or
 - iii. A Board of Public Utilities designation of route pursuant to N.J.S.A. 48:9-25.4.
 - (h) (l) (No change.)
- 7:13-18.4 Additional application requirements for a verification, for an authorization under a general permit, or for an individual permit
 - (a) (No change.)
- (b) An application for an individual permit for a regulated activity or project in the Pinelands Area as designated [by Section 10(a) of] **under** the Pinelands Protection Act[,] **at** N.J.S.A. 13:18A-[1 et seq.]**11.a** shall also include a Certificate of Filing, a Certificate of Completeness, or a resolution approving an application for public development, issued by the New Jersey Pinelands Commission.
 - (c) (No change.)

SUBCHAPTER 19. REQUIREMENTS FOR AN APPLICANT TO PROVIDE PUBLIC NOTICE OF AN APPLICATION

7:13-19.3 Contents and recipients of public notice of an application

- (a) (e) (No change.)
- (f) An application for a verification, authorization under a general permit, individual permit, or major technical modification for a delineation, regulated activity, or project in the Pinelands Area as designated [by Section 10(a) of] **under** the Pinelands Protection Act[,] **at** N.J.S.A. 13:18A-[1 et seq.]**11.a**, shall provide a copy of the completed application form as submitted to the Department, to the New Jersey Pinelands Commission.