ENVIRONMENTAL PROTECTION
LAND USE MANAGEMENT
DIVISION OF LAND USE REGULATION

Flood Hazard Area Control Act Rules
Coastal Zone Management Rules
Ninety-Day Construction Permits
Coastal Permit Program Rules

Proposed Repeal and New Rules: N.J.A.C. 7:13
Proposed Repeal: N.J.A.C. 7:7E Appendix 1, Figure 6
Proposed Amendments: N.J.A.C. 7:1C-1.2, 1.3, 1.5, 1.7, 1.9 and 1.12; 7:7-7.2, 7.7, 7.8, 7.9, 7.13 and 7.27; and 7:7E-3.17, 3.18, 3.19, 3.25, 3.26, 3.34, 3.48, 7.2, 7.5, 7.8 and 8.21

Authorized By: Lisa P. Jackson, Commissioner, Department of Environmental Protection.

Authority: N.J.S.A. 58:16A-50 et seq.; 58:10A-1 et seq.; 13:20-1 et seq.; 58:11A-1 et seq.; 13:1D-1 et seq.; 13:1D-29 et seq., specifically 13:1D-33; 13:19-1 et seq., 12:5-3, and 13:9A-1 et seq.

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

DEP Docket Number: 16-06-08/70.
Proposal Number: PRN 2006-330.

Public hearings concerning this proposal will be held as follows:

Monday, November 20, 2006, 7:00 P.M.
New Jersey Highlands Council
100 North Road (County Route 513)
Chester, New Jersey

Monday, November 27, 2006, 1:00 P.M.
DEP Public Hearing Room
401 East State Street
Trenton, New Jersey

Monday, December 4, 2006, 7:00 P.M.
The Richard Stockton College of New Jersey
Vera King Farris Drive
Pomona, New Jersey

Submit written comments by December 31, 2006 to:

Gary J. Brower, Esq.
Attn: DEP Docket Number 16-06-08/70

Office of Legal Affairs
New Jersey Department of Environmental Protection
P.O. Box 402
Trenton, New Jersey 08625-0402

The Department of Environmental Protection (Department) requests that commenters submit comments on disk or CD as well as on paper. Submission of a disk or CD is not a requirement. The Department prefers Microsoft Word 6.0 or above. MacIntosh formats should not be used. Each comment should be identified by the applicable N.J.A.C. citation, with the commenter's name and affiliation following the comment. The rule proposal can also be found at the Department's website (www.nj.gov/dep). The agency proposal follows.

SUMMARY

Introduction and Background

As the Department has provided a 90-day comment period on this notice of proposal, this notice is excepted from the rulemaking calendar requirement pursuant to N.J.A.C. 1:30-3.3(a)5.

The Department of Environmental Protection (Department) is proposing to repeal the existing Flood Hazard Area Control rules, N.J.A.C. 7:13, and to adopt new rules that will better protect the public from the hazards of flooding, preserve the quality of surface waters and protect the wildlife and vegetation that exist within and depend upon such areas for sustenance and habitat.

Unless properly controlled, development within flood hazard areas can increase the intensity and frequency of flooding by reducing flood storage, increasing stormwater runoff and obstructing the movement of floodwaters. In addition, structures that are improperly built in flood hazard areas are subject to flood damage and threaten the health, safety and welfare of

those who use them. Furthermore, healthy vegetation adjacent to surface waters is essential for maintaining bank stability and water quality. The indiscriminate disturbance of such vegetation can destabilize channels, leading to increased erosion and sedimentation that exacerbates the intensity and frequency of flooding. The loss of vegetation adjacent to surface waters also reduces filtration of stormwater runoff and thus degrades the quality of these waters. The proposed new rules therefore incorporate more stringent standards for development in flood hazard areas and adjacent to surface waters in order to mitigate the adverse impacts to flooding and the environment that can be caused by such development. The Department is also proposing related amendments to the Coastal Permit Program rules, N.J.A.C. 7:7, and to the Coastal Zone Management rules, N.J.A.C. 7:7E, in order to ensure better consistency with N.J.A.C. 7:13 as regards development in flood hazard areas and preservation of vegetation and habitat along surface waters.

The Flood Hazard Area Control rules implement the New Jersey Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq. These rules satisfy the statutory directive to "adopt land use regulations for the flood hazard area, to control stream encroachments, to coordinate effectively the development, dissemination, and use of information on floods and flood damages that may be available, to authorize the delegation of certain administrative and enforcement functions to county governing bodies and to integrate the flood control activities of the municipal, county, State and Federal Governments" (N.J.S.A. 58:16A-50b). This proposal substantially reorganizes the rules for clarity by reorganizing sections, consolidating similar provisions and simplifying language. The new rules also incorporate a large amount of detail and description regarding the substantive standards that must be met to undertake regulated activities for better consistency within the rules as well as to facilitate understanding and compliance among the regulated

community. To better reflect that this chapter implements the statutory authority of the Flood Hazard Area Control Act, the Department is proposing to add the word "Act" to the chapter heading. In addition, permits issued under these rules are commonly referred to as "stream encroachment permits," which implies the existence of both a stream and an encroachment into a stream, neither of which are necessarily aspects of an activity regulated under this chapter. In order to better reflect the overall purpose and statutory authority of the Flood Hazard Area Control Act, permits issued under the chapter are therefore referred to as flood hazard area permits in this proposal.

This proposal also includes amendments to the Ninety-Day Construction Permits rules, N.J.A.C. 7:1C. The Ninety-Day Construction Permits rules set forth fees, submission requirements and review procedures for applications under several different Department permits, including permits under existing N.J.A.C. 7:13. This proposal recodifies those provisions of the Ninety-Day Construction Permits rules that address permits issued under this chapter into the proposed new Flood Hazard Area Control Act rules, so that all application requirements for flood hazard areas permits will be contained in the same chapter.

The proposed new rules implement changes in several general areas as described below. Following the discussion of the general categories of changes, the Summary includes a section-by-section description to guide the reader through the proposal.

New methods of determining jurisdiction

The proposed rules introduce new methods for determining the extent of the flood hazard area and floodway on a site. Under the existing rules, there are three ways to determine the limits of a flood hazard area, the primary method being the use of a Department delineation, which is

promulgated under existing N.J.A.C. 7:13-7. In the absence of a Department delineation, the use of certain Federal Emergency Management Agency (FEMA) maps and/or the submittal of detailed calculations to determine the extent of the flood hazard area and floodway is acceptable. However, the existing rules restrict the use of FEMA mapping so that for many sites the only acceptable delineation method requires detailed hydrologic and hydraulic calculations to be performed. The Department has determined that this can be unnecessarily expensive and time-consuming for some projects. Therefore, the Department is proposing to both simplify the use of FEMA mapping to determine flood hazard areas and to expand the number of FEMA maps that can be used. In addition, the Department is proposing to add a simple and inexpensive method to conservatively approximate the flood hazard area elevation (but not the floodway limits) for projects that do not need an exact delineation to prove that they comply with the requirements of the rules. These new options will allow applicants to choose from a wider range of methods by which to determine the flood hazard area given the availability of mapping resources, the type of activity proposed and the level of accuracy required to demonstrate compliance for a given project.

Riparian zone

The proposed rules introduce a name for an existing regulated area adjacent to watercourses that is described at existing N.J.A.C. 7:13-1.3(a)2 and 3. The Department is proposing to call this area the "riparian zone." The riparian zone is comprised of the land and vegetation within a certain distance of all regulated waters, as well as the regulated water itself. The proposed rules also clarify and reorganize the provisions that apply to this regulated area under existing N.J.A.C. 7:13-3.2.

Research has shown that a vegetated area immediately adjacent to a watercourse provides a variety of significant functions and values. As stated by the United States Army Corps of Engineers in a rule proposal (Federal Register Volume 64 No. 139 Page 39274, July 21, 1999) that would allow the Army Corps to require vegetated buffers adjacent to certain water areas, which was later adopted (Federal Register Volume 65 No. 47 March 9, 2000), vegetated buffers along waters serve to:

1. Reduce adverse effects to water quality by removing nutrients and pollutants from surface runoff;
2. Reduce concentrations of nutrients and pollutants in subsurface water that flows into streams and other open waters;
3. Moderate storm flows to streams, which reduces downstream flooding and degradation of aquatic habitat;
4. Stabilize soil (through plant roots), which reduces erosion in the vicinity of the open water body;
5. Provide shade to the water body, which moderates water temperature changes and provides a more stable aquatic habitat for fish and other aquatic organisms;
6. Provide detritus, which is a food source for many aquatic organisms;
7. Provide large woody debris from riparian zones, which furnishes cover and habitat for aquatic organisms and may cause the formation of pools in the stream channel;
8. Provide habitat to a wide variety of aquatic and terrestrial species;
9. Trap sediments, thereby reducing degradation of the substrate that provides habitat for fish and other aquatic organisms (for example, some fish species depend upon gravel stream beds for spawning habitats); and

10. Provide corridors for movement and dispersal of many species of wildlife. In addition, vegetated buffers next to streams provide flood storage capacity and groundwater recharge functions.

Given the many important ecological functions that a healthy riparian zone provides, adequately preserving such areas is essential to protecting New Jersey's natural resources and water supply. The Department has determined that the width of the area protected under the existing rules does not ensure that these many benefits will be provided. The proposed rules, therefore, expand the size of this regulated area. Under existing N.J.A.C. 7:13-1.3(a)2 and 3, this regulated area extends either 25 feet or 50 feet from the top of the bank of a stream channel, depending on the type of stream and the resources present. The proposed rules expand this regulated area to 300 feet along Category One waters and all upstream tributaries within the same HUC-14 watershed; 150 feet along all upstream tributaries to trout production waters, trout maintenance waters and tributaries within one mile upstream, waters flowing through areas that support certain threatened or endangered species and tributaries within one mile upstream, and waters that flow through areas that contain acid producing soils; and 50 feet along all other waters.

It is noted that the existing Stormwater Management rules at N.J.A.C. 7:8-5.5(h) establish a 300-foot Special Water Resource Protection Area along Category One waters and certain tributaries only when a major development, as defined at N.J.A.C. 7:8-1.2, is proposed. The 300-foot riparian zone proposed under this chapter, however, will apply to any activity that requires approval under this chapter, which includes a larger set of activities than that which is regulated under the Stormwater Management rules.

Further details concerning the need for expanding the riparian zone and the proposed

limitations for uses within it are contained in the summary of proposed N.J.A.C. 7:13-4.1 and 10.2 below.

Flood storage displacement (Net fill)

A property that lies in a flood hazard area is periodically inundated by floodwaters. Consequently, a certain volume of floodwater will occupy that property during a flood. If a significant volume of floodwater is prevented from occupying a site, the excess floodwater will instead occupy neighboring and downstream properties, thus worsening flood conditions on those sites. Flood storage on a site can be reduced by erecting a structure, which prevents floodwaters from entering a portion of the site, or by raising the ground through the placement of fill material. Since this can adversely impact other properties, the existing and proposed rules include various restrictions on the volume of floodwater that can be displaced by development. The existing rules allow up to 20 percent of the existing flood storage volume to be displaced on a site in most non-tidal flood hazard areas (referred to as "20-percent net fill"). Within the Central Passaic Basin, all flood storage displacement on a site must be compensated by the creation of equal flood storage elsewhere in the basin so that there is no overall depletion of flood storage in the basin (referred to as "zero-percent" net fill"). The Highlands Water Protection and Planning Act rules also contain a similar provision that prevents development in the Highlands Preservation Area from displacing flood storage.

The proposed rules further restrict flood storage losses in several ways. First, the zero-percent net fill provision in the Central Passaic Basin and Highlands Preservation Area is expanded to all non-tidal flood hazard areas Statewide. As in the Central Passaic Basin and Highlands Preservation Area, a person can still displace up to 20 percent of the flood storage on

a site, provided flood storage compensation is provided offsite to meet the zero-percent requirement. However, all flood storage compensation must be made in the same flood hazard area and watershed as the proposed fill, and cannot be separated from the proposed fill by a water control structure such as a road or dam. The proposed rules also require that flood storage calculations be performed for both the flood hazard area design flood and the 10-year flood, to show that both the 20-percent onsite and the zero-percent overall fill limitations are met for both of these flood events.

These changes are significant and will also affect projects in the Central Passaic Basin, since applicants in that basin will no longer be able to compensate for fill miles away from their site as is currently allowed. An exception will be made to allow the use of existing fill-credits that have already been authorized in the Central Passaic Basin, as well as any pending applications to create fill-credits that are received prior to the proposal date of these rules and that are subsequently approved. After this proposal is published, the Department will not accept new applications to create fill-credits.

The rationale for these changes, as well as their anticipated impacts, are discussed in more detail in the summary for proposed N.J.A.C. 7:13-10.4 below.

Verifications

The proposed rules introduce a process by which an applicant may request the Department to verify the limit of the flood hazard area and/or floodway on a site without first obtaining a permit. This is similar to the process for obtaining a letter of interpretation under the Department's Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A. At present, there is no process by which a person can obtain the Department's verification of a flood hazard area or

floodway limit independent of the simultaneous proposal of a construction project. The proposed rules will allow a person to obtain the Department's confirmation of the limits of jurisdiction on a property under N.J.A.C. 7:13 prior to designing a project.

Permits-by-rule

The proposed rules introduce permits-by-rule for 46 regulated activities, which replace existing provisions for non-regulated uses in the floodway at N.J.A.C. 7:13-1.3(e) and non-regulated uses in the flood fringe at N.J.A.C. 7:13-1.3(f). A permit-by-rule is an authorization to undertake a specific regulated activity without the need to obtain prior written approval from the Department provided all conditions of the permit-by-rule are satisfied. The activities proposed to be permitted-by-rule meet the definition of a regulated activity under proposed N.J.A.C. 7:13-2.4. However, the Department has determined that each of these activities will have a *de minimis* impact on flooding and the environment if undertaken as prescribed by each proposed permit-by-rule. Eight of the proposed permits-by-rule require an applicant to notify the Department in writing or electronically 14 days prior to construction.

General permits

The proposed rules include general permits for 16 activities in order to facilitate undertaking various activities that have been identified as having minimal impacts. The proposed rules include general permits covering certain stream cleaning, scour protection and stormwater facility maintenance activities by public entities, various agricultural activities under Natural Resources Conservation Service (NRCS) oversight, relocation and reconstruction of damaged buildings, and certain activities along small streams and in tidal flood hazard areas.

General permits are for specific regulated activities and involve a simplified application to the Department as well as a special certification from an engineer. No public notice is required for an activity undertaken pursuant to a general permit and an application fee of $ 500.00 is required except for proposed general permit 1 (for activities under the Stream Cleaning Act, N.J.S.A. 58:16A-67) and proposed general permit 6 (to reconstruct and elevate a private residence destroyed by flood, fire or natural disaster). These minimal submission requirements are necessary to enable the Department to ensure that general permits are only utilized in appropriate circumstances.

Seven of the proposed general permits are specifically targeted for projects that are designed and overseen by the NRCS. Two of the proposed general permits are for local governments seeking either to remove sediment from channels (which implements the Stream Cleaning Act) or to provide scour protection to existing bridge abutments. One general permit allows the maintenance and repair of stormwater management structures and conveyance features by a public entity. One allows the relocation of a building in order to reduce flood damage potential and another allows the reconstruction of a private residence destroyed by fire, flood or other natural disaster. Finally, three general permits are proposed for certain activities along waters that drain less than 50 acres and one is proposed for the construction of a private residence in a tidal flood hazard area in certain circumstances.

Transfer

The proposed rules introduce a process by which the owner of a site who has received an approval under N.J.A.C. 7:13 can transfer the approval at the time of the sale of the site to a new owner, provided there is no change in the project and certain conditions are satisfied. Under the

existing rules, an approval is valid only for the original applicant, and a new approval must be obtained by the new owner if a site is sold.

Fees

The proposed rules and amendments relocate fee provisions into the Flood Hazard Area Control Act rules from the Ninety-Day Construction Permits rules at N.J.A.C. 7:1C. This will consolidate all requirements that apply to flood hazard area permits into one chapter. The fees applicable to permits issued under this chapter were most recently amended effective January 3, 2006, (see 38 N.J.R. 134(a)), and only minor modifications to the fee schedule are proposed herein. The existing fees for permits are not proposed to be changed. The reference to major and minor permits is removed, since this distinction is not continued in these proposed new rules. A new fee schedule is proposed for verifications (the fees for which match the existing fees for stream encroachment lines), the general permits that require fees, the transfer of an approval to a new owner of a property, and the revision of a Department flood hazard area delineation.

Section-by-Section Description of the Proposed Amendments and New Rules

N.J.A.C. 7:1C Ninety-Day Construction Permits

The Ninety-Day Construction Permits rules establish certain application and review standards for stream encroachment permits, such as application fees and default issuance of permits if the Department does not render timely decisions on applications. Amendments are proposed to the Ninety-Day Construction Permits rules that would remove all provisions relating to the stream encroachment rules and relocate the substance of these provisions in the proposed

new Flood Hazard Area Control Act rules. Consolidating the portions of the Ninety-Day Construction Permits rules that apply to flood hazard area permits into the Flood Hazard Area Control Act rules will make it easier for the regulated public to understand and comply with those rules.

N.J.A.C. 7:1C-1.2 Definitions

The definitions of "appropriate agency" and "construction permit" are proposed to be amended to delete references to the Land Use Regulation Program and stream encroachment permits issued under the Flood Hazard Area Control Act.

N.J.A.C. 7:1C-1.3 Pre-application procedure and requirements

References at N.J.A.C. 7:1C-1.3(b)5 and (c) to notice requirements and application procedures in the Flood Hazard Area Control Act rules are proposed for deletion. These provisions will be incorporated in the Flood Hazard Area Control Act rules at proposed N.J.A.C. 7:13-15.2.

N.J.A.C. 7:1C-1.5 Fees

Fee provisions for stream encroachment permits at N.J.A.C. 7:1C-1.5(a)4 are proposed to be deleted from the Ninety-Day Construction Permits rules and moved into the Flood Hazard Area Control Act rules at proposed N.J.A.C. 7:13-17.1, with changes as described below and as further detailed in the description of proposed N.J.A.C. 7:13-17.1.

Provisions at N.J.A.C. 7:1C-1.5(a)4i, ii and iii, which define minor and major project elements, are proposed for deletion because the proposed Flood Hazard Area Control Act rules

do not differentiate between major and minor projects. Under the existing rule, the only consequence of a "major" or "minor" designation, other than fee calculation, is the public notice requirements of existing N.J.A.C. 7:13-4.2. However, proposed changes in the public notice requirements and fee structure at proposed N.J.A.C. 7:13-16 and 17 render this distinction unnecessary.

The fee table at N.J.A.C. 7:1C-1.5(a)4iii is relocated to proposed N.J.A.C. 7:13-17.1(g), with minor amendments necessary to incorporate the verification fee structure, as well as to include fees for 14 of the proposed general permits at N.J.A.C. 7:13-8, fees to revise an application under proposed N.J.A.C. 7:13-13 and fees to transfer an approval under proposed N.J.A.C. 7:13-14. These proposed changes are discussed in more detail at the summary for Subchapter 17 below.

Existing N.J.A.C. 7:1C-1.5(c), which provides for a single permit fee for a project that requires more than one Division of Land Use Regulation permit, is proposed for deletion and relocation to proposed N.J.A.C. 7:13-17.1(e). This provision is already repeated in the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A-11.1(d) and the Coastal Permit Program rules at N.J.A.C. 7:7-10.5(a). There is no need to continue this provision in the Ninety-Day Construction Permits rules, since the proposed removal of the stream encroachment provisions will eliminate any reference to permits under the Division of Land Use Regulation.

A provision at N.J.A.C. 7:1C-1.5(d), which provides that a permit modification shall not be issued if there is a change to the hydraulics of the stream, is proposed for deletion, since this is a factor that only applies to stream encroachment permits and not to the other types of permits covered by the Ninety-Day Construction Permits rules. The proposed Flood Hazard Area Control Act rules include a similar, though broader, provision limiting modifications to changes which

do not involve a substantial redesign of a project, found at proposed N.J.A.C. 7:13-13.3(d).

The provisions at N.J.A.C. 7:1C-1.5(h), (i) and (j), which provide for annual fee adjustments for stream encroachment applications, are proposed for deletion here and relocation to proposed N.J.A.C. 7:13-17.1(h), (i) and (j) with minor amendments described in the summary for Subchapter 17 below. Furthermore, since all provisions related to stream encroachment applications are proposed for deletion from N.J.A.C. 7:1C and relocation to N.J.A.C. 7:13, existing N.J.A.C. 7:1C-1.5(d)1, which sets forth fees for a request to modify a stream encroachment permit, is proposed for deletion and relocation to proposed Table E at N.J.A.C. 7:13-17.1(e).

N.J.A.C. 7:1C-1.7 Review of application

A reference at N.J.A.C. 7:1C-1.7(d) to the application review procedures in the Flood Hazard Area Control Act rules is proposed for deletion as it will not be necessary to direct applicants to the rules.

N.J.A.C. 7:1C-1.9 Appeals

A reference at N.J.A.C. 7:1C-1.9(b) to the appeal procedures in the Flood Hazard Area Control Act rules is proposed for deletion. Appeal procedures are relocated to proposed N.J.A.C. 7:13-18.1.

N.J.A.C. 7:1C-1.12 Related regulations

A reference at N.J.A.C. 7:1C-1.12(b) to provisions for application information and procedures for pre-application conferences in the Flood Hazard Area Control Act rules is

proposed for deletion as it will not be necessary to direct applicants to the rules.

N.J.A.C. 7:7 Coastal Permit Program Rules

As mentioned briefly in the introductory portion of the Summary above, and as explained in more detail below with regard to the Coastal Zone Management rules, N.J.A.C. 7:7E, the Department is proposing various amendments to the rules governing coastal development that reference and coordinate with the proposed new Flood Hazard Area Control Act rules in order to ensure construction standards are applied with greater consistency in tidal and fluvial flood hazard areas. In the Coastal Permit Program rules at N.J.A.C. 7:7, the Department is proposing to amend the permits-by-rule and general permits that apply to the development, expansion, and/or reconstruction of single-family homes or duplexes, and residential or commercial development to incorporate reference to the special area rule for flood hazard areas in the Coastal Zone Management rules at N.J.A.C. 7:7E-3.25. Because these permits-by-rule and general permits authorize the construction of habitable structures, conformance with current flood hazard standards is important to ensure public safety. The Department is also proposing amendments to the general permits to reference the proposed new special area rule for riparian zones in the Coastal Zone Management rules at N.J.A.C. 7:7E-3.26.

Coastal permits-by-rule

The Department is proposing amendments to three coastal permits-by-rule at N.J.A.C. 7:7-7.2. These permits-by-rule authorize under specified circumstances the development or expansion of single family homes or duplexes, or of residential or commercial development. The permits-by-rule at N.J.A.C. 7:7-7.2(a)1, 3, and 7 are proposed to be amended to require the authorized activity to meet the requirements of the flood hazard areas special area rule at

N.J.A.C. 7:7E-3.25. As described later in this Summary, the flood hazard area special area rule is proposed to be amended to correspond and coordinate with the new Flood Hazard Area Control Act rules proposed herein.

Coastal general permits

The Department is proposing to amend four coastal general permits to coordinate with the new flood hazard area rules by reference to the amended flood hazard area special area rule at N.J.A.C. 7:7E-3.25 and to the new riparian zone special area rule at N.J.A.C. 7:7E-3.26. Specifically, the coastal general permit for voluntary reconstruction of certain residential or commercial development at N.J.A.C. 7:7-7.7; the coastal general permit for the development of a single family home or duplex at N.J.A.C. 7:7-7.8; the coastal general permit for the expansion, or reconstruction (with or without expansion), of a single family home or duplex at N.J.A.C. 7:7-7.9; and the coastal general permit for the construction of support facilities at legally existing and operating marinas at N.J.A.C. 7:7-7.13 are proposed to be amended to cross-reference the flood hazard area rule at N.J.A.C. 7:7E-3.25 and the riparian zone rule at N.J.A.C. 7:7E-3.26 so that the activities authorized under the general permits must be conducted in accordance with the requirements of the specified special area rules. Accordingly, existing N.J.A.C. 7:7-7.8(j) and 7.9(j), which require that development under these general permits must comply with the elevation and flood proofing requirements of the National Flood Insurance Program, are proposed for deletion, since proposed N.J.A.C. 7:7E-3.25 requires that development in all flood hazard areas must meet the Federal flood reduction standards at 44 CFR Part 60, which incorporates the requirements of the National Flood Insurance Program.

In addition, the coastal general permit for geotechnical survey borings at N.J.A.C. 7:7-7.27

is proposed to be amended to update the existing cross-reference to the standards of the Flood Hazard Area Control Act rules related to activities in areas with acid-producing soils.

N.J.A.C. 7:7E Coastal Zone Management Rules

The Coastal Zone Management rules at N.J.A.C. 7:7E contain the substantive standards regarding the use and development of coastal resources, and are utilized by the Department in reviewing permit applications under the Coastal Permit Program rules at N.J.A.C. 7:7. The Department is proposing amendments to various provisions of the Coastal Zone Management rules to ensure that standards for activities and development in fluvial and tidal flood hazard areas are consistent between the flood hazard area permitting program implemented under N.J.A.C. 7:13 and the coastal permitting program implemented under N.J.A.C. 7:7 and 7:7E.

In the existing Flood Hazard Area Control rules at N.J.A.C. 7:13-1.3(d), areas regulated under the Wetlands Act of 1970 (N.J.S.A. 13:9A-1 et seq.), which governs coastal wetlands, are exempt from the flood hazard rules. Also exempt are lands in tidally influenced flood plains regulated under the Waterfront Development law (N.J.S.A. 12:5-1 et seq.) and/or the Coastal Area Facility Review Act (CAFRA) (N.J.S.A. 13:19-1 et seq.). In the Coastal Zone Management rules, the existing flood hazard special area rule at N.J.A.C. 7:7E-3.25 requires that activities subject to fluvial flooding must conform with the Flood Hazard Area Control Act and rules and that development in areas subject to tidal flooding must conform with applicable Federal flood hazard reduction standards and the Uniform Construction Code (UCC). Thus the coastal rules require that activities in fluvial (non-tidal) flood hazard areas must meet the requirements of N.J.A.C. 7:13, yet, under existing N.J.A.C. 7:13-1.3(d), activities in fluvial flood hazard areas are not exempt and so require a stream encroachment permit anyway. Although the

coastal rules do require that activities in tidal flood hazard areas meet the Federal standards and the UCC, these standards are not as comprehensive as N.J.A.C. 7:13. The Department's longstanding interpretation of these provisions is as follows:

1. If a coastal permit is required for (and obtained for) a project in a tidal flood hazard area, then no stream encroachment permit is required for the project. Some review of development to ensure flood-resistant construction pursuant to Federal standards and the UCC is performed by the Department, as required at existing N.J.A.C. 7:7E-3.25(f).

2. If a coastal permit is required for a project in a fluvial flood hazard area, a stream encroachment permit is also required for the project (if the activity is regulated under N.J.A.C. 7:13). Thus, all standards at N.J.A.C. 7:13 apply to the activity.

3. If a coastal permit is not required for a project (whether in a tidal or fluvial flood hazard area), a stream encroachment permit is required for the project (if the activity is regulated under N.J.A.C. 7:13). Thus, all standards at N.J.A.C. 7:13 apply to the activity.

It had been the Department's intent that the interplay between the flood hazard rules and the coastal rules would adequately regulate construction within the tidal flood hazard areas. However, after careful review of both N.J.A.C. 7:7E and 7:13, as explained more fully below, the Department has determined that, relative to flood impacts, projects in tidal flood hazard areas are not subject to a level of review under N.J.A.C. 7:7E comparable or equivalent to that to which projects in fluvial flood hazard areas are subject under N.J.A.C. 7:13, and that revisions to both the coastal rules and flood hazard rules are necessary to address the discrepancy.

The Federal flood reduction standards deal primarily with basic construction practices in flood prone areas, as well as municipal participation in the National Flood Insurance Program and local responsibility to ensure these standards are satisfied. The Uniform Construction Code

contains further specific construction standards for buildings, including elevating floors and other means of ensuring flood-resistant construction. Both standards therefore focus mainly on the safe construction of buildings in flood prone areas, and do not go into great detail regarding the impacts that such construction may cause to other properties. However, many standards in N.J.A.C. 7:13, which are not contained in the Federal standards or UCC, are designed to address the impacts to flooding caused by construction, such as prohibitions on obstructions in floodways.

For example, since existing N.J.A.C. 7:13-2.2(a) prohibits new buildings and other obstructions in floodways, the Department will not issue a stream encroachment permit to construct a new house in a floodway. However, the Federal flood reduction standards and the UCC contain no such prohibition. Thus, individuals have been able to obtain a coastal permit to construct homes in tidal floodways, even though such construction could be unsafe for the occupants and could exacerbate local flood conditions. Another example involves the construction of bridges and culverts within tidal waters. Existing N.J.A.C. 7:13-2.16 contains specific standards for the construction of bridges and culverts in order to ensure that these structures do not cause or exacerbate flooding. If a public entity proposes to replace an existing bridge or culvert with one of a different size, under N.J.A.C. 7:13, the Department can require the public entity to demonstrate that the new structure will not exacerbate flooding upstream if the replacement is smaller (by constricting flow) or downstream if the replacement is larger (by allowing more floodwater to pass than the original structure). Since the coastal rules do not provide for a detailed hydraulic review of bridges and culverts, however, a new bridge or culvert may be built that potentially will exacerbate flooding in tidal areas. This would be a particular concern for higher frequency flood events such as the two-year or 10-year floods. The 100-year

flood elevation in tidal areas is controlled by the ocean and is unaffected by development. However, constrictions in a channel due to improperly sized bridges and culverts could significantly alter conditions during the two-year or 10-year flood, thus subjecting people and property to more frequent nuisance flooding.

Furthermore, the Federal standards and UCC do not contain specific standards to provide dry access during a flood, as compared to existing N.J.A.C. 7:13-2.13 and proposed N.J.A.C. 7:13-11.6, or standards that limit the construction of enclosed areas beneath buildings to the extent provided by proposed N.J.A.C. 7:13-11.5. There are also a number of environmental standards in the flood hazard rules that are not contained in the existing Coastal Zone Management rules, such as specific requirements for construction within channels and riparian zones.

The Flood Hazard Area Control Act does not differentiate between tidal and fluvial flood hazard areas, nor does it require that separate standards should be adopted for those areas. Certain activities have different impacts in fluvial areas than they do in tidal areas, and different standards are warranted from an engineering standpoint in certain cases. For example, displacing flood storage can cause fluvial flood elevations to rise, whereas tidal flood elevations in New Jersey are governed by flooding from the Atlantic Ocean, the elevation of which is unaffected by construction activities or available flood storage. However, the Department believes that certain construction standards should be applied consistently in both fluvial and tidal flood hazard areas, such as requirements to elevate the floor of buildings and requirements related to access to buildings during a flood.

Therefore, to ensure more consistent standards for flood hazard areas Statewide, the Department is proposing a new riparian zone special area rule at N.J.A.C. 7:7E-3.26 as well as

amendments to the flood hazard special area rule at N.J.A.C. 7:7E-3.25 and several other existing special areas rules at N.J.A.C. 7:7E-3, use rules in N.J.A.C. 7:7E-7, and resource rules in N.J.A.C. 7:7E-8.

To further coordinate the Coastal Zone Management rules and the Flood Hazard Area Control Act rules, so as to fully integrate the same construction standards in flood hazard areas Statewide, several changes are proposed to provisions at N.J.A.C. 7:13 which apply in tidal flood hazard areas. These new provisions are explained in greater detail in the summary for the Flood Hazard Area Control Act rules below, and are summarized briefly here in order to more fully explain the interplay between N.J.A.C. 7:7E and 7:13.

Existing N.J.A.C. 7:13-1.3(b)ii lists 15 specific sections of tidal watercourses, and one set of tidal watercourses, which are not regulated by N.J.A.C. 7:13. This section is not continued in the new Flood Hazard Area Control Act rules so that N.J.A.C. 7:13 will apply as appropriate in all fluvial and tidal flood hazard areas. This better reflects the intent of the Flood Hazard Area Control Act, which does not exempt the flood hazard areas of tidal waters from regulation, except for lands subject to the Wetlands Act of 1970 as discussed above. (See the summary for proposed N.J.A.C. 7:13-2.2 below for a discussion of regulated waters.) A permit-by-rule is also proposed at N.J.A.C. 7:13-7.2(b)6 for certain projects in tidal flood hazard areas that do not require a coastal permit, but which the Department has determined will not cause adverse impacts to flooding, the environment or public safety. (See the summary for proposed N.J.A.C. 7:13-7.2(b)6 below for more detail.) A general permit is further proposed at N.J.A.C. 7:13-8.9 that allows the construction of a private residence, a residential addition, or a structure appurtenant to a residence in a tidal flood hazard area. In many cases such construction does not currently require either a coastal permit or a stream encroachment permit. However the proposed

deletion of the exempt waterways at existing N.J.A.C. 7:13-1.3(b)ii (noted above) will newly subject many tidal flood hazard areas to the requirements of N.J.A.C. 7:13. This general permit is proposed in order to ease the administrative burden on homeowners who will now need a flood hazard area permit, while at the same time ensuring compliance with the design and construction standards of the Flood Hazard Area Control Act rules.

Since all construction standards under the Flood Hazard Area Control Act rules will be incorporated by reference into the Coastal Zone Management rules, obtaining a coastal permit will fully satisfy the design requirements of the Flood Hazard Area Control Act rules. As noted above, this is already the case in tidal flood hazard areas. However proposed N.J.A.C. 7:13-2.1 expands this to include fluvial areas as well. This is appropriate, as there is no need to obtain a separate flood hazard area permit since the coastal permit review will adequately cover all standards established at N.J.A.C. 7:13.

Special areas rules

N.J.A.C. 7:7E-3.17 Overwash areas; N.J.A.C. 7:7E-3.18 Coastal high hazard areas; N.J.A.C. 7:7E-3.19 Erosion hazard areas

The Department is proposing to amend the special areas rules for overwash areas, N.J.A.C. 7:7E-3.17; coastal high hazard areas, N.J.A.C. 7:7E-3.18; and erosion hazard areas, N.J.A.C. 7:7E-3.19, to require that development must meet the requirements of the flood hazard special area rule, N.J.A.C. 7:7E-3.25, not only the flood proofing requirements of that rule. As explained above and in further detail below, the Department is amending N.J.A.C. 7:7E-3.25 to provide that the comprehensive design and construction standards of the Flood Hazard Area Control Act rules are made applicable in the coastal zone in all tidal flood hazard areas other than those in

statutorily exempted coastal wetlands.

N.J.A.C. 7:7E-3.25 Flood hazard areas

The Department is proposing to amend the flood hazard special area rule at N.J.A.C. 7:7E-3.25 so that its requirements coordinate with the requirements of the new Flood Hazard Area Control Act rules being proposed herein. Specifically, the proposed amendments to N.J.A.C. 7:7E-3.25 coordinate with the new rules at N.J.A.C. 7:13 as described below.

At N.J.A.C. 7:7E-3.25(a), proposed amendments define "flood hazard areas" for purposes of this special area rule as areas subject to flooding from the flood hazard design flood, as that term is defined and used in the proposed new Flood Hazard Area Control Act rules at N.J.A.C. 7:13. Existing N.J.A.C. 7:7E-3.25(a)1 and 2, which reference, respectively, the list of Department-delineated waters and FEMA tidal flood plain delineations, are proposed to be deleted because the proposed amendments at (a) that reference N.J.A.C. 7:13 flood hazard area definitions and delineation provisions substantively replace them. The Department is also proposing to delete existing N.J.A.C. 7:7E-3.25(a)3, which provides that where parts of flood hazard areas meet the definitions of certain identified special water's edge special area rules in N.J.A.C. 7:7E, the special areas rules apply for purposes of the acceptability of the location of development and the flood hazard special area rule applies for purposes of setback and flood proofing. Deleting this limiting provision will ensure that the comprehensive standards of the Flood Hazard Area Control Act rules apply in fluvial and tidal flood hazard areas, including any special area under the Coastal Zone Management rules that is coincident with a flood hazard area.

The Department is proposing a new N.J.A.C. 7:7E-3.25(b), which provides that below the mean high water line in a tidal flood hazard area, N.J.A.C. 7:7E-3.25 applies only to the

development of habitable buildings and the construction of railroads, roadways, bridges and/or culverts. The Department has determined that the standards of the existing Coastal Zone Management rules adequately protect all other proposed structures in flood hazard areas. In the case of habitable buildings, the proposed Flood Hazard Area Control Act rules at N.J.A.C. 7:13-11.5 establish specific standards related to the construction of habitable buildings which exceed the standards contained in the Coastal Zone Management rules. Furthermore, standards related to the elevation and safe construction of railroads, roadways, bridges and/or culverts, which are necessary to preserve public safety, provide access during a flood and ensure that existing flooding is not exacerbated, are similarly contained in the proposed Flood Hazard Area Control Act rules at N.J.A.C. 7:13-11.6 and 7. The Department has therefore determined that the construction of habitable buildings, railroads, roadways, bridges and culverts require review under the standards of N.J.A.C. 7:13, whereas other activities proposed in a tidal flood hazard area below the mean high water line are adequately regulated under the existing standards at N.J.A.C. 7:7E.

The Department is proposing to delete existing N.J.A.C. 7:7E-3.25(e), which provides that stormwater management retention and detention basins are conditionally acceptable in flood hazard areas if they are constructed in accordance with the Stormwater management resource rule at N.J.A.C. 7:7E-8.7. The Stormwater management resource rule provides that a project or activity in the coastal zone that meets the definition of "major development" under the Stormwater Management rules at N.J.A.C. 7:8 must comply with those rules. Requirements applicable to stormwater management in flood hazard areas are established in the new Flood Hazard Area Control Act rules at N.J.A.C. 7:13-11.2. That rule likewise applies to major developments. Consequently, a stormwater management basin in a flood hazard area in the

coastal zone will be reviewed under N.J.A.C. 7:7E-3.25 and, therefore, in accordance with the standards in N.J.A.C. 7:13-11.2, which makes this existing provision in the flood hazard special area rule unnecessary.

Existing N.J.A.C. 7:7E-3.25(f) requires development in fluvial flood hazard areas in the coastal zone to conform with the Flood Hazard Area Control Act rules, whereas development in tidal flood hazard areas must conform with the Federal flood hazard reduction standards and Uniform Construction Code. In order to ensure that construction standards are applied consistently and appropriately in fluvial and tidal flood hazard areas, N.J.A.C. 7:7E-3.25(f) is proposed to be amended to require a development subject to the coastal rules in any flood hazard area (whether fluvial or tidal) to meet all three sets of standards. An exception is made for coastal wetlands, since N.J.S.A. 58:16A-60 provides that the Flood Hazard Area Control Act does not apply to lands subject to the Wetlands Act of 1970; therefore, in coastal wetlands, only the Federal flood hazard reduction standards and Uniform Construction Code apply. Elsewhere in the coastal zone, any necessary and appropriate differences in construction standards in tidal and fluvial areas are encompassed under proposed new N.J.A.C. 7:13. Thus, activities that require a coastal permit, and which are located in a flood hazard area, will be reviewed under the standards of N.J.A.C. 7:13 as well as the appropriate coastal permitting standards. Since the requirements of N.J.A.C. 7:13 will be incorporated into the review of the coastal permit, a separate flood hazard area permit will not be required.

The Department is proposing a new provision at N.J.A.C. 7:7E-3.25(h), which provides that if endangered and/or threatened wildlife or plant species habitat is present in the flood hazard area such that the area is also an Endangered or threatened wildlife or plant species habitat special area in accordance with N.J.A.C. 7:7E-3.38, then the requirements of N.J.A.C. 7:7E-3.38

regarding the protection of the habitat apply.

The Department is proposing a new provision at N.J.A.C. 7:7E-3.25(i), which provides that if a term used in the flood hazard special area rule is defined in the Coastal Zone Management rules as well as in the Flood Hazard Area Control Act rules, the definition for the term in the Flood Hazard Area Control Act rules will govern. If a term is used in the rule that is not defined or otherwise described in the Coastal Zone Management rules but is defined or described in the Flood Hazard Area Control Act rules, then the definition or description in the latter will apply.

N.J.A.C. 7:7E-3.26 Riparian zones

The Department is proposing a new special area rule at N.J.A.C. 7:7E-3.26, Riparian zones. N.J.A.C. 7:7E-3.26 incorporates and/or reflects elements of the proposed new Flood Hazard Area Control Act rules at N.J.A.C. 7:13 and the flood hazard special area rule at N.J.A.C. 7:7E-3.25, as it is proposed to be amended (see above). The functions and environmental benefits of the riparian zone are described in extensive detail below in the summary of the new Flood Hazard Area Control Act rules at N.J.A.C. 7:13-4.1. Briefly, riparian zones remove sediment, nutrients, and contaminants from runoff and floodwaters, thus helping protect water quality; stabilize the banks of the waterway; and provide habitat for wildlife; as well as maintain aesthetic value and provide opportunities for recreation and education.

Proposed new N.J.A.C. 7:7E-3.26 establishes a riparian zone adjacent to waters that are regulated waters under the Flood Hazard Area Control Act and rules. Depending on the quality and/or sensitivity of environmental resources associated with a particular waterway, the existing Flood Hazard Area Control rules at N.J.A.C. 7:13 provide for the protection of near-watercourse vegetation within 25 feet or 50 feet of the top of the channel bank along waterways under

existing N.J.A.C. 7:13-3.2. Under the proposed new Flood Hazard Area Control Act rules, these protected areas along waters are denominated "riparian zones" and are established as 300, 150 or 50 feet wide. In the Coastal Zone Management rules, the proposed new riparian zone special area rule at N.J.A.C. 7:7E-3.26 will establish protections for these areas for purposes of the coastal permitting program.

Proposed N.J.A.C. 7:7E-3.26(a) establishes that every regulated water has riparian zone, except that there is no riparian zone along the Atlantic Ocean nor along any manmade lagoon or oceanfront barrier island, spit or peninsula. The proposed language is identical to proposed N.J.A.C. 7:13-4.1(a), except that a reference is made to proposed N.J.A.C. 7:13-2.2 in order to define which waters are regulated. The Department has determined that the vegetation, topography, landscape and development typical along these waters is significantly different from other riparian areas in the State, and that the existing coastal policies that protect unique tidal landforms, including dunes (N.J.A.C 7:7E-3.16) and overwash areas (N.J.A.C 7:7E-3.17), barrier island corridors (N.J.A.C 7:7E-3.20) and beaches (N.J.A.C 7:7E-3.22) recognize the types of impacts that are specific to these areas and, therefore, provide adequate protection to vegetation along these tidal waters.

Proposed N.J.A.C. 7:7E-3.26(b) provides that the riparian zone includes both the land and vegetation within a certain distance of each regulated water as well as the land and vegetation within the regulated water itself. The proposed text is identical to proposed N.J.A.C. 7:13-4.1(b), which establishes equal provisions for riparian zones under the Flood Hazard Area Control Act rules. In cases where a discernible bank is present, the limit of the riparian zone is measured landward from the top of the bank. However, some regulated waters do not have definable channels and, therefore, do not have discernible banks from which to measure the riparian zone.

In such a case, proposed N.J.A.C. 7:7E-3.26(b)1 provides that the riparian zone along all linear features, whether fluvial or tidal, such as streams and swales, is to be measured landward of the feature's centerline. Proposed N.J.A.C. 7:7E-3.26(b)2 provides that the riparian zone along non-linear features in fluvial areas, such as lakes and ponds, is to be measured landward of the normal water surface limit. Along non-linear features in tidal areas, such as bays and inlets, proposed N.J.A.C. 7: 7E-3.26(b)3 similarly provides that the riparian zone is to be measured landward of the mean high water. These provisions provide predictable and easily identifiable locations from which to measure the riparian zone. A regulated water may also flow through a wetlands complex and, therefore, lose any definable shape. Along such amorphously-shaped features, proposed N.J.A.C. 7:7E-3.26(b)4 provides that the riparian zone is to be measured landward of the feature's centerline. This is consistent with the Department's application of the special water resource protection area under the Stormwater Management rules at N.J.A.C. 7:8-5.5(h).

Proposed N.J.A.C. 7:7E-3.26(c) sets forth the width of the riparian zone along various regulated waters. The proposed text is identical to proposed N.J.A.C. 7:13-4.1(c), which establishes equal provisions for riparian zones under the Flood Hazard Area Control Act rules. Proposed N.J.A.C. 7:7E-3.26(c)1 provides that the proposed riparian zone is 300 feet wide along both sides of any Category One waters and all upstream tributaries situated within the same HUC-14 watershed as the Category One water. Proposed N.J.A.C. 7:7E-3.26(c)2 establishes a 150-foot riparian zone along any upstream tributary to a trout production water not covered under proposed (c)1 above; along trout maintenance water and all upstream tributaries within one mile; along waters that support or are critical to threatened or endangered species and tributaries within one mile; and along any water flowing through an area that contains acid

producing soils. Proposed N.J.A.C. 7:7E-3.26(c)3 establishes a 50-foot riparian zone along all waters not identified as having a 300-foot or 150-foot riparian zone under proposed N.J.A.C. 7:13-7:7E-3.26(c)1 and 2. The rationale for establishing these riparian zone widths along these waters is discussed fully in the summary for proposed N.J.A.C. 7:13-4.1 below.

Proposed N.J.A.C. 7:13-3.26(d) clarifies that in addition to the riparian zones proposed in this section, other Department rules also protect near-stream areas. Projects subject to other rules must meet any applicable buffer requirements as well as the riparian zone requirements under this chapter. For example, the Stormwater Management rules at N.J.A.C. 7:8 and Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A apply buffers along certain regulated features. The proposed rules clarify that projects must comply with any applicable similar requirements imposed at the Federal, State and/or local levels. This proposed provision is similar to proposed N.J.A.C. 7:13-4.1(d), except that a reference to the Highlands Water Protection and Planning Act rules is not included at proposed N.J.A.C. 7:13-3.26(d), as no portion of the Highlands Preservation Area or Highlands Planning Area extends into the coastal zone.

Proposed N.J.A.C. 7:7E-3.26(e) provides that development in riparian zones must conform with the requirements of the proposed new Flood Hazard Area Control Act rules at N.J.A.C. 7:13-9, 10 and 11, which establishes for individual permits the standards for construction in riparian zones or as may be applicable instead, the requirements relating to construction in riparian zones under flood hazard permits-by-rule at N.J.A.C. 7:13-7 or under flood hazard general permits at N.J.A.C. 7:13-8.

Proposed N.J.A.C. 7:7E-3.26(f) provides that if endangered and/or threatened wildlife or plant species habitat is present in the riparian zone such that the area is also an Endangered or threatened wildlife or plant species habitat special area in accordance with N.J.A.C. 7:7E-3.38,

then the requirements of N.J.A.C. 7:7E-3.38 regarding the protection of the habitat apply.

At new N.J.A.C. 7:7E-3.26(g), the Department is proposing that if a term used in the riparian zone special area rule is defined in the Coastal Zone Management rules as well as in the Flood Hazard Area Control Act rules, the definition for the term in the Flood Hazard Area Control Act rules will govern. If a term is used in the rule that is not defined or otherwise described in the Coastal Zone Management rules but is defined or described in the Flood Hazard Area Control Act rules, then the definition or description in the latter will apply.

Proposed N.J.A.C. 7:7E-3.26(h) sets for the rationale for the riparian zone special area rule. The rationale focuses on the connection between the preservation of plant life and soil adjacent to waters and the quality of those waters and the health of the fish and wildlife in and along them.

N.J.A.C. 7:7E-3.34 Steep slopes

At N.J.A.C. 7:7E-3.34(b), in the existing steep slopes special area rule, the Department is proposing to add riparian zones to the list of special areas where development is discouraged in order to protect the adjacent waterways from degradation due to erosion and to prevent the erosion of the riparian zone itself.

N.J.A.C. 7:7E-3.48 Hudson River Waterfront Area

At N.J.A.C. 7:7E-3.48(a)5, the reference to the base flood elevation (the water surface elevation of a 100-year flood as defined by the Federal Emergency Management Agency) in the definition of "pier deck level" is proposed to be replaced with a reference to the flood hazard area design flood elevation as defined and determined in accordance with the Flood Hazard Area

Control Act rules at N.J.A.C 7:13 for purposes of consistency.

At N.J.A.C. 7:7E-3.48(d)1ix, reference to the Federal flood hazard reduction standards as found in 44 C.F.R. Part 60 and in the Uniform Construction Code, N.J.S.A. 52:27D-1 et seq., are proposed to be replaced with a reference to the flood hazard special area rule at N.J.A.C. 7:7E-3.25, which, as explained above, requires compliance with these standards.

Use rules

N.J.A.C. 7:7E-7.2 Housing use rule

At N.J.A.C. 7:7E-7.2(e)8 and (f)8, references to the National Flood Insurance Program regulations at 44 CFR Chapter 1 are proposed to be replaced with references to the Flood hazard special area rule at N.J.A.C. 7:7E-3.25, for consistency.

N.J.A.C. 7:7E-7.5 Transportation use rule

At N.J.A.C. 7:7E-7.5(c)2, a proposed amendment excludes the flood hazard special area and the riparian zone special area from the requirement that prohibits the construction of a linear foot or bike path that would disturb a Special Area. Since these special areas are by definition adjacent to waterways, their disturbance as a result of the installation of a bike path adjacent to waterway is unavoidable. The standards governing the disturbance of these areas that will apply under the flood hazard special area rule and the riparian zone special area rules, by reference to the Flood Hazard Area Control Act rules, provide for the minimization of disturbance related to construction of these pathways.

N.J.A.C. 7:7E-7.8 Mining use rule

At N.J.A.C. 7:7E-7.8(b), reference to the Flood Hazard Area Control Act is proposed to be replaced with reference to the flood hazard special area rule at N.J.A.C. 7:7E-3.25 for consistency.

Resource rules

N.J.A.C. 7:7E-8.21 Subsurface sewage disposal systems

At N.J.A.C. 7:7E-8.21(b)3, reference to the National Flood Insurance Program Regulations (44 CFR 60) prepared by the Federal Emergency Management Agency (FEMA) is proposed to be replaced with reference to the Flood hazard area special area rule at N.J.A.C. 7:7E-3.25 for consistency.

N.J.A.C. 7:13 Flood Hazard Area Control Act Rules

To aid in a comparison of the existing rules to the proposed new rules, the following table indicates the location in the proposed new rules of each section of the existing rules:

TABLE OF EXISTING AND PROPOSED CITATIONS

Subject	Existing Citation	Proposed Citation	Proposed Changes
Purpose and scope	1.1	Unchanged	Clarified
Definitions	1.2	Unchanged	Expanded
Regulated areas	1.3(a)	2.3	Clarified, expanded and renamed
Regulated waters	1.3(b) and (c)	2.2	Clarified
Exemption for projects in certain tidal areas	1.3(d)	7.2(b)6	Clarified; Permitted-by-rule. Restricted in certain cases.
Exempt activities in floodway	1.3(e)	7.2	Activities permitted-by-rule; reorganized and clarified
Exempt activities in flood fringe	1.3(f)	7.2	Activities permitted-by-rule; reorganized and clarified

Jurisdictional determination	1.3(g)	5	Expanded, clarified and renamed applicability determination
Liberal construction	1.4	1.6	Clarified
Program information	1.5	1.1(f)	Clarified
Other State statutes	1.6	Deleted	Unnecessary
Severability	1.7	1.7	Clarified
General project standards	2.1	9.1 and 11.1	Clarified
Prohibited uses	2.2	10.3, 11.5, 11.17 and 11.18	Expanded and clarified for specific projects
Regulatory flood	2.3	3	Expanded and clarified; Regulated flood plain called flood hazard area; Hierarchy established to determine extent of flooding on a given site
Stream encroachment lines	2.4	6	Process established to verify flood hazard area and floodway limits on a site; Stream encroachment lines no longer used
Watercourse cleaning	2.5	11.15	Clarified; Restricted in certain cases.
Excavation	2.6	11.3	Clarified
Disposal of spoils	2.7	11.15	Clarified; Restricted in certain cases.
Stormwater management	2.8	11.2	Applicability clarified; Former standards deleted; reference added to new standards at N.J.A.C. 7:8
Channel modification	2.9	10.1(c)	Clarified; Restricted in certain cases
Utility lines	2.10 and 2.11	7.2(c) and 11.9	Clarified; Restricted in certain cases; Some activities permitted-by-rule
Dams	2.12	11.11	Clarified; Restricted in certain cases
Structures	2.13	11.4, 11.5 and 11.6	Clarified and expanded; Restrictions added in certain cases
Fill in flood hazard area	2.14	10.4	Clarified
Fill in Central Passaic Basin	2.15	10.4	Clarified
Bridges and culverts	2.16	11.7	Clarified and expanded
Sewage disposal	2.17	Deleted	Unnecessary

General environmental standards	3.1	11.1(b)	Clarified
Protection of near-stream vegetation	3.2	4.1 and 10.2	Clarified and expanded
Soil erosion and sediment control	3.3	11.1(c) through (e)	Clarified; Unnecessary provisions deleted
Mitigation	3.4	Throughout the rules as applicable to a particular activity	Clarified; Unnecessary provisions deleted
Fishery resources	3.5 and 3.6	10.1, 10.5 and 11.7	Clarified and expanded
Acid-producing soils	3.7	10.7	Clarified
Freshwater wetlands	3.8	Deleted	Unnecessary
Threatened and endangered species	3.9	10.6	Clarified
Application requirements	4.1	9.2 for individual permits and verifications, and 8.1 for general permit authorizations	Clarified and expanded to include new approvals (throughout new rules)
Notice	4.2	16	Clarified and expanded to include new approvals
Pre-application conference	4.3	15.2	Clarified
Over-the-counter permits	4.4	Deleted	The Department is no longer able to process permits in this manner
Soil conservation district review	4.5	8.4	Clarified; Expanded and organized into seven agricultural general permits
Emergency permit	4.6	12	Clarified and expanded
Application review	4.7	9.3 for individual permits and verifications, and 8.1 for general permit authorizations	Clarified and expanded to include new types of approvals (throughout new rules)
Hardship waivers	4.8	9.8	Clarified
Permit modifications	4.9	13	Clarified and expanded to include new approvals
Appeal process	4.10	18	Clarified

Review by delegated agencies	4.11 and 5.3	1.4	Clarified
Consistency with other permits	5.1	1.1(e)	Clarified
Water resource association	5.2	1.5	Clarified
Penalties	5.4	19	Clarified and expanded to include penalties, jurisdiction and restoration
Reserved subchapter	6	Deleted	Unnecessary
State studies	7	Appendix 2	Clarified and reorganized

Subchapter 1. General Provisions

The opening subchapter of the existing Flood Hazard Area Control rules has been reorganized and rewritten. Many items in the existing rules have been moved to other subchapters. For example, provisions relating to areas of jurisdiction have been moved to a separate subchapter at N.J.A.C. 7:13-2, which includes provisions regarding regulated waters (N.J.A.C. 7:13-2.2), the land areas which are regulated adjacent to those regulated waters (N.J.A.C. 7:13-2.3), and which construction activities in those areas require a flood hazard area permit (N.J.A.C. 7:13-2.4). Other provisions are continued from the existing rules, but have been rewritten or expanded for clarity, with no change in meaning.

N.J.A.C. 7:13-1.1 Purpose and scope

Proposed N.J.A.C. 7:13-1.1(a) outlines the areas regulated under the chapter. These are the same areas regulated under the existing rules, although the proposed rule renames them. A regulated water has two regulated areas associated with it: the flood hazard area and the riparian zone. Each of these areas is defined by different parameters. Under the existing rules, the engineering standards apply in the flood hazard area, while the environmental standards apply mainly in the riparian zone. For a given water, the flood hazard area and the riparian zone are

usually not coextensive. The flood hazard area of a water is determined by the location of floodwaters during the flood hazard area design flood. The riparian zone of a water is determined by the environmental characteristics of the water, such as the presence and/or location of the top of the bank and whether the water is environmentally sensitive based on the presence of trout, threatened or endangered species, or other factors. Thus, while there is always some overlap between these areas, their boundaries are rarely the same. See the description of N.J.A.C. 7:13-3 and 4 below for a more detailed discussion of the flood hazard area and riparian zone, respectively.

Proposed N.J.A.C. 7:13-1.1(b) lists the statutes that the Flood Hazard Area Control Act rules implement. In addition to the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq., the list includes the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., the Highlands Water Protection and Planning Act, N.J.S.A. 13:20-1 et seq., the Ninety-Day Construction Permits Law, N.J.S.A. 13:1D-29 et seq., and N.J.S.A. 13:1D-1 et seq., since the proposed rules implement aspects of these statutes as well.

Proposed N.J.A.C. 7:13-1.1(c) summarizes the general purpose for the rules. These proposed provisions replace existing N.J.A.C. 7:13-1.1(a), (c), (d) and part of (e), and have been reworded for clarity. Existing N.J.A.C. 7:13-1.1(b), which defines certain basic terms, is proposed to be recodified at proposed N.J.A.C. 7:13-1.2.

Proposed N.J.A.C. 7:13-1.1(d) contains a provision found in the second sentence of existing N.J.A.C. 7:13-1.1(e) indicating that, except in limited circumstances, the Department implements flood hazard control in New Jersey. The provision is reworded for clarity, with no change in meaning.

The substance of proposed N.J.A.C. 7:13-1.1(e) is relocated from the first portion of existing N.J.A.C. 7:13-5.1(a), which provides that a permit issued under this chapter is conditioned upon the permittee receiving all other necessary permits. The existing provision implies that a permit is not valid until all other approvals are obtained, which has caused confusion concerning the expiration date of the permit. For instance, some have questioned whether a permit is valid for five years from the date of issuance or from the date that all other approvals are obtained. The existing language has also caused some confusion in the enforcement of the provision. Due to the existing wording, the question has arisen as to whether work undertaken without the approval of another jurisdiction, such as a local government, constitutes a violation of this chapter as well. The proposed text clarifies these issues by simply stating that other approvals may be necessary and that it is the applicant's responsibility to obtain all such approvals.

Proposed N.J.A.C. 7:13-1.1(f) and (g) provide contact information, such as the address, telephone numbers and website address for the Division of Land Use Regulation and the Department's Office of Maps and Publications.

N.J.A.C. 7:13-1.2 Definitions

The proposal substantially reworks the definitions found in the existing rules. Some definitions are not continued because the proposed new rules do not use certain terms, and others are not continued because they are explained in the rule text rather than in the definitions. Most of the definitions that are continued are reworded for clarity and to add detail, and many new definitions are added. The proposed definitions, and how they relate to the existing definitions, are described below.

A new definition is proposed for "acid-producing soils." Although the existing rules use the

terms "acid-producing soil" and "acid-producing deposits," the terms are not clearly defined. The proposed definition will remedy this. Acid producing soils produce sulfuric acid when exposed to oxygen. Existing N.J.A.C. 7:13-3.7 and proposed N.J.A.C. 7:13-10.7 place restrictions on how excavation should be performed in areas containing these soils in order to minimize adverse environmental impacts resulting from their exposure.

A new definition is proposed for "actively farmed" to clarify which projects qualify for certain agricultural permits-by-rule at proposed N.J.A.C. 7:13-7.2(f) and the seven proposed general permits at N.J.A.C. 7:13-8.4. The definition is necessary to identify those farms that are under active agricultural use from those that have been abandoned and should not benefit from the proposed permits-by-rule and general permits. The five-year limit on fallow areas is taken from the definition of "established, ongoing farming, ranching or silviculture operation" from the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A-1.4.

A new definition is proposed for "anadromous water" to clarify those regulated waters of the State which the Department has determined contain anadromous fishery resources, for use at proposed N.J.A.C. 7:13-10.5(b), 10.5(d) and 11.7(e).

A new definition is proposed for "applicability determination" since this term is not used in the existing rules. An applicability determination is the equivalent of a jurisdictional determination under existing N.J.A.C. 7:13-1.3(g). Applicability determinations are discussed further in the description of proposed N.J.A.C. 7:13-5 below.

A new definition is proposed for "architect," to clarify that an architect who submits materials to the Department under this chapter must be licensed in New Jersey.

The proposed rule expands the existing definition of "bank" to clarify that this term includes the inclined sides of lakes, ponds and other waters.

The proposed rule expands the existing definition of "bed" to clarify that it includes the floor of a lake, pond or other water body.

A new definition is proposed for "building." Since specific requirements apply to buildings throughout the proposed rules, particularly under several permits-by-rule and general permits under proposed N.J.A.C. 7:13-7 and 8, as well as individual permits under proposed N.J.A.C. 7:13-11.5, a definition is necessary in order to differentiate a building, which is a structure intended for human occupation, from other structures that are not intended for human occupation. A separate definition for "habitable building" is also proposed, as discussed below, in order to differentiate buildings that are intended for regular human occupation from buildings that are not.

The proposed rule simplifies the existing definition of "Category One waters." The rule text from the Department's Surface Water Quality Standards at N.J.A.C. 7:9B is not continued and the proposed definition simply states that Category One waters are those which are designated as such by N.J.A.C. 7:9B.

The proposed definition of "Central Passaic Basin" is substantively the same as the existing definition. However, detail is added in the proposed rule for clarity and accuracy.

The proposed definition of "channel" provides more detail and accuracy than the existing definition. The term "linear topographic depression" is substituted for the term "watercourse" to more accurately describe the physical features of a channel. Further, under the existing rules the terms "bed," "bank" and "channel" are all defined in reference to each other, creating a circular set of definitions that do not adequately explain the concept of a channel. The proposed rule corrects this situation by creating a more descriptive definition of "channel" and retaining the substance of the existing definitions of "bed" and "bank."

The proposed definition of "channel modification" is substantively the same as the existing definition of "channelization." The existing rules alternately refer to "channelization" or "channel modification" to describe the reconfiguration or reconstruction of all or part of a channel by means of lining, encasing or moving the channel. The proposed rule defines all such work as "channel modification."

The proposed definition of "Commissioner" is the same as in the existing rules.

A new definition is proposed for "crawl space," to clarify provisions at N.J.A.C. 7:13-11.5(m), which require a crawl space to have certain characteristics in order to prevent habitation and to keep the crawl space open to floodwaters. The proposed limitations on crawl spaces are discussed fully in the summary for proposed N.J.A.C. 7:13-11.5(m) below.

The proposed rule includes a definition of "dam" in order to provide standards for dams under N.J.A.C. 7:13-11.11. The proposed definition refers to the definition of "dam" in the Department's Dam Safety Standards, N.J.A.C. 7:20. While the existing rules define "low dam" as part of the definition of "dam," the proposed rules define the two terms separately. In both the existing and proposed Flood Hazard Area Control Act rules, a dam raises the water surface by five feet or more, whereas a low dam is an impounding structure that raises the water surface by a lesser amount.

The term "delegated agency" is found in the existing rules but is not included in the proposed rule, because it is only used at proposed N.J.A.C. 7:13-1.4, where it is explained sufficiently so that no definition is necessary.

The proposed definition of "Department" is the same as in the existing rules.

A new definition is proposed for "Department delineation," for use in provisions regarding determining the limits of the flood hazard area. A Department delineation includes flood hazard

area and floodway limits, flood profiles, flood elevations and flood mapping.

A new definition is proposed for "documented habitat for threatened or endangered species." The definition is identical to that which is in the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A-1.4, and is used in proposed N.J.A.C. 7:13-10.6 where standards are set forth regarding impacts to threatened or endangered species and their documented habitats.

A new definition is proposed for "drainage area." The term "drainage area" is used throughout the existing rules but is defined in the Ninety-Day Construction Permits rules at N.J.A.C. 7:1C-1.5 rather than in the Flood Hazard Area Control Act rules. The term "drainage area" is used in the proposed rules to define jurisdiction and to establish review parameters. The proposed definition is identical to that which is in the Stormwater Management rules at N.J.A.C. 7:8-1.2.

A new definition is proposed for "drawing" to clarify what type of graphic representation of a project is required for certain applications under this chapter. The proposed definition will ensure that the Department receives sufficient detail when drawings are required as part of the submittal of an application.

A new definition is proposed for "dry flood-proofing" to clarify that flood-proofing can be either "wet" or "dry." A building that is wet flood-proofed has openings to allow water into the structure during a flood in order to balance the force of floodwaters on the exterior walls. A building that is dry flood-proofed is watertight up to a certain elevation so that no water will enter the building during a flood. The term "wet flood-proofing" is not used in the proposed rules and so is not defined.

A new definition is proposed for "emergency permit" to clarify what qualifies for this approval. Emergency permits are issued under both the existing and proposed rules. See the

description for proposed N.J.A.C. 7:13-12 below for a more detailed discussion on emergency permits.

A new definition is proposed for "engineer" to clarify that an engineer who submits materials to the Department under this chapter must be licensed in New Jersey.

The proposed definition of "erosion" is substantively the same as that in the existing rules, but has been reworded for clarity and to match the definition in the Stormwater Management rules at N.J.A.C. 7:8-1.2.

The proposed definition of "excavation" is substantively the same as that in the existing rules, but is reworded for clarity.

A new definition is proposed for "FEMA," so that this acronym can be used throughout the rules for brevity.

New definitions are proposed for "FEMA flood insurance study," "FEMA flood profile," "FEMA floodway map," and "FEMA flow rate," for use in provisions allowing use of various information provided by FEMA to determine the limits of a flood hazard area and/or floodway. A FEMA flood insurance study is a document provided by FEMA for a municipality, which includes various materials utilized in assessing the extent of flood hazard areas in that municipality. It often includes flood profiles that indicate the depth of flooding at various locations along waterbodies as well as mapping of the 100-year flood plain and floodway limits along these waterbodies. In many cases, a FEMA flood insurance study also includes hydrologic and hydraulic information related to the drainage area and associated rate and volume of flood flows in various waterbodies for different flood events. The information included in these studies is useful in determining the limits of jurisdiction under this chapter, under certain circumstances as described at proposed N.J.A.C. 7:13-3.4.

The proposed definition of "fill" is similar to that in the existing rules. The definition is very broad because the rules must address anything that will displace water or flood storage volume, or which could increase flood damage potential if it is dislodged by floodwaters. Therefore, the definition clarifies that items such as trash, vehicles and vegetation in planters, which might not be considered fill in other contexts, constitute fill for the purposes of this chapter.

The proposed definition of "fish habitat enhancement device" is substantively the same as the existing definition, but is reworded for clarity.

A new definition is proposed for "flood control project" for use in provisions throughout the rules. The rules generally aim to prevent projects that change the hydraulics of a water, as this can exacerbate flooding. However, a flood control project by definition causes hydraulic changes in order to reduce or prevent destructive flooding. Therefore, the rules treat these projects differently than others, and a definition is necessary to clearly indicate the class of projects that the rules seek to accommodate.

The proposed definition of flood control project additionally qualifies that a flood control project must be performed for the public benefit and undertaken by a public entity. It is the Department's experience that individual property owners and other private parties sometimes propose structural or topographic changes to a channel or flood hazard area in order to reduce flooding on their own property, and attempt to qualify the activity as a flood control project under this chapter. While such activities may reduce flooding on one particular site, the floodwaters displaced or redirected by the proposed structural or topographic changes can adversely impact neighboring properties. The Department's review of a flood control project must therefore take into account potential offsite impacts and often involves the review of an alternatives analysis that explores, among other aspects, condemning properties, relocating

structures, redirecting flood flows and other similar activities, which are beyond the ability of a private party to undertake. Therefore, in order to qualify for the special standards for a flood control project, which are outlined in detail at proposed N.J.A.C. 7:13-11.12, the project must be initiated by a public entity and designed to benefit the public.

The proposed definition of "flood fringe" is substantively the same as the existing definition.

A new definition is proposed for "flood hazard area." Although the existing rules use this term, the term is not defined. The existing rules use two different terms to identify the regulated flood plain along a water, resulting in some confusion. If the water has been delineated by the Department, the existing rules refer to the regulated floodplain of that water as a "flood hazard area." If the water is not Department delineated, the existing rules refer to the regulated floodplain as a "100-year floodplain." For simplicity, the distinction between delineated and non-delineated waters has been omitted from the terminology used for the regulated area. In the proposed rule, the term "flood hazard area" is used to denote the regulated flood plain adjacent to either a Department delineated or a non-delineated water. Every regulated water in the State with a drainage area of 50 acres or greater has a flood hazard area regulated under this chapter. The flood hazard area is the land, and the space above that land, which lies below the flood hazard area design flood elevation. Structures or vegetation on that land are considered "in" or "within" the flood hazard area. The definition also clarifies that flood hazard areas are either "tidal" or "fluvial" depending on whether flooding is controlled or influenced by tidal or fluvial (non-tidal) waters.

The proposed definition of "flood hazard area design flood" is expanded from that in the existing rules. Under the existing rules, the term "flood hazard area design flood" is used to refer to the flood used to calculate the flood hazard area on a Department delineated water. The term

"100-year flood" is used in the existing rules to denote the flood used to determine the regulated flood plain along a non-delineated water. Under the existing rules, these are the two types of the "regulatory flood." Under the proposed rule, a single term, "flood hazard area design flood," refers to the flood used to calculate the flood hazard area, regardless of whether the water is Department delineated or not. The delineation methods at proposed N.J.A.C. 7:13-3 indicate what the flood hazard area design flood will be under various circumstances, such as the presence of absence of State or Federal flood mapping, and the type of project being proposed. This change is similar to the change described above regarding the term "flood hazard area." The proposed definition of "flood hazard area design flood" is reworded for clarity, and to reflect the change in its use described above.

A new definition is proposed for "flood hazard area design flood elevation." This term, utilized in provisions for determining the limits of the flood hazard area, is defined as the peak water surface elevation during the flood hazard area design flood.

A new definition is proposed for "Flood Hazard Area Technical Manual," to clarify provisions throughout the rules which refer the reader to this manual. The Flood Hazard Area Technical Manual contains application checklists, guidance for preparing applications and instructions on how to perform the calculations required for some applications.

The proposed definition of "floodway" has the same meaning as the definition in the existing rules, but is reworded for clarity, and more detail is added in order to better describe the land area encompassed by a floodway.

A new definition is proposed for "freshwater wetlands," which refers to the definition of this term in the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A-1.4. This term is used in this chapter with reference to the creation of freshwater wetlands in stormwater management

basins, freshwater wetlands restoration under general permit 2D at proposed N.J.A.C. 7:13-8.4(c)4, and various other regulated activities throughout the chapter that may concurrently impact freshwater wetlands and, therefore, require approvals under N.J.A.C. 7:7A in addition to this chapter.

Definitions for "FW," "FW1 waters" and "FW2 waters" are found in the existing rules since these terms are used to determine the width of near-stream vegetation that is protected under existing N.J.A.C. 7:13-1.3(a)3. However the proposed new rules do not refer to these surface water classifications and so there is no need to define them.

A new definition is proposed for "general permit." The proposed rules create 16 general permits for various minor activities as described under proposed N.J.A.C. 7:13-8. Applications under general permits are eligible for expedited review and require the submittal of less material than those for individual permits. A certification from an engineer is required, but an authorization under a general permits does not require public notice and general permits 1 and 6 require no application fee.

A new definition is proposed for "grace period." A grace period is the period of time afforded under the Grace Period Law, N.J.S.A. 13:10-125 et seq., for a person to correct a minor violation in order to avoid imposition of a penalty that would otherwise be applicable for such violation.

A new definition is proposed for "grading" because this is a regulated activity under proposed N.J.A.C. 7:13-2.4. "Grading" is defined as the movement of soil or fill on the surface of the ground by humans, so as to change the topography of the land. This distinguishes grading from erosion, which is the detachment and movement of soil or rock fragments by water, wind, ice or gravity.

A new definition is proposed for "habitable building" to identify the buildings that are subject to the lowest floor requirements at proposed N.J.A.C. 7:13-11.5. A habitable building is a building that is intended for regular human occupation, and several examples are provided.

A proposed change to the existing definition of "hazardous material" narrows the definition and renames it "hazardous substance." The existing definition includes "pollutants as defined by the New Jersey Water Pollution Control Act." However, the definition of "pollutants" in the New Jersey Water Pollution Control Act is very broad and includes many materials that are not hazardous. Therefore, it is inappropriate to include all pollutants in the definition of hazardous substances for the purposes of this chapter. In contrast, the proposed definition refers to the definition of hazardous substances in the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11, which includes materials that will pose a significant risk if stored or placed within a flood hazard area. The proposed definition is used at proposed N.J.A.C. 7:13-7.2(e) and 11.17 where it refers to the storage of hazardous and non-hazardous substances.

A new definition is proposed for "hazardous waste facility" for use at proposed N.J.A.C. 7:13-7.2(e)5 and 11.17, where standards are set forth for the operation and/or expansion of such facilities in flood hazard areas and riparian zones.

A new definition is proposed for "Highlands Preservation Area" which refers to the area of the State defined as such by the Highlands Water Protection and Planning Act at N.J.S.A. N.J.S.A. 13:20-7(b)1.

The proposed definition of "hydraulic capacity" is substantively the same as the existing definition of "flood carrying capacity." Whereas the term "flood carrying capacity" generally relates to the ability of a natural channel to convey flood flows, the term "hydraulic capacity" more accurately describes the ability of any natural or man-made channel, conveyance structure

or water control structure to pass water under various flow conditions.

A new definition is proposed for "impervious surface." This definition is slightly broader than the definition in the freshwater wetlands rules at N.J.A.C. 7:7A-1.4, and is identical to the definition in the Stormwater Management rules at N.J.A.C. 7:8-1.2 except that some examples of impervious surfaces are also included. The freshwater wetlands rules use this term primarily as one of the criteria for classifying a freshwater wetland as ordinary, and, therefore, define the term narrowly. The proposed Flood Hazard Area Control Act rules, however, use this term to determine when stormwater management requirements are triggered under proposed N.J.A.C. 7:13-11.2, and also limit the amount of impervious surface that may be placed while conducting certain activities permitted-by-rule under proposed N.J.A.C. 7:13-7. The amount of impervious surface created by a project therefore affects several aspects of the application and review process.

A new definition is proposed for "individual permit." An individual permit is the Department's written authorization to undertake a regulated activity after the Department has conducted a project-specific review according to the standards at N.J.A.C. 7:13-9, 10 and 11. The proposed chapter authorizes regulated activities in three ways: permits-by-rule, general permits and individual permits. Permits-by-rule are proposed at N.J.A.C. 7:13-7 and do not require prior written approval. General permits are permits whose terms are set forth in the rules for certain regulated activities described at proposed N.J.A.C. 7:13-8. They do require prior written approval but, due to their minor nature and less potential for adverse impacts to flooding and the environment, do not receive as extensive of a review as an individual permit.

A new definition is proposed for "invert," which is used to describe the lowest point of a channel, pipe, culvert or other structure with an opening such as a flood vent. For the purposes of

this chapter, the invert of one object is often compared with the position of another. For instance, proposed N.J.A.C. 7:13-7.2(c)3 requires that a utility line being jacked beneath a stream channel must be constructed so that the top of the pipe is at least four feet below the invert of the channel in order to protect the integrity of the channel. Another example, at proposed N.J.A.C. 7:13-11.5(p), requires the invert of a flood vent in the wall of a building to be no more than 12 inches above the adjoining exterior grade, so that the flood vent operates properly.

A new definition is proposed for "jacking," which is the placement of an underground pipe or utility line beneath a channel by means of horizontally pushing, drilling or otherwise forcing through the earth below the channel in such a way that the channel is not disturbed. The term is used to authorize the jacking of a utility line under a channel under the permit-by-rule at proposed N.J.A.C. 7:13-7.2(c)3.

A new definition is proposed for "land surveyor," to clarify that a land surveyor who submits materials to the Department under this chapter must be licensed in New Jersey.

A new definition is proposed for "lawfully existing" to describe a fill, structure or use which exists in accordance with all other laws, and which either predates the Flood Hazard Area Control Act or was constructed and/or undertaken in accordance with the Act and this chapter. The term is used to describe a fill, structure or use that is acceptable because it was authorized under the rules that applied at the time the fill, structure or use initially occurred, or else because the fill, structure or use existed before the Act and rules were in place and was, therefore, not subject to certain restrictions that may have been established afterward.

A definition is proposed for "low dam" for use in provisions governing dams at N.J.A.C. 7:13-11.11. The definition is substantively the same as the existing definition of this term, which is included in the existing definition of "dam."

A new definition is proposed for "low-flow aquatic passage" to describe the ability of aquatic species to travel up and down a watercourse without impediment during low-flow conditions. The proposed new rules continue the existing requirement that bridges, culverts and other man-made alterations to watercourses do not interfere with low-flow aquatic passage. During dry periods of the year, water typically collects in small rivulets in the stream bed, thereby permitting aquatic species to migrate upstream and downstream in search of food or for spawning. Man-made structures with very flat bottoms eliminate this passage and form a barrier to aquatic species, thereby causing aquatic species to be trapped on one side of the structure until flow in the stream increases again.

A new definition is proposed for "lowest floor" for purposes of N.J.A.C. 7:13-11.5 that impose elevation requirements on the lowest floor of a building. "Lowest floor" is generally used to describe the enclosed area on the bottom floor (or basement) of a building that can be regularly occupied by humans. Existing N.J.A.C. 7:13-2.13 and proposed N.J.A.C. 7:13-11.5 set forth certain elevation requirements for the lowest floor of a building in flood hazard areas. Enclosed habitable areas are generally not allowed below the flood hazard area design flood elevation. However, cases exist where an area beneath the "lowest floor" is either partially or completely enclosed for various reasons other than habitation, such as to create a crawl space for storage or a small garage beneath the actual habitable area of the building. Proposed N.J.A.C. 7:13-11.5(m), (n) and (o) describe three cases where limited enclosures are permitted beneath the habitable area of the building which, if constructed as prescribed, are not themselves considered to be the "lowest floor" of the building.

New definitions are proposed for the six methods of determining the flood hazard area design flood elevation, and in some cases for determining the floodway limit. The methods are

numbered from 1 through 6 and include one method based on Department flood mapping, three methods based on FEMA flood mapping, one method that approximates the flood hazard area based on the chart in proposed Appendix 1, and one method by which the applicant submits detailed engineering calculations. These methods are discussed in further detail under the description for proposed N.J.A.C. 7:13-3.

A new definition is proposed for "NGVD" for use throughout the rules. NGVD stands for the national geodetic vertical datum of 1929, which is the technical term used by land surveyors to describe the elevation of a feature relative to a universal reference datum, roughly equal to sea level.

The proposed definition of "non-trout water" is substantively the same as the definition in the existing rules. The proposed definition clarifies that a non-trout water is one that is not classified as trout production, trout maintenance or trout stocked (which are also defined in this section).

A new definition is proposed for "NRCS" or "Natural Resources Conservation Service" for use throughout the rules. The NRCS is an agency of the U.S. Department of Agriculture (USDA), which assists farmers in soil conservation and agricultural management practices.

The proposed definition of "obstruction" is simplified for clarity and brevity. A clause including materials that could be swept downstream is not continued from the existing definition, because it could be interpreted to include materials placed outside of an area regulated by this chapter.

The proposed definition of "100-year flood" is clarified to explain that it is flooding that is expected to occur from a 100-year storm, which has a one percent probability of being equaled or exceeded within a given drainage area each year. This term is used throughout the rules and is

the basis for the flood hazard area that is regulated under this chapter.

A new definition is proposed for "permit-by-rule." A permit-by-rule is a flood hazard area permit for which the terms and conditions are established in a promulgated rule and for which no prior application or approval from the Department is necessary in order to undertake the particular regulated activity. The Department is proposing 46 permits-by-rule for various minor activities at N.J.A.C. 7:13-7 and discussed further below in the summary for Subchapter 7.

The proposed definition of "person" is substantially the same as the existing definition, but is clarified and made consistent with the definition of the term in other Department rules.

A new definition is proposed for "private residence" for use throughout the rules, particularly under several permits-by-rule at proposed N.J.A.C. 7:13-7, general permits 6 and 7 at proposed N.J.A.C. 7:13-8.8 and 8.9, restrictions on riparian zone disturbance at proposed N.J.A.C. 7:13-10.2 and elevation requirements at proposed N.J.A.C. 7:13-11.5. The Department recognizes that the unique circumstances associated with the construction of a one or two-family dwelling warrant special consideration with regard to access and safety, as well as certain allowances from some of the more strict requirements of the chapter.

A new definition of "private roadway" is proposed for use in provisions that provide for different standards applicable to private and public roadways as described in detail below in this Summary. A private roadway includes any access road that is not maintained by a public entity even though the public may be free to use such roadways. For instance, an access road that serves a commercial or residential development, but which has not been dedicated to a public entity, is a private roadway for the purposes of this chapter.

A new definition is proposed for "public building," for use in defining regulated activities at proposed N.J.A.C. 7:13-2.4(a)6, in provisions requiring minimum floor elevations at proposed

N.J.A.C. 7:13-11.5, and in requirements for access roadways at N.J.A.C. 7:13-11.6. The definition lists buildings that should be accessible and safe during times of flooding in order to protect public safety. These are generally the same types of buildings as are found in existing N.J.A.C. 7:13-2.13(a)3 and 4.

A new definition is proposed for "public roadway" which is used throughout the rules. The Department recognizes that public roadways require a degree of regulatory oversight distinct from private roadways, given the public's reliance on the safety of public roadways during floods as well as various circumstances related to expanding and maintaining existing public roadways.

A new definition is proposed for "reconstruct" for use in proposed provisions which determine whether an activity is regulated, and to identify activities covered by certain proposed permits-by-rule and general permits. Existing structures require occasional maintenance and repair, and portions of structures sometime need to be replaced or altogether reconstructed. For instance, a portion of a house may be damaged by fire and need to be reconstructed, or a portion of a retaining wall could collapse and thus require the replacement of a section of wall. A change in the dimensions and/or location of a structure situated in a flood hazard area can potentially affect flooding by displacing flood storage or by obstructing flow. It is therefore necessary to draw a distinction between those maintenance activities which alter the dimensions or location of a structure from those which do not. It is proposed to define "reconstruct" as a maintenance activity that alters the size, shape or location of a structure, whereas a "repair," as discussed below, does not alter these characteristics. Due to the potential impacts that reconstruction can cause, different standards apply in this chapter to the reconstruction of a structure than to the repairing of a structure. Furthermore, a limit is placed on the amount of the structure that can be reconstructed or repaired. As the amount of a structure being replaced increases, there is also an

increased opportunity to bring the structure into compliance with current building codes. If a large portion of a house is destroyed by a flood, for example, it is reasonable to require that the lowest floor of the reconstructed house be elevated above the flood hazard area elevation. However, if only a small portion of a house is damaged or minor repairs are being proposed which do not result in the replacement of a significant portion of the structure, it would not be reasonable to require the rest of the structure to be upgraded to meet current building codes. Therefore, any activity that results in greater than 50 percent of the structure being replaced is considered reconstruction, regardless of whether the dimensions or location of the structure are being altered.

A new definition is proposed for "regulated activity" which simply refers to the expanded definition at N.J.A.C. 7:13-2.4. Rather than constantly restate the activities that are subject to the rules, the proposal defines this term and then uses the term throughout.

A new definition is proposed for "regulated area," to describe the areas that are subject to this chapter. The flood hazard area and the riparian zone comprise the regulated areas along regulated waters, as described at N.J.A.C. 7:13-2.3.

A new definition is proposed for "regulated water" to describe the waters that are subject to this chapter. Regulated waters are described at proposed N.J.A.C. 7:13-2.2.

A new definition is proposed for "repair," in order to distinguish it from "reconstruct." "Repair" involves restoration of a structure with the replacement of less than 50 percent of the existing structure. Furthermore, the size, shape and location of the structure may not be altered under a "repair" as proposed. If more than 50 percent of the existing structure is replaced and/or if the dimensions or location of the structure are altered, the proposed rule defines such activities as a reconstruction rather than a repair.

As noted in the summary for "reconstruct" above, and based on the Department's experience, the proposed 50 percent threshold is necessary in order to allow a reasonable level of restorative work on moderately damaged structures, while preventing badly damaged structures, which would otherwise not be permitted to be constructed at all, from being replaced without Department oversight, and thereby circumventing the requirements of the rules. For example, while the Department recognizes that it is reasonable to allow a homeowner to repair a moderately damaged structure, the reconstruction of buildings in a floodway or with basements or lowest floors below the flood hazard area design flood elevation should not be encouraged. The reconstruction of such buildings warrants a closer review. Accordingly, reconstruction of a building in the floodway would require a permit under this chapter. In contrast, the repair of a lawfully existing structure is permitted-by-rule under proposed N.J.A.C. 7:13-7.2(b)1, regardless of where the structure is located, since "repair" is limited to activities that do not alter the dimensions and location of the structure. This language is proposed because any activity that meets the definition of "repair" as proposed could not adversely impact flooding or the environment. However, reconstruction activities could adversely impact flooding or the environment and therefore require a permit.

This proposed threshold also reflects a similar concept used under local building codes, whereby rebuilt structures must meet aspects of the code if restoration work exceeds certain percentages of the replacement value of the structure. For habitable buildings, the percentage of replacement is therefore determined from the cost of the repair compared with the replacement value of the building, which is consistent with the methodology used by local building codes. For all other structures, the percentage of replacement is based on the area of the structure being replaced, since the replacement cost for the entire structure can be difficult to estimate in some

cases (such as a retaining wall, stormwater pipe or utility line, for instance) and is not generally a determining factor for such repairs.

A new definition is proposed for "revision" in order to describe the document issued by the Department to revise a permit, verification or Department delineation. The term used for this in the existing rules is "modification" and is sometimes referred to as a "modification-in-detail."

A new definition is proposed for "riparian zone." A "riparian zone" is the land and vegetation both within a regulated water and within either 50 feet, 150 feet or 300 feet from the top of bank of a regulated water, as described in the proposed rules at N.J.A.C. 7:13-4.1. The width of the riparian zone is expanded from the area regulated under the existing rules at N.J.A.C. 7:13-1.3(a)2 and 3, which extends either 25 feet or 50 feet from the top of bank.

A new definition is proposed for "sediment." Although the term is used throughout the existing rules, it is not defined. The proposed definition is identical to that in the Stormwater Management rules at N.J.A.C. 7:8-1.2.

A new definition is proposed for "site." The new definition clarifies that multiple tax lots can together comprise a single site. This prevents an applicant from circumventing a limit that applies per site by merely subdividing a property.

A new definition is proposed for "soil bioengineering," for purposes of the general permit which authorizes the use of soil bioengineering for bank stabilization by the USDA Natural Resource Conservation Service (NRCS) under proposed N.J.A.C. 7:13-8.4(c)1 and also for purposes of individual permit requirements at proposed N.J.A.C. 7:13-11.3(b) and 11.14(c). Soil bioengineering is a method of bank stabilization that utilizes live plants, such as cut, un-rooted branches, as the main structural component. Other natural materials such as rocks and tree stumps can also be used to augment the stability of the vegetation. The definition incorporates by

reference section 650.1601(d)(2) of Chapter 16 in the NRCS Engineering Field Handbook published in December 1996, which describes in detail a number of proven soil bioengineering methods. Should the handbook be updated after this proposal is adopted, the Department will decide at that time whether to incorporate the new handbook into these rules and will promulgate an amendment to the definition, if appropriate.

Clarifying changes are proposed to the definition of "Soil Conservation District." The Department has found that there is often confusion between the Soil Conservation Districts, which are State agencies, and the Natural Resources Conservation Service, which is a Federal agency. This proposed definition will help to clarify the role and functions of the Soil Conservation Districts and is similar to the definition of the same term in the Freshwater Wetlands Protection Act rules.

The proposed definition for "solid waste" is reworded from the existing definition to make the definition consistent with, and referencing, N.J.A.C. 7:26-1.6 in the Solid Waste rules where the term is further defined.

A new definition is proposed for "solid waste facility" for use at proposed N.J.A.C. 7:13-7.2(e)6 and 11.18. The proposed definition is consistent with the definition of the same term in the Solid Waste Management rules.

A new definition is proposed for "stormwater," for use in provisions throughout the proposed rules. The proposed definition is identical to the definition of the same term in the Stormwater Management rules at N.J.A.C. 7:8-1.2.

A new definition is proposed for "stormwater management basin" which includes descriptions of certain types of basins that are used for stormwater management. The existing rules include design and construction standards for various types of basins, whereas the proposed

rules simply refer to the standards at N.J.A.C. 7:8. Stormwater management basins can therefore be described collectively in the proposed rules since the term is only used in cases where the construction of a basin of any kind is referenced. The proposed definition is substantively the same as that in the Stormwater Management rules at N.J.A.C. 7:8-1.2, with some added detail for clarity appropriate for this chapter and for use at proposed N.J.A.C. 7:13-11.2.

A new definition is proposed for "stormwater runoff," for use in provisions throughout the proposed rules related to requirements for treatment and management of runoff generated by regulated activities. The existing rules generally use the term "runoff" to describe stormwater runoff and, although used throughout the existing rules, it is not defined. The proposed definition is identical to that in the Stormwater Management rules at N.J.A.C. 7:8-1.2.

The proposed definition for "structure" is modified from the existing definition to add detail, and a clarification that certain soil bioengineering materials can constitute a structure.

A new definition is proposed for "suitably anchored." The terms "properly anchored" and "anchored" are used throughout the existing rules but are not defined. The proposed definition provides that, to be considered suitably anchored, a structure must be erected in accordance with the flood-resistant construction standards of the International Building Code which, among other requirements, include standards intended to enable structures to resist damage and movement during flood conditions. A structure or object that is not suitably anchored is considered to be unsecured material and is subject to the requirements at proposed N.J.A.C. 7:13-11.16, unless permitted-by-rule at proposed N.J.A.C. 7:13-7.2.

A new definition is proposed for the term "temporary." This term is used throughout the existing rules but is not defined. The proposal defines "temporary" as lasting six months or less. This is consistent with the definition of the term "temporary disturbance" in the existing

Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A-1.4.

The proposed definition of "threatened or endangered species" is substantively the same as in the existing rules, but is reworded for clarity.

The proposal adds detail and makes minor clarifications to the existing definitions of "trout maintenance water," "trout production water" and "trout stocked water" with no substantive changes.

A new definition is proposed for "unsecured material" for use in proposed N.J.A.C. 7:13-7.2(e), which establishes a permit-by-rule for the storage of unsecured materials in certain cases, and proposed N.J.A.C. 7:13-11.16, which introduces permit standards for such storage not covered by the permit-by-rule.

A new definition is proposed for "USDA" for use throughout the rules.

A new definition is proposed for "USGS quad map." USGS quad maps are included in application requirements throughout the proposed rules. The definition is substantively the same as the definition of the same term in the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A-1.4.

A new definition is proposed for "utility line." The existing rules use the term "utilities" extensively, but does not define it, although a list of types of underground utilities is included at existing N.J.A.C. 7:13-2.10(a). The proposed definition includes pipes, cables, lines and wires and their support structures, but does not include a tower that does not support a linear utility line. For example, a cell phone tower is not a utility line. This distinction is important because the special requirements for utility lines are designed to recognize the unique problems associated with the linear nature of utility lines. For example, a support tower for a wire must be placed within a certain distance of the next support tower, which can make it more difficult to

situate the tower outside of a regulated area. However, if the tower is not needed to support a wire but merely broadcasts a signal, it can more easily be moved to a location outside of a regulated area.

A new definition is proposed for "verification." A verification under the proposed rules is a document issued by the Department to verify the limits of the regulated areas on a site. See the description of proposed N.J.A.C. 7:13-6 for a full explanation of this new option.

The proposal replaces the existing definition of "watercourse" with a new definition of "water." The existing rules regulate watercourses, which are defined as "a path which conveys surface water runoff." While common usage of the word watercourse implies a linear feature, the chapter has authority over the flood hazard area around non-linear features such as lakes and ponds, which may or may not be located along a watercourse. Therefore, the use of the word watercourse has led to some confusion. There has also been confusion over whether storm sewers are regulated features, since a storm sewer is a "path which conveys surface water runoff." To address these problems, the term "watercourse" has been replaced with "water," which is broadly defined to include any collection of surface water as well as the path or depression through which water flows or is confined. "Water" includes surface water features that have been piped, but specifically excludes storm sewers.

A new definition is proposed for "water control structure." It is the Department's experience that many structures placed within or adjacent to a channel affect flooding, regardless of whether they were intended to have such an effect. The existing rules sometimes refer to such structures as water control structures, but in other provisions refer to "a bridge, culvert, or dam which acts as a water-control structure." Therefore, the proposed rule includes a definition of "water control structure" to improve clarity and consistency throughout the rules.

A new definition is proposed for "water surface elevation" for use throughout the rules. The water surface elevation is the height of the surface of the water in a regulated feature during a given condition or flood event, measured in feet NGVD, which is a standard reference point roughly equal to sea level.

N.J.A.C. 7:13-1.3 Types of permits and approvals

Proposed N.J.A.C. 7:13-1.3(a) lists the permits and approvals provided for under the proposed Flood Hazard Area Control Act rules. This is a new provision that does not appear in the existing rules. The eight permits and approvals are applicability determinations, verifications, permits-by-rule, general permit authorizations, individual permits, emergency permits, revisions and transfers. Applicability determinations are called jurisdictional determinations under the existing rules, but have been renamed in the proposed rules at N.J.A.C. 7:13-5 to more accurately reflect their purpose. Verifications, permits-by-rule, general permits and transfers are not part of the existing rules. They are discussed in more detail in the summary of proposed N.J.A.C. 7:13-6, 7, 8 and 14.1 below, respectively. An individual permit is a flood hazard area permit as described in the summary of proposed N.J.A.C. 7:13-9, 10 and 11 below. Emergency permits are described in the summary of proposed N.J.A.C. 7:13-12, and revisions, which replace modifications in the existing rules, are described in the summary of proposed N.J.A.C. 7:13-13.

The permits issued under the existing rules are called stream encroachment permits. However, this term implies the existence of both a stream and an encroachment into the stream, neither of which are necessarily aspects of an activity regulated under this chapter. The proposed term "flood hazard area permit" is a more descriptive and accurate term that better reflects the subject matter of the Flood Hazard Area Control Act.

Proposed N.J.A.C. 7:13-1.3(b) explains that the permits and approvals under this chapter are available only to the owners of a site, an authorized agent of the owners, or to a government agency that is proposing work within a right-of-way or easement on that site. This proposed subsection also requires that if work is performed in a right-of-way or easement, by someone other than the owner of the right-of-way or easement, written consent from the owners of the right-of-way or easement must be provided. A similar requirement is contained in existing N.J.A.C. 7:13-4.1(h).

Proposed N.J.A.C. 7:13-1.3(c) provides that the rules in effect at the time a complete application is received under this chapter will govern the review of that application. This is necessary since there has been some confusion in cases where a rule change has occurred during the Department's review of an application. An exception is provided, however, for cases where both the Department and the applicant agree in writing that the newer rules should govern, such as in cases where an amendment will enable a proposed activity to qualify for a general permit that would allow increased efficiency for the applicant without creating adverse flooding or environmental impacts, and the Department consequently has no objection.

Proposed N.J.A.C. 7:13-1.3(d) is a new provision that requires an applicant to make the Department aware of any facts related to a site or project that would be relevant to the Department's review of the application. This provision is necessary in order to clarify that purposely withholding relevant information from the Department, as well as providing knowingly false information to the Department, is a violation of the chapter and may subject the perpetrator to enforcement action, as described in N.J.A.C. 7:13-19.

Proposed N.J.A.C. 7:13-1.3(e) provides that a Department decision under this chapter does not obligate the Department to approve or deny any other application, whether an application to

the Division of Land Use Regulation, or an application to another program in the Department. This is found in the second portion of existing N.J.A.C. 7:13-5.1(a), and is reworded in the proposed rule for clarity, with no change in meaning. For example, a particular project may meet the provisions of this rule, and therefore be approved under a flood hazard area permit, while at the same time not meet the provisions of the Freshwater Wetlands Protection Act rules. Applicants should understand that the approval of a flood hazard area permit does not in any way indicate that the project is acceptable under other rules, statutes and jurisdictions.

N.J.A.C. 7:13-1.4 Delegation of authority

Proposed N.J.A.C. 7:13-1.4 replaces existing N.J.A.C. 7:13-5.3, and is substantively similar to the existing section, except that the proposed rule imposes two additional limits and also clarifies the process by which the Department will review an application for delegation. Both the existing and proposed rules implement the provisions under the Flood Hazard Area Control Act at N.J.S.A. 58:16A-55.6, which allows the delegation of the Department's authority under this chapter to county governing body in certain cases. Whereas the existing and proposed rules prohibit a county from reviewing an application submitted by a State agency, the proposed rule adds a further requirement that does not allow a delegated agency to approve an application for a regulated activity proposed by the delegated agency itself, in order prevent conflicts of interest for the delegated agency. In addition, the proposed rule does not allow a delegated agency to approve an application involving a hardship exception. It is important that any exceptions to the normal requirements of the rules only be granted by the Department to ensure fairness and consistency throughout the State.

N.J.A.C. 7:13-1.5 Creation of a county water resources association

Proposed N.J.A.C. 7:13-1.5 contains information found in existing N.J.A.C. 7:13-5.2, which provides for the creation of a county water resources association. The text has been reworded for clarity with no change in meaning. Both the existing and proposed rules implement the provisions under the Flood Hazard Area Control Act at N.J.S.A. 58:16A-55.5, which allows for the creation of a county water resources association in order to perform certain functions as described in the statute.

N.J.A.C. 7:13-1.6 Liberal construction

Proposed N.J.A.C. 7:13-1.6, which provides that the chapter is to be liberally construed to fulfill the intent of the Act, is equivalent to existing N.J.A.C. 7:13-1.4. The text has been reworded for clarity with no change in meaning.

N.J.A.C. 7:13-1.7 Severability

Proposed N.J.A.C. 7:13-1.7 is equivalent to existing N.J.A.C. 7:13-1.7. The text has been reworded for clarity with no change in meaning.

Subchapter 2. Extent of Regulatory Authority

N.J.A.C. 7:13-2.1 Permit requirement

Proposed N.J.A.C. 7:13-2.1(a) sets forth the requirement that anyone undertaking a regulated activity in a regulated area must do so in accordance a flood hazard area permit. The rule makes clear that enforcement action, under N.J.A.C. 7:13-19, may be taken against any

person responsible for undertaking a regulated activity not in conformance with one of the flood hazard area permits listed at N.J.A.C. 7:13-2.1(b), except as provided at proposed N.J.A.C. 7:13-2.1(c).

Proposed N.J.A.C. 7:13-2.1(b) lists the flood hazard area permits under which persons may conduct regulated activities. They are a permit-by-rule pursuant to N.J.A.C. 7:13-7; an authorization under a general permit pursuant to N.J.A.C. 7:13-8; an individual permit pursuant to N.J.A.C. 7:13-9, 10 and 11; an emergency permit pursuant to N.J.A.C. 7:13-12; or a CAFRA or waterfront development permit, pursuant to N.J.A.C. 7:7 and N.J.A.C. 7:7E.

Proposed N.J.A.C. 7:13-2.1(c) sets forth three circumstances where an approval under proposed N.J.A.C. 7:13-2.1(b) is not required.

Proposed N.J.A.C. 7:13-2.1(c)1 describes a case where the regulated activity has already been approved under a valid stream encroachment permit that was accepted by the Department for review prior to the effective date of these new rules. Similarly, proposed N.J.A.C. 7:13-2.1(c)2 describes a case where the regulated activity has already been approved under a valid CAFRA or waterfront development permit that was accepted by the Department for review prior to the effective date of these new rules. In both situations, the Department has already performed an extensive review of the project under the flood hazard area standards that were in place at the time the application was accepted by the Department for review. The Department does not believe that it is reasonable to retroactively apply the proposed standards of this chapter to projects that have already been approved under N.J.A.C. 7:7, N.J.A.C. 7:7E and/or N.J.A.C. 7:13.

Proposed N.J.A.C. 7:13-2.1(c)3 addresses the situation where a regulated activity was not subject to the requirements of this chapter prior to the effective date of these new rules, but will

become subject to the requirements of this chapter after these new rules are effective. For example, a project could be situated outside the flood hazard area and existing stream buffers onsite but, upon the effective date of the new, wider riparian zones in this proposal, be situated within a riparian zone and therefore be subject to this chapter. Another example is a project that lies in a flood hazard area of a water that is currently exempt at existing N.J.A.C. 7:13-1.3(b) and which also does not require a coastal permit. Upon adoption of these new rules, all flood hazard areas currently exempt will become regulated and the project would need an approval under this chapter if it is a regulated activity.

However, as with the situations described in the discussion of proposed paragraphs (c)1 and 2 above, the Department does not believe that it is reasonable to retroactively apply the proposed standards of this chapter to certain projects that satisfied requirements that were in place at the time the activity was undertaken. Two cases are therefore presented in which the Department will not require an approval listed at proposed N.J.A.C. 7:13-2.1(b). In the first case, described at proposed N.J.A.C. 7:13-2.1(c)3i, the activity has already been approved under a valid final municipal building or construction permit prior to the adoption date of these new rules. In such a case, the project has likely already begun construction or else will begin construction in the near future, and a significant investment has likely been made by the applicant. Furthermore, in order to receive a final municipal building or construction permit, the project would need to have been reviewed by a local government agency, which necessarily includes a review under the UCC and its accompanying flood codes. In the case described at proposed N.J.A.C. 7:13-2.1(c)3ii, the regulated activity does not require a municipal building or construction permit, but certain construction activities were already completed onsite prior to the adoption date of these new rules. This provision address situations such as State or county roadway projects and other

activities that do not require a municipal building or construction permit. In such a case, the Department will not require an approval listed at proposed N.J.A.C. 7:13-2.1(b), since a significant investment has been made by the applicant. Three construction activities are listed which qualify a project under this paragraph. The foundation for at least one building or structure, all of the subsurface improvements for a roadway, or the installation of all of the bedding materials for a utility line must be completed onsite prior to the adoption date of these new rules to qualify. This provision is similar to parallel provisions in the Coastal Permit Program rules at N.J.A.C. 7:7-2.1(c)2iii since, in the Department's experience, these construction activities are an appropriate gauge of the level of completion of on ongoing project.

Proposed N.J.A.C. 7:13-2.1(d) establishes that a qualifying approval listed at N.J.A.C. 7:13-2.1(c) above is valid to satisfy the permit requirement of this section only if the project has not been significantly modified subsequent to its approval. If one or more of four proposed criteria are met, the Department will consider the project to be substantively revised and therefore subject to the proposed standards of this chapter. The proposed criteria are self explanatory; increased disturbance to the riparian zone or increases in flood storage displacement both require Department oversight, given the extensive changes proposed under these new rules on both of these areas. Furthermore, any revision that results in new regulated activities onsite that have not been reviewed by the Department under a flood hazard area or coastal permit, or any revision that would change the land use or alter the basic purpose and intent of the project, also requires Department oversight.

N.J.A.C. 7:13-2.2 Regulated waters

Proposed N.J.A.C. 7:13-2.2 sets forth the waters of New Jersey that are subject to the

requirements of the chapter. This information is found in the existing rules at N.J.A.C. 7:13-1.3(b)1, 1.3(c), 1.3(d) and 2.1(a) and has been reorganized and rewritten to encompass a larger set of waters than the existing rules.

Existing N.J.A.C. 7:13-1.3(b)1ii names sections of 15 tidal watercourses, as well as a set of tidal watercourses that drain into Raritan Bay, which are not subject to the requirements of N.J.A.C. 7:13. These waters had been exempted from the Flood Hazard Area Control Act rules because of the Department's intent that any potential flooding impacts along these waters would be effectively reviewed under the Coastal Zone Management rules at N.J.A.C. 7:7E-3.25, which governs coastal permit activities in flood hazard areas. However, as discussed in the summary for proposed amendments to N.J.A.C. 7:7E-3.25 above, the existing coastal rules do not provide an equivalent level of flood protection as N.J.A.C. 7:13. Furthermore, since the tidal waters identified at existing N.J.A.C. 7:13-1.3(b)1ii are not subject to the requirements of N.J.A.C. 7:13, the riparian zone along these waters is currently unprotected. The Department is therefore proposing to create a new special area rule at N.J.A.C. 7:7E-3.26 for riparian zones along the same set of waters regulated under N.J.A.C. 7:13. The proposed amendments at N.J.A.C. 7:7E-3.25, and the promulgation of the riparian zone special area rule at N.J.A.C. 7:7E-3.26, will ensure that development in tidal and fluvial flood hazard areas receives appropriate oversight.

Projects for which a coastal permit has been obtained will not require a separate flood hazard area permit. This is currently the case in tidal areas, pursuant to N.J.A.C. 7:13-1.3(d). However, since the standards at N.J.A.C. 7:13 will be applied under N.J.A.C. 7:7E-3.25 and 3.26 to any project under review for a coastal permit, whether fluvial or tidal, proposed N.J.A.C. 7:13-2.1(b) provides that obtaining a coastal permit in a flood hazard area satisfies the permit requirements under this chapter. In some cases, a project may not require a coastal permit, and so

a flood hazard area permit-by-rule is established at proposed N.J.A.C. 7:13-7.2(b)6 for certain projects that the Department has determined will not adversely impact flooding, the environment or public safety. (See the summary for proposed N.J.A.C. 7:13-2.1(b) and 7.2(b)6 for further discussion).

As a result of the proposed elimination of the exemptions for certain tidal waters, regulated activities (described at proposed N.J.A.C. 7:13-2.4) that lie within the flood hazard area of these waters and that do not require a coastal permit or meet the permit-by-rule requirements at proposed N.J.A.C. 7:13-7.2(b)6, will now require a flood hazard area individual permit or general permit authorization. The Department believes that it is necessary to begin to oversee these projects, which do not currently require any permit from the Division of Land Use Regulation, in order to prevent adverse impacts to flooding, the environment or public safety. Furthermore, proposed general permit 7, set forth at proposed N.J.A.C. 7:13-8.9, applies to the construction of a private residence, a residential addition or a structure appurtenant to a residence in a tidal flood hazard area. Given the relatively broad scope of projects that require coastal permits, and the availability of the flood hazard area permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)6 and proposed general permit 7, the Department does not anticipate that the number of individual flood hazard area permits for projects in this newly-regulated area will be substantial.

Proposed N.J.A.C. 7:13-2.2(a) explains that all waters in New Jersey are regulated under N.J.A.C. 7:13, except for those which fall within three categories as described at proposed N.J.A.C. 7:13-2.2(a)1 through 3.

Proposed N.J.A.C. 7:13-2.2(a)1 exempts any manmade canal. Existing N.J.A.C. 7:13-1.3(b)1i exempts tidal canals and lagoons that are manmade, and existing N.J.A.C. 7:13-1.3(c) specifically lists the Delaware and Raritan Canal as non-regulated. The proposed rule therefore

clarifies that any portion of a manmade canal, whether tidal or fluvial, is exempt. However, any portion of a canal that lies within the flood hazard area or riparian zone of another water is still regulated under this chapter. The canal itself is not regulated and does not have its own flood hazard area and riparian zone. But if a segment of the canal passes through the flood hazard area or riparian zone of another water regulated by this chapter, then all activities within the flood hazard area and riparian zone of that regulated water are subject to the requirements of this chapter.

The term "lagoon" is not continued from the existing rule. Exempting lagoons is appropriate under the existing rules since the Atlantic Ocean is specifically exempt at existing N.J.A.C. 7:13-1.3(b)1i. Since the ocean is not exempt under the proposed rules, and as all lagoons are tidal and lie within the flood hazard area of the Atlantic Ocean, to exempt lagoons would arbitrarily exempt various portions of the ocean's flood hazard area. However, most activities along lagoons would require a coastal permit, and thus not require a separate flood hazard area permit or else be eligible for a permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)6 or qualify for general permit 7 at proposed N.J.A.C. 7:13-8.9. Therefore, the Department does not anticipate the number of flood hazard area individual permits required for activities along lagoons to be significant.

Proposed N.J.A.C. 7:13-2.2(a)2 exempts any water that is regulated as a coastal wetland under the Wetlands Act of 1970, N.J.S.A. 13:9A-1 et seq. This provision is included in existing N.J.A.C. 7:13-1.3(d) and is reworded for clarity with no change in meaning. The Flood Hazard Area Control Act at N.J.S.A. 58:16A-60 specifically exempts coastal wetlands from regulation under N.J.A.C. 7:13.

Proposed N.J.A.C. 7:13-2.2(a)3 exempts any section of water that has a drainage area of less than 50 acres, provided at least one of three listed criteria applies. If the water has no definable

channel or is confined within a lawfully existing pipe or culvert, the water is exempt from regulations. Similarly, if the water is confined within a lawfully existing, manmade conveyance structure or drainage feature, such as a pipe, culvert, ditch, channel or basin, not including natural channels that were previously modified, it is not regulated under this chapter. Finally, if the water is an isolated pond or depression that has no outlet (and is therefore not connected to a regulated water by a channel or pipe), it is not regulated.

The exemption of certain waters that drain less than 50 acres is provided at existing N.J.A.C. 7:13-2.1(a) and (b). Existing N.J.A.C. 7:13-2.1(a) states that the engineering standards in the existing rules apply to all waters with a drainage area over 50 acres. Thus, no engineering standards apply to waters draining 50 acres or less. Existing N.J.A.C. 7:13-2.1(b) states that environmental standards apply to all waters except manmade watercourses that drain less than 50 acres. Thus, for manmade watercourses that drain less than 50 acres, neither engineering nor environmental standards apply. Since all of the standards in the existing rules are either engineering standards or environmental standards, no standards apply to manmade watercourses that drain less than 50 acres. These waters are therefore not regulated under the existing rules.

Proposed N.J.A.C. 7:13-2.2(a)3i clarifies that a water that drains less than 50 acres and which has no definable channel is not regulated, because under the existing rules such a water does not meet the existing definition of a "watercourse" and thus would not be regulated.

Proposed N.J.A.C. 7:13-2.2(a)3ii clarifies that a water that drains less than 50 acres and is contained in a lawfully existing, manmade conveyance structure or drainage feature, such as a pipe, culvert, ditch, channel or basin is not regulated. Although such features are not explicitly listed as being exempt under the existing rules, neither the engineering nor the environmental standards of existing N.J.A.C. 7:13-2.1(a) and (b) apply. Therefore, these waters are effectively

not regulated under the existing rules and will continue to be exempt under the new rules. The term "lawfully existing," as defined at proposed N.J.A.C. 7:13-1.2, is used to describe the exempted features, since the Department does not intend to exempt activities along waters that have been illegally piped or culverted.

Proposed N.J.A.C. 7:13-2.2(a)3iii is new. It proposes to exclude isolated waters from regulation because there would be no effect on flooding from disturbance or filling of such a small water, if it is isolated from other waters. This will ensure that, although ponds and lakes are regulated in some cases, they will not be regulated under these rules when they can have no impact on flooding or the environment. Note that activities along such features are likely regulated under the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A and, as such, would need prior approval under that chapter.

N.J.A.C. 7:13-2.3 Regulated areas

Proposed N.J.A.C. 7:13-2.3 describes the area that includes and surrounds each regulated water that is subject to the requirements of this chapter. For the purposes of this chapter, the Department identifies two distinct areas that are regulated: the flood hazard area and the riparian zone. As described below, all regulated waters draining at least 50 acres have a flood hazard area. Consequently, regulated waters that drain less than 50 acres do not have a flood hazard area. The proposed rule explains that the flood hazard area is comprised of a flood fringe and a floodway, both of which are defined at proposed N.J.A.C. 7:13-1.2. An exception is made for the Atlantic Ocean and associated tidal bays. Floodways are found only along waterbodies that convey flow in a linear manner, such as riverine systems. The ocean and its bays do not convey flow in this manner and therefore do not have a defined floodway. Therefore, the entire flood

hazard area along these tidal waters is considered to be a flood fringe for the purposes of this chapter. Furthermore, all regulated waters have a riparian zone regardless of the water's drainage area (except that there is no riparian zone along the Atlantic Ocean nor along any manmade lagoon or oceanfront barrier island, spit or peninsula, pursuant to proposed N.J.A.C. 7:13-4.1). In order to have a flood hazard area or riparian zone, a water must first be regulated under proposed N.J.A.C. 7:13-2.2. A water that is not regulated under proposed N.J.A.C. 7:13-2.2, such as a man-made canal or a piped feature that drains less than 50 acres, is not regulated and, therefore, does not have either a flood hazard area or a riparian zone. The flood hazard area is more fully described in the summary of proposed new N.J.A.C. 7:13-3, and the riparian zone (which is larger than the analogous near-stream area regulated under the existing rules) is more fully described in the summary of proposed new N.J.A.C. 7:13-4.

As described in the summary of the definition of "flood hazard area" at proposed N.J.A.C. 7:13-1.2 above, the flood hazard area is the land adjacent to a regulated water, which is inundated by the flood hazard area design flood. A riparian zone is the area within and adjacent to a regulated water, which is described in the existing rules at N.J.A.C. 7:13-1.3(a)2 and 3, and in the proposed rules at N.J.A.C. 7:13-4.1. The flood hazard area and the riparian zone are typically not coextensive and different requirements and restrictions on development apply in each. For example, a roadway crossing over a stream must meet both the flood storage volume displacement limits at proposed N.J.A.C. 7:13-10.4 as well as limits on removal of vegetation from a riparian zone at proposed N.J.A.C. 7:13-10.2.

All regulated waters that have a drainage area of 50 acres or more are surrounded by a flood hazard area that is regulated under the chapter. In addition, all regulated waters, regardless of drainage area, are surrounded by the area identified in the proposed rules as the riparian zone

(except as noted above). Although this area is described and regulated under existing N.J.A.C. 7:13-1.3(a)2 and 3, the proposed rule gives the area the name "riparian zone" to provide a short and simple term for referring to this area throughout the proposed rules. Furthermore, the proposed riparian zone is larger than the area described and regulated under existing N.J.A.C. 7:13-1.3(a)2 and 3, as detailed in the summary for proposed N.J.A.C. 7:13-4 below. Proposed N.J.A.C. 7:13-2.3(a)2 clarifies that the regulated water itself is included in the riparian zone.

Proposed Figures A and B illustrate the floodway, flood fringe, channel and riparian zone to reflect the inter-relationship of these areas.

N.J.A.C. 7:13-2.4 Regulated activities

This proposed new section specifies the types of activities that are regulated under the Flood Hazard Area Control Act rules. Existing N.J.A.C. 7:13-1.3(a) requires a permit for "development" in the "flood plain," and existing N.J.A.C. 7:13-1.2 defines "development" as "any construction activity or other manmade land disturbance." The terms "construction activity" and "manmade land disturbance" are not defined under the existing rule. Proposed N.J.A.C. 7:13-2.4 is intended to clarify which activities are and are not regulated under this chapter.

Proposed N.J.A.C. 7:13-2.4 lists six classes of activities which, if proposed in a regulated area, require a permit under this chapter. These six classes of regulated activities are either stated or implied in the existing definition of "development," or are implied by the presence of design and construction standards under existing N.J.A.C. 7:13-2 and 3.

Proposed N.J.A.C. 7:13-2.4(a)1 provides that any topographic alteration, such as excavation, grading or the placement of fill, is a regulated activity. This group of activities is included in the existing definition of "development." Such activities can alter the available flood storage volume

on a site or obstruct the flow of floodwater in a channel or floodway, and therefore can adversely impact flooding.

Proposed N.J.A.C. 7:13-2.4(a)2 provides that the clearing, cutting or removal of vegetation in a riparian zone is a regulated activity. While the removal of vegetation is not specifically mentioned in the existing definition of development, it is regulated in the existing rules at N.J.A.C. 7:13-3.2 and elsewhere, which clearly state that near-stream vegetation should not be disturbed. Proposed N.J.A.C. 7:13-2.4(a)2 clarifies that clearing, cutting and/or removing vegetation is regulated within the riparian zone.

Proposed N.J.A.C. 7:13-2.4(a)3 provides that the creation of impervious surface is a regulated activity. This activity is a type of "manmade land disturbance" and, therefore, meets the existing definition of "development." In addition, the placement of impervious surface increases stormwater runoff, which therefore requires stormwater management under existing N.J.A.C. 7:13-2.8 and proposed N.J.A.C. 7:13-11.2.

Proposed N.J.A.C. 7:13-2.4(a)4 provides that the storage of unsecured material is a regulated activity. While the storage of unsecured material is not specifically included in the definition of development, it does meet the existing definition of fill and the existing rules do provide for its regulation. For example, existing N.J.A.C. 7:13-2.2(a)4 regulates storage of materials or equipment in a floodway.

One significant contributor to the damage caused by flooding is floating debris that crashes into downstream buildings and bridges, or collects on such structures and obstructs the passage of floodwaters, causing greater flooding. Much of that floating debris originates from unsecured material stored in flood hazard areas, which becomes buoyant during a flood or is otherwise carried off by floodwaters. For this reason existing N.J.A.C. 7:13-2.2(a)4 prohibits the storage of

materials or equipment in floodways. Existing N.J.A.C. 7:13-1.1(c) describes regulating materials that could be "swept onto nearby or downstream lands" and which could therefore pose a threat to public safety. In addition, any material, secured or otherwise, that is placed in a flood hazard area will displace flood storage volume and thus meets the existing definition of "fill." Therefore, the proposed rule specifically lists "the storage of unsecured material" as a regulated activity. Some unsecured material may be stored on a site under a permit-by-rule at proposed N.J.A.C. 7:13-7.2(e). All other unsecured materials stored in a regulated area are subject to the requirements at proposed N.J.A.C. 7:13-11.16. See the summary of proposed N.J.A.C. 7:13-7.2(e) and 11.16 below for conditions that apply to these provisions.

Proposed N.J.A.C. 7:13-2.4(a)5 provides that the construction, reconstruction and/or enlargement of a structure is a regulated activity. These activities are also included in the definition of "development" found in the existing rules.

Proposed N.J.A.C. 7:13-2.4(a)6 provides that the conversion of any building into a private residence or a public building is a regulated activity. Since such conversions typically involve only internal renovations, this activity is not included in the existing definition of "development." However, both the existing and proposed rules have more stringent design and construction standards for residential structures than for non-residential structures. These more stringent requirements are necessary because flooding presents a greater danger to people in residential structures and public buildings. However, it has been the Department's experience that some people try to circumvent the stricter residential requirements by obtaining a permit for a non-residential structure and then converting the building to residential use after it is constructed. Others have purchased existing non-residential buildings and have converted them into residences without adding the safeguards to protect against flooding that would normally be

required for a dwelling. Since internal renovations are not regulated under the existing rules, such a person in either case does not currently need to obtain the Department's approval for such a change. To remedy this problem, the proposed rules require a permit for the conversion of any building into a residential building or a public building. This will ensure that a converted building includes the same flood safety features required of a new residence or public building.

Subchapter 3. Determining the Flood Hazard Area and Floodway

Proposed N.J.A.C. 7:13-3 sets forth the methods for determining the flood hazard area and/or the floodway on a particular site. This subchapter replaces provisions found at existing N.J.A.C. 7:13-2.3(b).

The first step in determining the limits of the flood hazard area and floodway on a site is to determine the probable height or elevation to which floodwaters will rise under various flooding conditions. The 100-year storm is the basis for the flood hazard area regulated under both the existing and proposed rules. The 100-year storm is a rainstorm that has a one percent probability of occurring or being exceeded in a one-year period for a given watershed. Statistically, this event is likely to occur at least once in any 100-year period, and is therefore called the 100-year storm. To ensure adequate protection from flooding, adjustments are made in certain situations to account for development and other factors that may affect flooding. The term assigned to the flood which is used to determine the flood hazard area on a site is the flood hazard area design flood. Once the probable flood hazard area design flood elevation is determined, the flood hazard area can be determined by drawing a line around the portion of the site that would be covered by water if the flood rose to that elevation.

Under the existing rules, there are three ways to determine the limits of a flood hazard area:

the use of a Department delineation, use of FEMA mapping in limited instances, and the submittal of detailed calculations. However, Department delineations or FEMA mapping are available only for some waters, and submittal of detailed calculations is often time-consuming and costly. Therefore, the Department is proposing several additional options for determining the limits of the flood hazard area on a site.

First, the proposed rule provides a method for determining flood hazard area and/or floodway limits based on FEMA information in fluvial areas. This method will expand and greatly simplify the use of FEMA information for determining the flood hazard area on many sites.

Second, the proposed rule provides a method for approximating the flood hazard area limits on a site. This method will assist applicants who want a conservative approximation of the regulated areas on a site and do not want or need to expend the time and resources to perform detailed calculations to determine this.

Third, the proposed rule simplifies the method of determining the flood hazard area and floodway limits through calculations. Under the existing rules, when an applicant determines the flood hazard area limit through calculations, the Department requires an applicant to assume full development of the watershed. This can require considerable effort and tends to result in an overestimation of the size of the flood hazard area in sparsely developed areas. Under the proposed rule, the calculation method does not require this assumption but instead adds a standard factor of safety of 25 percent to the 100-year flow, which approximates full development conditions and is the same method used to map the Department delineations.

N.J.A.C. 7:13-3.1 General provisions for determining the flood hazard area and floodway

along a regulated water

Proposed N.J.A.C. 7:13-3.1(a) introduces the subchapter and lists the six methods that are available for determining the flood hazard area and/or floodway limits on a site. As noted in the proposed sections describing each of the six methods, however, each method has certain inherent restrictions on its use depending on a number of factors. Therefore, while the proposed rule provides these six different methods for determining the flood hazard area, fewer than six methods will typically be available for a given waterbody, site or project, and in some cases only one method may be available.

Proposed N.J.A.C. 7:13-3.1(b) explains that in order to determine the flood hazard area, one must first determine the flood hazard area design flood elevation. This is true because the depth of flooding must be known in order to determine the size of the area that will be flooded. The six methods listed in proposed N.J.A.C. 7:13-3.1(a) therefore provide the flood hazard area design flood elevation, from which the flood hazard area limits on a site can be established.

Proposed N.J.A.C. 7:13-3.1(c) provides that, in most cases, the flood hazard area limit and floodway limit on a site must be determined by the applicant and verified by the Department in order for the Department to approve an application for an individual permit for activities on the site. Proposed N.J.A.C. 7:13-3.1(c) also refers the reader to proposed N.J.A.C. 7:13-9.6, which sets forth certain cases in which the Department does not need a verification of the flood hazard area and/or floodway limits on a site in order to approve an individual permit. A similar statement is made for general permit authorizations, in which case a verification is required under certain circumstances for general permits 5, 6 and 7 at N.J.A.C. 7:13-8.7, 8.8 and 8.9, respectively.

Proposed N.J.A.C. 7:13-3.1(d) provides that the flood hazard area and/or floodway

determined under this subchapter may differ from the area identified as a floodplain and/or floodway by other agencies or entities. In the Department's experience, members of the public sometimes assume that the area regulated by the Department for flooding purposes will be the same area regulated by other agencies that deal with flood control concerns, such as FEMA, but this is often not the case. The disparity arises from the different legal authorities under which the various agencies operate, and from policy differences such as the Department's use of a factor of safety when calculating flood depths to account for future development.

N.J.A.C. 7:13-3.2 Selecting a method for determining the flood hazard area and floodway along a regulated water

Proposed N.J.A.C. 7:13-3.2 sets forth the conditions under which each method for determining the flood hazard area and floodway are to be used.

Proposed N.J.A.C. 7:13-3.2(a) introduces the section and directs the reader to a flowchart found at the end of the section, which illustrates the correct means of determining the flood hazard area and floodway along a regulated water.

Proposed N.J.A.C. 7:13-3.2(b) explains that selection of the appropriate method depends on several factors. Certain factors are dictated by the rules. For example, certain methods rely on State and Federal flood mapping, so these methods cannot be used in areas where such mapping has not been made available. Other factors may not be dictated by the rules but will influence an applicant's choice of method. While all of the methods will provide information on the location of regulated areas on a site, not all methods will provide the type of information or the level of detail necessary for issuance of a permit for certain activities on that site. Therefore, if an applicant has a project in mind, the permitting requirements for that project may dictate the

delineation method the applicant selects.

For example, to obtain an individual permit for a bridge under proposed N.J.A.C. 7:13-11.7, an applicant must demonstrate that the bridge will not increase offsite flooding. This requires not only an accurate delineation of the existing flood hazard area and floodway, but also an accurate projection of flood conditions if the bridge is approved and constructed. Therefore, whereas the proposed section may not specifically require the use of a particular delineation method, the fact that the applicant must submit calculations limits the applicant to Method 1 (if State flood mapping is available), Method 4 (if FEMA mapping is available) or Method 6 (if neither State nor FEMA mapping is available) because only these three methods provide the hydraulic data needed to project future flood conditions.

By contrast, an applicant constructing one single family home on a site where there is no State or FEMA mapping may choose Method 5 (approximation method) because it is easier and less expensive than using Method 6 and will still provide sufficient accuracy to ensure that the house is either safely elevated or located outside of any flood hazard area. Another factor that may affect an applicant's choice of delineation method is whether the standards that will apply to a planned project require the applicant to show where the floodway is located. For example, an applicant may propose to construct a house very close to a stream channel such that the Department cannot determine by inspection that the house is located outside the stream's floodway. Since the construction of a house in a floodway is prohibited, the applicant must choose a delineation method which provides a floodway limit in order to demonstrate the house is not situated within the stream's floodway. In such a case, the applicant cannot use Method 5 to support the permit application for the construction of the house because this method simply approximates the flood hazard area and does not determine the floodway. Proposed N.J.A.C.

7:13-9.7 describes when an individual permit can be issued in an approximated flood hazard area.

Proposed N.J.A.C. 7:13-3.2(c) establishes the basic hierarchy of methods that are available to determine the flood hazard area and/or floodway limits.

Proposed N.J.A.C. 7:13-3.2(c)1 requires that, if there is a Department delineation for the water, the limits of the flood hazard area on the site shall be determined in accordance with Method 1, which is described fully at proposed N.J.A.C. 7:13-3.3. This provision is found in the existing rules in the definition of "flood hazard area design flood" and at N.J.A.C. 7:13-2.3(a). More than 2,500 miles of regulated waters have been delineated by the Department. These waters are listed in existing N.J.A.C. 7:13-7 and are reorganized for ease of use in proposed chapter Appendix 2.

Proposed N.J.A.C. 7:13-3.2(c)2 provides that, in absence of a Department delineation, the applicant may choose among the other five proposed methods under certain conditions. The flood hazard area and/or floodway can be determined based on information provided by FEMA in certain cases under Methods 2, 3 or 4 (described at proposed N.J.A.C. 7:13-3.4) or, if the applicant prefers, through calculation under Method 6 (described at proposed N.J.A.C. 7:13-3.6). If neither a Department delineation nor the necessary FEMA information is available, an applicant may also choose to determine the flood hazard area on the site through approximation under Method 5 (described at proposed N.J.A.C. 7:13-3.5).

Proposed N.J.A.C. 7:13-3.2(d) explains that only one method can be used to determine the flood hazard area and/or floodway per regulated water on a site, with two exceptions. For example, a person will not be allowed to use Method 5 to determine the flood hazard area and Method 6 to determine the floodway on the same water. This restriction is necessary to ensure

that there is consistency in delineating the flood hazard area and floodway, and also so that applicants cannot circumvent the requirements of the rules by simply choosing data that is convenient, such as by using a mixture of methodologies to artificially maximize development on a site.

The first exception to this restriction is where a Department or FEMA study terminates within a site and the flood hazard area or floodway must be determined for the remainder of the site. In such a case, there is no option but to use another method to continue the delineation for the portion of the site that is unmapped. The second exception is where a FEMA map shows the flood hazard area limit but not the floodway limit in a fluvial area. In such a case, Method 3 may be used to determine the flood hazard area from the FEMA map, and Method 4 may be used to determine the floodway limits via hydraulic calculations. This is necessary only in those cases where the floodway limits need to be known in order to demonstrate compliance with a requirement of this chapter, but the floodway limit is not given on the available FEMA map. This exception is allowed because applicants would otherwise be forced to use Method 4 for the whole site, which would represent an unnecessary expense for applicants.

N.J.A.C. 7:13-3.3 Flood hazard area and floodway based on a Department delineation (Method 1)

Proposed N.J.A.C. 7:13-3.3 sets forth the method of delineating a flood hazard area and/or floodway based on a Department delineation. This method of delineation is called Method 1.

Proposed N.J.A.C. 7:13-3.3(a) introduces the section and explains that that chapter Appendix 2 lists the Department delineations. The proposed subsection also provides information on how to obtain a copy of a Department delineation and related information. The

Division of Land Use Regulation, which administers the flood hazard area permit program, is not the program in the Department that delineates waters. Rather, the Department's Office of Floodplain Management performs this function. This information is found in the existing rules at N.J.A.C. 7:13-2.3(a), and is reworded in the proposed rule for clarity.

Proposed N.J.A.C. 7:13-3.3(b)1 and 2 provide that, if the Department has delineated the flood hazard area limits, the flood hazard area design flood elevation for the site shall be that determined in the Department delineation, and the floodway limits shall be those delineated by the Department.

Proposed N.J.A.C. 7:13-3.3(c) explains that applicants seeking to modify a Department delineation can submit an application for a revision as provided at proposed N.J.A.C. 7:13-13.4. The existing rules do not have a procedure for modifying a Department delineation. The summary for proposed N.J.A.C. 7:13-13.4 below discusses this proposed modification procedure in detail.

Proposed N.J.A.C. 7:13-3.3(d) requires that any hydraulic calculations submitted with individual permit applications must be based on the original data used by the Department for the study, such as flow rates and cross-sections. For example, if an applicant proposes to construct a bridge across a channel, and thus through a floodway, hydraulic calculations are often necessary to compare pre-construction and post-construction water surface elevations under proposed N.J.A.C. 7:13-11.1(f) and (g) and proposed N.J.A.C. 7:13-11.7(c) and (d). In order to ensure consistency, and to be able to effectively compare pre-construction and post-construction water surface elevations, the applicant must use the Department's flood hazard area design flood flow rate (where a Department delineation is available) to calculate the new flood hazard area design flood elevation and the Department's 100-year flow rate to calculate the new floodway. The

Department cannot accept calculations that use other flow rates along delineated waters since there would be no way to accurately compare water surface elevations if different data were used.

N.J.A.C. 7:13-3.4 Flood hazard area and floodway based on FEMA information (Methods 2 through 4)

Proposed N.J.A.C. 7:13-3.4 sets forth the way in which certain information available from FEMA may be used to determine the limits of the flood hazard area and/or floodway on a site.

Proposed N.J.A.C. 7:13-3.4(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-3.4(b) sets forth the conditions under which FEMA information may be used to determine the flood hazard area and floodway on a site. There must be no promulgated Department delineation for the water on the site, and only the listed FEMA documents may be used. The Department will not accept a flood hazard area based on other FEMA information, such as an unnumbered A-zone, because this does not provide a 100-year flood elevation. In addition, the FEMA information used must be the most recent available at the time of application and must not have been published by FEMA prior to January 31, 1980, since that is the date of the Flood Hazard Area Control Act and also because some earlier FEMA flood insurance studies may no longer be reliable indicators of the extent of the 100-year flood plain due to changes in methodology and development in the watershed.

Proposed N.J.A.C. 7:13-3.4(c) lists the three methods of determining the flood hazard area design flood elevation and floodway limit based on FEMA information, and specifies in which situation each may be used. The three methods are: Method 2 (FEMA tidal method), which applies to tidal waters; Method 3 (FEMA fluvial method), which applies to fluvial waters; and

Method 4 (FEMA hydraulic method), which applies when hydraulic calculations are needed in order to determine whether a proposed activity complies with this chapter. This subsection also specifies information that must be included in the FEMA documents for the specific method to be acceptable. Methods 2 and 3 are usable only if the FEMA information provides a 100-year flood elevation since both of these methods are based directly upon this elevation. Method 4 is only acceptable if the FEMA information provides a 100-year flood flow rate, since knowing this flow rate is necessary to calculate the flood elevation. Furthermore Method 4 can be used only if the Department requires an applicant to provide calculations comparing pre and post flood elevations as part of the review of a permit application. Absent the need for such calculations, there is no benefit in using this method since Methods 2 or 3 would already provide the existing 100-year elevation.

Proposed N.J.A.C. 7:13-3.4(d) provides that, under Method 2, the flood hazard area design flood elevation for a tidal flood hazard area shall be equal to the FEMA 100-year flood elevation. Proposed N.J.A.C. 7:13-3.4(d) also provides that the floodway limit shall be equal to the floodway limit shown on the FEMA flood insurance maps. In cases where the floodway limit is not mapped by FEMA, the channel itself will be considered to be the floodway. Consequently the area outside the channel will be considered the flood fringe. The use of this method is acceptable under existing N.J.A.C. 7:13-2.3(b)2, since tidal flood hazard area elevations cannot be affected by development.

Proposed N.J.A.C. 7:13-3.4(e) provides that, under Method 3, the flood hazard area design flood elevation for a fluvial flood hazard area shall be one foot above the FEMA 100-year flood elevation. This is different from the use of FEMA information for determining the flood hazard area under existing N.J.A.C. 7:13-2.3(b) as described below. Proposed N.J.A.C. 7:13-3.4(e) also

provides that the floodway limit shall be equal to the FEMA floodway limit where mapped. If the floodway limit is not mapped by FEMA, the applicant must use Method 4 to calculate the floodway under proposed N.J.A.C. 7:13-3.4(e)2ii.

Increased development generally leads to increased stormwater runoff, so the size of the 100-year flood plain along any given water typically increases with development in the watershed. In order to account for the effects of future development, the existing rules require that the 100-year flood elevation along non-delineated waters be calculated assuming that the entire contributory watershed is fully developed. This concept is reflected in Department delineations of flood hazard areas, which include a 25 percent factor of safety to account for future development in the watershed. This is also reflected in the existing rules, which allow use of FEMA information to determine the flood hazard area only if the applicant can show that the FEMA information adequately accounts for future development. However, this demonstration cannot be made for the majority of FEMA flood insurance studies. As a result, many applicants have been required to perform a detailed hydrologic and hydraulic analysis that projects runoff conditions under full development of the watershed in order to determine the limit of flooding on their site.

To help alleviate this burden, the Department has reviewed the flood plain analyses which have been performed under the existing rule. The Department has found that the 100-year flood plain derived from assuming full development in the watershed often lies approximately one foot above the 100-year flood plain derived using existing development conditions in the watershed. Therefore, the proposed rule allows the use of FEMA information where available, but adds a one-foot factor of safety to the FEMA 100-flood elevation in fluvial areas. There is no need to account for future development in tidal areas, because the height and extent of tidal flooding is

not affected by increased stormwater runoff.

Proposed N.J.A.C. 7:13-3.4(f) provides for Method 4, which is used in certain cases where the Department requires an applicant to perform calculations to demonstrate that a proposed activity does not adversely affect flooding, as described at proposed N.J.A.C. 7:13-3.4(c)3. Under this method, the FEMA 100-year flow rate must be used to determine the flood hazard area design flood elevation for a tidal flood hazard area, and 125 percent of the FEMA 100-year flow rate must be used to determine the flood hazard area design flood elevation for a fluvial flood hazard area. Again, this factor of safety is necessary to account for the effects of future development in a fluvial area, but is not necessary for a tidal area since tidal flooding will not increase due to development. The flood hazard area limits must be calculated using a standard step backwater analysis, which continues the requirement for such calculations at existing N.J.A.C. 7:13-2.4(a). Similarly, the floodway must be calculated by the applicant using the FEMA 100-year flow rate based on equal conveyance reduction calculations. This continues the existing provision for such calculations at existing N.J.A.C. 7:13-2.4(b).

N.J.A.C. 7:13-3.5 Flood hazard area determined by approximation (Method 5)

Proposed N.J.A.C. 7:13-3.5 provides for a method to approximate the flood hazard area on a site. The approximation method will alleviate several problems caused by the limited methods available under the existing rules for determining the flood hazard area.

The approximation method, referred to as Method 5, is a new option proposed in these new rules. In the Department's experience, people sometimes do not need an exact delineation of the flood hazard area on their site in order to determine compliance with this chapter and, therefore, find it unnecessarily burdensome to determine the flood hazard area limits through calculations.

For example, a person with a large site, who is proposing only a small activity and is willing to place the activity anywhere on the site, might prefer a conservative estimate of the flood hazard area in order to avoid the flood hazard area altogether. In such a case, a quick and inexpensive estimate of the flood hazard area is sufficient, even if it is a conservative estimate, rather than an expensive and time-consuming, yet more exact delineation. Therefore, the proposed rule introduces a method for determining the flood hazard area on a site through a conservative approximation. Since this method is conservative, in no case shall an applicant be required to use this method.

The approximation method does not provide a floodway limit for reasons discussed below. In some cases, the Department needs to know the location of the floodway in order to determine compliance with a rule standard. In such cases, the Department cannot issue a permit for an activity in an approximated flood hazard area. In some cases an applicant may, therefore, be forced to use another method to determine the flood hazard area and floodway limits in order to obtain a permit. The conditions under which the Department can approve an individual permit in an approximated flood hazard area are discussed at proposed N.J.A.C. 7:13-9.7.

The approximation method is based on an extensive analysis of USGS data, FEMA flood insurance studies and methods used by other states to approximate flood hazard areas. Data was collected from every FEMA detailed flood insurance study in the State in order to generate a logarithmic relationship between the 100-year flood depth in a water and the water's drainage area. Flood depths that were artificially raised due to influences from road crossings, dams and/or confluence with other waters were not included, since these values would skew the data. Separate equations were then calculated for each of the State's 20 Watershed Management Areas (WMA) as shown in Figure 5 in proposed chapter Appendix 1. Equations for WMA 1 and 2 were

subsequently combined due to the geographic and hydrologic similarities of the regions, as well to as to balance the otherwise uneven distribution of data available for the area. For similar reasons, the data from WMA 13 through 17 was also combined, as well as the data from WMA 19 and 20.

As a result, 14 separate equations were generated which depict the average 100-year water surface elevation as a function of drainage area in each region. Each equation line was then plotted and subsequently raised so that all collected data points fell below the equation line. An additional 0.5 foot factor of safety was also added to each equation and flood depths were rounded up to the next-highest foot to provide even increments. These actions were necessary to ensure that the actual flooding along a stream will not be greater than what this method approximates. The FEMA data represents 100-year flood conditions at the time the FEMA study was produced. These added factors of safety therefore estimate the effects of development on each watershed as well as take into account the recently published increases in 100-year rainfalls in New Jersey.

The final computed values are shown in Table 1 in Appendix 1. Given the above, the flood depth shown in this table for a particular stream will always be between 0.5 and 1.5 feet (an average of 1.0 foot) above the highest flood elevation reported by FEMA for a stream of equal drainage area in the same, or similar, Watershed Management Area. The result is a consistent and conservative estimate of the depth of flooding, as measured from the average streambed elevation. This simple method of estimating the flood hazard area will both reduce applicants' expenditures and make it easier for the public to determine the location and extent of flood hazard areas while ensuring that appropriate safeguards against flooding are in place.

In addition to the table in Appendix 1, another factor that is used to approximate the depth of

flooding is the presence of any roadways that may cross the water downstream of the site. If a small culvert or bridge is located downstream of a site, floodwaters may back up and even overtop the roadway. In such a case, the depth of flooding can be higher on a site than indicated by Table 1. While some road crossings are designed to pass the 100-year flood, most crossings will cause some impediment to flow and will therefore raise flood elevations upstream of the structure to some degree. Railroad crossings, dams and other water control structures have a similar effect. In absence of hydraulic calculations for each structure, the conservative assumption must therefore be made that any crossing will impede flow and increase flooding to the point that water actually overtops the road surface. As such, an applicant must determine the elevation of the lowest point of each roadway or other water control structure that crosses the stream within one mile downstream of the site, which is known as the "low-point" of the crossing. Using Table 2 in proposed Appendix 1, and based on the drainage area of the water, the flood depth in the vicinity of the crossing will be between one and three feet above the crossing's low-point. These depths were calculated using typical road profiles and flow rates for streams of various drainage areas. Figures 1 through 4 in Appendix 1 illustrate these concepts. It is the Department's experience that water control structures more than one mile downstream of a project rarely have a significant impact to flooding on the site and therefore do not need to be considered. However, if the Department is aware of an unusual condition that would indeed affect flooding, such as an extremely large and/or inadequate water control structure more than one mile downstream, proposed N.J.A.C. 7:13-3.5(f), which is discussed in further detail below, allows the Department to address this situation.

The use of Method 5 is explained in greater detail in proposed Appendix 1. To summarize, however, the approximated flood depth on a site will be either a depth shown in Table 1 or a

depth shown in Table 2, whichever is higher. In order to use the approximation method, the applicant must know the drainage area of the water in question, and to which Watershed Management Area the water belongs. A topographic survey of the area in question must also be obtained, as well as the roadway elevations of any roads (or other water control structure) that cross the stream within one mile downstream of the site. An applicant can determine the Watershed Management Area by reference to Figure 5 in Appendix 1. The size of the drainage area can be determined using USGS maps.

As noted above, the approximation method is designed to be conservative, and, therefore, may in some cases overestimate the size of the flood hazard area. For this reason, an applicant is never required to use the approximation method, but may choose to use it under certain circumstances. Using detailed hydrologic and hydraulic calculations under Method 6 may result in a smaller and more accurate flood hazard area limit than can be provided using Method 5. An applicant is also limited in the type of construction the Department will permit in an approximated flood hazard area as discussed further in the summary of proposed N.J.A.C. 7:13-9.7. Thus, the applicant may instead choose to use Method 6, which provides more information, as discussed below.

As noted above, there are cases where the approximation method will not be useful. When flood storage volume calculations or hydraulic calculations are required to demonstrate that a proposed activity complies with the standards of the rules, the approximation method cannot be used because the approximation method does not provide a floodway limit or a peak flow rate. The approximation method is most useful in cases where no construction is yet proposed on site and a property owner wants to know the approximate extent of the flood hazard area in order to plan future development outside of it. The approximation method is also useful when a small

project, such as a home or a stormwater outfall structure, is proposed in a flood hazard area. The approximation method provides a flood hazard area design flood elevation, which is needed in order to establish the lowest floor of the building under proposed N.J.A.C. 7:13-11.5. Using the approximation method may force the building to be constructed somewhat higher than if the applicant used Method 6. However, the surveying and engineering costs associated with Method 6 often exceed the extra cost of constructing the house a foot or two higher than it might otherwise need to be. Furthermore, a higher floor elevation usually results in lower flood insurance rates. Therefore, Method 5 provides a cost-effective alternative to Method 6 in such cases, while ensuring equal or better flood protection.

Proposed N.J.A.C. 7:13-3.5(a) introduces the section. Reference is made to chapter Appendix 1, which includes complete directions for using the approximation method to determine a flood hazard area design flood elevation. Proposed N.J.A.C. 7:13-3.5(a) also explains that Method 5 does not provide a floodway limit. The approximation method does provide an approximate flood hazard area design flood elevation, from which the limits of a flood hazard area can be determined. However, the limits of a floodway can only be determined using detailed hydraulic calculations, which are beyond the scope of the approximation method. Therefore, Method 5 is of no use to an applicant who needs to determine the floodway limits.

Proposed N.J.A.C. 7:13-3.5(b) establishes when Method 5 may be used to determine the flood hazard area on a site. The approximation method may be used only if no Department delineation or FEMA information is available, since those methods are more accurate. The drainage area of the water must also be less than 30 square miles. Most streams of this size have already been delineated by the State or FEMA. Furthermore, as the drainage area increases, it becomes more difficult to approximate the flood hazard area. Factors such as zoning, slope, land

uses and level of development are harder to estimate for larger watersheds, and the FEMA data from which the approximation method was calculated (see above) was not always available in a given Watershed Management Area for larger waterbodies. Therefore the Department has limited the use of the approximation method accordingly.

Proposed N.J.A.C. 7:13-3.5(c) explains that an applicant may choose to establish a flood hazard area limit that is even more conservative than the approximation method. An applicant may wish to do this to reduce surveying costs in an area that may not be developed anyway. For example, a freshwater wetlands transition area limit may already be established by metes and bounds outside the approximated flood hazard area limit. The applicant could, therefore, choose to use the transition area limit as the approximate flood hazard area limit in order to save time and money.

Proposed N.J.A.C. 7:13-3.5(d) emphasizes that the approximation method may in some cases overestimate the area on a site that is actually subject to flooding. However, for reasons discussed above, the Department believes that the approximation method is nonetheless a useful option for some applicants.

Proposed N.J.A.C. 7:13-3.5(e) explains that the Department reserves the right to deny construction within an approximated flood hazard area in rare instances in which Method 5 significantly underestimates flooding due to an unusual condition on or near the site. This provision is necessary to protect public health, safety and welfare in cases where the Department determines that the approximate method is not conservative or accurate enough to do so.

N.J.A.C. 7:13-3.6 Flood hazard area and floodway determined by calculation (Method 6)

In cases where no Department delineation or FEMA study is available, and where the

approximation method cannot be used, the limits of the flood hazard area can only be determined by use of calculations. Under the proposed rule, the calculation method is simplified somewhat. Under existing N.J.A.C. 7:13-2.3(b)1, the 100-year flood plain along non-delineated waters must be calculated using an analysis that assumes full development of the upstream watershed. This hydrologic analysis must take into account local zoning restrictions and stormwater management regulations. This can become very complicated and cumbersome where the watershed is large and/or spans several municipalities or counties. Depending on municipal zoning and land use restrictions, the calculated runoff can vary widely for the same drainage area. In many cases, the flood hazard area calculated using these assumptions represents a total build-out condition, which may never occur. In addition, the hydrologic analyses the Department has received under the existing rules varies greatly in methodology, accuracy and level of assumptions. Projecting full development conditions into the future is necessarily an inexact science, with results that vary depending on the individual performing the projection.

Given the above, instead of requiring an applicant to project full development conditions in the watershed, proposed N.J.A.C. 7:13-3.6 adds a 25 percent factor of safety to the existing 100-year flood. Therefore, the flood hazard area design flood under this method is equal to 125 percent of the 100-year flood calculated assuming existing development conditions in the watershed. Removing the requirement to estimate future development in the watershed will simplify calculations, saving time and money for both applicants and the Department, and will ensure more consistent results. Further, Department delineations were developed using the same 25 percent factor of safety, and so this requirement is consistent with the method used to develop Department delineations (Method 1) and with the proposed FEMA hydraulic method (Method 4).

Proposed N.J.A.C. 7:13-3.6(a) allows the use of the calculation method to determine a flood hazard area and/or floodway, except where there is a Department delineation available for the water, since the Department flood maps are promulgated and form the basis for jurisdiction under this chapter.

Proposed N.J.A.C. 7:13-3.6(b) sets forth the cases in which the calculation method must be used. The Department believes that the proposed rule will reduce the number of applicants who will have to use this method, since the proposed rule allows the use of FEMA information and the approximation method in many cases.

Proposed N.J.A.C. 7:13-3.6(c) sets forth the technical requirements for determining the flood hazard area and/or floodway on a site using the calculation method. These are found in the existing rules at N.J.A.C. 7:13-2.3(b), but the proposed rule differs from the existing rules in the method of calculating the peak flow rate as described above.

Subchapter 4. Determining the Riparian Zone

N.J.A.C. 7:13-4.1 The riparian zone

Proposed N.J.A.C. 7:13-4.1 describes the method for determining the riparian zone of a regulated water. Provisions describing and regulating the riparian zone are found in the existing rules at N.J.A.C. 7:13-1.3(a)2 and 3. However, the term "riparian zone" is new. The proposed rules introduce this term to allow for simplification of the rule text and to encourage increased public awareness that this area exists and is regulated differently from other areas.

The proposed rules also change the extent of the area regulated. The existing rules at N.J.A.C. 7:13-1.3(a)2 and 3 define this area of near-stream preservation as extending 50 feet

from the top of bank along waters with certain resources that are especially sensitive to adverse impacts to water quality. A 50-foot buffer is currently established along Category One waters, trout associated waters, waters that support or are located within threatened or endangered species habitat, and waters containing deposits of acid-producing soils. The definition of "trout-associated" includes all tributaries upstream of trout production waters (all trout production waters are Category One waters) as well as all tributaries within one mile upstream of trout maintenance waters. Therefore, the 50-foot buffer also applies along these tributaries as well. The near-stream area currently extends 25 feet from the top of bank along all other waters.

Proposed N.J.A.C. 7:13-4.1(c) defines the riparian zone as extending 50 feet, 150 feet or 300 feet from the water. The proposed 300-foot riparian zone applies along Category One waters and upstream tributaries within the same HUC-14 watershed. The proposed 150-foot riparian zone applies to the same waters as the existing 50-foot buffer, except for Category One waters, and with minor changes as noted below. Similarly, the proposed 50-foot riparian zone applies to all waters that are not provided a 300-foot or 150-foot riparian zone.

The expansion of the riparian zone is being proposed because the Department has determined that the level of protection afforded under the existing rules is not adequate to preserve the functions of the riparian systems. Healthy riparian zones are essential to the natural environment. Loss of soil and plant life that occurs adjacent to regulated waters not only threatens public and private property, but directly impacts water quality and the health of fish and wildlife. The extreme importance of preserving and restoring adequate stream corridors has been heavily documented in recent decades. A detailed review of the scientific literature that references over 150 studies published within the last 30 years was conducted by Seth Wenger for the Office of Public Service & Outreach Institute of Ecology at the University of Georgia

(Wenger, 1999). This review outlines the importance of functioning riparian zones and attributes the following functions to the riparian zones:

- Sediment removal;
- Streambank stabilization;
- Nutrient removal;
- Contaminant removal;
- Flood storage;
- Wildlife habitat;
- Aesthetics; and
- Recreation and education.

The importance of adequate riparian zone widths is also discussed in Wenger's review of available research on the topic. Varying widths are recommended for specific functions. For example, Wenger notes that the ability to remove sediments increases as the width of the riparian zone increases. Sediment can travel up to 300 feet through a riparian zone, and the removal of rocks, vegetation and vegetative debris within the zone increases the distance that sediment can travel (Belt et al., 1992). One study shows that a riparian zone of 60 meters (approximately 200 feet) removed 94 percent of total suspended solids (TSS) (Peterjohn & Correll, 1984). Another study shows that a riparian zone of 70 feet removed between 75 and 81 percent of TSS. In general Wenger recommends a riparian zone of 100 feet for sufficient sediment entrapment.

Riparian zones can also remove excess nutrients and contaminants such as pesticides, heavy metals and organic matter, all of which are detrimental to water quality. Nitrogen can often be found in excess in the ecosystem and contributes to the eutrophication of water bodies. A riparian zone of 50 meters (approximately 165 feet) resulted in a decrease in all forms of

nitrogen in surface runoff and a decrease in nitrate in subsurface flow (Peterjohn & Correll, 1985). Based on his review of the literature, Wenger notes that a minimum riparian zone width of 15 meters (approximately 50 feet) is generally required for the purposes of denitrification but notes that a width of 30 meters (approximately 100 feet) will likely provide more nitrogen removal.

Phosphorus also contributes to eutrophication and its removal can result in improved water quality. A riparian zone width of 50 meters (approximately 165 feet) led to an 84 percent decrease in total phosphorus and a 73 percent decrease in soluble phosphorus in surface runoff (Peterjohn & Correll, 1984). Most studies reviewed by Wenger showed a positive correlation between phosphorus removal and riparian zone width. In addition, for the removal of pesticides and heavy metals, a width of 15 meters (approximately 50 feet) is recommended (Neary, 1993). However, studies in this area were limited and it is suggested that the above recommendation be considered a minimum width. In fact, the USDA Natural Resource Conservation Service notes that soluble compound removal is accomplished with a minimum riparian zone width of 100 feet. Lastly, the removal of organic matter is also essential to water quality. A riparian zone of 60 meters (approximately 200 feet) resulted in a decrease in fecal coliform by 87 percent, in total fecal coliform by 84 percent and in biological oxygen demand by 62 percent (Wenger, 1999).

While the above functions are probably the most studied, suggestions for the width of the riparian zone for various other functions are as follows:

Function	Recommended Width	Source
Flood Attenuation	20 to 150 meters (approximately 65 to 500 feet)	Fischer and Fischenich, 2000
	Width of the 100-year floodplain	Wenger, 1999
Stream Stabilization	10 to 20 meters (approximately 30 to 65 feet)	Fischer and Fischenich, 2000
Wildlife Habitat	30-500 meters (approximately 100 to 1650 feet)	Fischer and Fischenich, 2000

While a sufficient width of a riparian zone is essential to its effectiveness, it is also noted in the reviewed literature that a riparian zone's continuity is also vital. A break or gap in this area can negatively affect the overall riparian system (Rabeni & Smale, 1995).

A review of various states' policies and legislation also reveals the importance of riparian zones. Massachusetts regulates activities within 25 to 200 feet of its rivers through its Wetlands Act. This buffer area is known as the "riverfront area" and its importance to the environment is presumed in the Wetlands Act. The width of the riverfront area varies based on geographic area and surrounding land use. In the case of the presence of rare wetland and upland vertebrates or invertebrates or vernal pool species, development within the riverfront area is prohibited. Maryland recommends a local model ordinance that includes a "no build" setback 100 feet from the top of bank of FEMA mapped watercourses and 50 feet from unmapped watercourses. Connecticut has had a law in place since 1996 which allows its wetland agency to review activities in certain upland areas, including those uplands surrounding watercourses.

Lastly, the Federal government has recognized the importance of riparian zones through programs such as the National Conservation Buffers Initiative, which encourages the installation of conservation buffers to aid in improving water quality. The large number of Federal grants that have been used to fund riparian zone protection and enhancement indicates the importance of these areas.

Given the above, the Department has determined that expanding the regulated area adjacent to waters as proposed herein is both appropriate and necessary to adequately protect the State's surface and groundwater resources. The Department will also continue to review the available literature and research on this topic in order to assess if these riparian zone widths adequately

protect the State's resources, as future research may conclude that different widths are necessary to ensure that the riparian zone can better serve its important functions.

The proposed rules establish three riparian zones depending on the resource classification of a given regulated water. Under proposed N.J.A.C. 7:13-4.1, regulated waters are subject to a 300-foot riparian zone, a 150-foot riparian zone or a 50-foot riparian zone as described below. Existing N.J.A.C. 7:13-1.3(a)3 applies a 50-foot buffer along streams that are classified as either Category One or "trout-associated," as well as streams that contain acid-producing deposits and/or support endangered species. Existing N.J.A.C. 7:13-1.3(a)2 applies a 25-foot buffer along all other streams. The proposed rule applies a 300-foot riparian zone along Category One waters and upstream tributaries within the same HUC-14 watershed. The proposed 150-foot and 50-foot riparian zones apply along generally the same class of waters as the existing 50-foot and 25-foot buffers, respectively, except for Category One waters as noted above, and with minor changes noted below.

Proposed N.J.A.C. 7:13-4.1(a) provides that every regulated water has a riparian zone, except that there is no riparian zone along the Atlantic Ocean nor along any manmade lagoon or oceanfront barrier island, spit or peninsula. The Department has determined that the vegetation, topography, landscape and development typical along these waters is significantly different from other riparian areas in the State, and that the existing coastal policies that protect unique tidal landforms, including dunes (N.J.A.C. 7:7E-3.16) and overwash areas (N.J.A.C. 7:7E-3.17), as well as other policies specific to the beach areas, recognize the types of impacts that are specific to these areas and therefore provide adequate protection to vegetation along these tidal waters. This new provision parallels proposed N.J.A.C. 7:7E-3.26 in the Coastal Zone Management rules, which establishes riparian zones along the same set of waters.

Proposed N.J.A.C. 7:13-4.1(b) explains that the riparian zone includes both the land and vegetation within a certain distance of each regulated water as well as the land and vegetation within the regulated water itself. In cases where a discernible bank is present, the limit of the riparian zone is measured landward from the top of the bank. However, some regulated waters do not have definable channels and, therefore, do not have discernible banks from which to measure the riparian zone. In such a case, proposed N.J.A.C. 7:13-4.1(b)1 provides that the riparian zone along all linear features, whether fluvial or tidal, such as streams and swales, is to be measured landward of the feature's centerline. Proposed N.J.A.C. 7:13-4.1(b)2 provides that the riparian zone along non-linear features in fluvial areas, such as lakes and ponds, is to be measured landward of the normal water surface limit. Along non-linear features in tidal areas, such as bays and inlets, proposed N.J.A.C. 7:13-4.1(b)3 similarly provides that the riparian zone is to be measured landward of the mean high water. These provisions provide predictable and easily identifiable locations from which to measure the riparian zone. A regulated water may also flow through a wetlands complex and therefore lose any definable shape. Along such amorphously-shaped features, proposed N.J.A.C. 7:13-4.1(b)4 provides that the riparian zone is to be measured landward of the feature's centerline. This is consistent with the Department's application of the special water resource protection area under the Stormwater Management rules at N.J.A.C. 7:8-5.5(h).

Proposed N.J.A.C. 7:13-4.1(c) sets forth the width of the riparian zone along various regulated waters. Proposed N.J.A.C. 7:13-4.1(c)1 provides that the proposed riparian zone is 300 feet wide along both sides of any Category One waters and all upstream tributaries situated within the same HUC-14 watershed as the Category One water. The existing rules at N.J.A.C. 7:13-1.3(a)3ii apply a 50-foot buffer along Category One waters but do not apply them along any

upstream tributaries. The proposed rule applies the 300-foot riparian zone to these upstream tributaries of Category One waters because the Department has determined that an enhanced level of environmental protection along these tributaries is supported by the research review detailed above. Furthermore, applying the expanded riparian zone along tributaries that lie within the same HUC-14 watershed as a Category One water is consistent with the applicability of the 300-foot Special Water Resource Protection Areas under the Stormwater Management rules at N.J.A.C. 7:8-5.5(h). It should be noted, however, that the 300-foot riparian zone at proposed N.J.A.C. 7:13-4.1(c)1 applies along all waters regulated under the Flood Hazard Area Control Act rules (as described at proposed N.J.A.C. 7:13-2.2), whereas the Special Water Resource Protection Areas under N.J.A.C. 7:8-5.5(h) apply only along surface water features that are shown on USGS Quadrangle Maps or in County Soil Surveys, and only if a project meets the definition of a major development at N.J.A.C. 7:8-1.2. Since many small tributaries regulated under this chapter are not shown on USGS Quadrangle Maps or in County Soil Surveys, and as this chapter regulates a larger universe of activities than do the Stormwater Management rules, the proposed 300-foot riparian zone will apply along a greater number of waters, and impact a greater number of construction projects, than do the 300-foot Special Water Resource Protection Areas under the Storm Water Management rules.

Proposed N.J.A.C. 7:13-4.1(c)2i and ii establish a 150-foot riparian zone along certain waters containing trout resources. The trout waters to which the proposed 150-foot riparian zones apply are the same set of trout waters that currently are subject to 50-foot buffers under existing N.J.A.C. 7:13-1.3(a)3ii (which uses the term "trout-associated" waters), except as noted below for trout production waters. Existing N.J.A.C. 7:13-1.2 defines trout-associated to include all waters upstream of trout production waters as well as waters that lie within one mile upstream of

a trout maintenance waters. Proposed N.J.A.C. 7:13-4.1(c)2i and ii establish a 150-foot riparian zone along the same set of waters, except that proposed N.J.A.C. 7:13-4.1(c)2i applies only to tributaries to trout production waters that are not covered by the 300-foot riparian zone under proposed N.J.A.C. 7:13-4.1(c)1. This distinction is necessary because all trout production waters are also Category One waters under the Department's Surface Water Quality Standards at N.J.A.C. 7:9B. All trout production waters and their upstream tributaries within the same HUC-14 watershed will, therefore, receive a 300-foot riparian zone under proposed N.J.A.C. 7:13-4.1(c)1. Tributaries to trout production waters that lie upstream of the HUC-14 watershed boundary in which the trout production waters lie will receive a 150-foot riparian zone under proposed N.J.A.C. 7:13-4.1(c)2i.

Existing N.J.A.C. 7:13-1.3(a)3i also applies a 50-foot buffer along waters that support or are critical to threatened or endangered species. The 150-foot riparian zone applies to the same set of waters, as well as all upstream tributaries within one mile, as described at proposed N.J.A.C. 7:13-4.1(c)2iii. Given the sensitivity of threatened or endangered species to pollutants within stream corridors, an enhanced level of environmental protection is appropriate for these tributaries. Since the 150-foot riparian zone is applicable to tributaries within one mile upstream of trout maintenance waters, the Department has determined that it is also appropriate to extend the same riparian zone along upstream tributaries within one mile of waters that support threatened or endangered species that are critically dependent on the regulated water to survive. The Department is limiting the waters that are provided this additional protection to those associated with threatened or endangered species that are dependent on the watercourse to survive because these are the species that will be impacted by disturbances to the riparian zone.

Existing N.J.A.C. 7:13-1.3(a)3 applies a 50-foot buffer along streams containing acid-

producing deposits. The proposed rule continues this protection and applies a 150-foot riparian zone along the same set of waters under N.J.A.C. 7:13-4.1(c)2iv in order to prevent the degradation of water quality and the riparian zone due to exposure to acid.

Proposed N.J.A.C. 7:13-4.1(c)3 establishes a 50-foot riparian zone along all waters not identified as having a 300-foot riparian zone under proposed N.J.A.C. 7:13-4.1(c)1 or a 150-foot riparian zone under proposed N.J.A.C. 7:13-4.1(c)2. The proposed 50-foot riparian zone applies to generally the same set of waters that are subject to a 25-foot buffer under the existing rules with certain exceptions as noted above.

Proposed N.J.A.C. 7:13-4.1(d) clarifies that in addition to the riparian zones proposed in this section, other Department rules also protect near-stream areas. Projects subject to other rules must meet any applicable buffer requirements as well as the riparian zone requirements under this chapter. For example, the Stormwater Management rules at N.J.A.C. 7:8 and the Highlands Water Protection and Planning Act rules at N.J.A.C. 7:38 both establish 300-foot buffers to certain waters under certain circumstances. The Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A furthermore establish 50-foot and 150-foot transition areas along certain freshwater wetlands and other features that are also regulated under this the Flood Hazard Area Control Act rules. Accordingly, the proposed rule makes it clear that projects must comply with any applicable similar requirements imposed at the Federal, State and/or local levels.

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Subchapter 5. Applicability Determinations

Proposed Subchapter 5 contains provisions relating to applicability determinations, which are an optional service the Department provides to persons who want a written determination of whether a particular activity requires a flood hazard area permit. An applicability determination is called a jurisdictional determination under the existing rules at existing N.J.A.C. 7:13-1.3(g). With the exception of a stated five-year limit on the term of an applicability determination (which the Department currently imposes on jurisdictional determinations by policy), and the

voiding of an applicability determination if conditions change (as described at proposed N.J.A.C. 7:13-5.1(g) below), the substance of the proposed provisions for applicability determinations is essentially the same as the existing provisions for jurisdictional determinations, with clarifying changes and added detail.

N.J.A.C. 7:13-5.1 General provisions for applicability determinations

Proposed N.J.A.C. 7:13-5.1(a) describes the purpose of an applicability determination.

Proposed N.J.A.C. 7:13-5.1(b) provides that an applicability determination is optional, though recommended in order to avoid unintentionally undertaking unauthorized regulated activities and incurring potential liability.

Proposed N.J.A.C. 7:13-5.1(c) details the application requirements for an applicability determination. In order to evaluate and process a request for an applicability determination, the Department needs basic information on the proposed activity, such as drawings depicting the project, location maps, photographs of the work area and a written description of the project. Much of the required information is contained in an application report, which is described at proposed N.J.A.C. 7:13-15.3, and which is referenced at N.J.A.C. 7:13-5.1(c)1. The information required for an application for an applicability determination is similar to that which the Department currently requires for a jurisdictional determination, with one exception. The application report at proposed N.J.A.C. 7:13-15.3 requires a LURP-1 form to be submitted, which provides basic information, such as the name, address and signature of the applicant, and the lot, block, municipality and county of the project. The Department has found that this form is helpful in processing its applications, and is proposing to require it be submitted as part of most applications under this chapter.

Proposed N.J.A.C. 7:13-5.1(d) sets forth the Department's review procedure for an applicability determination. In some cases, the Department will be able to determine that the rules do or do not apply to a proposed activity and whether the activity is eligible for a permit-by-rule, or instead that a general permit authorization or individual permit must be obtained. However, in some cases it may be impossible to determine applicability without a verification of the flood hazard area and/or floodway limits. In such a case, the Department will issue a letter stating that applicability is unclear and that a verification pursuant to N.J.A.C. 7:13-6 must first be obtained in order to determine applicability.

Proposed N.J.A.C. 7:13-5.1(e) provides that the Department will generally respond to an application for an applicability determination within 30 calendar days, workload permitting. This time frame, while not binding on the Department, is intended to provide applicants with an estimate so that they can better plan projects.

Proposed N.J.A.C. 7:13-5.1(f) sets forth the term of an applicability determination, which is five years, except as provided at proposed N.J.A.C. 7:13-5.1(g). An applicability determination cannot be extended because site conditions can change. Whether an activity is subject to the new rules might need to be re-evaluated if it has not yet been undertaken or a permit not applied for after five years. Although this has been the Department's longstanding practice for jurisdictional determinations, it is not reflected in the existing rules. Proposed N.J.A.C. 7:13-5.1(f) also notes that a person can transfer an applicability determination to a new owner, pursuant to proposed N.J.A.C. 7:13-14.1. Transferring a document does not extend the term of the document; therefore, the Department anticipates that a new owner will, in most cases, likely apply for a new applicability determination rather than taking over an existing one. Nevertheless, the option to transfer an applicability determination to a new property owner is available.

Proposed N.J.A.C. 7:13-5.1(g) provides for the situation where the Department determines under proposed N.J.A.C. 7:13-5.1(d)2ii that this chapter does not apply to a proposed activity, but the chapter is subsequently amended to put in place stricter standards or conditions such that the proposed activity becomes regulated, or else the Department amends the flood hazard area or riparian zone onsite such that the proposed activity now lies within one of these regulated areas. In such a case, the applicability determination will become void and the applicant must obtain a permit pursuant to proposed N.J.A.C. 7:13-2.1 prior to commencing any regulated activities onsite. This is appropriate since the Department may, at any time during the life of an applicability determination, determine that more stringent standards need to be implemented under this chapter to adequately protect the public from the hazards of flooding and/or to prevent adverse impacts to the environment. Furthermore, the Department may at any time be presented with new information that indicates a flood hazard area or riparian zone is inaccurate and in need of amendment on a given site. An applicability determination therefore reflects the status of a proposed activity under the conditions existing at the time the applicability determination is approved. Should these rules change, or should the Department subsequently find that a previously-determined flood hazard area or riparian zone is incorrect on a given site, a previously exempt activity may no longer be exempt, and a permit may be required to undertake the activity.

For example, an activity near a stream may lie outside the flood hazard area and riparian zone, as these areas are currently defined by this chapter. As such, the applicant can receive an applicability determination stating that no permit is needed to undertake this activity since it does not currently lie within a regulated area. However, the Department may subsequently determine that it is necessary to expand the flood hazard area or riparian zone along the stream in question.

If the activity lies within the newly-expanded regulated area, the activity would become regulated and require a permit. In such a case, the applicability determination would become void and the applicant must receive a permit under this chapter prior to undertaking the activity.

Subchapter 6. Verifications

Proposed Subchapter 6 provides for a new type of Department determination that will verify the limits of a flood hazard area and/or a floodway on a particular site. This is called a flood hazard area verification, or verification, and is similar to a freshwater wetlands letter of interpretation.

The existing rules do not provide a means by which the Department can verify the limits of a flood hazard area and/or floodway on a particular site independent of a proposed construction activity. Thus, an applicant who wants to determine the extent of the regulated area on a property before deciding whether to plan a project cannot do so under the existing rules. Currently, the Department's only mechanism for this is to approve a "stream encroachment line" through issuance of a permit to construct. A "stream encroachment line" generally indicates the limit of disturbance authorized on the site adjacent to a stream, and the Department considers the stream encroachment line to be the floodway limit for permitting purposes. For some applicants this can result in the unnecessary expense of obtaining a permit for a disturbance even when no specific project is yet planned. Furthermore, the current process discourages applicants who would like to know the extent of the regulated area on their site prior to designing their project.

The concept of stream encroachment lines predates the imposition of flood storage volume displacement (net fill) limits. An applicant was at one time permitted to completely fill in the flood hazard area outside the encroachment lines that were established under a permit. Fill was

not allowed inside the encroachment lines, since the area inside the encroachment lines is considered to be floodway. However, with the advent of net fill restrictions in 1977 in the Central Passaic Basin, and in 1984 throughout the rest of the State, and owing to the fact that some projects (such as road crossings and bridges) must necessarily "encroach" within the encroachment limits, the concept of establishing stream encroachment lines along a regulated water has become obsolete. It is both more useful and more accurate to instead establish flood hazard area and floodway limits on a site, since these limits demarcate the Department's actual jurisdiction under these rules. Furthermore, since the design and construction standards under this chapter are different for activities inside the floodway than for activities outside the floodway, knowing the actual location of the floodway is helpful to both the Department and the regulated community.

Under the proposed rules, the Department will be able to issue a document verifying the limit of the flood hazard area and/or floodway on a site independent of an application for a permit to undertake a construction activity. Rather than stream encroachment lines, the Department will establish flood hazard area and floodway limits on a site. As noted above, determining the flood hazard area and floodway limits is more useful to the Department and the applicant, as well as any future owners of the site. An applicant can of course apply for a verification and an individual permit at the same time, as may often be the case, but a permit application does not automatically include a verification of the flood hazard area and/or floodway, since the verification process and permitting process are separated in the new rules.

To obtain a verification, an applicant must determine the flood hazard area design flood elevation, flood hazard area and/or floodway limits on the site using one of the methods in proposed Subchapter 3 and must submit the elevation and/or limits to the Department for review

and approval under the procedures outlined in this proposed subchapter.

N.J.A.C. 7:13-6.1 General provisions for verifications

Proposed N.J.A.C. 7:13-6.1(a) describes a verification and its scope. Every verification will include the flood hazard area design flood elevation, since this is the basis for drawing the boundaries of the flood hazard area on a site. The elevation is expressed in feet NGVD, which is a universally recognized measurement of elevation above a point roughly equal to sea level. Verifications also include a delineation of the flood hazard area on the site, unless the entire site lies in a flood hazard area. In such a case, only the flood hazard area design flood elevation will be verified since no flood hazard area boundary actually exists on site. A similar procedure will be followed for properties that lie completely in the floodway.

Proposed N.J.A.C. 7:13-6.1(b) provides that the flood hazard area design flood elevation, flood hazard area and/or floodway limits on a site must be established in accordance with the procedures outlined in N.J.A.C. 7:13-3, which sets forth the acceptable methods for determining these areas.

Proposed N.J.A.C. 7:13-6.1(c) sets forth requirements for an application for a verification. Most of the requirements in this section are similar to the permit application requirements found in the existing rules at N.J.A.C. 7:13-4.1. However, the information is reorganized and reworded to apply to verifications. Five items are required to apply for a verification. An application report is required, which contains basic information about the applicant and the site, as described at proposed N.J.A.C. 7:13-15.3. An engineering report is also required, which details the analysis that was performed to determine the extent of the flood hazard area and floodway on site, as described at proposed N.J.A.C. 7:13-15.4. Proof of public notice under N.J.A.C. 7:13-16 and an

application fee under N.J.A.C. 7:13-17 are also required, both of which are described more fully in those proposed subchapters. Proposed N.J.A.C. 7:13-6.1(c)5 requires six sets of drawings that depict the flood hazard area and/or floodway limits being verified. No environmental report is required for a verification application because a verification does not authorize any regulated activities on a site and therefore cannot impact the environment.

Proposed N.J.A.C. 7:13-6.1(d) explains that applications for verifications will be reviewed in accordance with the procedures at proposed N.J.A.C. 7:13-9.3 for individual permits. This is consistent with the existing Department procedure for approving stream encroachment lines.

Proposed N.J.A.C. 7:13-6.1(e) provides that the term of a verification is five years which cannot be extended. However, a verification can be automatically reissued in some cases under proposed N.J.A.C. 7:13-6.1(f) and can be transferred to a new owner of the property to which the verification applies under proposed N.J.A.C. 7:13-14.1. A number of factors can change within a watershed and thus alter the flood hazard area and floodway limits along a regulated water. For example, changes in land use within the watershed or new obstructions in the channel can raise flood elevations. Therefore, the Department believes that it is both necessary and appropriate to place time limits on the valid period of a verification.

Proposed N.J.A.C. 7:13-6.1(f) provides for the automatic reissuance of a valid verification if an individual permit or general permit authorization that references or relies upon the verification is issued for the same site. Verifications are valid for five years under proposed N.J.A.C. 7:13-6.1(e) and individual permits are valid for five years under proposed N.J.A.C. 7:13-9.4(a), except for very large or complex public projects, which are valid for 10 years under proposed N.J.A.C. 7:13-9.4(b). Often a verification is necessary for the determination that a regulated activity complies with this chapter and consequently for the issuance of an individual permit or general

permit authorization. In cases where an applicant receives a verification prior to an individual permit or general permit authorization, the verification would expire during the term of the permit or authorization. The automatic reissuance provided in this subsection solves this problem, and ensures that the documents are valid for the same period. There is no fee for such an automatic reissuance.

Proposed N.J.A.C. 7:13-6.1(f) also provides that, if a verification is issued concurrently with an individual permit or general permit authorization, the verification must show all alterations to the flood hazard area or floodway limit that will be caused by the permitted activities. Grading and/or filling on a site often raises some areas above the flood hazard area design flood elevation, and, therefore, changes the flood hazard area limits. Similarly, bridges and other water control structures in a channel can alter the floodway limits. Therefore, verifications must show both the existing (pre-construction) and the proposed (post-construction) flood hazard area and floodway limits.

Proposed N.J.A.C. 7:13-6.1(g) sets forth requirements that the applicant for a verification must satisfy within 90 calendar days after receiving a verification. These requirements relate to recording the verified flood hazard area and/or floodway limits on the deed for the property. This will ensure that future buyers of the property will be aware that the site may be subject to flooding under various circumstances and will disclose the location of any flood hazard area and/or floodways onsite.

Subchapter 7. Permits-by-Rule

Proposed Subchapter 7 introduces permits-by-rule, which are not found in the existing rules. A permit-by-rule is a permit whose terms and conditions are set forth in these rules and for

which no prior written approval from the Department is necessary in order to undertake the specified regulated activity, provided all conditions of the permit-by-rule are satisfied. The Department has determined that if the regulated activities are undertaken as prescribed in the respective permits-by-rule, the impact on flooding and the environment will be *de minimis*.

The existing rules contain provisions regarding "non-regulated uses" in the floodway at N.J.A.C. 7:13-1.3(e) and "non-regulated uses" in the flood fringe at N.J.A.C. 7:13-1.3(f). The activities described are non-regulated because they have a *de minimis* impact on flooding and the environment provided certain conditions are satisfied. Under the proposed new rules, these are the activities that are subject to permits-by-rule under proposed N.J.A.C. 7:13-7.1 and 7.2. Since these activities under both the existing rules and these new rules meet the description of regulated activity at proposed N.J.A.C. 7:13-2.4, it is more accurate to refer to them as being permitted-by-rule rather than being non-regulated. A non-regulated, that is, exempt, activity is one that is not described at proposed N.J.A.C. 7:13-2.4, or which is not undertaken within the areas regulated under this chapter as set forth at proposed N.J.A.C. 7:13-2.3.

Existing N.J.A.C. 7:13-1.3(e)1 explains the general characteristics of a non-regulated use in the floodway, and existing N.J.A.C. 7:13-1.3(e)2 lists specific activities which the Department has determined meet these general characteristics. The rule does not limit non-regulated uses in the floodway to only those listed at N.J.A.C. 7:13-1.3(e)2, but provides that list as examples of uses which meet the general characteristics in N.J.A.C. 7:13-1.3(e)1. In practice, however, the list in N.J.A.C. 7:13-1.3(e)2 has been viewed as exhaustive, with only the described activities considered non-regulated when in fact any number of activities have the characteristics of a non-regulated use as described in N.J.A.C. 7:13-1.3(e)1. The same approach has caused similar problems of misinterpretation of non-regulated uses in the flood fringe under existing N.J.A.C.

7:13-1.3(f)1 and 2.

To remedy this problem, the proposed rules establish a more comprehensive list of *de minimis* regulated activities that are proposed to be governed by permits-by-rule under proposed N.J.A.C. 7:13-7.1 and 7.2. The intent of the permit-by-rule approach is to better define the class of regulated activities that do not require prior Department approval. Some non-regulated uses listed in the existing rules have been expanded, refined or restricted under the proposed permits-by-rule and some new activities are proposed to be covered by permits-by-rule.

N.J.A.C. 7:13-7.1 General provisions for permits-by-rule

Proposed N.J.A.C. 7:13-7.1(a) explains what permits-by-rule are and that they are established by rulemaking. It explains that the specific permits-by-rule are set forth at N.J.A.C. 7:13-7.2, and are summarized in proposed Table A (discussed further below).

Proposed N.J.A.C. 7:13-7.1(b) establishes two requirements that apply to all permits-by-rule. One is that all proposed structures are suitably anchored, which is continued from various provision relating to non-regulated structures under existing N.J.A.C. 7:13-1.3(e) and (f). The other requirement relates to the review of detailed engineering calculations. Each permit-by-rule has certain standards that must be met in order for a regulated activity to be authorized. In some cases, the standards are self evident. For instance, a particular permit-by-rule may require that no trees be removed in a riparian zone. In other cases, knowledge of more intricate aspects of certain regulated areas, which are sometimes based on engineering calculations, is required. For example, a particular permit-by-rule may require that no work be situated in a floodway, which necessitates knowledge of the location of the floodway. In some cases, the floodway limits on a site can be easily determined from State or Federal maps. In other cases, determining the

floodway limits can require detailed hydraulic calculations. Since applications are not made to the Department for permit-by-rule authorizations, each individual project is not reviewed by the Department. Therefore, there is no opportunity for the Department to verify any calculations that may have been performed in order to demonstrate compliance with a particular permit-by-rule. The new rules, therefore, clarify that a regulated activity must not require a review of detailed engineering calculations in order for a project to be known to meet the standards of a particular permit-by-rule.

Proposed N.J.A.C. 7:13-7.1(c) explains that no approval from the Department is required prior to undertaking a permitted-by-rule activity. However, if it is unclear if a particular activity is permitted-by-rule, or a municipality issuing a local building permit wants written proof that an activity does not require prior Department approval, the subsection cross-references and describes the ability to obtain an applicability determination under proposed N.J.A.C. 7:13-5.1.

Proposed N.J.A.C. 7:13-7.1(d) requires people to notify the Department prior to undertaking activities under eight of the proposed 46 permits-by-rule in this subchapter. The permits-by-rule subject to prior notification are those established at proposed N.J.A.C. 7:13-7.2(a).

To help safeguard against the potential adverse effects of exceeding the limits of these eight permits-by-rule, the Department is requiring a simple notification to the Department's Bureau of Land Use Compliance and Enforcement of the intent to conduct activities under one of these permits-by-rule. As explained below, the notice will enable the Department to perform compliance inspections as appropriate to ensure that the activities are conducted consistent with the standards of the respective permits-by-rule.

Any activity conducted under a permit-by-rule, if not conformed to the limits established in the permit-by-rule, has the potential to adversely affect flooding, water quality, and wildlife or

plant habitat at the site of the activity and/or on nearby properties. Many of the proposed permits-by-rule authorize activities such as ongoing property maintenance or minor construction incidental to the use of private property or public roadways, utilities and recreational facilities. However, the Department is concerned that activities carried out under certain of the permits-by-rule, if not performed in conformance with the limits of the respective permits-by-rule, could have cumulative or significant adverse impacts that manifest themselves quickly. The activities that present this concern are activities in the floodway or channel, and certain construction activities that are not incidental to the normal use of private or public property.

It has been the Department's experience in implementing the existing rules that the reconstruction of a building or structure has not infrequently become a means to enlarge the building. Also, the repeated performance of a construction activity over the years could result in the addition of fill in the flood hazard area to a degree there could be adverse flooding impacts both on-site and to neighboring properties. Requiring prior notice of the intent to undertake such activities will enable the Department to track the activities on a particular property and ensure that the permit-by-rule limits for that property are not exceeded in the first instance (for example, enlargement rather than reconstruction), and that they are not exceeded over time by the same or successive owners of the property. Accordingly, because they are construction activities that are not incidental to the normal use of private or public property, prior notice is required for the permits-by-rule at N.J.A.C. 7:13-7.1(a)1, for reconstruction of a lawfully existing structure; at paragraph (a)2, for construction at or below grade; at paragraph (a)3, for elevating a building above the flood hazard area design flood elevation; and at paragraph (a)4, for constructing an addition to a building of no more than 300 square feet.

Furthermore, work in a channel poses an increased risk that fish habitat may be adversely

affected or that an obstruction will raise the flood elevation, decrease water quality, increase sediment or adversely affect the aquatic biota. Consequently, because they are permits-by-rule for activities in the floodway or channel, prior notice is required for the permits-by-rule at N.J.A.C. 7:13-7.2(a)5, for removing a major obstruction from a channel with machinery; at paragraph (a)6, for constructing a boat launching ramp of 1,000 square feet or less; at paragraph (a)7, for constructing fish habitat enhancement device; and at paragraph (a)8, for constructing a USGS-approved flow gauge or weir.

Proposed N.J.A.C. 7:13-7.1(e) provides that, prior to undertaking a regulated activity which fails to comply with any limit, condition or requirement of a permit-by-rule, the applicant must first obtain another approval under this chapter (such as a general permit authorization, individual permit or emergency permit) or else a CAFRA or waterfront development permit for the regulated activity. This reflects the permit requirements at proposed N.J.A.C. 7:13-2.1.

Proposed N.J.A.C. 7:13-7.1(e) also explains that the total or cumulative impacts of activities that qualify for permits-by-rule must be taken into account. An example is provided regarding the permit-by-rule to place five cubic yards of fill under proposed N.J.A.C. 7:13-7.2(b)3. The permit-by-rule allows the placement of no more than five cubic yards of fill, so multiple placements of fill that cumulatively do not exceed five cubic yards are also permitted-by-rule. For example, a person could place one cubic yard of fill per month for five months and be covered under this permit-by-rule. However, any additional fill placed after the limit is reached, no matter how small, is not permitted-by-rule and requires an individual permit or general permit authorization. Proposed N.J.A.C. 7:13-7.1(e) also explains that a project can be approved under multiple permits-by-rule and still be authorized under this section, provided no individual activity is undertaken that does not qualify for one of the proposed permits-by-rule.

Proposed Table A summarizes the permits-by-rule set forth at proposed N.J.A.C. 7:13-7.2. A total of 46 permits-by-rule are listed. This table is provided for information only, as a quick guide to the available permits-by-rule.

N.J.A.C. 7:13-7.2 Permits-by-rule

Proposed N.J.A.C. 7:13-7.2(a) lists eight permits-by-rule for which prior notice to the Department is required pursuant to proposed N.J.A.C. 7:13-7.1(d).

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(a)1 authorizes the reconstruction of a structure located in a flood fringe. This proposed permit-by-rule would cover some activities that currently are non-regulated uses under existing N.J.A.C. 7:13-1.3(f)2v. Furthermore, existing N.J.A.C. 7:13-1.3(e)2v exempts the minor repair, maintenance or replacement-in-kind of existing roads, bridges, culverts, gauging structures (including weirs) or retaining walls that will not change the cross-sectional area open to flow during the regulatory flood or increase the footprint of the structure are non-regulated uses. This proposed permit-by-rule applies to the same *de minimis* activities but limits reconstruction to the flood fringe. A reconstructed structure need not be "in-kind" under this proposed permit-by-rule, but it must be built within the same footprint as the original structure and cannot be enlarged, thus ensuring the flood storage displacement of the new structure will be similar to the existing structure. Also, the structure cannot be a habitable building, since floor elevations and access requirements under proposed N.J.A.C. 7:13-11.5 would need to be evaluated in such a case. The reconstruction of a retaining wall at least four feet high is also not authorized under this proposed permit-by-rule, since a stability analysis by a professional engineer is required for walls of this height under proposed N.J.A.C. 7:13-11.13(b). The activity under the permit-by-rule also cannot be a major development under the Stormwater

Management rules, as defined at N.J.A.C. 7:8-1.2. In such a case, an engineering review would be necessary in order to determine compliance with the Stormwater Management rules. The review of detailed calculations disqualifies an activity from being permitted-by-rule under proposed N.J.A.C. 7:13-7.1(b). Furthermore, a limited amount of riparian zone disturbance is permitted to access a structure that lies within or adjacent to the riparian zone, since it would generally not be possible to reconstruct a structure located within a riparian zone without some temporary disturbance of vegetation. However, all temporarily disturbed vegetation within the riparian zone must be replanted with indigenous, non-invasive species upon completion of the reconstruction, therefore ensuring that no lasting environmental damage will occur.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(a)2 authorizes construction activities at or below grade under certain circumstances. The examples of projects authorized under this permit-by-rule are similar to those listed as non-regulated uses at existing N.J.A.C. 7:13-1.3(f)2ii. Certain limitations are established in order to minimize adverse impacts to flooding and the environment. The activity under the permit-by-rule also cannot be a major development, as defined at N.J.A.C. 7:8-1.2. In such a case, an engineering review would be necessary in order to determine compliance with the Stormwater Management rules. The review of detailed calculations disqualifies an activity from being permitted-by-rule under proposed N.J.A.C. 7:13-7.1(b). In order to preserve flood storage, flow capacity and channel integrity, the existing ground elevation cannot be raised and the activities cannot be conducted within 25 feet of any channel. Furthermore, no vegetation may be disturbed within a riparian zone, unless the area was previously disturbed and all temporarily disturbed vegetated areas are replanted upon completion of the project.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(a)3 authorizes the elevating or raising of a

building in order to reduce flood damage potential. This activity is not described in the existing rules. However, the activity described in the proposed permit-by-rule meets the description of a non-regulated use under existing N.J.A.C. 7:13-1.3(e)1 and (f)1. It is the Department's experience that many older buildings in New Jersey have been constructed in flood hazard areas without regard for the design flood elevation or the elevation of the first floor. In many cases, the lowest floor of the building can be several feet below the flood hazard area design flood elevation and thus be subject to frequent flooding. This permit-by-rule is intended to encourage people to elevate such structures so that the lowest finished floor of the building is raised to the flood hazard area design flood elevation or above. In order to maximize flood storage onsite and to ensure that hydrostatic pressure on the walls of the building is balanced, the area below the lowest finished floor of the building must remain open to floodwaters. Also, in the event that the existing building is located within a riparian zone, no vegetation located more than 20 feet from the building may be disturbed to accommodate the raising of the building and all temporarily disturbed vegetation within the riparian zone must be replanted with indigenous, non-invasive species upon completion of the project. Raising a building in such a manner would not adversely impact the environment, would serve to increase available flood storage volume in the flood fringe and thus help reduce flood impacts, and would also provide a substantial benefit for the owner of the building being raised.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(a)4 authorizes the construction of an addition of up to 300 square feet to a lawfully existing building in the flood fringe. This is a non-regulated use under existing N.J.A.C. 7:13-1.3(f)2i, but the existing rule is limited to single-family homes. The proposed rule expands the authorization to allow additions of 300 square feet to any existing building in a flood fringe, because the flooding impact of an addition is not

related to the use of the building. A restriction on destruction of vegetation in the riparian zone and a requirement to replant temporarily disturbed vegetated areas are included in the proposed rule, as well as a limit on the proximity to a channel in order to protect channel integrity.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(a)5 authorizes the removal of a major obstruction from a regulated water with machinery. The permit-by-rule applies in cases where a large obstruction within a stream or river cannot be removed by hand. Examples include a fallen tree, an abandoned vehicle and furniture. It is the Department's experience that allowing people to use machinery to remove such debris from a channel is both beneficial to the environment and helps to ameliorate nuisance flooding, provided proper measures to prevent adverse impacts to the aquatic biota of the waterway are followed.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(a)6 authorizes the construction of a boat launching ramp. This is a non-regulated use under existing N.J.A.C. 7:13-1.3(f)2ii, but the proposed permit-by-rule adds limits on the size of the ramp and on destruction of vegetation. Since the nature of a boat ramp is such that it must lie partially adjacent to and/or within a water and therefore in the riparian zone, the amount of vegetation that may be permanently removed is higher for this permit-by-rule than for others. This is appropriate because some disturbance of vegetation in the riparian zone may be necessary during the construction of the ramp, as well as to provide permanent access to the ramp through the riparian zone. As such, the proposed permit-by-rule allows 2,000 square feet of disturbance to riparian zone vegetation and also requires that all temporarily disturbed vegetation within the riparian zone is replanted with indigenous, non-invasive species upon completion of the project. These limits ensure that the proposed activity will have no significant adverse impacts on flooding or the environment.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(a)7 authorizes the construction of a fish

habitat enhancement device in a water. This is a non-regulated use under existing N.J.A.C. 7:13-1.3(e)2x and xi. The proposed permit-by-rule includes restrictions on removal of vegetation and on any increase in offsite flooding. The limits on vegetation removal are less strict than for other activities, because fish habitat enhancement devices must be placed in streams, and this often requires destruction of vegetation in order to obtain access to the stream. However, the construction of a fish habitat enhancement device provides its own environmental benefits which offset the negative environmental impacts of destruction of vegetation and all disturbed vegetation must be restored where possible.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(a)8 authorizes the construction of a flow gauge approved by the USGS. This activity requires a permit under the existing rule. However, the activity is an important component of the State and Federal governments' efforts to measure and control flooding, and the restrictions proposed in this permit-by-rule will prevent any adverse environmental or flooding impacts. The limits on vegetation removal are less strict than for other activities for the same reasons discussed above in regard to placement of fish habitat enhancement devices under the permit-by-rule at proposed N.J.A.C. 7:13-7.2(a)7 above. Similarly, all disturbed vegetation must be restored where possible.

Proposed N.J.A.C. 7:13-7.2(b) lists 18 permits-by-rule for general construction and maintenance activities. Prior notification of the Department is not required before undertaking the activities authorized by these permits-by rule.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)1 authorizes normal property maintenance in the riparian zone. Normal property maintenance as set forth here is similar to the use of the term in the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A-2.6(b), which allow normal property maintenance in a transition area. Proposed N.J.A.C. 7:13-7.2(b)1 also

includes as normal property maintenance certain activities that are non-regulated uses under existing N.J.A.C. 7:13-1.3(e)2iii. This permit-by-rule is provided to allow property owners to perform basic activities typical to the maintenance of a home, business, garden or lawn, while preventing an expansion of use that could exacerbate flooding or adversely impact the environment.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)2 authorizes the removal of a structure from a flood fringe under certain conditions. The existing rules do not address this activity and it has been the Department's experience that there is confusion as to whether a permit is needed to remove a structure. Since removal of existing structures generally benefits the environment and increases flood storage, the Department believes that this proposed permit-by-rule will encourage such activities and will ensure that they are conducted in an acceptable manner. This permit-by-rule only applies outside a floodway, since removing a structure from a floodway could potentially exacerbate offsite flooding. Furthermore, a limited amount of riparian zone disturbance is permitted to access a structure that lies within or adjacent to the riparian zone, since it would generally not be possible to remove a structure located within a riparian zone without some temporary disturbance of vegetation. The removal of a structure that does not meet this permit-by-rule would require an individual permit and meet the requirements of proposed N.J.A.C. 7:13-11.19.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)3 authorizes the placement of five cubic yards or less of fill in a flood fringe, because this amount of fill will have a *de minimis* impact to the flood storage capacity of a regulated water. The existing rule does not contain a lower limit on regulated fill so that technically even the smallest amount of fill is regulated. The *de minimis* five cubic yards will allow the Department to focus the Department's time and resources on

activities that have potential to more impact the flood hazard area and riparian zone.

In order to preserve flow capacity and channel integrity, the proposed permit-by-rule provides that fill cannot be placed within the floodway or within 25 feet of any channel. Furthermore, no vegetation may be disturbed within a riparian zone, unless the area was previously disturbed. The proposed permit-by-rule does not apply to placing a structure because necessary public safety requirements apply to structures. For example, although a person could conceivably construct a berm, retaining wall or a small building with flood vents that displaces less than five cubic yards of fill, other requirements must also be met in order to protect public safety, such as elevating the lowest floor of the building or performing an engineering analysis of the retaining wall to ensure that it will not collapse. This proposed permit-by-rule is intended for small placements of fill, such as for landscaping or resulting from minor grading, which a landowner may propose as part of the normal maintenance of a property.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)4 authorizes the repair of a lawfully existing structure. This is distinct from reconstruction of a structure. Both "repair" and "reconstruct" are defined in proposed N.J.A.C. 7:13-1.2. Proposed N.J.A.C. 7:13-7.2(b)4 includes repairing structures, but not reconstructing structures. Based on the definition of "repair," a repaired structure cannot differ in size, shape or location from the original structure, and no more than 50 percent of the original structure may be replaced. Unlike the permit-by-rule at proposed N.J.A.C. 7:13-7.2(a)1 above, which allows a limited amount of riparian zone disturbance to access a structure being reconstructed within or adjacent to the riparian zone, this permit-by-rule does not authorize the removal of riparian zone vegetation unless it has been previously disturbed. This is appropriate since accessing a structure to reconstruct it may require an envelope of disturbance whereas repairing an existing structure without changing its size or

location should not require the removal of previously undisturbed vegetation in the riparian zone. The proposed permit-by-rule, therefore, authorizes the necessary repair of a lawfully existing structure, while ensuring that the repaired structure does not increase flooding or adversely affect the environment. It should also be noted that the permit-by-rule proposed N.J.A.C. 7:13-7.2(b)4 is designed to authorize the repair of manmade structures and not to "repair" erosion or clean sediment from channels. Applicants have argued that a stream is a type of "structure" but structure as defined in proposed N.J.A.C. 7:13-1.2 does not apply to a naturally occurring stream. Therefore, a failing retaining wall situated along a stream bank can be repaired under this permit-by-rule; a failing natural stream bank, which contains no manmade structure to be repaired, cannot.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)5 authorizes the placement of a fence that will not obstruct flood flows. Such a fence is a non-regulated use in the floodway under existing N.J.A.C. 7:13-1.3(e)2 as well as in a flood fringe at existing N.J.A.C. 7:13-1.3(f)2. A fence that will obstruct flood flows in a floodway, such as a chain link fence, requires an individual permit. No vegetation may be disturbed within a riparian zone, unless the area was previously disturbed. This allowance to disturb vegetation is provided since the Department recognizes that a person may wish to place a fence within or around a mowed yard or other similar area that happens to lie within a riparian zone. Only vegetation in areas that were previously disturbed may be cleared, cut or removed and all vegetated areas temporarily disturbed within the riparian zone must be replanted. Therefore, the permanent loss of vegetation is minimal and there is no significant environmental benefit in preventing the activity or requiring an individual permit.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)6 authorizes activities in tidal flood

hazard areas that are not regulated under N.J.A.C. 7:7 and 7:7E, provided a number of conditions are met to ensure the activity will not adversely affect flooding, the environment or public safety. No fill or aboveground structure can be placed in a floodway, thus ensuring that no obstruction to flow that could exacerbate flooding will be created. No habitable structure can be erected, since habitable structures are subject to access requirements and restrictions on floor elevations to ensure flood-resistant construction and maintain public safety. The activity under the permit-by-rule also cannot be a major development, as defined at N.J.A.C. 7:8-1.2. In such a case, an engineering review would be necessary in order to determine compliance with the Stormwater Management rules. The review of detailed calculations disqualifies an activity from being permitted-by-rule under proposed N.J.A.C. 7:13-7.1(b). Restrictions on proximity to a channel and the removal of vegetation in the riparian zone are necessary to ensure the activity will not adversely impact the environment. Under this proposed permit-by-rule there is no limitation on flood storage displacement because the depth of flooding in tidal flood hazard areas is governed by the Atlantic Ocean and loss of flood storage on a site cannot adversely impact flooding.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)7 authorizes the construction of an addition that increases the height of an existing building in a flood fringe, such as a second-story addition. The addition must be situated wholly above the flood hazard area design flood elevation and completely supported by the existing building. Although this is not explicitly covered in the existing rules, such a project meets the requirements of a non-regulated use at existing N.J.A.C. 7:13-1.3(f). Such an addition, within the limits in the proposed permit-by-rule, would have no effect on flooding. A restriction on destruction of vegetation in the riparian zone is also included in the proposed rule. All vegetation that is temporarily disturbed in the riparian zone must be replanted.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)8 authorizes the construction of a non-habitable building of up to 150 square feet in the flood fringe. The construction of a 100-square-foot auxiliary building in the flood fringe is a non-regulated use under existing N.J.A.C. 7:13-1.3(f)2i. The proposed permit-by-rule allows a 150-square-foot building, provided the building complies with restrictions to protect the channel and riparian zone. This increase in size is proposed since the Department has encountered few buildings of less than 100 square feet, and the Department has determined that a non-habitable building of 150 square feet or less in a flood fringe will not measurably impact flooding. The proposed rule also drops the requirement that the building be an "auxiliary" building, since this has no bearing on its flooding impact, but adds that the building must be non-habitable. Since most buildings in this class are constructed adjacent to existing homes and business, such as a tool shed or storage area, it is reasonable to assume that the building could be proposed on a mowed lawn or other disturbed area that happens to lie within a riparian zone. All vegetation that is temporarily disturbed in the riparian zone must be replanted. The vegetation permanently lost due to the construction of such a building is therefore minimal.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)9 authorizes the construction in a flood fringe of an open structure with a roof, such as a car port, patio or pole barn. This is a non-regulated use under existing N.J.A.C. 7:13-1.3(f)2i. However, requirements have been added to the proposed permit-by-rule in order to prevent adverse impacts to flooding or the environment. Although an open structure covered by this proposed permit-by-rule could also be covered by the proposed permits-by-rule at N.J.A.C. 7:13-7.2(a)4 or (b)8 as described above, proposed N.J.A.C. 7:13-7.2(b)9 does not limit the size of the building because the building has no walls and, therefore, cannot adversely impact flooding or be inhabited. A restriction on destruction of

vegetation in the riparian zone is added in the proposed permit-by-rule, as well as a limit on the proximity to a channel in order to protect channel integrity. As with proposed N.J.A.C. 7:13-7.2(a)4 or (b)8 as described above, most structures in this class are constructed adjacent to existing homes and businesses. It is, therefore, reasonable to assume that the structure could be proposed on a mowed lawn or other disturbed area that happens to lie within a riparian zone. All vegetation that is temporarily disturbed in the riparian zone must be replanted. The vegetation permanently lost due to the construction of such a structure is therefore minimal.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)10 authorizes recreational structures that are not buildings and that are open to flood flow, such as playground equipment, bleachers, picnic tables and backstops. These structures qualify as non-regulated uses at existing N.J.A.C. 7:13-1.3(e)2ii. If constructed in accordance with this proposed permit-by-rule, these structures will not adversely impact flooding. All vegetation that is temporarily disturbed in the riparian zone must be replanted. The vegetation permanently lost due to the construction of such a structure is, therefore, minimal.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)11 authorizes the construction in a flood fringe of a small above-ground swimming pool. This is a non-regulated use under existing N.J.A.C. 7:13-1.3(f)2ii. It is the Department's experience that the flood storage volume displaced by a small above-ground pool is negligible. A restriction on destruction of vegetation in the riparian zone is added in the proposed permit-by-rule, as well as a limit on the proximity to a channel in order to protect channel integrity. All vegetation that is temporarily disturbed in the riparian zone must be replanted. The vegetation permanently lost would be therefore minimal.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)12 authorizes the construction of an in-ground swimming pool associated with residential use that lies completely at or below existing

grade. This is a non-regulated use at existing N.J.A.C. 7:13-1.3(e)2ii. The existing rule also allows the construction of a safety fence even if the pool is located within a floodway, which is continued in the proposed permit-by-rule. In order to prevent the loss of flood storage volume, any material excavated to construct the pool must be removed from the flood hazard area. Furthermore, a restriction on the destruction of vegetation in the riparian zone is added in the proposed rule, as well as a limit on the proximity to a channel in order to protect channel integrity. Since the vegetation permanently lost would be minimal, there is no significant environmental benefit in preventing the activity or requiring an individual permit.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)13 authorizes the construction of an open deck attached to a lawfully existing building, which is a non-regulated use under existing N.J.A.C. 7:13-1.3(e)2iv. A restriction on destruction of vegetation in the riparian zone is included in the proposed permit-by-rule, as well as a limit on the proximity to a channel in order to protect channel integrity. The vegetation permanently lost would be minimal. In addition, all vegetated areas temporarily disturbed within the riparian zone must be replanted with indigenous, non-invasive species upon completion of the regulated activity. Decorative fencing, banisters or latticework is permitted provided such accoutrements remain open to floodwaters. Certain types of latticework have small openings which could in some cases restrict flood flows if located in a floodway. However, the Department recognizes that, unlike fences, the typical size, shape and location of a deck, as well as its proximity to an existing building, prevents a deck from causing significant obstruction in a floodway. Latticework is, therefore, permitted, provided there are openings to allow floodwaters to enter the deck area in order to balance hydrostatic pressure during a flood.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)14 authorizes the construction of an

open dock along an impounded body of water, such as a lake, pond or reservoir. This activity is non-regulated under existing N.J.A.C. 7:13-1.3(e)2vii, if performed in a water that is labeled as a lake, pond, or reservoir on a USGS quadrangle map. The proposed permit-by-rule allows this use on any impounded water over one acre in surface area. While this authorizes dock construction along a greater number of waters than the existing rule, the permit-by-rule also adds a maximum for the size of the structure, a maximum on the size of the structure in relation to the width of the water and a limit on destruction of vegetation. Although the dock itself would extend over water and, therefore, not likely disturb vegetation, some disturbance of vegetation in the riparian zone may be necessary during the construction of the dock, as well as to provide permanent access to the dock through the riparian zone. As such, the proposed permit-by-rule allows 1,000 square feet of riparian zone vegetation in total, including permanent and temporary disturbance, to be cleared, cut or removed and also requires that all temporarily disturbed vegetation within the riparian zone are replanted with indigenous, non-invasive species upon completion of the project. These limits ensure that the proposed activity will have no significant adverse impacts on flooding or the environment.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)15 authorizes watertight, aboveground fuel tanks of 2,000 gallons or less within or adjacent to existing buildings in a flood fringe. The existing rules at N.J.A.C. 7:13-2.2(a)3 and (c)1 prohibit the storage of petroleum products in flood hazard areas. However, the Department recognizes that existing homes and businesses in the flood hazard area may need to replace or add new fuel tanks. Small aboveground fuel tanks will not obstruct flow if placed in a flood fringe, will displace little flood storage volume and will not adversely impact the environment if they are anchored and remain watertight during a flood. Therefore, their placement in the flood fringe is proposed to be authorized under this permit-by-

rule. Larger tanks, however, could possibly present some flooding hazard. They are not authorized under this permit-by-rule. An aboveground fuel tank larger than 2,000 gallons requires an individual permit. A restriction on destruction of vegetation in the riparian zone is included in the proposed permit-by-rule, as well as a limit on the proximity to a channel in order to protect channel integrity. The vegetation permanently lost would be minimal. In addition, all vegetated areas temporarily disturbed within the riparian zone must be replanted with indigenous, non-invasive species upon completion of the regulated activity.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)16 authorizes the construction of an underground fuel tank within or adjacent to the building it serves. The existing rules at N.J.A.C. 7:13-2.2(a)3 and (c)1 prohibit the storage of petroleum products in flood hazard areas. However, as noted above regarding the permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)15, the Department recognizes that existing homes and businesses in the flood hazard area may need to replace or add new fuel tanks. A tank located underground and designed to remain watertight during a flood poses no flooding hazard, and storage tanks are regulated by the Department under other rules. Therefore, their placement in flood hazard area is proposed for authorization under this permit-by-rule. A restriction on destruction of vegetation in the riparian zone is included as well as a limit on the proximity to a channel in order to protect channel integrity. The vegetation permanently lost would be minimal. In addition, all vegetated areas temporarily disturbed within the riparian zone must be replanted with indigenous, non-invasive species upon completion of the regulated activity.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)17 authorizes the filling of an abandoned raceway, which is defined as a manmade conveyance structure that was created to divert water from a channel for the purpose of providing hydrology or hydraulic power before

returning the water to the channel. In some cases, these raceway structures have been partially blocked and abandoned for years and sometimes pose a public safety threat and/or provide a breeding ground for mosquitoes. In many cases where the raceway is no longer functioning to convey water from the adjacent channel, there is no longer any hydraulic or environmental benefit served by the structure. Therefore, it is the Department's experience that allowing abandoned raceways to be filled will not adversely impact flooding or the environment, provided proper limitations on the work are instituted. The raceway cannot be filled under this permit-by-rule if it supplies hydrology to an otherwise isolated freshwater wetlands complex. Furthermore, it is permissible to fill the raceway up to, but not above, the surrounding topography, so that there is no obstruction in the floodway and/or loss of flood storage in the flood fringe. The entire disturbed area must also be properly graded so as not to interfere with overland drainage and all vegetated areas temporarily disturbed within the riparian zone must be replanted with indigenous, non-invasive species upon completion of the project.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)18 authorizes the repair, maintenance or dredging of the channel and/or embankments of a manmade canal, which happens to be situated within the regulated area of a regulated water. Proposed N.J.A.C. 7:13-2.2(a)1 provides that manmade canals are not regulated under this chapter. However, some manmade canals pass through the flood hazard area or riparian zone of waters that are regulated under this chapter. For instance, large portions of the Delaware and Raritan Canal lie within the flood hazard area of the Delaware River in Mercer County. While the Department does not intend to regulate activities in canals themselves, those portions of canals that lie within the regulated area of another water are subject to this chapter. The Department has, therefore, determined that it is appropriate to establish a permit-by-rule for minor activities necessary for the proper operation of the canal in

cases where such activities pose no potential adverse impact to flooding or the environment. Under the proposed permit-by-rule, a public entity having jurisdiction over the canal must determine that the proposed work is necessary for the proper operation of the canal. No fill or dredged spoils can be placed in the flood hazard area and no trees can be cleared, cut or removed in a riparian zone. Vegetation may be temporarily disturbed as the nature of the activity is likely to require some disturbance. The disturbance of trees, however, should be avoidable and is therefore prohibited. Furthermore, all vegetated areas temporarily disturbed within the riparian zone must be replanted with indigenous, non-invasive species upon completion of the regulated activity.

Proposed N.J.A.C. 7:13-7.2(c) lists six permits-by-rule for activities associated with the construction and maintenance of utility lines. These permits-by-rule cover overhead utility lines on poles and towers as well as underground pipes and cables. Prior notification of the Department is not required before undertaking the activities authorized under these permits-by-rule.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(c)1 authorizes the placement of one or more utility poles. Under existing N.J.A.C. 7:13-1.3(f)2iv, utility poles in the flood fringe are non-regulated uses, and under existing N.J.A.C. 7:13-1.3(e)2viii utility poles in the floodway are non-regulated uses if they cannot be located outside the floodway. It has been the Department's experience that it is sometimes difficult to determine whether a utility pole can be located outside a floodway for a given project since floodway limits are often unknown. Furthermore, utility poles in floodways do not cause a measurable impact to flooding. Therefore it is unnecessary to restrict the placement of utility poles in a floodway. A prohibition of any impact on trees is included in the proposed permit-by-rule because utility poles can generally be installed so as to

avoid disturbance to trees. Vegetation may be temporarily disturbed as installation of utility poles is likely to result in minimal disturbance to vegetation. The permit-by-rule also includes a limit on the proximity to a channel in order to protect channel integrity.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(c)2 authorizes open-frame towers supporting utility lines provided the tower's footing is constructed at or below grade. Under existing N.J.A.C. 7:13-1.3(e)2viii poles and towers in a floodway that cannot be located outside the floodway are non-regulated uses. However, since towers can be large structures that could significantly obstruct flow in a floodway, the proposed permit-by-rule allows only the construction of a tower with an underground footing in the flood fringe, which will not obstruct flow and will displace little flood storage volume. Towers in the flood fringe are non-regulated uses under existing N.J.A.C. 7:13-1.3(f)2iv.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(c)3 authorizes the placement of an underground utility line beneath a water or channel through directional drilling or "jacking" provided a number of conditions are satisfied. Jacking a utility line under a watercourse is a non-regulated use under existing N.J.A.C. 7:13-1.3(e)2ix. However, to lessen the potential for utility lines to be incorrectly jacked under waterways and threaten the integrity of the channel, the proposed permit-by-rule includes conditions intended to prevent this, including standards for any manholes that may be associated with the proposed line. Trees cannot be cut, cleared or removed in the riparian zone, but it is acceptable to temporarily disturb other vegetation in the riparian zone, such as for construction staging or the creation of the jacking pit, provided the disturbed vegetation is restored. This provision is included because it would often be impractical to require jacking pits to be located completely outside the riparian zone, which can extend up to 300 feet from the channel.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(c)4 authorizes the placement of an underground utility line within an existing roadway that crosses a water or channel. This activity essentially consists of digging a trench within an existing roadway, placing a utility line in the trench, and then replacing the roadway paving or other surface material over the utility line. In the Department's experience, such placement is similar in effect to jacking, and has no significant environmental or flooding impact if performed within certain limits. All work must take place within a paved area and should not result in any filling of the flood hazard area, so the permit-by-rule does not allow any disturbance of vegetation in the riparian zone or flood storage volume displacement. Other standards similar to those included in the permit-by-rule at proposed N.J.A.C. 7:13-7.2(c)3 to protect both the line and any bridge or culvert that could be affected are included for the reasons described in the summary for that permit-by-rule above.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(c)5 authorizes the attachment of a utility line to an existing road crossing of a regulated water, such as a bridge or culvert that spans or conveys a channel. When attached properly, no significant environmental or flooding impact will occur as a result of the utility line. Thus, by authorizing this activity under a permit-by-rule, the Department intends to encourage utility companies to avoid the impacts associated with cutting an open trench across a channel. Other standards similar to those included in the permit-by-rule at proposed N.J.A.C. 7:13-7.2(c)3 to protect both the line and any bridge or culvert that could be affected are included for the reasons described in the summary for that permit-by-rule above.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(c)6 authorizes the placement of an underground utility line outside of a riparian zone, provided a number of conditions are satisfied. While this activity requires a permit under the existing rules, the proposed restrictions on this activity under this permit-by-rule will ensure that no adverse environmental or flooding impacts

will occur. Other standards similar to those included in the permit-by-rule at proposed N.J.A.C. 7:13-7.2(c)3 to protect the line are included for the reasons described in the summary for that permit-by-rule above.

Proposed N.J.A.C. 7:13-7.2(d) lists four permits-by-rule for activities associated with roadways and parking areas. Prior notification of the Department is not required before undertaking the activities authorized under these permits-by-rule.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(d)1 authorizes the repaving and/or resurfacing of a lawfully existing paved roadway or paved parking area within a flood fringe, provided the existing grade is not raised by more than three inches. Resurfacing will not increase runoff or impact water quality, and it is the Department's experience that the amount of flood storage volume displaced by raising an existing grade by no more than three inches is negligible. Further, resurfacing is often necessary for the safety of the traveling public and thus should not be restricted by flood storage displacement limitations. However, the addition of more than three inches of pavement, either in one application or cumulatively, as well as resurfacing a roadway that is located within a floodway, requires an individual permit because the Department must evaluate the potential impacts on flooding in such cases. The proposed permit-by-rule also provides that the roadway cannot be enlarged.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(d)2 authorizes the placement of a guardrail along a public roadway by a public entity. Guardrails are often necessary for public safety, and do not cause significant obstructions to flood flows. The herbaceous vegetation permanently lost due to their placement would be minimal provided in the riparian zone that no trees are disturbed and all temporarily disturbed vegetation is restored.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(d)3 authorizes the removal of sediment

and debris by hand within and adjacent to existing culverts and stormwater discharges. A number of public entities have expressed frustration that minor maintenance activities such as digging out a clogged culvert require a permit under the existing rules even if done by hand. This permit-by-rule responds to those concerns and is designed specifically for public entities wishing to maintain positive drainage through existing structures. The restrictions on the work ensure that that there will be no adverse impacts on flooding or the environment.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(d)4 authorizes the replacement of all or part of a bridge superstructure provided the replacement activity occurs above the flood hazard area design flood elevation. Given this restriction, the work cannot affect flooding. This activity would qualify as a non-regulated activity under existing N.J.A.C. 7:13-1.3(e) although it is not specifically listed there.

Proposed N.J.A.C. 7:13-7.2(e) lists six permits-by-rule for activities associated with the storage of secured and unsecured material. Prior notification of the Department is not required before undertaking the activities authorized under these permits-by-rule.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(e)1 authorizes temporary storage in flood fringe that is necessary for construction activities. Proposed N.J.A.C. 7:13-11.16 establishes standards for the storage of unsecured material in regulated areas; this permit-by-rule enables a typical amount of short term storage of materials for a particular purpose (construction) that will not pose a significant flooding danger. It is the Department's experience that undertaking regulated activities in regulated areas sometimes unavoidably necessitates the temporary storage of construction material in regulated areas. This permit-by-rule is intended to allow such storage, with appropriate limits to ensure that there is *de minimis* impact to flooding and the environment.

The permits-by-rule at proposed N.J.A.C. 7:13-7.2(e)2 and 3 authorize temporary or

incidental storage in regulated areas associated with existing residences, businesses and other facilities in regulated areas. Proposed N.J.A.C. 7:13-11.16 regulates the storage of unsecured material in regulated areas; however these permits-by-rule allow a typical amount of storage that will not pose a significant flooding danger. These permits-by-rule are not intended to inconvenience home and business owners situated in flood hazard areas, but to limit storage to an amount that is usual and customary and that will not result in a public hazard. For example, the Department recognizes that typical storage at a residence may include several cars, wood piles, toys, patio furniture, shelters for animals and any number of other objects that could become buoyant or be transported offsite during a flood. The Department does not intend to cause homeowners to remove such objects from the flood hazard area. However, it has been the Department's experience that some homeowners store dozens of junked cars or used tires, piles of debris and other materials which serve no use to the residence whatsoever and simply present an increased public hazard if a flood should wash this material downstream. The provisions of these permits-by-rule, therefore, are designed to allow the normal storage of unsecured material in various circumstances while enabling the Department to prevent obvious abuses that could present a public hazard.

The permit-by-rule proposed N.J.A.C. 7:13-7.2(e)2 authorizes typical amounts of storage incidental to a residence, and the permit-by-rule at proposed N.J.A.C. 7:13-7.2(e)3 authorizes typical amounts of storage incidental to a business. As noted above, an inordinate amount of unsecured material, or stored material that is not typical to a residence or business, is not authorized under these permits-by-rule. For example, large amounts of construction debris, unused vehicles or machinery, or piles of refuse stored in flood hazard areas present a public hazard and are not authorized. Such storage is subject to the requirements at proposed N.J.A.C.

7:13-11.16. Hazardous substances are not allowed to be stored under proposed N.J.A.C. 7:13-7.2(e)2, since the storage of such materials is not typical to a residence. Hazardous substances may be stored under proposed N.J.A.C. 7:13-7.2(e)3 if the material is essential to the operation of the business or facility, and provided the material is stored lawfully and is isolated from contact with floodwaters where possible.

The proposed permit-by-rule at proposed N.J.A.C. 7:13-7.2(e)4 authorizes the storage of unsecured material necessary for the normal operation of certain existing businesses or non-residential facilities, whose primary function is to store and distribute material. Lumber yards, gravel pits, vehicle dealerships and other similar businesses depend on the constant import and export of unsecured material. New facilities of this type are regulated under proposed N.J.A.C. 7:13-11.16. However, this permit-by-rule authorizes an existing business or similar facility to continue operating in a flood hazard area, provided the facility is not expanded and provided the activities meet certain other conditions that ensure there will be no adverse impacts on flooding or the environment. Hazardous materials may be stored under the proposed permit-by-rule if the material is essential to the operation of the business or facility, and provided the material is stored lawfully and is isolated from contact with floodwaters where possible.

The permit-by-rule proposed N.J.A.C. 7:13-7.2(e)5 authorizes the placement, storage or processing of hazardous waste at a lawfully existing hazardous waste facility, provided certain conditions are satisfied. Existing N.J.A.C. 7:13-2.2(a)3 prohibits the unauthorized discharge, processing, storage or disposal of wastes and hazardous materials in a floodway, and existing N.J.A.C. 7:13-2.2(c)1 similarly prohibits such disposal in a flood fringe. This proposed permit-by-rule clarifies that an existing hazardous waste facility can continue to operate, provided it is not expanded and provided the facility is operating lawfully. Activities involving hazardous

wastes that do not meet the limits under this permit-by-rule are regulated under proposed N.J.A.C. 7:13-11.17.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(e)6 authorizes the continued operation of existing solid waste facilities. The conditions that apply to this permit-by-rule are identical to those for the permit-by-rule at proposed N.J.A.C. 7:13-7.2(e)5, described above, which authorizes the continued operation of existing hazardous waste facilities. Existing N.J.A.C. 7:13-2.2(a)2 prohibits the "addition of solid waste" in a floodway. However, existing N.J.A.C. 7:13-2.2(b)3 allows lawfully existing "sanitary landfills" to operate and expand under certain conditions. This proposed permit-by-rule authorizes the continued operation of a solid waste facility, provided it is not expanded. Activities involving solid waste that do not meet the limits of this permit-by-rule, such as expansions, are regulated under proposed N.J.A.C. 7:13-11.18 and require an individual permit.

Proposed N.J.A.C. 7:13-7.2(f) lists four permits-by-rule for agricultural activities. Prior notification of the Department is not required before undertaking activities authorized under these permits-by-rule.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(f)1 authorizes the continuation of existing, ongoing agricultural activities. Existing N.J.A.C. 7:13-1.3(e)2vi identifies certain agricultural practices as non-regulated uses, but is not clear as to when the practice must have started in order to be non-regulated. The permit-by-rule requires that the activities must have been established at the time the rule is proposed in order to be authorized under the permit-by-rule. The proposed permit-by-rule also clarifies that these activities may not involve placement of fill or structures.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(f)2 authorizes new agricultural activities that do not result in the placement of fill or an aboveground structure. Vegetation in the riparian zone can be disturbed to accommodate new agricultural activities only where previous development or disturbance has occurred, such as a lawn, garden or abandoned parking area. Given these restrictions, new agricultural activities will not adversely affect the environment or flooding, and are therefore proposed for authorization under a permit-by-rule. This is consistent with existing N.J.A.C. 7:13-1.3(f)2iii.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(f)3 authorizes certain soil conservation and agricultural activities. It is similar to existing N.J.A.C. 7:13-1.3(e)2vi and (f)2iii. Under the existing rules, a number of these activities are non-regulated uses in both the floodway and flood fringe. However, the existing rules are not clear as to whether these activities may be undertaken on land that is not currently agricultural. Therefore, the permits-by-rule makes a distinction between ongoing activities and the undertaking of new activities. Like permit-by-rule at proposed N.J.A.C. 7:13-7.2(f)1, which authorizes certain ongoing agricultural activities outside a channel, the permit-by-rule at proposed N.J.A.C. 7:13-7.2(f)3 authorizes certain soil conservation practices, provided they take place on land that has been continuously farmed as of the proposal of these new rules. Since these activities may introduce fill into the flood fringe, this restriction will ensure that only ongoing agricultural operations are permitted-by-rule. Farms that are established after the proposal date of these new rules will need an individual permit for such activities. A restriction on destruction of vegetation in the riparian zone is also included in the proposed permit-by-rule, as well as a limit on the proximity to a channel in order to protect channel integrity.

The permit-by-rule at proposed N.J.A.C. 7:13-7.2(f)4 authorizes the construction of an

agricultural building without a foundation. This is currently a non-regulated use under existing N.J.A.C. 7:13-1.3(f)2iii(2). Under the proposed permit-by-rule, the size of the building is limited to 1,000 square feet to ensure that large areas of land are not covered by such structures. Large structures could result in impacts to flooding and therefore necessitate a review under an individual permit application. A restriction on destruction of vegetation in the riparian zone is included in the proposed permit-by-rule, as well as a limit on the proximity to a channel in order to protect channel integrity. Since the herbaceous vegetation permanently lost in such a case would be minimal, there is no significant environmental benefit in preventing the activity or requiring an individual permit, provided no trees in the riparian zone are disturbed.

Subchapter 8. General Permits

Proposed Subchapter 8 introduces general permits, which are not found in the existing rules. A general permit is a permit whose terms and conditions are set forth in these rules and for which an application to and approval from the Department is necessary in order to undertake the particular regulated activity. A 45-day review time applies to complete applications for authorization under these proposed flood hazard general permits (except for proposed general permit 1, which is governed by specific statutory deadlines) and an authorization under the general permits will automatically be approved if the Department does not reject or deny the application within that 45-day timeframe. No public notice is required for an application for a general permit authorization and the application fee is $ 500.00, except for general permits 1 and 6 at proposed N.J.A.C. 7:13-8.3 and 8.8, respectively, for which no application fee is required.

The proposed subchapter establishes general permits for 16 activities that have been identified as having minimal impacts on flooding and the environment if they are performed in

an appropriate manner. The proposed subchapter includes general permits covering certain stream cleaning, scour protection and stormwater facility maintenance activities by public entities, various agricultural activities under Natural Resource Conservation Service oversight, relocation and reconstruction of damaged buildings, and certain activities along small streams and in tidal flood hazard areas.

N.J.A.C. 7:13-8.1 Standards applicable to all general permits

Proposed N.J.A.C. 7:13-8.1(a) explains what a general permit is and lists the general permits set forth in this subchapter. Proposed general permit 1 allows local governments to remove sediment and debris from channels, pursuant to the "Stream Cleaning Act" at N.J.S.A. 58:16A-67. Seven proposed general permits (2A through 2G) are specifically targeted for projects that are designed and overseen by the NRCS. Proposed general permit 3 allows public entities to provide scour protection for bridges along public roadways, and proposed general permit 4 allows public entities to maintain and repair stormwater structures. Proposed general permit 5 allows the relocation of a building to reduce flood damage potential, and proposed general permit 6 allows the reconstruction of a private residence damaged or destroyed by fire, flood or other natural disaster. Proposed general permit 7 allows the construction of a private residence, a residential addition or a structure appurtenant to a residence in a tidal flood hazard area. Proposed general permit 8 allows the construction of a utility line across or along a water draining less than 50 acres, general permit 9 allows the construction of a roadway or footbridge across a regulated water that has a drainage area of less than 50 acres, and proposed general permit 10 allows the construction of a stormwater outfall structure along the same set of waters.

Proposed N.J.A.C. 7:13-8.1(b) sets forth several self explanatory conditions that apply to all

general permits, such as a requirement that the activity must not adversely affect fishery resources and threatened or endangered species, that all structures be suitably anchored, that appropriate soil conservation methods are practiced and that the local Soil Conservation District approves the project if they have jurisdiction over the proposed activities. Proposed N.J.A.C. 7:13-8.1(b)7 requires either that the overall project associated with the general permit activity is not subject to the requirements of the Stormwater Management rules at N.J.A.C. 7:8, or else that the overall project has already been reviewed and approved under a Land Use permit, during which review the Department has determined that the overall project meets the requirements of N.J.A.C. 7:8. Any activity that requires a review of stormwater management calculations to determine compliance with N.J.A.C. 7:8 is not eligible for a general permit under this chapter.

Proposed N.J.A.C. 7:13-8.1(c) sets forth the application review material that must be submitted to the Department in order to demonstrate that the limitations and requirements of the proposed general permit is satisfied. This subsection does not apply to general permit 1, the application and review procedures for which are described at proposed N.J.A.C. 7:13-8.3. The required material includes an application report, discussed in more detail in the summary for proposed N.J.A.C. 7:13-15.3, which includes basic information relating to the location of the site and who will be performing the work. Drawings of the project illustrating the proposed work and any impacts to the riparian zone must be provided, as must a certification from an engineer. The certification details how the project meets the requirements of the particular general permit under which authorization is sought. Except for general permit 6, which has no fee, general permits require a proposed $ 500.00 application fee, as described at the summary for proposed N.J.A.C. 7:13-17.1.

Proposed N.J.A.C. 7:13-8.1(d) sets forth the Department's procedures for initial

completeness review of general permit applications. This procedure is identical to the completeness review for stream encroachment permits under existing N.J.A.C. 7:13-4.7(a), as well as the completeness review for individual permits at proposed N.J.A.C. 7:13-9.3(b). The proposed subsection provides that the Department must determine whether all necessary information required for a complete general permit application has been provided, and accept or reject the application accordingly. The proposed subsection further provides that if the Department takes no action within 20 working days following the receipt of an application, the application is automatically deemed complete for review. However, this automatic acceptance does not preclude the Department from requesting additional information during the subsequent review of the application in order to render the application approvable.

Proposed N.J.A.C. 7:13-8.1(e) provides that the Department must take one of two actions within 45 calendar days after receiving a complete application under all proposed general permits (except general permit 1, which is subject to the timeframes in N.J.A.C. 7:13-8.3), otherwise the project is automatically authorized under N.J.A.C. 7:13-8.1(f). The Department may determine that the submitted project is authorized under the general permit and approve the application. The Department may alternatively notify the applicant that the project does not qualify for authorization under a general permit. For example, an applicant may request authorization under proposed general permit 2A to perform bank stabilization work, and may submit all information required at proposed N.J.A.C. 7:13-8.1(c). However, upon review of the project, the Department could determine that the proposed bank stabilization work exceeds the scope of activities authorized under general permit 2A. In such a case, the Department is required to notify the applicant that the submitted project does not qualify for authorization under the general permit in question and an individual permit would need to be pursued to conduct the

regulated activity.

Proposed N.J.A.C. 7:13-8.1(f) provides for a default approval of a general permit if the Department does not make a decision on the application as required under proposed N.J.A.C. 7:13-8.1(e). This is found in the existing rules at N.J.A.C. 7:13-4.7(d) for stream encroachment permit application reviews, is identical to proposed N.J.A.C. 7:13-9.3(h), which sets forth the automatic approval of individual permits, and is reworded in the proposed rule for clarity, with no change in meaning.

Proposed N.J.A.C. 7:13-8.1(g) provides that an authorization under a general permit is subject to the general conditions for all permits at proposed N.J.A.C. 7:13-8.2. These conditions are basic requirements designed to ensure that a permittee successfully undertakes the approved activities and that environmental impacts are limited. The requirements, discussed in more detail in the summary of proposed N.J.A.C. 7:13-8.2, include the responsibility of the permittee to comply with conditions, to alert the Department to potential problems, to halt or limit activities which are found to be harmful and to properly oversee construction and maintenance of the project.

Proposed N.J.A.C. 7:13-8.1(h) sets limits on multiple or repeated use of general permits. If the cumulative impacts from repeated general permit applications on the same site exceed the threshold for a given general permit, an individual permit will be required for the proposed activity.

Proposed N.J.A.C. 7:13-8.1(i) provides that a general permit is valid for five years and cannot be extended, except as provided at proposed N.J.A.C. 7:13-8.1(j). Proposed N.J.A.C. 7:13-8.1(i) also provides that a general permit authorization can be transferred with the sale of a property to a new owner pursuant to proposed N.J.A.C. 7:13-14.1.

Proposed N.J.A.C. 7:13-8.1(j) provides that a person who has received a general permit authorization must immediately cease the authorized activities if the rule in this subchapter establishing a particular general permit is repealed or amended to establish stricter standards or conditions. If the general permit is repealed, then an individual permit is required in order to resume the authorized activities. If the general permit is made stricter, then a new general permit authorization or an individual permit is required in order to resume the authorized activities.

Proposed N.J.A.C. 7:13-8.1(k) provides that an applicant does not need to obtain a verification prior to obtaining a general permit authorization, except for certain cases under general permits 5, 6 and 7, as discussed below. In some cases, the flood hazard area design flood elevation, flood hazard area limit and/or floodway limit must be known onsite in order to determine whether a proposed regulated activity complies with the requirements of this chapter. For instance, the new rules often require that a building constructed in a flood hazard area must be elevated so that the lowest habitable floor lies one foot above the flood hazard area design flood elevation. The Department cannot determine whether this requirement is met unless the flood hazard area design flood elevation is first known. The mechanism in the new rules for determining and verifying the depth and extent of flooding is known as a verification, which is set forth at proposed N.J.A.C. 7:13-6. For this reason, a verification is required prior to obtaining an individual permit to undertake a regulated activity, except for the situations provided at proposed N.J.A.C. 7:13-9.6.

However, with certain exceptions noted below, the Department can evaluate and determine compliance for the activities covered under the proposed general permits without knowing the depth and extent of flooding. For example, the depth and extent of flooding is not relevant when evaluating a sediment removal project under general permit 1 or scour protection activities under

general permit 3. Proposed general permits 5, 6 and 7, however, authorize the relocation and/or construction of a building in a flood hazard area, and require that the lowest floor of the building be elevated one foot above the flood hazard area design flood elevation. Therefore, in order to determine compliance with these general permits, the flood hazard area design flood elevation must be known. General permits 5 and 6 further require that the building not be located in a floodway, and so the floodway limits must also be known for these general permits.

In cases where a Department delineation or FEMA flood insurance study is available for a site, the flood hazard area design flood elevation and floodway limits can often be easily determined (see Methods 1, 2 and 3 at proposed N.J.A.C. 7:13-3.3, 3.4(d) and 3.4(e), respectively). In order to facilitate the processing of these general permits, the Department will accept a certification from the submitting engineer regarding the flood hazard area design flood elevation and floodway limits rather than require a formal verification under proposed N.J.A.C. 7:13-6. This is appropriate since the engineer is certifying the accuracy of the information and the Department can easily verify whether the proper flood data has been utilized.

However, if no Department delineation or FEMA flood insurance study is available for a site, Methods 4, 5 or 6 must then be used to determine the flood hazard area design flood elevation and/or floodway limits (at proposed N.J.A.C. 7:13-3.4(f), 3.5 and 3.6, respectively). Methods 4 and 6 involve detailed hydrologic and/or hydraulic calculations and Method 5 utilizes the approximate method to estimate flooding, which is described in detail at proposed Appendix 1. Due to the complexity of these methods, it is appropriate for the Department to review their use and require a verification when these methods are employed when obtaining authorization under general permits 5, 6 and 7. However, the application fee for a verification based on Method 5 will be waived if submitted with these general permit applications, as noted at the

proposed fee schedule at N.J.A.C. 7:13-17.1.

N.J.A.C. 7:13-8.2 General permit conditions

Proposed N.J.A.C. 7:13-8.2 is a new provision not found in the existing rules. This proposed new section specifies conditions applicable to all general permits; references the Department's ability to impose other conditions as necessary on a specific permit basis; and indicates that if a permittee begins permitted activities, this shall constitute the permittee's acceptance of all conditions that were placed on the general permit authorization.

Proposed N.J.A.C. 7:13-8.2(a) introduces the section and explains that standard conditions which apply to all general permits are described in proposed N.J.A.C. 7:13-8.2(b) and site-specific conditions are described in proposed N.J.A.C. 7:13-8.2(c) through (e). The proposed subsection also explains that if a permittee does not agree with a condition, the permittee is entitled to appeal the general permit authorization within the time specified at proposed N.J.A.C. 7:13-18.1. However, if a permittee undertakes any regulated activity authorized under a general permit, such activity shall constitute acceptance by the permittee of the general permit authorization and all conditions contained in the general permit authorization. This provision is intended to prevent a permittee from simultaneously appealing one or more conditions of the permit, while proceeding with regulated activities. Such action by a permittee can cause environmental harm that is difficult to reverse if the permit conditions are later upheld. This proposed stipulation is consistent with provisions in the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A-13.1(c).

Proposed N.J.A.C. 7:13-8.2(b) establishes 12 general conditions that apply to all general permits issued under this chapter. These conditions are basic requirements designed to ensure

that a permittee successfully undertakes the activities that are authorized under a general permit without causing unnecessary environmental impacts, and are similar to the standard conditions set forth at N.J.A.C. 7:7A-13.1 for freshwater wetlands permits, as well as the standard conditions currently placed on stream encroachment permits. These 12 conditions applicable to all general permit authorizations include basic responsibilities of the permittee to comply with conditions, to alert the Department to potential problems, to halt or limit activities which are found to be harmful and to properly oversee construction and maintenance of the project.

Proposed N.J.A.C. 7:13-8.2(c) recognizes the Department's authority to impose specific conditions on a general permit authorization, which are designed to ensure compliance with the requirements of the chapter and its enabling acts. It has been the Department's longstanding practice to impose site-specific conditions on a permit to ensure compliance with the rules. The Department has found that providing specific conditions within a permit applicable to the particular type of regulated activity proposed reduces the likelihood of non-compliance. For example, an activity proposed within a water with fishery resources often is restricted during certain times of year under existing N.J.A.C. 7:13-3.5 and 3.6 and proposed N.J.A.C. 7:13-10.5. While a permittee seeking to conduct an activity that would impact these resources would already be responsible for complying with the limitations included in the rules, the Department may include in the permit a specific condition that work cannot be done during the critical times of year. The additional conditions reinforce the Department's expectations on how and when a permittee shall execute a regulated activity, and also provide the permittee with a reasonable level of assurance of what is and what is not acceptable to the Department.

Proposed N.J.A.C. 7:13-8.2(d) provides that the Department may require a permittee to meet with Department representatives on a site prior to the start of work. The Department has found

that such meetings help clarify the mutual expectations of the permittee and the Department, and therefore help establish a better working relationship between the parties involved. In addition, such a meeting may be required as unique conditions on site warrant in order to inform those doing the actual construction how to proceed in a manner that is consistent with the permit. At a pre-construction meeting, permit conditions can be discussed and site-specific issues that were unanticipated during permit review can be addressed, thus increasing compliance on site and protecting the environment.

Proposed N.J.A.C. 7:13-8.2(e) explains that the Department, when adding conditions to a general permit, must either write the condition directly in the permit, or else must direct the permittee to a specific citation in the rules. This provision ensures that permit conditions are clear and predictable.

N.J.A.C. 7:13-8.3 General permit 1 for channel cleaning under the Stream Cleaning Act

In 1998, the Flood Hazard Area Control Act at N.J.S.A. 58:16A-67 was amended to allow a local government to clean, clear or desnag a stream under certain conditions without applying for a 90-day stream encroachment permit. The amendments require the applicant to notify the Department of the proposed stream cleaning project, and the Department has either 15 or 60 calendar days to respond, depending on the particular activities proposed. If the Department does not respond within the allotted time, the project is automatically approved. Since the enactment of the amendments, the Department has been complying with this mandate, and has been following this procedure for projects that comply with the conditions in the legislation. Proposed N.J.A.C. 7:13-8.3 has been included to codify the procedure required under the amendments to the Act and to add necessary clarification and detail. While the statute uses the term "stream," the

proposed rules instead use the more precise term "channel" to avoid confusion and ensure consistent use of terms throughout the chapter.

Proposed N.J.A.C. 7:13-8.3(a) lists the types of activities that may be authorized under the general permit, and provides that the activities must be conducted by a county, municipality or a designated agency of the county or municipality.

Proposed N.J.A.C. 7:13-8.3(b) provides that an agency that has obtained authorization under a freshwater wetlands general permit 26 does not have to obtain a general permit 1 authorization under this chapter for a project that would otherwise qualify for a general permit 1 authorization. The channel cleaning general permit in this chapter is substantively the same as freshwater wetlands general permit 26 (see N.J.A.C. 7:7A-5.26), which allows stream cleaning by a county, municipality or a designated agency. Thus, an applicant who obtains authorization under freshwater wetlands general permit 26 automatically satisfies the requirements for this proposed flood hazard general permit. However, the freshwater wetlands general permit has certain notice requirements, whereas no notice is necessary for proposed general permit 1 since the Act does not require notice prior to undertaking this activity. Therefore, receiving authorization under general permit 1 does not automatically provide authorization under freshwater wetlands general permit 26.

Proposed N.J.A.C. 7:13-8.3(c) refers to the application requirements for the channel cleaning general permit, which are set forth at proposed N.J.A.C. 7:13-8.3(f) through (j).

Proposed N.J.A.C. 7:13-8.3(d) sets limits and conditions on the activities which may be pursued under the general permit. Many of these limits are set forth in the Flood Hazard Area Control Act and ensure that environmental impacts are minimized. For example, proposed N.J.A.C. 7:13-8.3(d)8 requires preservation of vegetation and trees on the more southerly or

westerly bank of the stream in order to preserve shading. Shading is important because it keeps the water cool, which is important for some aquatic species. Cooler water also holds more dissolved oxygen; greater amounts of dissolved oxygen in the water improve habitat value and water quality. Proposed N.J.A.C. 7:13-8.3(d)10 sets forth additional limits, found in the Flood Hazard Area Control Act, that apply if the stream cleaning project involves sediment removal. This proposed paragraph limits the size of the stream that may be affected, requires a showing of necessity based on flooding concerns, and limits eligible streams based on the presence of threatened or endangered species habitat and water quality classification.

Proposed N.J.A.C. 7:13-8.3(e) requires that material removed from a stream must be disposed of outside of regulated areas and outside of freshwater wetlands, transition areas and State open waters, unless the applicant demonstrates that this would cause more environmental harm than disposal in these areas.

Proposed N.J.A.C. 7:13-8.3(f) sets forth the application review material that must be sent to the Department in order to demonstrate that the limitations and requirements of the proposed general permit are satisfied. The required material includes drawings that clearly depict the segments of channel to be cleaned, as well as an application report, discussed in more detail under the description for proposed N.J.A.C. 7:13-15.3 below, which includes basic information relating to the location of the site and who will be performing the work. A certification from an engineer employed by the county, municipal or local Soil Conservation District involved with the project must also be provided. This certification details how the project meets the requirements of this proposed general permit.

Proposed N.J.A.C. 7:13-8.3(g) and (h) set forth the expedited authorization process for the channel cleaning general permit. Under this process, the Department has 15 or 60 calendar days

(depending on whether the project involves sediment removal) after receiving the application in which to notify the applicant that additional information is needed, that the project is not authorized under the general permit or the Department shall approve the general permit authorization.

Proposed N.J.A.C. 7:13-8.3(i) provides that if the Department does not request more information or notify the applicant that the proposed project does not qualify for authorization under the general permit, the project is automatically authorized upon the 15th or 60th day after the Department received the application, as appropriate under proposed N.J.A.C. 7:13-8.3(g) and (h), respectively. This provision is identical to the automatic approval provision at proposed N.J.A.C. 7:13-8.1(f) for all other proposed general permits.

Proposed N.J.A.C. 7:13-8.3(j) requires the Department to identify the technical reasons for any Department decision not to authorize the activity, and requires that, if the problem is an inability to determine the natural channel bed, the Department must assist the applicant in making this determination.

Proposed N.J.A.C. 7:13-8.3(k) requires a permittee who is removing sediment from a channel to submit a completion report to the Department, including a certification that all conditions of the general permit have been satisfied.

N.J.A.C. 7:13-8.4 General permits 2A through 2G for agricultural activities designed by the NRCS

Proposed N.J.A.C. 7:13-8.4 contains seven proposed general permits for agricultural activities. These general permits are designed to promote water quality improvement on farms and will replace both the existing provisions at N.J.A.C. 7:13-4.5 and an obsolete 1978

agreement with the State Soil Conservation Committee. Under the 1978 agreement, a local Soil Conservation District (SCD) may design projects and issue stream encroachment approval for certain regulated activities, upon notice to the Department or in some cases using a simplified permit application. However, the 1978 agreement addresses a number of activities that are no longer regulated under this chapter and includes outdated application requirements for many projects. Therefore, the Department is proposing to replace the 1978 agreement with the general permits under this section.

The seven general permits in proposed N.J.A.C. 7:13-8.4 also facilitate approvals for beneficial activities targeted under agricultural initiatives developed by the NRCS. These initiatives encourage environmentally beneficial practices on farms, with special focus on stream bank restoration, riparian zone restoration and best management practices. Through these initiatives, the State and USDA have provided funding to farmers who wish to restore riparian zones along streams and ponds on their land and to install pumps, fences and fords to limit both human and animal intrusion into stream corridors. The proposed agricultural general permits allow these activities and provide standards for them in order to promote the Department's objective of improving surface water quality and preserving riparian zones. Furthermore, the limits and conditions included in each general permit are designed to ensure that the activities do not adversely affect flooding or the environment.

Proposed N.J.A.C. 7:13-8.4(a) introduces the section and sets forth basic requirements for all seven proposed agricultural general permits. In order to qualify for a general permit authorization under this section, the activity must meet certain basic conditions, including a requirement that the activity qualify for a general permit authorization under proposed N.J.A.C. 7:13-8.1(b). The remaining conditions are self explanatory, such as a requirement that the

activity occurs on agricultural land, is designed for agricultural purposes and is designed and performed under the supervision of the NRCS.

Proposed N.J.A.C. 7:13-8.4(b) provides that general permits under this section are subject to the application requirements and review procedures at proposed N.J.A.C. 7:13-8.1(c) through (e).

Proposed N.J.A.C. 7:13-8.4(c) lists the activities covered by the seven agricultural general permits.

Proposed general permit 2A authorizes soil erosion control, bank stabilization and bank restoration projects. This is a broad category of activities, some of which are covered under the 1978 agreement, and most of which require a stream encroachment permit under the existing rules. In order to protect the biota of the stream, all work must be accomplished by regrading the eroded areas to a stable slope and replanting the disturbed areas with suitable vegetation, where possible. Where this technique alone is not sufficient to stabilize erosion, or if excessive tree removal would occur as a result, soil-bioengineering may be used (see the definition of at soil-bioengineering at proposed N.J.A.C. 7:13-1.2). The amount of vegetation removed in a riparian zone must be minimized, and replanting in the riparian zone is required for all temporary disturbances. In order to preserve the flood-carrying capacity of the channel, and thereby ensure that the project will not exacerbate flooding, the cross-sectional area of the channel and floodway may not be significantly altered and the proposed activity must not obstruct flow.

Proposed general permit 2B authorizes the removal of accumulated sediment and debris from a regulated water. This is also covered under the 1978 Agreement, but the proposed general permit updates the requirements, providing a number of conditions similar to those which apply to an individual permit for sediment and debris removal at proposed N.J.A.C. 7:13-11.15. This

proposed general permit is also similar to the general permit 1 at proposed N.J.A.C. 7:13-8.3, except that general permit 2B is somewhat less restrictive. This is appropriate because the activity will be performed under the supervision of the NRCS or local SCD.

Proposed general permit 2C authorizes the construction of a roadway crossing on a farm, provided certain structural and hydraulic conditions are satisfied. This activity is not covered under the 1978 Agreement and so would need a stream encroachment permit under the existing rules. The general permit makes it easier to obtain approval of such a crossing, but includes appropriate limits to minimize impacts. As with other proposed general permits in this section, the activities must be performed under the supervision of the NRCS or local SCD.

Proposed general permit 2D authorizes the filling of a manmade channel for the purpose of freshwater wetlands restoration, provided certain conditions are satisfied. This activity is covered under the 1978 Agreement. The general permit will encourage restoration and includes limits to minimize impacts.

Proposed general permit 2E authorizes the construction of a ford across a channel for livestock. A ford is a shallow area along the bed of a stream where the channel can be crossed by walking or driving a vehicle. The construction of a ford involves locating such a shallow place in a channel and stabilizing the crossing with hard material such as concrete in order to provide livestock with stable footing and to prevent channel erosion. This activity is not covered by the 1978 Agreement and needs a stream encroachment permit under the existing rules. However, this activity will have a substantial benefit to water quality and flood prevention. When large numbers of livestock access and/or cross a stream with a natural bed, the repetitive trampling causes erosion, sediment discharge, destruction of stabilizing vegetation and deterioration of channel integrity. Livestock are sometimes permitted to cross streams anywhere on site and thus

large portions of channel are continually damaged. By permitting a small amount of short term disturbance required to construct a stable ford, and thereby concentrating access and crossings at one stable location, the proposed general permit will prevent larger disturbances with far greater long term impacts. No trees may be disturbed in the riparian zone under this proposed general permit since it is usually possible to construct a ford around any trees that may exist near the channel while still accomplishing the purpose of the project.

Proposed general permit 2F authorizes the construction of a fence along or across a channel. Such fences are often necessary to limit livestock access to a channel and also to prevent livestock from leaving the farm and deer or other animals from entering. This could in some cases entail the construction of a fence in a floodway, which is classified as a "prohibited use" under existing N.J.A.C. 7:13-2.2(a). However, the proposed restrictions on the fence will ensure that it will have negligible flooding impacts. The Department believes that allowing a small amount of disturbance necessary to construct such a fence will provide long term environmental benefits, including preventing trampling in the stream and other damage caused by unconfined livestock. No trees may be disturbed in the riparian zone under this proposed general permit since it is usually possible to construct a fence between any trees that may exist near the channel while still accomplishing the purpose of the project.

Proposed general permit 2G authorizes the construction of a pump and/or water intake structure in or along a channel in order to provide a source of water to livestock outside the channel. It is common for livestock to access a stream as a water source. As indicated in the summary for general permits 2E and 2F above, unlimited access to a stream by livestock can quickly destroy any vegetation along the banks. Additionally, the stream often receives a large amount of animal waste in such cases. Limiting livestock access to only a few, stable locations

along a stream, or preventing access completely, is, therefore, an important way to improve the biota of a stream. This proposed general permit, therefore, allows a pump and/or intake structure to be constructed along a channel, which will then carry water to a remote location away from the channel. The Department believes that allowing a small amount of disturbance within the channel and riparian zone necessary to construct the pump and/or intake structure will provide long term environmental benefits. The proposed restrictions will also ensure that any such disturbance will have negligible flooding impacts. No trees may be disturbed in the riparian zone since it is usually possible to construct a pump and/or intake structure between any trees that may exist near the channel while still accomplishing the purpose of the project.

N.J.A.C. 7:13-8.5 General permit 3 for bridge scour protection along a public roadway

Proposed N.J.A.C. 7:13-8.5(a) introduces this section, which sets forth a general permit for the placement of stabilization material in a water by a public entity in order to prevent scouring of bridge abutments or footings along public roadways. There has been a problem with scouring on many bridge abutments, where the soil and rock that stabilize the abutments have eroded away. To remedy this, State and Federal transportation authorities have allocated funds to repair such erosion. This general permit will facilitate maintenance of infrastructure and is an important safety measure. All public entities are eligible to obtain a general permit 3; it is not limited to county or municipal agencies as is general permit 1 for channel cleaning under proposed N.J.A.C. 7:13-8.3.

Proposed N.J.A.C. 7:13-8.5(b) sets forth the types of scour protection activities that are eligible for authorization under general permit 3. The activity must first satisfy the requirements applicable to all general permits under proposed N.J.A.C. 7:13-8.1(b). The activity must also be

necessary for the protection of an existing bridge or culvert along a public roadway. Limits and conditions on the scour protection activity are also included, such as a requirement that the stabilizing material only replace material that has eroded away and not obstruct flow. Additional requirements for conduct of the activity include minimization of disturbance in the riparian zone, replanting requirements in the riparian zone, and the public entity must make every effort to perform the scour protection work from only one bank and preserve vegetation and canopy in order to reduce adverse impacts. These limitations and conditions are necessary to ensure that scour protection activities do not adversely affect flooding or the environment.

N.J.A.C. 7:13-8.6 General permit 4 for stormwater maintenance by a public entity

Proposed N.J.A.C. 7:13-8.6(a) introduces this section, which sets forth a general permit for the maintenance and repair of various public stormwater management structures and conveyance features by a public entity. Improperly maintained stormwater features are a common cause of flooding in the State. As such, the Department has worked with the local governments to develop a list of routine projects that would facilitate local drainage improvement initiatives if authorized under a general permit. The projects are limited in various ways in order to prevent adverse impacts to flooding or the environment.

The class of activities that may qualify for authorization under general permit 4 are normal maintenance procedures intended to allow the continued proper operation of existing structures and manmade features. Discouraging such activities would not benefit the environment and would only serve to exacerbate flooding. To qualify for authorization under general permit 4, an activity must meet certain requirements listed at proposed N.J.A.C. 7:13-8.6(a), in addition to the general requirements for a general permit at proposed N.J.A.C. 7:13-8.1(b). In order to ensure

appropriate government oversight, the activity must be approved by and performed under the supervision of a public entity. A public entity can remove accumulated sediment, debris or nuisance vegetation from any culvert, pipe, manhole, catch basin or manmade channel under this general permit. A public entity may also stabilize any eroded, manmade channel. Finally, a public entity may reconstruct, repair, line or replace in-kind a number of existing structures, such as a culverts, pipes, manholes, catch basins, headwalls, tidegates, levees and pump stations, as well as restore and maintain conduit outlet protection. Upon completion of the project, all temporarily disturbed vegetation in a riparian zone must be replanted with indigenous, non-invasive vegetation.

N.J.A.C. 7:13-8.7 General permit 5 for the relocation of a building to reduce flood damage

Proposed N.J.A.C. 7:13-8.7(a) introduces this section, which sets forth a general permit that authorizes the relocation of a lawfully existing building to another location on the same site in order to reduce flood damage potential.

It has been the Department's experience that potential flood damage to many buildings located in flood hazard areas could be reduced if the structure is relocated to higher ground and properly elevated above the flood elevation. In order to encourage building owners to do this, the Department is proposing general permit 5, which is available only for lawfully existing buildings. Relocation of buildings erected in violation of local, State or Federal law must receive an individual permit under this chapter.

The relocation of a building is eligible for authorization under this general permit only if it satisfies all conditions at proposed N.J.A.C. 7:13-8.7(b). The project must first be eligible for a general permit authorization as described at proposed N.J.A.C. 7:13-8.1(b). In order to reduce

flood damage potential, the building must be moved where possible further from the regulated water and to higher ground on the same site. Elevating a lawfully existing building without relocating it qualifies for a permit-by-rule under proposed N.J.A.C. 7:13-7.2(a)3. The building cannot be enlarged or located in a floodway under this general permit. The enlargement of structures may qualify for a permit-by-rule in certain cases in accordance with proposed N.J.A.C. 7:13-7.2(a) or (b). If the enlargement does not satisfy the conditions for a permit-by-rule, it would require an individual permit under this chapter.

The removal of a building located in a floodway also requires an individual permit and must meet the requirements at proposed N.J.A.C. 7:13-11.19(c). It is appropriate to require an individual permit to relocate a building in a floodway because the existing building may be blocking the flow of floodwaters for another structure downstream. Relocation could cause increased flood damage to nearby structures and therefore warrants a closer review by the Department.

In order to further reduce flood damage potential, the lowest finished floor of the building must be raised to at least one foot above the flood elevation. Further, the area below the lowest finished floor cannot be used for habitation and must remain open to floodwaters as required by the standards at proposed N.J.A.C. 7:13-11.5(l). Finally, a 20-foot perimeter of vegetation within the riparian zone can be removed around the building in order to facilitate its relocation, provided all temporarily disturbed areas are replanted with indigenous, non-invasive vegetation upon completion of the project, including the area vacated by the relocation of the building.

Proposed N.J.A.C. 7:13-8.7(c) provides that a verification of the flood hazard area design flood elevation and floodway limits must be obtained prior to, or concurrent with, obtaining authorization under this general permit. An exception is made if the flood hazard area design

flood elevation and floodway limits are determined using Method 1, which relies on a Department delineation, or Methods 2 and 3, which rely on FEMA flood insurance studies for flood data. The rationale for this requirement is explained in the summary for proposed N.J.A.C. 7:13-8.1(k) above.

N.J.A.C. 7:13-8.8 General permit 6 for the reconstruction of a damaged or destroyed residence

Proposed N.J.A.C. 7:13-8.8(a) introduces this section, which sets forth a general permit that authorizes the reconstruction of a lawfully existing private residence that has been damaged or destroyed by fire, flood or other natural disaster. It has been the Department's experience that private homeowners often find the permitting process difficult to negotiate after the loss or severe damage of a home. In order to facilitate the expeditious reconstruction of a home that is destroyed or damaged due to fire, flooding or other natural disaster, the Department is proposing general permit 6, which will allow reconstruction to occur provided a number of conditions are met to reduce future flood damage potential. In order to encourage homeowners to take advantage of this general permit, the Department is proposing to require no application fee. General permit 6 is available only for the reconstruction of a lawfully existing private residence. Reconstruction of a building other than a private residence, as well as a private residence that was erected in violation of local, State or Federal law, must receive an individual permit under this chapter.

The reconstruction of a private residence is eligible for authorization under this general permit only if it satisfies all conditions at proposed N.J.A.C. 7:13-8.7(b). The project must first be eligible for a general permit authorization as described at proposed N.J.A.C. 7:13-8.1(b). The

residence must also have been damaged or destroyed by fire, flood or other natural disaster within the past 12 months. The proposed general permit is designed to facilitate reconstruction by homeowners who have been suddenly displaced due to the destruction or severe damage of their home, and allow them to quickly rebuild and reoccupy their residence. Homes that have been destroyed or damaged and subsequently abandoned for more than 12 months must therefore receive an individual permit under this chapter.

The reconstructed residence must either be situated within the footprint of the original residence or else moved further from the regulated water to higher ground onsite in order to reduce future flood damage potential. The building cannot be enlarged or located in a floodway under this general permit. The enlargement of buildings is permitted-by-rule in some cases under proposed N.J.A.C. 7:13-7.2(a) or (b) and otherwise requires an individual permit under this chapter. The reconstruction of a building in a floodway requires an individual permit and is subject to the requirements at proposed N.J.A.C. 7:13-11.5. Similarly, the removal of a residence located in a floodway requires an individual permit and must meet the requirements at proposed N.J.A.C. 7:13-11.19(c). It is appropriate to require an individual permit to relocate or reconstruct a building in a floodway. As noted in the summary for proposed general permit 5 above, the existing building may be blocking the flow of floodwaters for another structure downstream. Relocation or improper reconstruction could cause increased flood damage to nearby structures. Both cases therefore warrant a closer review by the Department.

In order to further reduce flood damage potential, the lowest finished floor of the building must be raised to at least one foot above the flood elevation. Further, the area below the lowest finished floor cannot be used for habitation and must remain open to floodwaters in accordance with the standards at proposed N.J.A.C. 7:13-11.5(l). Finally, a 20-foot perimeter of vegetation

within the riparian zone can be removed around the home in order to facilitate its reconstruction, provided all temporarily disturbed areas are replanted with indigenous, non-invasive vegetation upon completion of the project, including the area vacated by the relocation of the residence if it is moved elsewhere on site.

Proposed N.J.A.C. 7:13-8.8(c) provides that a verification of the flood hazard area design flood elevation and floodway limits must be obtained prior to, or concurrent with, obtaining authorization under this general permit. An exception is made if the flood hazard area design flood elevation and floodway limits are determined using Method 1, which relies on a Department delineation, or Methods 2 and 3, which rely on FEMA flood insurance studies for flood data. The rationale for this requirement is explained in the summary for proposed N.J.A.C. 7:13-8.1(k) above.

N.J.A.C. 7:13-8.9 General permit 7 for residential construction in a tidal flood hazard area

Proposed N.J.A.C. 7:13-8.9(a) introduces this section, which sets forth a general permit to construct certain residential buildings in a tidal flood hazard area. Under this general permit, one new private residence can be constructed, provided it is not being constructed as part of a larger residential subdivision, as well as an addition and/or an appurtenant structure such as a garage, barn or shed.

As a result of the proposed changes to the Coastal Zone Management rules at N.J.A.C. 7:7E-3.25, and the proposed removal of the list of exempted waters at existing N.J.A.C. 7:13-1.3(b)1ii, a number of tidal flood hazard areas in New Jersey which are not currently subject to this chapter will now become regulated (see the summary of N.J.A.C. 7:7E-3.25 and 7:13-2.3 above for more detail). In order to facilitate the construction of a new residential structure that is not part of a

larger development in these areas, the Department is proposing general permit 7, which will authorize such construction provided a number of conditions are satisfied. Construction in tidal flood hazard areas is not subject to many of the requirements of this chapter, such as net fill restrictions. This is due to the fact that tidal flood hazard areas are controlled by the elevation of the Atlantic Ocean, which is totally unaffected by development. As such, construction in a tidal flood fringe will not exacerbate offsite flooding as construction potentially could in fluvial areas. As a result, the primary focus of this chapter regarding individual residential structures in tidal areas is the safety of the building itself, as opposed to the flooding impact the building could cause to other nearby properties. By providing a general permit for these activities, which entails a simplified application package, expedited review time and reduced application fee, the Department intends to provide an incentive for homeowners to meet the standards of the section and thereby simultaneously reduce flood damage potential.

Proposed N.J.A.C. 7:13-8.9(b) provides that application requirements and review procedures for this general permit are set forth at proposed N.J.A.C. 7:13-8.1(c) and (d). Furthermore, the proposed subsection includes a cross-reference to notify the potential applicant that the construction of certain types of residential additions and appurtenant structures qualify for permits-by-rule pursuant to proposed N.J.A.C. 7:13-7.2(a) and (b), and do not require either a general permit or an individual permit.

Proposed N.J.A.C. 7:13-8.9(c) explains that the construction of a residential building is eligible for this general permit only if it satisfies all specified conditions. The project must first be eligible for a general permit as described at proposed N.J.A.C. 7:13-8.1(b). The building must be located in a tidal flood hazard area and not require a CAFRA or waterfront development permit under N.J.A.C. 7:7 and 7:7E. If a coastal permit is required, the requirements of this

chapter will be applied as part of the coastal permit review, and a separate permit under this chapter will not be required in accordance with proposed N.J.A.C. 7:13-2.1(b)5. The building must also meet the requirements for disturbance in the riparian zone at N.J.A.C. 7:13-10.2, including any justification that may be required for the activity and any limitations on the area of vegetation that can be cleared, cut or removed in the riparian zone. The building is additionally required to satisfy the applicable requirements for a building at proposed N.J.A.C. 7:13-11.5. These standards ensure that the proposed residential building will not adversely affect the environment or exacerbate flooding.

Proposed N.J.A.C. 7:13-8.9(d) provides that a verification of the flood hazard area design flood elevation and floodway limits must be obtained prior to, or concurrent with, obtaining authorization under this general permit. An exception is made if the flood hazard area design flood elevation and floodway limits are determined using Method 1, which relies on a Department delineation, or Methods 2 and 3, which rely on FEMA flood insurance studies for flood data. The rationale for this requirement is explained in the summary for proposed N.J.A.C. 7:13-8.1(k) above.

N.J.A.C. 7:13-8.10 General permit 8 for a utility line across or along a water with a drainage area of less than 50 acres

Proposed N.J.A.C. 7:13-8.10(a) introduces this section, which sets forth a general permit to construct a utility line across or along a regulated water that has a drainage area of less than 50 acres. Under the existing rules, only the "environmental" requirements in existing Subchapters 2 and 3 apply to a project along waters that drain less than 50 acres. Accordingly, issues related to flooding are not regulated along such streams. The proposed rules continue this distinction, and

therefore the set of standards that a project must meet are more limited than those that apply along a larger watercourse.

Proposed N.J.A.C. 7:13-8.10(b) explains that a utility line is eligible for authorization under this general permit only if it satisfies the requirements applicable to all general permits as described at proposed N.J.A.C. 7:13-8.1(b). The regulated water must have a drainage area of less than 50 acres, and the project cannot be located in the flood hazard area or riparian zone of another larger water, since the flood hazard area of the larger water would govern. The utility line must also be authorized under a valid freshwater wetlands general permit 2, pursuant to N.J.A.C. 7:7A-5.2. During the review of this freshwater wetland permit the Department will review many of the environmental impacts associated with the project. In order to ensure that environmental impacts are minimized, this permit must therefore be issued in advance of, or concurrent with, an authorization under this flood hazard general permit. The standards for disturbance in the riparian zone at N.J.A.C. 7:13-10.2 must also be satisfied, as well as specific standards related to the construction of utility lines under proposed N.J.A.C. 7:13-11.9. If all these standards are satisfied, the utility line is eligible for authorization under this proposed general permit.

N.J.A.C. 7:13-8.11 General permit 9 for a roadway or footbridge across a water with a drainage area of less than 50 acres

Proposed N.J.A.C. 7:13-8.11(a) introduces this section, which sets forth a general permit to construct a roadway or footbridge across a regulated water that has a drainage area of less than 50 acres. As noted in the summary for proposed general permit 8 above, only the "environmental" requirements in existing Subchapters 2 and 3 apply to a project along waters

that drain less than 50 acres, and so issues related to flooding are not regulated along such streams. The proposed rules continue this distinction, and, as such, the set of standards that a roadway or footbridge must meet along a water that drains less than 50 acres are more limited than a roadway or footbridge along a larger watercourse.

Proposed N.J.A.C. 7:13-8.11(b) explains that a roadway or footbridge is eligible for this general permit only if it first qualifies for authorization under a general permit as described at N.J.A.C. 7:13-8.1(b). The regulated water being crossed must have a drainage area of less than 50 acres, and the project cannot be located in the flood hazard area or riparian zone of another larger water, since the flood hazard area of the larger water would govern. The roadway or footbridge must also be authorized under a valid freshwater wetlands general permit 10A or 10B, pursuant to N.J.A.C. 7:7A-5.10A or 5.10B, respectively. During the review of one of these freshwater wetland permits the Department will review many of the environmental impacts associated with the project. In order to ensure that environmental impacts are minimized, these permits must therefore be issued in advance of, or concurrent with, an authorization under this flood hazard general permit. The only remaining environmental standards that need to be addressed to qualify for general permit 9 are the requirements for disturbance in the riparian zone at N.J.A.C. 7:13-10.2 and the requirements at N.J.A.C. 7:13-11.7(e) through (l) for the protection of aquatic habitat and the maintenance of low-flow passage for aquatic biota. If all these standards are satisfied the roadway or footbridge is eligible for authorization under this proposed general permit.

N.J.A.C. 7:13-8.12 General permit 10 for stormwater outfall along a water with a drainage area of less than 50 acres

Proposed N.J.A.C. 7:13-8.12(a) introduces this section, which sets forth a general permit to construct a stormwater outfall structure along a regulated water that has a drainage area of less than 50 acres. As noted in the summaries for proposed general permits 8 and 9 above, only the "environmental" requirements in existing Subchapters 2 and 3 apply to a project along waters that drain less than 50 acres. Accordingly, issues related to flooding are not regulated along such streams. The proposed rules continue this distinction, and, therefore, the set of standards that a project must meet are more limited than those that apply along a larger watercourse.

Proposed N.J.A.C. 7:13-8.12(b) explains that a stormwater outfall structure is eligible for authorization under this general permit only if it satisfies the requirements applicable to all general permits as described at proposed N.J.A.C. 7:13-8.1(b). The regulated water must have a drainage area of less than 50 acres, and the project cannot be located in the flood hazard area or riparian zone of another larger water, since the flood hazard area of the larger water would govern. The discharge must also be authorized under a valid freshwater wetlands general permit 11, pursuant to N.J.A.C. 7:7A-5.11. During the review of this freshwater wetland permit the Department will review many of the environmental impacts associated with the project. In order to ensure that environmental impacts are minimized therefore, this permit must, therefore, be issued in advance of, or concurrent with, an authorization under this flood hazard general permit. The standards for disturbance in the riparian zone at N.J.A.C. 7:13-10.2 must also be satisfied as well as the standards for construction of a stormwater outfall structure at proposed N.J.A.C. 7:13-11.10. If all these standards are satisfied, the discharge is eligible for authorization under this proposed general permit.

Subchapter 9. Individual Permits

Proposed N.J.A.C. 7:13-9 provides for issuance of an individual permit. An individual permit is the name the Department is proposing to assign to the type of site-specific stream encroachment permit the Department currently issues. A new name is needed for this permit because the proposed new rules create new permit options which are different from the existing permit type, such as permits-by-rule and general permits. The name "individual permit" distinguishes site-specific permits from these other proposed new permit options.

N.J.A.C. 7:13-9.1 General provisions for individual permits

Proposed N.J.A.C. 7:13-9.1(a) introduces the section, which explains that the subchapter sets forth application and review procedures for an individual permit. Proposed N.J.A.C. 7:13-9.1(a) also explains that the design and construction standards that the Department will use in order to determine if a regulated activity qualifies for an individual permit are contained in proposed N.J.A.C. 7:13-10 and 11. Proposed Subchapter 10 addresses standards associated with the location of a project in various regulated areas, such as the floodway or riparian zone, as well as in relation to certain natural resources, such as fishery resources and threatened and endangered species. Proposed Subchapter 11 addresses standards associated with particular construction activities, such as a house, road or bridge. This arrangement is necessary to ensure that the essential standards for flood-safe and environmentally-sound construction are adequately represented within the chapter while avoiding repetition in each section.

Proposed N.J.A.C. 7:13-9.1(b) explains that proposed N.J.A.C. 7:13-10 and 11 contain different standards that apply to a particular area or activity. Since projects usually contain multiple regulated activities in several different regulated areas, a project may be subject to a number of design and construction standards located throughout these subchapters. It is the

applicant's responsibility to evaluate the proposed activity to determine which standards apply.

N.J.A.C. 7:13-9.2 Application requirements for an individual permit

Proposed N.J.A.C. 7:13-9.2 sets forth requirements for an application for an individual permit. Some of the requirements in this section are found in the existing rules at N.J.A.C. 7:13-4.1. However, the information is reorganized, reworded and expanded to reflect the new permitting standards in the proposed rule.

Proposed N.J.A.C. 7:13-9.2(a) introduces the section and explains that an application for an individual permit must include all planned activities that are reasonably related to the proposed project. This requirement is necessary because the Department must be made aware of all proposed activities on a site that could affect flooding, the environment or public safety. The proposed subsection further explains that, in general, the level of detail and documentation required for an application should correspond to the size and likely impact of the proposed project. Larger and/or more complicated projects necessarily warrant more attention and thus often require a greater level of detail and justification. If an applicant is unsure of the amount of detail or information required for an application, the Department will provide guidance in this regard upon request.

Proposed N.J.A.C. 7:13-9.2(b) specifies the basic information required for an individual permit application, much of which is required for a permit application under existing N.J.A.C. 7:13-4.1(a) through (g). Proposed N.J.A.C. 7:13-9.2(b)1 though 6 require the submittal of checklists, three copies of an application report, one engineering report, three copies on an environmental report, proof of public notice and the application fee. Proposed N.J.A.C. 7:13-9.2(b)7 requires six sets of drawings that depict the proposed regulated activities. This material is

necessary to accurately determine whether the project complies with the requirements of the rules, and is similar to the information required at existing N.J.A.C. 7:13-4.1, with added detail.

Proposed N.J.A.C. 7:13-9.2(c) requires that an application in a regulated area that is known or suspected to contain acid producing soils must include certain information. An evaluation of the risks of exposing the soil, and a plan to minimize such risks, must be made. This requirement is continued from existing N.J.A.C. 7:13-3.7(d).

Proposed N.J.A.C. 7:13-9.2(d) explains that fill credits can be used to balance fill in the Central Passaic Basin only if the applicant proves that the fill credits have already been purchased by the applicant before the application is submitted. This requirement prevents flood storage volume from being displaced on a site prior to the creation of the compensating flood storage volume elsewhere in the Central Passaic Basin.

Proposed N.J.A.C. 7:13-9.2(e) requires information that is necessary for the Department to verify that a proposed building is properly flood-proofed. The required material includes drawings of the proposed flood-proofing measures, calculations that prove the building is flood resistant, and a certification that details how the building meets the flood-proofing requirements at proposed N.J.A.C. 7:13-11.5(q). This requirement is similar to the provisions at existing N.J.A.C. 7:13-2.2(b)1iii, which apply to buildings in a floodway, and existing N.J.A.C. 7:13-2.13(a)7, which apply to buildings that cannot be elevated above the design flood elevation. The proposal adds detail to the required information to ensure that the Department can determine whether the building is sufficiently flood-proofed.

Proposed N.J.A.C. 7:13-9.2(f) sets forth application requirements that must be satisfied for the issuance of an individual permit for an activity that may adversely impact a property not owned by the applicant, as required in proposed N.J.A.C. 7:13-11.1(f). The proposed subsection

sets forth four methods by which an applicant can obtain authorization from the affected property owners. This is found in the existing rules at N.J.A.C. 7:13-2.18(a) and 4.1(h), and is rephrased here for clarity. Other than adding detail to the acceptable methods, the proposed subsection does not change the meaning of the existing provision. Proposed N.J.A.C. 7:13-9.2(f)1, which provides that a public entity may demonstrate that it intends to appropriate the impacted properties through the power of eminent domain, is continued from existing N.J.A.C. 7:13-4.1(h). Proposed N.J.A.C. 7:13-9.2(f)2, 3 and 4 provide for buying the affected property, obtaining an easement on the affected property to perform the work, or simply obtaining written permission to undertake the work. These requirements are designed to protect off-site properties from unauthorized adverse impacts.

Proposed N.J.A.C. 7:13-9.2(g) provides that any regulated activity authorized under an individual permit, which is also regulated under the Department's Water Quality Management Planning rules at N.J.A.C. 7:15, must be consistent with those rules and with the applicable approved Areawide Water Quality Management Plan (commonly referred to as the "208 Plan") adopted under the Water Quality Management Planning Act, N.J.S.A. 58:11A-1 et seq.

Proposed N.J.A.C. 7:13-9.2(h) provides that an application for an individual permit for an activity located in an area under the jurisdiction of the Pinelands Commission must include a Certificate of Filing, a Certificate of Compliance or an Resolution of Approval from the Pinelands Commission for the proposed activity. If the applicant has not obtained one of these approvals from the Pinelands Commission for the project, the Department will not accept the individual permit application. Contact information for the Pinelands Commission is also included. This is continued from existing N.J.A.C. 7:13-4.1(i) with added clarification and no change in meaning.

N.J.A.C. 7:13-9.3 Application review procedures for a verification or individual permit

Proposed N.J.A.C. 7:13-9.3 continues provisions found in existing N.J.A.C. 7:13-4.7, which covers application review procedures. The provisions have been reorganized and reworded for clarity, and provisions addressing verifications are added.

The existing rules do not provide for flood hazard area verifications, which are proposed at N.J.A.C. 7:13-6.1. Rather, stream encroachment lines are established as part of a permit application. Since the proposed rules separate the delineation of a flood hazard area from construction activities in the flood hazard area, it is necessary to provide a review procedure for both activities. As the Department anticipates that many verification applications will be submitted in conjunction with individual permit applications, and the effort and time to review a verification is similar to that for an individual permit application, to make the processing of these two applications most efficient for both the applicant and the Department, the Department is proposing that both applications follow the same review process.

Proposed N.J.A.C. 7:13-9.3(a) sets forth the scope of the section, which applies to all verification and individual permit applications with two exceptions. Proposed N.J.A.C. 7:13-9.3(a)1 explains that the default 90-day approval provisions under proposed N.J.A.C. 7:13-9.3(e) through (h) do not apply to certain facilities that are expressly excluded from those provisions under the Ninety-Day Construction Permits law at N.J.S.A. 13:1D-29. Proposed N.J.A.C. 7:13-9.3(a)2 explains that the section does not apply to a regulated activity associated with a Major Highlands Development, which is instead subject to the application review procedures at N.J.A.C. 7:38.

Proposed N.J.A.C. 7:13-9.3(b) sets forth the Department's procedures for initial

completeness review of applications. These provisions are found in existing N.J.A.C. 7:13-4.7(a), and are reorganized and reworded in the proposed rule. The proposed subsection omits some unnecessary detail regarding the Department's internal processes, such as provisions for the Department to assign an agency project number. In addition, the proposed subsection explains that if the Department takes no action within 20 working days following the receipt of an application, the application is automatically deemed complete for review. However, the automatic acceptance provided at proposed N.J.A.C. 7:13-9.3(b)3 does not preclude the Department from requiring submission of additional information that may be necessary during the subsequent review of the application in order to render the application approvable. The Department's failure to act during the initial 20-day pre-review of the application does not release an applicant from fulfilling all necessary requirements under this chapter prior to the approval of the application. For example, an application may come to the Department missing its required public notice. If the Department does not take action on the application under proposed N.J.A.C. 7:13-9.3(b), the application is deemed complete for review and the 90-day clock for ultimate decision on the application begins on the day the application was received by the Department. Nevertheless, the applicant is still required to provide public notice of the application before the Department can approve the application.

Proposed N.J.A.C. 7:13-9.3(c) is a new provision that allows an applicant to cancel an application and receive a refund of the application fee in certain cases. Applications can only be cancelled within 20 working days of receipt (unless the Department has already approved or denied the application), or within 60 calendar days of receipt if the application remains incomplete under proposed N.J.A.C. 7:13-9.3(b)2. These time limitations are necessary to ensure that the Department will not refund the application fee of a project for which the Department has

invested a significant amount of review time. In contrast, where the Department has not spent a significant amount of time on the application, this proposed subsection allows applicants to reclaim the submitted review fee within a reasonable timeframe.

Proposed N.J.A.C. 7:13-9.3(d) provides that the Department may request additional information or recommend changes to a project, in order to assist an applicant in bringing a project into compliance with the rules, and, thus, becoming eligible for approval. This proposed subsection is similar to existing N.J.A.C. 7:13-4.7(c). Frequently, an applicant will contact the Department and ask if the project is likely to be permitted, and if not, how to change the project to make it comply with the rules. The Department staff will explain to the applicant what changes would be necessary and the applicant may then make the necessary adjustments and submit them as amendments to the application. However, some projects may require significant changes and/or redesign in order to comply with the rules. If the necessary changes are too significant to be accomplished within the timeframe in which a permit decision must be made under this chapter, the Department will so advise the applicant and will deny the application if it is not withdrawn. In those cases, the applicant must submit a new application.

Proposed N.J.A.C. 7:13-9.3(e) provides that, unless there is agreement to extend the review period of the application by 30 calendar days under N.J.A.C. 7:13-8.4(f) as described below, within 90 calendar days of receipt of a complete application, the Department will approve or deny the application. This proposed subsection is similar to existing N.J.A.C. 7:13-4.7(d).

Proposed N.J.A.C. 7:13-9.3(f) allows for one 30-day extension of the 90-day review period, by mutual agreement of the applicant and the Department. This consensual extension is found in existing rules at N.J.A.C. 7:13-4.7(e). The proposed rule omits a requirement in the existing rules that a telephone request for an extension must be made to the "Region head at the Department or

his or her designated agent." The proposed subsection instead specifies that the project manager (or his or her supervisor) assigned to review the application should receive the request. This will provide more flexibility for applicants and the Department in cases where the project review officer is unavailable.

Proposed N.J.A.C. 7:13-9.3(f) also clarifies that the Department shall not extend the 90-day review period by more or less than 30 calendar days. Applicants have sometimes requested five- or 10-day extensions, which needlessly complicates the application review process. It is further explained that an applicant cannot waive the right for a timely review under this section, and thereby avoid or indefinitely extend the Department's 90-day or 120-day review period for the application. Applicants have often requested more than one 30-day extension in order to rectify problems associated with a project that does not meet the requirements of this chapter. Since the Ninety-Day Construction Permits law provides for only one 30-day extension, applicants have sometimes stated that they are willing to "waive" their right to an automatic approval as provided by the law. The Department had previously allowed this under certain, limited cases, especially when it was perceived to be in the best interest of the public. However, since the Ninety-Day Construction Permits law only provides for one 30-day extension, a permittee cannot obviate the Department's responsibility to act on an application even by mutual consent. Therefore, proposed N.J.A.C. 7:13-9.3(f) codifies the Department's current practice of allowing only one 30-day extension.

If an application has been granted a 30-day extension under proposed N.J.A.C. 7:13-9.3(f), proposed N.J.A.C. 7:13-9.3(g) provides the Department will approve or deny the application within this 30-day period.

Proposed N.J.A.C. 7:13-9.3(h) provides for default approval of an application if the

Department does not make a decision on the application as required under proposed N.J.A.C. 7:13-9.3(e) and/or (g). This is found in the existing rules at N.J.A.C. 7:13-4.7(d) and is reworded in the proposed rule for clarity, with no change in meaning.

Proposed N.J.A.C. 7:13-9.3(i) provides that an applicant can request to withdraw an application, but also provides that the Department is under no obligation to accept the request and may instead choose to approve or deny the application. This proposed provision will standardize procedures for withdrawal, and will allow the Department to complete the processing of the application if necessary. In some cases, the Department may need to deny an application to formalize its findings regarding the unacceptability of a project or the proposed limits of the flood hazard area and/or floodway.

Proposed N.J.A.C. 7:13-9.3(j) provides that the fee for a withdrawn or denied application may be credited to one future application if submitted by the same applicant for the same site and project within one year. However, the credit for previously submitted fees only applies to the same project, along with changes necessary to comply with the chapter. This potential credit is found in existing N.J.A.C. 7:13-4.7(g) and has been reworded with detail added.

Proposed N.J.A.C. 7:13-9.3(k) provides that the Department will publish in the DEP Bulletin information on pending applications and permit decisions made. This is found in the existing rules at N.J.A.C. 7:13-4.7(b).

Proposed N.J.A.C. 7:13-9.3(l) provides that the Department may approve a verification or individual permit with or without a public hearing, but that a hearing will be held if the Department receives relevant, written comments from at least 10 different parties, or in any other case where the Department determines that a hearing will best serve the public. This is provided for under the existing rules only for mosquito control projects and hardship exception requests.

However, it is applied in the proposed rules to all applications to provide the Department the option to hold or require a public hearing when appropriate.

N.J.A.C. 7:13-9.4 Duration of an individual permit

Proposed N.J.A.C. 7:13-9.4(a) contains information found in the existing rules at N.J.A.C. 7:13-4.7(f), concerning the term of an individual permit. Except as provided at proposed N.J.A.C. 7:13-9.4(b), the term of an individual permit is five years, and it cannot be extended. Individual permits can, however, be transferred to a new owner under proposed N.J.A.C. 7:13-14.1, which is a new provision and is described in more detail below.

Proposed N.J.A.C. 7:13-9.4(b) is a new provision that enables the Department to issue a permit that is valid for up to 10 years to a public entity for a railroad, public roadway or flood control project, provided the Department determines that the size and scope of the project prevent the completion of all regulated activities within a five-year period. Under the existing rules, permits are valid for five years and public entities with large projects are sometimes unable to complete construction before the permit expires. Thus, even if it is clear from the outset that the project cannot be completed within five years, applicants must first obtain a five-year permit and then must resubmit applications at the end of five years for another review. Because of the difficulty or even impossibility of making major design changes on a large project that is partially completed, permits are typically reissued with little or no modification in such cases. The option for a longer permit term will prevent unnecessary delay and paperwork for those projects that clearly need more than five years for completion.

Proposed N.J.A.C. 7:13-9.4(c) addresses standards that will be applicable when an individual permit expires before all permitted activities have been completed. A similar

subsection is found in the existing rules at N.J.A.C. 7:13-4.7(f). The proposed subsection requires that, if no work has begun under the permit at the time of expiration, a new permit must be obtained which conforms to the rules in effect at the time of application for the new permit. However, if work has already begun under the permit at the time of expiration, the project must be modified to the extent feasible to conform with the rules in effect at the time of application for the new permit. This reduces confusion at the expiration of permits and strikes an appropriate balance between the public interest and the interests of permittees.

N.J.A.C. 7:13-9.5 Individual permit conditions

Proposed N.J.A.C. 7:13-9.5 is a new provision not found in the existing rules. This proposed new section specifies conditions applicable to all individual permits; references the Department's ability to impose other conditions as necessary on a specific permit basis; and indicates that if a permittee begins permitted activities, this shall constitute the permittee's acceptance of all conditions that were placed on the individual permit. The provisions at proposed N.J.A.C. 7:13-9.5 for individual permits are identical for those being proposed at N.J.A.C. 7:13-8.2 for general permits.

Proposed N.J.A.C. 7:13-9.5(a) introduces the section and explains that standard conditions which apply to all individual permits are described in proposed N.J.A.C. 7:13-9.5(b) and site-specific conditions are described in proposed N.J.A.C. 7:13-9.5(c) through (e). The proposed subsection also explains that if a permittee does not agree with a condition, the permittee is entitled to appeal the individual permit within a certain period of time as described at proposed N.J.A.C. 7:13-18.1. However, if a permittee undertakes any regulated activity approved under an individual permit, such activity constitutes acceptance by the permittee of the individual permit

and all conditions contained in the individual permit. This provision is intended to prevent a permittee from simultaneously appealing one or more conditions of the permit, while proceeding with regulated activities. Such action by a permittee can cause environmental harm that is difficult to reverse if the permit conditions are later upheld. This proposed stipulation is consistent with provisions in the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A-13.1(c).

Proposed N.J.A.C. 7:13-9.5(b) is a new provision that establishes 12 general conditions that apply to all individual permits issued under this chapter. These conditions are basic requirements designed to ensure that a permittee successfully undertakes the activities that are authorized under an individual permit without causing unacceptable environmental impacts, and are similar to the standard conditions set forth at N.J.A.C. 7:7A-13.1 for freshwater wetlands permits, as well as the standard conditions currently placed on stream encroachment permits. These 12 conditions applicable to all individual permits include basic responsibilities of the permittee to comply with conditions, to alert the Department to potential problems, to halt or limit activities which are found to be harmful and to properly oversee construction and maintenance of the project.

Proposed N.J.A.C. 7:13-9.5(c) is a new provision that recognizes the Department's authority to impose specific conditions on an individual permit, which are designed to ensure compliance with the requirements of the chapter and its enabling acts. It has been the Department's longstanding practice to impose site-specific conditions on a permit to ensure compliance with the rules. The Department has found that providing specific conditions within a permit applicable to the particular type of regulated activity proposed reduces the likelihood for non-compliance. For example, an activity proposed within a water with fishery resources often is restricted during

certain times of year under existing N.J.A.C. 7:13-3.5 and 3.6 and proposed N.J.A.C. 7:13-10.5. While a permittee seeking to conduct an activity that would impact these resources would already be responsible for complying with the limitations included in the rules, the Department may include in the permit a specific condition that work cannot be done during the critical times of year. The additional conditions therefore reinforce the Department's expectations on how and when a permittee shall execute a regulated activity, and also provide the permittee with a reasonable level of assurance of what is and what is not acceptable to the Department.

Proposed N.J.A.C. 7:13-9.5(d) is also a new provision that enables the Department to require a permittee to meet with Department representatives on a site prior to the start of work. The Department has found that such meetings help clarify the mutual expectations of the permittee and the Department, and, therefore, help establish a better working relationship between the parties involved. In addition, such a meeting may be required as unique conditions on site warrant in order to inform those doing the actual construction how to proceed in a manner that is consistent with the permit. At a pre-construction meeting, permit conditions can be discussed and site-specific issues that were unanticipated during permit review can be addressed, thus increasing compliance on site and protecting the environment.

Proposed N.J.A.C. 7:13-9.5(e) is a new provision that explains that the Department, when adding conditions to an individual permit, must either write the condition directly in the permit, or else must direct the permittee to a specific citation in the rules. This provision ensures that permit conditions are clear and predictable.

N.J.A.C. 7:13-9.6 Cases where a verification is required prior to obtaining an individual permit

Proposed N.J.A.C. 7:13-9.6 addresses the situations in which the Department will require a verification before it is able to issue an individual permit. In most cases, the Department cannot evaluate whether a proposed activity meets the design and construction standards at proposed N.J.A.C. 7:13-10 and 11 for an individual permit without a determination of the limits of the flood hazard area and floodway on a site. This is true because certain standards require a knowledge of the depth of flooding in the flood hazard area and/or the limits of the floodway to determine compliance with a requirement of the chapter. For example, existing N.J.A.C. 7:13-2.2(a)1 and proposed N.J.A.C. 7:13-10.3(b)1 prohibit the construction of a building in a floodway under most cases. If a person proposes to construct a building along a stream, and the Department does not know where the floodway of the stream is located, then the Department cannot evaluate whether the building is proposed within a floodway. In such a case, the Department cannot determine if the building complies with the rules unless the floodway limits are known. Since knowing the floodway limits requires a verification under proposed N.J.A.C. 7:13-6, the Department cannot issue an individual permit in this case without a verification.

Proposed N.J.A.C. 7:13-9.6(a) therefore establishes that in most cases the Department can issue an individual permit only if a verification of the flood hazard area and/or floodway is obtained, either prior to or in conjunction with the individual permit. Exceptions to this requirement are provided in proposed N.J.A.C. 7:13-9.6(b) and (c), which detail the situations in which the Department is able to determine compliance with the rules without a verification of both the flood hazard area and the floodway.

Proposed N.J.A.C. 7:13-9.6(b) and (c) are cases in which either the activity proposed could obviously not affect flooding, or the project and site conditions are such that compliance with the chapter can be evaluated without a detailed delineation of the regulated areas on a site. These

proposed subsections will prevent an unnecessary administrative burden on applicants proposing projects that obviously do not need a verification to determine compliance with the substantive standards for an individual permit.

Proposed N.J.A.C. 7:13-9.6(b) sets forth two cases in which the Department does not require a verification of either the flood hazard area elevation or the floodway in order to determine that a project meets the requirements of this chapter.

Proposed N.J.A.C. 7:13-9.6(b)1 describes a project that involves no fill and no aboveground structure. An example of such a project would be constructing a parking lot in the flood hazard area at or below the existing topography, which does not qualify for a permit-by-rule under proposed N.J.A.C. 7:13-7.2(a)2. Although the project is regulated since it could have impacts on the environment (and possibly require stormwater management review pursuant to N.J.A.C. 7:8), it clearly does not displace flood storage, cause an obstruction in the floodway or have any other potential adverse effect on flooding. Thus, the Department does not need to know the exact limits of the flood hazard area and floodway in order to evaluate the project. A utility line constructed beneath a channel is another example of a project that may not require a verification before obtaining an individual permit. In most cases, all work is below ground and will not result in any above ground fill or structures. Therefore, the exact limit of the flood hazard area and floodway is not a factor in determining whether the proposed utility crossing is acceptable.

Proposed N.J.A.C. 7:13-9.6(b)2 describes another situation, in which fill and/or an aboveground structure is proposed (and thus the project does not meet the requirements at proposed N.J.A.C. 7:13-9.6(b)1), but where it is not necessary for the flood hazard area elevation or floodway limits to be verified if four conditions apply. Proposed N.J.A.C. 7:13-9.6(b)2i provides that no habitable building can be proposed, which requires knowledge of the flood

hazard area design flood elevation to determine compliance with this chapter. In many cases, the flood hazard area design flood elevation would need to be known in order to establish the proper floor elevation of a habitable building and also to determine if access to the building was possible during a flood (as required at existing N.J.A.C. 7:13-2.13 and proposed N.J.A.C. 7:13-11.5 and 11.6). Proposed N.J.A.C. 7:13-9.6(b)2ii provides that no railroad, roadway or parking area is proposed, which requires knowledge of the flood hazard area design flood elevation to determine compliance with this chapter. As with habitable structures, the flood hazard area design flood elevation would often need to be known in order to that demonstrate that these structures meet the requirements of the chapter. Proposed N.J.A.C. 7:13-9.6(b)2iii and iv establish two other conditions that must be met to qualify for this exception from the verification requirement. Particularly, the Department must be able to make two determinations from a visual inspection of drawings without a review of calculations. First, any fill and/or structure that is proposed must clearly be either located outside a floodway or else must not obstruct flow in a floodway. Negligible fills in the floodway can thus be allowed if the Department determines that the fill will not obstruct flow. Second, the flood storage displacement requirements at proposed N.J.A.C. 7:13-10.4 must be satisfied. If both of these conditions are clearly satisfied, then the project cannot have any significant adverse effect on flooding. In such a case, the Department does not need to know the exact limit of the flood hazard area and floodway in order to evaluate the project.

One example of a project that may qualify under proposed N.J.A.C. 7:13-9.6(b)2 is a stormwater outfall structure. Since it is typical to locate such a structure within or adjacent to a stream in order to prevent erosion, stormwater discharges are often located in the flood hazard area or riparian zone, and sometimes within the floodway. Such structures are typically small,

mostly underground and unlikely to involve more than a negligible amount of fill. It is even sometimes the case that all other construction activities on site (such as roads, buildings or stormwater management basins) are located so far away from a stream that the Department recognizes there is no possibility that any other activity on site lies within a regulated area. Thus, the exact limit of the flood hazard area and floodway limits are unimportant in evaluating the proposed stormwater outfall structure and have no bearing on whether the Department issues an individual permit. In such a case, the Department would not require a delineation of the flood hazard area or floodway under the proposed rule.

Proposed N.J.A.C. 7:13-9.6(c) provides for situations in which it is necessary for the Department to know the flood hazard area elevation, but unnecessary for the floodway limits to be verified. This proposed exception to the floodway verification requirement is applicable where an applicant wishes to construct a habitable building, or a railroad, roadway or parking area, but where it is clear from a visual inspection of submitted drawings that the proposed building is located outside a floodway and also that the flood storage displacement requirements of N.J.A.C. 7:13-10.4 are satisfied. In the case of a habitable building, the flood hazard area design flood elevation typically needs to be known (and verified) in order to establish the proper floor elevation for the building and also to determine if access to the building is possible during a flood (as required at existing N.J.A.C. 7:13-2.13 and proposed N.J.A.C. 7:13-11.5 and 11.6). Similarly, the flood hazard area design flood elevation must typically be known when constructing a railroad, roadway or parking area to determine whether the requirements of proposed N.J.A.C. 7:13-11.6 are met. However, if, due to the size and location of the project, the Department can determine (without reviewing calculations) that the project is clearly located outside the floodway and also that the project meets the flood storage displacement limits of

proposed N.J.A.C. 7:13-10.4, it is unnecessary to also require verification of the floodway limits.

N.J.A.C. 7:13-9.7 Cases where an individual permit can be issued in an approximated flood hazard area

As described in the summary for proposed N.J.A.C. 7:13-9.6 above, the Department generally needs to know the flood hazard area elevation and/or floodway limit in order to determine whether a proposed regulated activity complies with the requirements of this chapter. Given the introduction of a method to approximate the flood hazard area design flood elevation under proposed Method 5 at N.J.A.C. 7:13-3.5, there will be cases where the Department will not be able to determine whether an activity is acceptable in an approximated flood hazard area. This is due to the fact that Method 5 does not provide a floodway and only provides an approximate flood hazard area elevation.

For example, existing N.J.A.C. 7:13-2.14 and proposed N.J.A.C. 7:13-10.4(c) limit the placement of fill within the flood fringe. Some projects propose such a small amount of fill in the flood hazard area that it is obvious to the Department that such fill limitations in the flood fringe are satisfied. However, for other projects, which propose large amounts of fill, or which propose to cut, fill and grade a site, it is not obvious that the fill limitations are satisfied. In such a case, the applicant must provide the Department with detailed cut and fill calculations which demonstrate that these limitations are met to obtain an individual permit. Since the flood fringe is defined as the portion of the flood hazard area that lies outside the floodway, both the limit of the flood hazard area and the limit of the floodway must be known to produce these calculations. Since proposed Method 5 does not provide a floodway limit, accurate fill calculations cannot be produced if this method is used. Furthermore, proposed Method 5 is designed to be conservative

and may overestimate the limit of flooding on a site. As such, even if a floodway limit could be produced under this method, the volume of the flood fringe may be overestimated, again leading to incorrect calculations that may allow too much fill on a site.

Given the above described limitations of Method 5, the Department can issue an individual permit for an activity in an approximated flood hazard area only if the Department can determine by review of submitted drawings that the activity is obviously located outside a floodway or if the activity obviously meets the floodway and fill restrictions of the chapter without the review of calculations. The requirements that must be satisfied to allow an applicant to rely upon an approximated flood hazard and floodway delineation are listed at proposed N.J.A.C. 7:13-9.7(a)1 and 2. A person cannot obtain an individual permit for any project in an approximated flood hazard area which does not meet either N.J.A.C. 7:13-9.7(a)1 or 2. The Department can issue an individual permit for a project that does not satisfy the conditions contained in N.J.A.C. 7:13-9.7 only if another method under proposed N.J.A.C. 7:13-3 is used to provide a flood hazard area and floodway limit.

N.J.A.C. 7:13-9.8 Hardship exception for an individual permit

Proposed N.J.A.C. 7:13-9.8, which provides for the issuance of an individual permit based on a hardship exception, is continued from existing N.J.A.C. 7:13-4.8, with clarifying amendments that do not affect meaning, and certain substantive amendments described below. The Department recognizes that situations do exist when strict compliance with the requirements of this chapter would create an undue hardship on an applicant. The standards of this chapter are designed to capture nearly all situations that could come before the Department. However, for those cases that are not specifically addressed by the proposed text, the Department believes that

it is appropriate to include this section in order to allow for those unanticipated, special and/or unique situations that could arise.

It should be noted that the existing rules refer to "hardship waivers" whereas the term "hardship exception" is used in the proposed rules. This change in terms is proposed because it more accurately describes the process whereby a unique project or situation merits an exception to a requirement of the rules, rather than the implication that the Department is waiving any rights or responsibilities under the rules.

Proposed N.J.A.C. 7:13-9.8(a) sets forth the requirements for a project to qualify for an individual permit based on a hardship exception. These requirements are continued from existing N.J.A.C. 7:13-4.8(a). For a project to qualify for such a permit, there must be no feasible and prudent alternative to the project, the cost of complying must be unreasonably high in relation to the benefits of compliance, or the Department and applicant must agree to alternative requirements that the Department determines will provide equal or better protection of the environment and public health, safety and welfare. This provision accommodates the reality that there is a vast variety of sites and proposed projects. In some cases, an applicant may be able to provide a unique or unusual environmental benefit that may more than compensate for another aspect of the project that cannot comply with a rule requirement.

Proposed N.J.A.C. 7:13-9.8(b), which sets forth the demonstration that an applicant must make to be eligible for a hardship exception, is continued from existing N.J.A.C. 7:13-4.8(d), with one minor substantive amendment. The proposed subsection changes the wording slightly, so that hardship may be based on an "extraordinary situation or site condition," rather than only upon an "extraordinary or exceptional situation or condition of the property." Thus, an extraordinary situation arising from either the applicant's circumstances or the project itself,

rather than solely from the property, could form the basis of a hardship exception, provided all other requirements for a hardship exception were satisfied.

Proposed N.J.A.C. 7:13-9.8(c), which sets forth the information required to support a hardship exception, is continued from existing N.J.A.C. 7:13-4.8(e), with the substantive amendments described below.

Proposed N.J.A.C. 7:13-9.8(c)1 requires a description of the potential effects upon the environment of the proposed project that is the subject of the hardship exception request. This is continued from existing N.J.A.C. 7:13-4.8(e)11, which requires a description of the potential effects of the project upon the environment assuming the Department grants the hardship. This provision is rewritten for clarity with no change in meaning.

Proposed N.J.A.C. 7:13-9.8(c)2 is continued from existing N.J.A.C. 7:13-4.8(e)4, which requires that proposed routes to and from the property during floods be identified. The proposed rule clarifies that proposed routes need only be identified if the hardship exception relates to the access requirements of proposed N.J.A.C. 7:13-11.6, since the location and elevation of such routes is relevant only if the access standards at proposed N.J.A.C. 7:13-11.6 are not being met. In such a case, the Department needs to evaluate the existing access routes to and from the site in order to determine if the proposed activity jeopardizes public safety.

Proposed N.J.A.C. 7:13-9.8(c)3 is continued from existing N.J.A.C. 7:13-4.8(e)5, which requires disclosure of the projected height, velocity and duration of the flood waters expected at the site during the regulatory flood. The proposed paragraph substitutes the term "flood hazard area design flood" for "regulatory flood" since the flood hazard area design flood is the term used to describe the regulatory flood throughout the proposed rules.

Proposed N.J.A.C. 7:13-9.8(c)4 is similar to existing N.J.A.C. 7:13-4.8(e)7, which requires

detailed financial documentation to support any hardship exception request based on economic grounds. Existing N.J.A.C. 7:13-4.8(e)7 requires a statement concerning the current and post-construction land use and value. The Department has found that the existing language confuses applicants, and often results in submittal of unnecessary or insufficient economic information. The proposed language is broader and allows the Department to request the information necessary to determine if the standards for a hardship exception are satisfied.

Proposed N.J.A.C. 7:13-9.8(c)5 is continued from existing N.J.A.C. 7:13-4.8(e)8, which requires an applicant to describe the existing development in the area and the impact of the proposed work on that development. The proposed paragraph substitutes the term "regulated activities" for "work" since regulated activities is the term used in this proposal to describe activities that are subject to the requirements of this chapter.

Proposed N.J.A.C. 7:13-9.8(c)6 is continued from existing N.J.A.C. 7:13-4.8(e)9, which requires an applicant to provide evidence that the project will not distort or reduce the affected watercourse's flood carrying capacity so as to cause significant flooding problems both upstream and downstream from the proposed project. It is the Department's experience that applicants are sometimes confused by the reference to the "affected watercourse," since the project may not actually adversely affect any watercourse, as well as to the terms "distort or reduce." Proposed N.J.A.C. 7:13-9.8(c)6, therefore, clarifies that the applicant must demonstrate that the project will not adversely affect the hydraulic capacity of any water so as to cause or increase flooding upstream and/or downstream of the proposed project.

Proposed N.J.A.C. 7:13-9.8(c)7 provides that a hardship exception request shall include any additional information necessary to evaluate whether the request meets the requirements of the chapter. This provision gives the Department the flexibility to require additional information that

is relevant to determining whether a particular hardship exception request complies with this section. For instance, an applicant may wish to stabilize an eroded channel by constructing a wall in front of one bank, and therefore partially in the channel (and floodway) of a river. Since the placement of aboveground structures in a floodway is prohibited at proposed N.J.A.C. 7:13-10.3(b)1, such a project would not qualify for an individual permit. Nevertheless, the applicant maintains that nearby trees and structures will eventually fall into the river if the bank is not stabilized, and that this can only be accomplished through the construction of a wall. Therefore, the applicant believes that strict compliance with the rules (in this case, not building a wall) would result in a hardship (the potential loss of the existing trees and structures). In such a situation, the Department may ask for records indicating the historical location of the bank before it eroded, in order to determine whether the wall is merely replacing eroded material or will constitute an obstruction to flow. The Department may also request a special hydraulic analysis of the channel to determine whether the proposed wall would cause adverse impacts to flooding. Proposed N.J.A.C. 7:13-9.8(c)7, therefore, gives the Department the flexibility to request information that is unique to each situation in order to better evaluate a hardship request.

Several requirements under existing N.J.A.C. 7:13-4.8(e) are not included in the proposal because they are redundant or unnecessary. Existing N.J.A.C. 7:13-4.8(e)1 and 2 are not included because they are found elsewhere in provisions requiring flood proofing at proposed N.J.A.C. 7:13-11.5(q) and anchoring at proposed N.J.A.C. 7:13-11.4. Existing N.J.A.C. 7:13-4.8(e)3 is not included because the provision refers to plans that no longer exist and this information is no longer relevant. Existing N.J.A.C. 7:13-4.8(e)6 is not included because soil types are unlikely to be a factor in most hardship requests. However in cases where soils types are a factor that must be considered under a hardship request, the Department can request the

necessary information under proposed N.J.A.C. 7:13-9.8(c)7. Existing N.J.A.C. 7:13-4.8(e)10 is not proposed to be included in the new rules because it requires information already included in existing N.J.A.C. 7:13-4.8(e)11, which is found at proposed N.J.A.C. 7:13-9.8(c)1.

Proposed N.J.A.C. 7:13-9.8(d) is continued from existing N.J.A.C. 7:13-4.8(g) and (h) with clarifying changes that do not affect meaning. This section also directs the reader to the application review procedures at proposed N.J.A.C. 7:13-9.3.

Proposed N.J.A.C. 7:13-9.8(e) prohibits a delegated agency from issuing an individual permit based on a hardship exception. This is a new provision. Under existing N.J.A.C. 7:13-4.8(c), a delegated agency may grant a hardship waiver. However, the Department believes that it is important that hardship exceptions be applied consistently, and that requiring all such exceptions to be issued by the same agency will best ensure consistency.

Subchapter 10. Individual Permit Requirements Within Various Regulated Areas

This proposed new subchapter sets forth substantive standards for regulated activities based on the location of a project. A project can be located within a particular portion of the regulated area (such as the channel, riparian zone, floodway or flood fringe) or within an area that contains certain natural resources or special features (such as fishery resources, threatened or endangered species, or areas that contain acid-producing soils) provided necessary standards are satisfied. The requirements of this subchapter are therefore called "area-specific" since the particular requirements depend upon the location of the project. Similarly, the requirements in proposed Subchapter 11 are described as being "activity-specific" because they apply to specific activities, such as the construction of a building or a roadway, rather than where the activity is located.

The standards contained in proposed Subchapter 10 are found in the existing rules under

"general environmental standards" at N.J.A.C. 7:13-3, and some text has been continued from existing N.J.A.C. 7:13-2, Project Standards. Proposed Subchapters 10 and 11 constitute the complete body of substantive requirements that apply to the activities subject to an individual permit.

N.J.A.C. 7:13-10.1 Requirements for a regulated activity in a channel

Proposed N.J.A.C. 7:13-10.1 sets forth requirements that must be met for the issuance of an individual permit for a regulated activity located in a channel. The activity specific requirements in this section are in addition to any other requirements in this chapter applicable to individual permits.

Proposed N.J.A.C. 7:13-10.1(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-10.1(b) requires that a regulated activity in a channel meet nine criteria in order to be eligible for an individual permit. Many of the requirements are included or implied in various provisions of the existing rules, but are not clearly stated in a single provision relating to the channel. Existing N.J.A.C. 7:13-3 requires applicants to minimize adverse impacts to the environment, to avoid such disturbances where possible, and to justify such disturbances when unavoidable. The proposed rule is intended to systemize, clarify and, where necessary, tighten requirements for activities in a channel. Therefore, proposed N.J.A.C. 7:13-10.1(b) outlines specific standards to accomplish these goals since the stability and non-obstruction of the channel is important for maintaining flood-carrying capacity, aquatic resources and water quality.

Proposed N.J.A.C. 7:13-10.1(b)1 is a new requirement, which states that any permitted channel disturbance must be necessary in order to accomplish the basic project purpose.

Protecting the channel from unnecessary and adverse impacts is essential to maintaining a healthy ecosystem. Construction in channels can cause obstructions to flow which increase flooding. Therefore, if the basic purpose of a project can be accomplished outside a channel, the Department has determined that the activity should not be approved in a channel.

For example, the construction of a house or parking lot does not need to disturb a channel, or be located within a channel, in order to function as intended. In fact, such construction would likely be unsafe, and would harm the environment and increase flooding. By contrast, constructing a road across a channel to access an otherwise unreachable piece of land may necessarily involve some amount of disturbance to the channel. Such a project could not serve its basic function if constructed outside a channel, since its purpose is to cross the channel. Even so, there may be cases in which the impact of the crossing could be significantly reduced through reconfiguration or relocation. Therefore, proposed N.J.A.C. 7:13-10.1(b)1 enables the Department to review such activities and ensure that impacts are avoided, where possible.

Proposed N.J.A.C. 7:13-10.1(b)2 contains the substance of existing N.J.A.C. 7:13-3.1(b), which requires that all environmental impacts must be minimized for any regulated activity.

Proposed N.J.A.C. 7:13-10.1(b)3 requires that any channel crossing be placed as nearly perpendicular to the channel as possible. The Department has historically encouraged applicants to minimize channel disturbances from crossings of all kinds, and perpendicular crossings minimize the length of channel that will be disturbed. Perpendicular crossings also typically reduce the amount of channel transition that is necessary. This provision is similar to existing N.J.A.C. 7:13-3.5(b)2, which requires crossings of trout associated waters to be at "right angles" to the feature, and N.J.A.C. 7:13-2.16(c)2, which requires that channel transitions be minimized.

Proposed N.J.A.C. 7:13-10.1(b)4, which requires that all disturbed channel sections be

stabilized, applies to channel modifications under existing N.J.A.C. 7:13-2.9(b)1. The provision is rephrased in the proposed rule for clarity, and expanded to apply to all channel disturbances. Again, the Department has historically encouraged stabilization to minimize erosion and other adverse impacts.

Proposed N.J.A.C. 7:13-10.1(b)5 requires applicants to justify the use of rip-rap, scour holes and similar stabilization methods within a channel. Specifically, applicants must demonstrate that such measures are necessary to stabilize the channel and/or to withstand scour along a bridge or culvert. Applicants must also demonstrate that the disturbance to the channel cannot be avoided through alternative designs. This is a new requirement intended to prevent unnecessary disturbance to the channel as a result of excessive use of armoring. For example, an applicant may propose to construct a bridge or culvert which is too small to carry flood flows and thus causes the velocity of flow within the channel to increase. Rather than place rip-rap within the channel to stabilize it, proposed N.J.A.C. 7:13-10.1(b)5 is intended to make applicants explore other solutions, such as constructing a larger bridge or culvert, which would not constrict flows as much and therefore reduce or eliminate the need for rip-rap in the channel.

Proposed N.J.A.C. 7:13-10.1(b)6, which prohibits an individual permit for a project involving mining of the channel, is taken from existing N.J.A.C. 7:13-3.5(e), which applies to trout associated watercourses. Since the channel supports aquatic life, and the integrity of the channel is of primary importance for a healthy, water-dependent ecosystem, the proposed rule applies this requirement to all waters. Mining is an example of an activity which may be performed outside a channel with equal benefit and is therefore not justified in a channel.

Proposed N.J.A.C. 7:13-10.1(b)7, which requires the restoration of the physical characteristics of the channel upon completion of work, applies to channelization projects under

existing N.J.A.C. 7:13-2.9(c), and is expanded in the proposed rule to apply to all types of channel disturbances because the Department has found that there are many activities that are as detrimental to the channel as channelization.

Proposed N.J.A.C. 7:13-10.1(b)8 and 9 require preservation of aquatic habitat or enhancement of such habitat where preservation is not possible. These provisions are similar to existing N.J.A.C. 7:13-3.5(f) and (i), but are somewhat broader. The proposed paragraphs protect all aquatic life, whereas the existing subsections focus largely on fish. Further, proposed N.J.A.C. 7:13-10.1(b)8 and 9 apply to all waters rather than being limited to trout-associated waters. These changes recognize advances in ecological science demonstrating that many types of aquatic life are crucial to the ecosystem and require protection.

Proposed N.J.A.C. 7:13-10.1(c) requires that a channel modification, in addition to meeting the channel disturbance requirements at N.J.A.C. 7:13-10.1(b), must also meet at least one of two additional requirements.

Proposed N.J.A.C. 7:13-10.1(c)1 allows a channel modification that is necessary to control existing flooding or erosion which poses an immediate threat to life, property or a lawfully existing structure. This condition for channel modification is found at existing N.J.A.C. 7:13-2.9(a) and is rephrased here for clarity, with no change in meaning.

Proposed N.J.A.C. 7:13-10.1(c)2 allows up to 200 feet of channel modification if necessary for the construction of a bridge or culvert, provided channel disturbance is minimized, a bridge is constructed rather than a culvert, where feasible, and the length of channel enclosed by the structure is the minimum feasible. The construction of a bridge or culvert often requires some amount of channel modification. The existing rules at N.J.A.C. 7:13-2.16(b)4 encourage minimizing the length of a channel modification, but set no specific length limit. It has been the

Department's experience that the construction of a bridge or culvert rarely justifies a channel modification of greater than 200 feet. Therefore, the proposed provision requires that the length of disturbed channel be minimized and requires that disturbance be limited to no greater than 200 feet. If a particular bridge or culvert proposed for construction requires a greater amount of channel disturbance, the project should be redesigned using a larger span or culvert size to reduce the length of transition in the channel.

Proposed N.J.A.C. 7:13-10.1(d) permits the use of heavy machinery in a channel only if six requirements are satisfied. These requirements are found in the existing rules at N.J.A.C. 7:13-3.5(b) and (c), but apply only to trout associated waters. However, these conditions are expanded in the proposed rule to apply to the use of machinery in any channel in order to protect and maintain water quality and aquatic resources in all of the State's waterways. While these requirements are intended primarily to apply to machinery that is situated within or driven across a channel, such as a backhoe or bulldozer, they also apply to large machinery that reaches into the channel, which could have the same impacts as in-channel machinery. For example a backhoe situated outside the channel, which is reaching into the channel with its bucket, would be subject to these requirements. Since some projects would be impossible to construct without such machinery, this provision is designed to be flexible yet restrictive toward unnecessary disturbances.

Proposed N.J.A.C. 7:13-10.1(e) prohibits the driving of a vehicle across a channel except in one of three cases. As discussed above under proposed N.J.A.C. 7:13-10.1(d), it is sometimes necessary to operate construction equipment in or across a channel as part of a temporary construction activity. The Department also recognizes that an emergency vehicle may need to access a site that has no other feasible means of entry. However, the proposed subsection makes

clear that the type of access allowed does not include repeated visits to the same site by delivery trucks. Repeated access to a site by driving across a stream, such as an oil truck making periodic deliveries to a home where the existing driveway across the channel is too small to carry a truck, is not acceptable. In such a case, the owner has a responsibility to provide another means of access into the site, such as by improving the existing driveway or constructing a new one that can accommodate larger vehicles. A vehicle may, however, be driven across a lawfully existing, stable ford that was constructed prior to the proposal date of these proposed rules. Some sites have been accessed by cars and trucks in this manner for many years, and this provision is not intended to prevent continued use of such access provided it is stable. A vehicle may also be driven across a ford that is authorized under proposed general permit 5 at N.J.A.C. 7:13-8.4(c)5. While this general permit has been proposed to allow livestock passage on existing agricultural lands, the Department recognizes that agricultural machinery will likely also use the ford.

N.J.A.C. 7:13-10.2 Requirements for a regulated activity in a riparian zone

This proposed section sets forth requirements that must be met for the issuance of an individual permit for any regulated activity located in a riparian zone. The riparian zone itself is described in proposed N.J.A.C. 7:13-4.1. The activity-specific requirements in this section are in addition to any other requirements in this chapter applicable to individual permits.

Proposed N.J.A.C. 7:13-10.2 replaces existing N.J.A.C. 7:13-3.2, which contains limits on disturbance of near-stream vegetation. As described in the summary of N.J.A.C. 7:13-4.1 above, the proposed riparian zone is larger than the area regulated under existing N.J.A.C. 7:13-3.2. The existing rules also require an applicant to show that there is no alternative to the disturbance and to compensate for the disturbance. However, the existing rules have resulted in some confusion

because they do not provide specific criteria for analyzing alternatives or measuring compensation. To remedy this, the proposed rule includes a number of specific limits and requirements for acceptable uses in the riparian zone.

Proposed N.J.A.C. 7:13-10.2(a) sets forth the scope of the section and provides that the requirements in this section apply to any regulated activity in a riparian zone.

Proposed N.J.A.C. 7:13-10.2(b) is identical to proposed N.J.A.C. 7:13-4.1(d) and clarifies that, in addition to the riparian zones proposed in this section, other Department rules also protect near-stream vegetation. Projects subject to other rules must meet their buffer requirements as well as the riparian zones established under this chapter. Specifically, proposed N.J.A.C. 7:13-10.2(b) mentions the Stormwater Management rules at N.J.A.C. 7:8 and the Highlands Water Protection and Planning Act rules at N.J.A.C. 7:38, both of which apply 300-foot buffers to waters in certain cases. However, the reference to these two rules is not intended to be all-inclusive. Accordingly, the proposed subsection makes clear that projects must continue to comply with any applicable similar requirement, whether it be imposed at the Federal, State or local level.

Proposed N.J.A.C. 7:13-10.2(c) sets forth the areas the Department will consider in determining the size of the area from which vegetation may be removed in a riparian zone for the purposes of determining compliance with this section. Particularly, this subsection provides that the area of vegetation to be disturbed include all areas that are depicted as disturbed on the submitted drawings, the area under the canopy of trees that will be cleared and all other areas where vegetation will be cleared, cut or removed.

Proposed N.J.A.C. 7:13-10.2(d) includes four requirements that must be met in order for the Department to permit a regulated activity within a riparian zone. Proposed N.J.A.C. 7:13-10.2(d)

also introduces Table B, which sets forth the maximum area of vegetation that can be disturbed within the riparian zone for a number of specific activities discussed in proposed N.J.A.C. 7:13-10.2(e) through (r). Proposed N.J.A.C. 7:13-10.2(d), therefore, lists the basic criteria for any regulated activity within a riparian zone, while proposed N.J.A.C. 7:13-10.2(e) through (r) place additional restrictions for various projects.

Proposed N.J.A.C. 7:13-10.2(d)1 provides that, in order for the Department to allow a regulated activity to be conducted within a riparian zone, it must be determined that the basic purpose of the project cannot be accomplished onsite without disturbing riparian zone vegetation. The intent of this provision is to prevent unnecessary disturbance to such vegetation.

If a regulated activity can be conducted outside a riparian zone and still serve its intended purpose and function, then the activity must be conducted outside the riparian zone. Some projects cannot serve their basic purpose or function without impacting the riparian zone. For example, a roadway constructed across a stream in order to reach an otherwise inaccessible piece of land on the other side must necessarily cross through the riparian zone. The area of disturbance can be minimized by carefully configuring the roadway's location or width, but the basic purpose of the project could not be accomplished without some loss of vegetation in the riparian zone.

Some activities are water dependent and therefore must access the edge of water or the channel. A boat ramp, fishing pier or public access to the water, for example, could not possibly be constructed outside a riparian zone. Conversely, the basic purpose of a house is to provide habitation for humans, a function served equally well within or outside a riparian zone. On a vacant lot there may be several potential locations to construct a new house. If on a given site there exists a viable location outside a riparian zone where a house can be built, then proposed

N.J.A.C. 7:13-10.2(d)1 prevents the construction of a new house within the riparian zone on that site. However, if all or a large portion of a site lies within a riparian zone such that any house constructed on that site would necessarily impact the riparian zone, proposed N.J.A.C. 7:13-10.2(m) permits the construction of the house within the riparian zone since there is no alternative location onsite that would avoid disturbing the riparian zone.

Proposed N.J.A.C. 7:13-10.2(d)2 requires that, in order for the Department to allow a regulated activity to be conducted within a riparian zone, it must be determined that disturbance is eliminated where possible and, where it is not possible, disturbance in the riparian zone is minimized. To determine whether this criterion is satisfied, the Department will examine various alternatives, including relocating the project and/or reducing the size or scope of the project, as well as situating the project in portions of the riparian zone where previous development or disturbance has occurred. The Department does not intend to require that every applicant prepare an exhaustive alternative analysis under this provision. However, the Department will evaluate each project to determine whether another reasonable location on site or configuration is available that would minimize or eliminate disturbance to the riparian zone.

Proposed N.J.A.C. 7:13-10.2(d)3 provides that the Department will allow a regulated activity to be conducted within a riparian zone only if all temporarily disturbed areas in the riparian zone are replanted with indigenous, non-invasive vegetation upon completion of the project. The acceptable method for accomplishing this is discussed in proposed N.J.A.C. 7:13-10.2(u). The Department recognizes that some disturbance within the riparian zone is of a temporary nature and therefore establishes the requirement to restore such disturbed areas.

Proposed N.J.A.C. 7:13-10.2(d)4 explains that a given project proposed within a riparian zone may be subject to additional requirements and limitations that are found elsewhere in the

chapter. An example is given of a flood control project. While both proposed Table B and N.J.A.C. 7:13-10.2(o) set forth the basic parameters and upper limits on disturbance to vegetation in the riparian zone for flood control projects, proposed N.J.A.C. 7:13-11.12 includes additional requirements that must be considered specifically for such projects. Therefore, it should not be assumed that the full amount of disturbance allowed under this section is always warranted or will be allowed for a given project. Proposed Table B and the remainder of this section merely set the upper limits for disturbance to vegetation in the riparian zone, provided all other requirements and restrictions of the chapter are satisfied.

Proposed Table B sets forth the maximum area of vegetation that the Department will allow to be disturbed within the riparian zone for various activities. The values presented in Table B were established based on the Department's experience with thousands of projects reviewed over the past 20 years. The Department believes that these values represent the upper-limit of disturbance that is reasonably required to accomplish the various activities listed in the table. It should be remembered that the values contained in Table B represent the maximum allowable disturbance for a given activity and that all disturbances must first be justified and minimized under proposed N.J.A.C. 7:13-10.2(d). Each disturbance is also subject to additional requirements listed at proposed N.J.A.C. 7:13-10.2(e) through (r). The values established in Table B are those determined by the Department to be the maximum levels allowable to assure that healthy riparian zones, which have been proven to be an essential part of preserving clean water necessary for both humans and wildlife, are preserved. By establishing stringent guidelines to prevent unnecessary and adverse impacts in riparian zones, the Department is confident that it is best achieving its mandate to serve and protect the residents of the State.

Since proposed N.J.A.C. 7:13-4.1 establishes three widths for the riparian zone depending

upon the classification of the water with which the riparian zone is associated (50 feet, 150 feet or 300 feet), Table B includes the maximum allowable area of vegetation removal for all three riparian zones widths. Since most of the projects included in Table B are linear, the amount of disturbance allowed is generally proportional to the width of the riparian zone. For example, twice as much disturbance for a given linear project is allowed in a 300-foot-wide riparian zone as in a 150-foot-wide riparian zone, and three times as much disturbance for a given linear project is allowed in a 150-foot-wide riparian zone as in a 50-foot-wide riparian zone. However, the area of vegetation disturbance necessary for certain nonlinear projects, such as the construction of a house, do not increase proportionally with the size of the riparian zone. Accordingly, while a larger area of vegetation disturbance is allowed in a wider riparian zone for a driveway serving a private residence, in recognition that a larger total area may need to be disturbed for access in a wider riparian zone, the allowable area of vegetation disturbance for construction of the house itself is not proportionally larger for the 300-foot and 150-foot riparian zone width.

Table B allows more vegetation disturbance for railroads, roadways and driveways that cross a water from those that do not. This differentiation is appropriate because a roadway crossing a water necessarily disturbs the riparian zone on both sides of the channel, whereas a roadway not crossing a water will disturb the riparian zone only on one side of the channel. As previously indicated, crossing of a waterbody is to be avoided if possible. However, this provision recognizes that, if it is necessary that a water be crossed, greater riparian zone disturbance will occur than if a crossing is not necessary. Projects that do not cross a regulated water are allowed 40 percent of the disturbance that is allowed for projects that do cross a water. The allowable disturbance for expanding or improving existing railroads, roadways and

driveways is 50 percent of what is allowed for new construction. Both of these values reflect the Department's experience with such projects.

Proposed N.J.A.C. 7:13-10.2(e) sets forth standards for the construction of a new railroad or public roadway, which results in clearing, cutting and/or removing vegetation in a riparian zone. The amount of vegetation removal allowed for a new railroad or public roadway is larger than for other projects because these activities are larger by their nature, provide public benefits and usually require more disturbance. The proposed subsection will protect the riparian zone from unnecessary disturbance, and will serve as a clear standard for the regulated community in designing projects in such areas.

Proposed N.J.A.C. 7:13-10.2(e)1 explains that the total area of vegetation cleared, cut and/or removed within the riparian zone cannot exceed the limits set forth in Table B. Proposed N.J.A.C. 7:13-10.2(e)2 further requires the width of the new railroad or public roadway to be minimized, and proposed N.J.A.C. 7:13-10.2(e)3 requires any crossing be constructed as nearly perpendicular to the water as possible, since crossings that are perpendicular to the riparian zone minimize the area of riparian zone that will be disturbed. This requirement is found in the existing rules at N.J.A.C. 7:13-3.5(b)2 for projects along trout associated waters. The requirement is rephrased in the proposed rule for clarity and expanded to apply to crossings of the riparian zone along all waters, since preservation of near-stream vegetation is important along all regulated waters.

Proposed N.J.A.C. 7:13-10.2(e)4 applies to projects impacting a 150-foot or 300-foot riparian zone. In such cases, an applicant must demonstrate that there is a compelling public need for the project, which cannot be met without impacting the riparian zone. The applicant must consider alternate routes and projects that would avoid impacting the riparian zone because these

areas are more sensitive to environmental impacts. These requirements are necessary to prevent unnecessary impacts to riparian zones, while allowing projects that satisfy a compelling public need.

Proposed N.J.A.C. 7:13-10.2(f) sets forth standards for the expansion or improvement of a lawfully existing railroad or public roadway, which results in clearing, cutting and/or removing vegetation in a riparian zone.

Proposed N.J.A.C. 7:13-10.2(f)1 provides that the total area of vegetation disturbed within the riparian zone must not exceed limits set forth in Table B above, unless the applicant demonstrates that public safety cannot be adequately ensured without exceeding these limits. If the applicant demonstrates that this is true, the applicant must restore twice the area of disturbance in excess of the limit contained in Table B, in a manner described at proposed N.J.A.C. 7:13-10.2(t). For example, the limit of disturbance in Table B to expand or improve a public roadway across a water with a 50-foot-wide riparian zone is 2,500 square feet. If an applicant seeking to expand or improve such a roadway is able to demonstrate to the Department that 4,000 square feet of vegetative disturbance is justified in that particular case, the Department may approve the excess amount of 1,500 square feet of disturbance (4,000 square feet total approved minus 2,500 square feet maximum disturbance under Table B). However, the applicant must provide compensation in an amount two times the excess area of disturbance, or 3,000 square feet of riparian zone vegetation. The compensation must be performed in accordance with proposed N.J.A.C. 7:13-10.2(t), which is discussed in further detail below.

Proposed N.J.A.C. 7:13-10.2(f)2, which is identical to proposed N.J.A.C. 7:13-10.2(e)2, requires that the width of the expanded or improved railroad or public roadway be minimized in order to reduce unnecessary impacts to the riparian zone. There is no requirement to reconstruct

the railroad or public roadway perpendicular to the stream, as is required at proposed N.J.A.C. 7:13-10.2(e)3 for new construction, since it is understood that the opportunity to greatly reconfigure a crossing is limited where the project involves expansion or improvement of existing features.

Proposed N.J.A.C. 7:13-10.2(f)3, which is identical to proposed N.J.A.C. 7:13-10.2(e)4, applies to expansion or improvement projects impacting a 150-foot or 300-foot riparian zone. In such cases, an applicant must demonstrate that there is a compelling public need for the project, which cannot be met without impacting the riparian zone because these areas are more sensitive to environmental impacts. The applicant must consider alternate routes and projects that would avoid impacting the riparian zone. These requirements are needed to prevent unnecessary impacts to riparian zones, while allowing projects that satisfy a compelling public need.

Proposed N.J.A.C. 7:13-10.2(g) sets forth standards for the construction of a new private roadway, which results in clearing, cutting and/or removing vegetation in a riparian zone. This subsection deals only with the construction of the roadway itself and not any house or other associated development, the limits for which are covered elsewhere in this section.

Proposed N.J.A.C. 7:13-10.2(g)1 provides that the total area of vegetation cleared, cut and/or removed within the riparian zone cannot exceed the limits set forth in Table B. The allowable disturbance for the construction of a new driveway to access a private residence in Table B is less than that which is allowed for other private roadways; private driveways are typically narrower than private roadways since private roadways need sufficient width for traffic in opposing directions to pass.

In order to reduce unnecessary disturbance to the riparian zone, proposed N.J.A.C. 7:13-10.2(g)2 and 3, respectively, require that the width of the roadway is minimized and that any

crossing is constructed as nearly perpendicular to the channel as possible.

In order to prevent people from subdividing large properties and selling off lots to individual owners, each of which could build a separate roadway and thus cause a large amount of riparian zone disturbance, proposed N.J.A.C. 7:13-10.2(g)4 requires that the new roadway accesses a lot that did not receive preliminary or final subdivision approval after the proposal date of these rules.

Proposed N.J.A.C. 7:13-10.2(g)5 and 6 apply to roadways that impact a 150-foot or 300-foot riparian zone. In such a case, the applicant must demonstrate that there is no other means of constructing a roadway onsite to access developable land, which would reduce or eliminate the impact to the riparian zone. For example, the roadway or proposed development could potentially be relocated elsewhere on the lot to avoid or reduce riparian zone impacts. If the roadway crosses a regulated water, the applicant must also demonstrate that the crossing is necessary to access developable land on the other side of the water, and that there is no other feasible means of reaching this land including accessing the site through neighboring properties. Both of these standards are necessary to ensure that unnecessary riparian zone impacts are avoided.

Proposed N.J.A.C. 7:13-10.2(h) sets forth standards for the expansion or improvement of a lawfully existing private roadway which disturbs a riparian zone. As with proposed N.J.A.C. 7:13-10.2(g), this subsection deals only with the expansion or improvement of the roadway and not any disturbance associated with appurtenant development.

Proposed N.J.A.C. 7:13-10.2(h)1 provides that the total area of vegetation cleared, cut and/or removed within the riparian zone cannot exceed the limits set forth in Table B.

In order to reduce unnecessary disturbance to the riparian zone, proposed N.J.A.C. 7:13-

10.2(h)2 requires that the width of the private roadway being expanded or improved is minimized.

Proposed N.J.A.C. 7:13-10.2(h)3 sets forth an additional standard that applies if the expansion or improvement impacts a 150-foot or 300-foot riparian zone. The applicant must demonstrate that the proposed expansion or improvement is necessary for the continued safe access to the site, since allowing disturbance to the riparian zone would be justified in such a case.

Proposed N.J.A.C. 7:13-10.2(i) sets forth standards for stabilizing an eroded bank of a channel or impounded water, which results in clearing, cutting and/or removing vegetation in a riparian zone.

Proposed N.J.A.C. 7:13-10.2(i)1 provides that there is no limit on the area of vegetation temporarily disturbed in a riparian zone if the vegetation disturbance results from cutting back eroded banks to a stable slope and planting the disturbed area with suitable vegetation. This method is described at proposed N.J.A.C. 7:13-11.14(c)2. The applicant must, however, demonstrate that the project is necessary pursuant to proposed N.J.A.C. 7:13-11.14(b).

Proposed N.J.A.C. 7:13-10.2(i)2 provides that the total area of vegetation permanently disturbed in the riparian zone cannot exceed the limits set forth in Table B, unless the applicant demonstrates that the bank cannot be adequately stabilized without exceeding these limits. In such a case, the applicant must restore twice the area of disturbance over the limit, in a manner described at proposed N.J.A.C. 7:13-10.2(t). Permanent disturbance includes areas replaced with rip-rap, walls and revetments, as well as soil bioengineering methods that incorporate structural components made of metal, plastic or wood. Table B allows 2,000 square feet of permanent disturbance in all three riparian zones widths (50 feet, 150 feet and 300 feet). This is appropriate

since any permanent disturbance would be located along the bank itself and will not be sensitive to the width of the riparian zone.

Proposed N.J.A.C. 7:13-10.2(i)3 provides that the total area of vegetation temporarily disturbed within the riparian zone in order to provide access to the eroded area to perform the stabilization work cannot exceed the limits set forth in Table B. Unlike the permanent disturbance in proposed paragraph (i)2 described above, it is appropriate to allow temporary disturbance for access to the bank proportional to the width of the riparian zone. Accordingly, the proposed rules provide that 1,000 square feet of temporary disturbance is allowed in a riparian zone 50 feet wide, 3,000 square feet of temporary disturbance is allowed in a riparian zone 150 feet wide, and 6,000 square feet of temporary disturbance is allowed in a riparian zone 300 feet wide. All such disturbed areas must also be replanted with indigenous, non-invasive vegetation.

Proposed N.J.A.C. 7:13-10.2(j) sets forth standards for constructing a stormwater discharge within a riparian zone, as well as the stormwater pipe leading to the discharge.

Proposed N.J.A.C. 7:13-10.2(j)1 provides that the total area of vegetation disturbed in the riparian zone cannot exceed the limits set forth in Table B. As with bank stabilization projects under proposed N.J.A.C. 7:13-10.2(i), different limits are established for temporary and permanent disturbances. Since any areas disturbed for the construction of the underground pipes that lead to the discharge can be revegetated, the only permanent disturbance resulting from a stormwater discharge would be for the construction of the outfall structure itself as well as any conduit outlet protection that may be necessary. Therefore, Table B allows 1,000 square feet of permanent disturbance in a riparian zone, regardless of the riparian zone's width. The allowable temporary disturbance, however, varies proportionally with the width of the riparian zone and is

based on the assumption that the width of disturbance within the riparian zone is 20 feet or less.

Proposed N.J.A.C. 7:13-10.2(j)2 provides that no portion of the stormwater discharge impact a 150-foot or 300-foot riparian zone, except in four specific cases. This is necessary to ensure that the riparian zone can function properly to protect water quality. This is also consistent with the Stormwater Management rules that prohibit discharges within the special water resource protection area in order to protect water quality, except as provided at N.J.A.C. 7:8-5.5(h)3.

The Department recognizes that the reconstruction of an existing stormwater discharge is sometimes necessary to alleviate an existing erosion or flooding problem. Proposed N.J.A.C. 7:13-10.2(j)2i, therefore, allows the reconstruction of an existing discharge that is located within a 150-foot or 300-foot riparian zone, provided the volume, rate and quality of stormwater being discharged is not altered from the existing condition. This is necessary to ensure that the proposed reconstruction of the discharge does not adversely impact the receiving waterbody.

Proposed N.J.A.C. 7:13-10.2(j)2ii similarly allows the construction of a new stormwater discharge along an existing roadway, in certain cases where the discharge is necessary to ameliorate erosion and/or flooding. It has been the Department's experience that existing roadways are sometimes subject to nuisance flooding or erosion, which warrants the construction of a stormwater collection system and subsequent discharge in order to address the problem. Cases also exist where existing roadways need to be improved or expanded, and a stormwater system is necessary to safely accommodate the increased stormwater runoff. In situations where the roadway is already located within or adjacent to a riparian zone, it may not be physically possible to create a new discharge outside the riparian zone due to existing topography, soil type, vegetative cover or the location of the roadway and other structures. Therefore, proposed

N.J.A.C. 7:13-10.2(j)2ii allows a new stormwater discharge within a 150-foot or 300-foot riparian zone if there is no feasible alternative means of constructing the discharge outside the riparian zone for any of these reasons.

Proposed N.J.A.C. 7:13-10.2(j)2iii allows the construction of a new stormwater discharge within a 150-foot or 300-foot riparian zone, associated with the construction of a new roadway, provided certain requirements are met. First, it must be demonstrated that there is no feasible alternative location or alignment for either the discharge or the roadway, which would eliminate the need to construct a discharge in the riparian zone. It may be possible, for example, to construct the roadway at another location that would avoid the need for a new discharge within a 150-foot or 300-foot riparian zone. It may also be possible to change the alignment of the roadway so that stormwater runoff from the roadway can be collected and discharged at a location outside the riparian zone. However, the Department recognizes that situations exist where alternative locations and/or alignments are not feasible and is, therefore, proposing this provision to accommodate such cases. Second, if the new roadway is public, the applicant must demonstrate that there is a compelling public need to construct the roadway and the discharge, which cannot be satisfied without impacting the riparian zone. This is similar to the requirement at proposed N.J.A.C. 7:13-10.2(e)4 for the construction of a new public roadway within a 150-foot or 300-foot riparian zone. Third, if the roadway is private, the applicant must demonstrate that there is developable land onsite that cannot feasibly be accessed without constructing a new roadway and/or discharge that impacts the riparian zone, including accessing the site through neighboring properties. This is similar to the requirement at proposed N.J.A.C. 7:13-10.2(g)5 and 6 or the construction of a new private roadway within a 150-foot or 300-foot riparian zone.

The Stormwater Management rules at N.J.A.C. 7:8-5.5(h) establish a 300-foot Special Water

Resource Protection Area for major development (as defined at N.J.A.C. 7:8-1.2) along Category One waters and certain upstream tributaries. Stormwater discharges are prohibited in Special Water Resource Protection Areas, except for cases described at N.J.A.C. 7:8-5.5(h)3, which addresses situations where discharging stormwater outside the Special Water Resource Protection Area would conflict with the Standard For Off-Site Stability in the "Standards for Soil Erosion and Sediment Control in New Jersey," established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq., and implemented at N.J.A.C. 2:90-1.3. In such a case, a stormwater discharge is allowed to be constructed within a Special Water Resource Protection Area, provided no disturbance occurs within 150 feet of the Category One water or upstream tributary. In order to be consistent with this provision in the Stormwater Management rules, N.J.A.C. 7:13-10.2(j)2iv is proposed to allow the construction or reconstruction of a stormwater discharge not described elsewhere in proposed N.J.A.C. 7:13-10.2(j), provided the discharge meets the requirements at N.J.A.C. 7:8-5.5(h)3. Proposed N.J.A.C. 7:13-10.2(j)2iv therefore covers stormwater discharges that do not meet the provisions of proposed N.J.A.C. 7:13-10.2(j)2i, ii and iii, but which nevertheless are justified to be constructed or reconstructed within a 300-foot riparian zone.

Proposed N.J.A.C. 7:13-10.2(k) sets forth standards for constructing a utility line that crosses a regulated water through a riparian zone. Standards for utility lines that impact riparian zones but do not cross a water are set forth at proposed N.J.A.C. 7:13-10.2(l).

Proposed N.J.A.C. 7:13-10.2(k)1 provides that the total area of vegetation disturbed within the riparian zone cannot exceed the limits set forth in Table B, unless the applicant demonstrates that a greater area of disturbance is warranted for the safe construction of the line. Various construction standards and occupational safety guidelines require workers in trenches to have a

certain width to safely operate machinery and perform the intended work. Since the width of the trench can vary depending upon soil types, the depth of the work and other factors, the proposal sets a disturbance limit and also allows flexibility for those projects that justifiably exceed those limits. The proposed paragraph also refers to proposed N.J.A.C. 7:13-11.9(b)4, which includes further requirements regarding the construction of an open trench across a channel for the installation of a utility line.

The limit of disturbance in Table B is proportional to the width of the riparian zone and is based on the assumption that the width of disturbance within the riparian zone is 20 feet or less. The allowable disturbance is twice that for a stormwater discharge under proposed N.J.A.C. 7:13-10.2(j) because a discharge needs to only disturb one side of the channel (in order to reach it) whereas a utility line crossing a channel necessarily disturbs land on both sides of the channel.

Proposed N.J.A.C. 7:13-10.2(k)2 requires an applicant to demonstrate that disturbance in the riparian zone is unavoidable pursuant to proposed N.J.A.C. 7:13-11.9(b)1 through 4. Proposed N.J.A.C. 7:13-11.9(b)1, 2 and 3 require the applicant to show that the utility cannot be jacked under the channel, placed in an existing road or attached to an existing bridge, respectively. All of these activities qualify for a permit-by-rule under proposed N.J.A.C. 7:13-7.2(c)3, 4 and 5, respectively. These alternatives are preferable because they result in less impact to regulated areas than cutting an open trench across a channel to place a utility underground. It can also be safer and less expensive for a utility to be installed in such a manner without a construction crew cutting and restoring an open trench. Proposed N.J.A.C. 7:13-11.9(b)4 requires that cutting an open trench through flowing water should be avoided if possible and sets limits on the width of such a trench. The normal flow of the stream should also be piped or diverted around the open trench so that sediment does not enter the waterway, which prevents or minimizes channel

disturbance and water quality impacts.

Proposed N.J.A.C. 7:13-10.2(l) sets forth standards for constructing a utility line that crosses through and disturbs a riparian zone but does not actually cross a regulated water. The standards for this activity differ from those set forth for utilities that cross a water under proposed N.J.A.C. 7:13-10.2(k) as described above. Different standards are warranted because crossing a water with a utility line sometimes involves unavoidable impacts to the riparian zone simply because the line needs to get to the other side of the water. This factor is not present for a line that only passes through a riparian zone.

Proposed N.J.A.C. 7:13-10.2(l)1 explains that the total area of vegetation disturbed in the riparian zone cannot exceed the limits set forth in Table B. The allowable limit of disturbance is proportional to the width of the riparian zone and is based on the assumption that the width of disturbance within the riparian zone is 20 feet or less. As with roadways under proposed N.J.A.C. 7:13-10.2(e) through (h) above, the allowable disturbance for utilities that do not cross a regulated water is 40 percent of the allowable disturbance for utilities that do cross a regulated water.

Proposed N.J.A.C. 7:13-10.2(l)2 requires applicants to demonstrate that it is not feasible to construct the line either outside the riparian zone completely, or otherwise in such a way that no vegetation in the riparian zone is disturbed. If it is necessary for a utility line to be extended to the other side of a regulated water, as described in proposed N.J.A.C. 7:13-10.2(k) above, it follows that some disturbance to the channel and riparian zone may occur. In some cases, there are no means of placing a utility line through a riparian zone without causing some temporary disturbance. However, a line that does not need to reach the other side of a water, but instead runs parallel to it in order to reach another location on the same side, usually has more options

available that could reduce or eliminate riparian zone impacts. For example, a utility that needs to run parallel to a water might be constructed further away from the channel and therefore outside the riparian zone. In some cases, a line could be connected to its destination by running completely outside the riparian zone. Therefore, proposed N.J.A.C. 7:13-10.2(l)2 requires that any disturbance within the riparian zone is justified.

Proposed N.J.A.C. 7:13-10.2(l)3 requires that any utility line which does not cross a regulated water be placed at least 25 feet from any top of bank or edge of water. This is necessary to ensure that the placement of the utility will not jeopardize the stability of the channel, bank or water and also to lessen the possibility that the utility could be undermined or exposed if the channel migrates over time.

Proposed N.J.A.C. 7:13-10.2(m) sets forth standards for constructing of a new private residence in a riparian zone. In general, the Department discourages such construction within riparian zones because a house generally does not meet proposed N.J.A.C. 7:13-10.2(d)1, which requires applicants to demonstrate that the basic purpose of the project cannot be accomplished without disturbing vegetation in the riparian zone. If a regulated activity can be conducted outside a riparian zone and still serve its intended purpose and function as well as if it were conducted within a riparian zone, then proposed N.J.A.C. 7:13-10.2(d)1 requires that the activity must be conducted outside the riparian zone. While some projects cannot serve their basic purpose or function without impacting the riparian zone, this is not true with a house. Nevertheless, the Department recognizes that cases exist where an existing lot may lie partially or completely within a riparian zone such that preventing the construction of even one house could constitute a hardship on the owner. This proposed subsection is intended to allow the construction of one house within the riparian zone in such cases with certain limitations.

Under proposed N.J.A.C. 7:13-10.2(m)1, the total area of vegetation cleared, cut and/or removed within the riparian zone cannot exceed the limits set forth in Table B. A total of 2,500 square feet of disturbance is allowed within a 50-foot riparian zone and a total of 5,000 square feet of disturbance is allowed within a 150-foot or 300-foot riparian zone. The Department's experience is that this amount of disturbance is sufficient for the construction of a new private residence in a riparian zone. The 2,500 square foot limit for a 50-foot riparian zone assumes that not all of all the private residence is located within the riparian zone, considering that no construction is permitted within 25 feet of the top of bank under proposed N.J.A.C. 7:13-10.2(m)4 (see below). Furthermore, the same area of disturbance is proposed for both the 150-foot and 300-foot riparian zones, since this is a sufficient area to construct a private residence in either riparian zone. Impacts associated with the driveway are covered under proposed N.J.A.C. 7:13-10.2(g) and impacts associated with appurtenant structures (such as an addition, detached garage, barn or shed) are covered under proposed N.J.A.C. 7:13-10.2(n).

Proposed N.J.A.C. 7:13-10.2(m)2 requires that the private residence must be constructed on a lot that did not receive preliminary or final subdivision approval after the proposal date of these rules. This is necessary to prevent people from subdividing parcels in such a way that many lots are created entirely within a riparian zone, and subsequently selling these lots to individual owners who could each build a house under this proposed subsection.

Proposed N.J.A.C. 7:13-10.2(m)3 requires that the private residence is not being constructed as part of a larger residential subdivision. The owner of a large tract who wishes to subdivide and construct many houses is likely able to configure the site in such a way that no houses are constructed within the riparian zone. However, there are smaller residential lots in existence that lie partially or completely within a riparian zone. Preventing the construction of even one house

on one such lot could be construed as an undue hardship since there may be no other reasonable use for the property. As such, proposed N.J.A.C. 7:13-10.2(m) is intended only to allow the construction of one house on one existing lot.

Proposed N.J.A.C. 7:13-10.2(m)4 requires the applicant to demonstrate three things in order to qualify under this subsection. An applicant must first demonstrate that there is no other reasonable use for the site which would reduce or eliminate the impact to the riparian zone. This is an appropriate test since another use for the site may exist that better meets the intention of this chapter to preserve riparian zones. The applicant must also demonstrate that there is no other reasonable location onsite to construct a private residence, which would similarly reduce or eliminate the impact to the riparian zone. A lot may only partially lie within a riparian zone. In such a case, the house should be located on the portion of the site outside the riparian zone if at all possible. Finally, all disturbance must be located at least 25 feet from any top of bank or edge of water and as far from the regulated water as possible. Constructing a house within 25 feet of a bank can be unsafe, since the bank can undermine if the stream migrates and thus threaten the integrity of the structure. The requirement to locate the house as far from the channel as possible is necessary to minimize riparian zone impacts. An exception is made if the private residence is to be constructed adjacent to a man-made tidal waterway, in which case undermining of the bank is not a source of concern.

Proposed N.J.A.C. 7:13-10.2(n) sets forth standards for constructing an addition to an existing building, or an appurtenant structure associated with an existing building, within a riparian zone. Listed examples of appurtenant structures include a garage, barn or shed. This subsection is proposed since the Department recognizes that maintaining an existing building or residence that is located within or adjacent to a riparian zone may warrant some riparian zone

disturbance.

Proposed N.J.A.C. 7:13-10.2(n)1 provides that the total area of disturbed riparian zone vegetation cannot exceed the limits set forth in Table B. This limit is 1,000 square feet of disturbance in a 50-foot riparian zone and 2,000 square feet of disturbance in a 150-foot or 300-foot riparian zone. This is an appropriate amount of disturbance since additions are located immediately adjacent to existing structures, and garages, barns and sheds are also typically located near existing structures. Additional riparian zone disturbance is, therefore, not needed to create an access to these structures through the riparian zone from the existing residence.

Proposed N.J.A.C. 7:13-10.2(n)2 requires the applicant to demonstrate two things in order to qualify under this subsection. An applicant must first demonstrate that there is no other reasonable location onsite to construct the addition or building, which would reduce or eliminate the impact to the riparian zone. A lot may be only partially occupied by a riparian zone and in such a case the addition or building should be located on the portion of the site outside the riparian zone, if at all possible. For example, a house may exist on the edge of a riparian zone. Therefore, it may be possible to construct the addition or appurtenant building partially or completely outside the riparian zone, while still serving its intended function. Second, all disturbance must be located at least 25 feet from any top of bank or edge of water and as far from the regulated water as possible. Constructing a building within 25 feet of bank can be unsafe, since the bank can undermine if the stream migrates and thus threaten the integrity of the structure. The requirement to locate the addition or building as far from the channel as possible is necessary to minimize riparian zone impacts.

Proposed N.J.A.C. 7:13-10.2(o) sets forth standards for flood control projects within riparian zones. The total area of vegetation cleared, cut and/or removed within the riparian zone cannot

exceed the limits set forth in Table B, unless the applicant demonstrates that public safety cannot be adequately ensured without exceeding these limits. Since flood control projects are intended to improve public safety, and often require construction within or adjacent to channels, Table B allows a relatively large amount of riparian zone disturbance. Furthermore, the flood control project itself must be clearly justified under proposed N.J.A.C. 7:13-11.12 in order to warrant any riparian zone disturbance. If the project justifiably exceeds the limits in Table B, the applicant must provide 2:1 compensation for all excess vegetation disturbed as described at proposed N.J.A.C. 7:13-10.2(t).

Proposed N.J.A.C. 7:13-10.2(p) sets forth standards for the construction of a public accessway or public access area along a tidal water. The Department recognizes that access to the waterway is a public benefit and, therefore, is proposing to allow for such use provided the access is designed in accordance with the standards of the Coastal Zone Management rules at N.J.A.C. 7:7E-8.11. Proposed N.J.A.C. 7:13-10.2(p)2 prohibits the construction of a building within 25 feet of the top of bank or edge of water in order to ensure stability of the proposed structure. Under proposed N.J.A.C. 7:13-10.2(p)3, parking associated with the public access area is only permitted in the riparian zone if there is no alternative location onsite that would reduce or eliminate impacts to the riparian zone.

Proposed N.J.A.C. 7:13-10.2(q) sets forth standards for the construction of water dependent development along a tidal water. The Department recognizes that water dependent development is a part of the character of the waterfront and is, in many cases, encouraged under the Coastal Zone Management rules at N.J.A.C. 7:7E. In order to be consistent with those rules and to ensure that the waterfront is developed with appropriate uses, the proposed rule establishes standards for this type of development. In order to qualify for this provision, the development must meet the

definition of water dependent at N.J.A.C. 7:7E-1.8 and be designed in accordance with the N.J.A.C. 7:7E. In order to ensure channel stability, no building may be constructed within 25 feet of the top of bank or edge of water. The applicant must also demonstrate that there is no other location onsite to construct the proposed development that would reduce or eliminate impacts to the riparian zone.

Proposed N.J.A.C. 7:13-10.2(r) is proposed to cover cases where a regulated activity is proposed in a riparian zone, but the activity is not covered under the provisions of proposed N.J.A.C. 7:13-10.2(e) through (q). While the Department is confident that proposed N.J.A.C. 7:13-10.2(e) through (q) cover the vast majority of projects that could justifiably disturb riparian zones, this subsection addresses any other unanticipated scenario.

Proposed N.J.A.C. 7:13-10.2(r)1 provides that the total area of disturbed vegetation cannot exceed the limits set forth in Table B. A very small amount of disturbance, proportionate to the width of the riparian zone, is allowed under Table B.

Proposed N.J.A.C. 7:13-10.2(r)2 prevents the construction of any building within 25 feet of any top of bank or edge of water. Constructing a building within 25 feet of a bank can be unsafe, since the bank can undermine if the stream migrates and thus threaten the integrity of the structure

Proposed N.J.A.C. 7:13-10.2(r)3 requires an applicant to demonstrate three things in order to qualify under this subsection. First, the applicant must show that there is no other reasonable means of accomplishing the project which would reduce or eliminate the impact to the riparian zone. This requirement is consistent with the requirements imposed on all other construction near the riparian zone under this proposed section. Further, the applicant must show that there is no other feasible location onsite to undertake the project, which would reduce or eliminate the

impact to the riparian zone, and that all disturbance within the riparian zone is located as far from the regulated water as possible. These are basic limitations intended to reduce riparian zone impacts.

Proposed N.J.A.C. 7:13-10.2(r)4 requires that the applicant must provide 2:1 compensation for all vegetation disturbed in the riparian zone. Restoration techniques are described at proposed N.J.A.C. 7:13-10.2(t). This requirement is different from all others in this section because it requires 2:1 compensation for all riparian zone impacts, whereas the other activities regulated in the section are permitted some amount of permanent and/or temporary disturbance without requiring 2:1 compensation. For activities under proposed N.J.A.C. 7:13-10.2(f)1, (i), (o) and (s), which justifiably exceed the limits of Table B, 2:1 compensation is required for the vegetation removed in excess of the limit in Table B. Under proposed N.J.A.C. 7:13-10.2(r)4, however, all riparian zone disturbance is subject to 2:1 compensation. This provision is appropriate since the impacts resulting from this permit, while justified, are unlike the activities noted in this section in that the associated disturbance is not specifically limited. Therefore, the Department must ensure that the appropriate compensation for the lost vegetation is made.

Proposed N.J.A.C. 7:13-10.2(s) covers cases where the Department agrees that meeting the limits at Table B for a given project constitutes a hardship under proposed N.J.A.C. 7:13-9.8. If the Department grants a hardship exception to a project, and thereby allows disturbance in excess of the limit provided in Table B, the applicant must provide 2:1 compensation for all disturbed vegetation in excess of the limit. Restoration techniques are described at proposed N.J.A.C. 7:13-10.2(t). This provision is appropriate since it provides for situations where disturbance in the riparian zone in excess of the specified limits of Table B are clearly justified, while assuring that appropriate compensation for the lost vegetation is made.

Proposed N.J.A.C. 7:13-10.2(t) sets forth the guidelines for providing 2:1 compensation as referred to in proposed N.J.A.C. 7:13-10.2(f)1, (i), (o), (r)4 and (s). In all cases except proposed N.J.A.C. 7:13-10.2(r)4, an applicant is required to replant at least twice the area of all cleared, cut and removed vegetation in excess of the limit in Table B. In the case of proposed N.J.A.C. 7:13-10.2(r)4, an applicant is required to replant at least twice the area of all cleared, cut and removed vegetation, for reasons discussed in the summary for that paragraph above. Requiring 2:1 compensation for disturbed areas is consistent with other similar environmental mitigation standards (such as under the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A), and is necessary to ensure that the lost resource is adequately mitigated. Replanted areas can take many years to replicate the size and density of the original vegetation that is lost, and survival rates of planted species are less than 100 percent. Furthermore, the replanted area is generally not immediately adjacent to the lost vegetation and may be offsite altogether. Requiring 2:1 compensation, therefore, ensures that any adverse impacts that occur due to the loss of riparian zone vegetation will be adequately compensated for by the replanting.

Proposed N.J.A.C. 7:13-10.2(t) provides that all replanting of vegetation under this section for the purpose of 2:1 compensation shall be accomplished as described in proposed N.J.A.C. 7:13-10.2(u), and must be accomplished in one or both of two ways. An applicant can remove lawfully existing structures and/or impervious surfaces in a riparian zone and replant that area with vegetation. An applicant can also plant new trees in a riparian zone in an area that is devoid of trees, provided the trees were lawfully removed prior to the application to the Department. The area selected for replanting must also be deed restricted against future development that would remove the compensatory vegetation. It is the Department's experience that the two methods described in this proposed subsection are acceptable means of restoring the lost value of

riparian zones. An applicant can choose to perform one or both of these methods to reach the total area of compensation required. Compensation could, therefore, consist solely of one method or could be a combination of two methods at the discretion of the applicant, provide the standards at proposed N.J.A.C. 7:13-10.2(u) are satisfied. The proposed text further explains that replanting vegetation removed in violation of this chapter does not qualify as adequate compensation.

Proposed N.J.A.C. 7:13-10.2(u) sets forth specifications for performing the restoration in the riparian zone required at proposed N.J.A.C. 7:13-10.2(t). These specifications are consistent with those in other Department programs requiring restoration such as freshwater wetlands mitigation, and will ensure success of the restoration projects. In order to ensure that any adverse impacts to water quality are limited to a small area, all plantings must be done within the riparian zone of the same regulated water that has been disturbed, and must be located as close to the disturbed area as possible. All replanting must be of indigenous, non-invasive vegetation and be of equal or greater density than the cleared, cut or removed vegetation. The applicant must also monitor and maintain the replanted vegetation for at least three growing seasons in order to ensure establishment and survival of the plantings. Finally, the Department must review and approve specific details related to the plantings shown on submitted drawings to ensure the plantings are done correctly.

Proposed N.J.A.C. 7:13-10.2(v) sets forth requirements for certain redevelopment activities within the riparian zone. In cases where an applicant proposes to redevelop a site within 25 feet of any top of bank or edge of water, proposed N.J.A.C. 7:13-10.2(v) requires that all existing impervious surface within 25 feet of the top of bank or edge of water must be removed, and the riparian zone must be replanted with vegetation, with two exceptions discussed below. It is not

uncommon in older developments for structures and other impervious surfaces to exist very close to the top of bank, and in some cases, pavement can extend up to the top of bank itself. Such development causes increased erosion within the channel, degrades water quality and poses a public safety risk since such structures can become undermined and sustain structural damaged and/or collapse as the size and shape of the channel changes over time. In order to prevent such conditions from continuing, proposed N.J.A.C. 7:13-10.2(v) requires that the area within 25 feet of the channel be adequately stabilized and restored with indigenous, non-invasive vegetation. This requirement applies only to those areas where redevelopment is proposed within 25 feet of the channel. If redevelopment occurs elsewhere on a site, and no work is proposed within 25 feet of the channel, proposed N.J.A.C. 7:13-10.2(v) does not require that the existing impervious areas within 25 feet of the channel be removed.

Proposed N.J.A.C. 7:13-10.2(v) also provides for two situations where an applicant is not required to restore and replant the riparian zone within 25 feet of the top of bank or edge of water. Proposed N.J.A.C. 7:13-10.2(v)1 provides for cases where an applicant demonstrates that removing the existing impervious surface, or preventing the replacement of the existing impervious surface, within 25 feet of the top of bank or edge of water would likely threaten public safety, exacerbate flooding or erosion or cause an undue economic hardship upon the applicant. In such a case, the riparian zone within 25 feet of the top of bank or edge of water must be restored, stabilized and replanted only to the extent feasible. Proposed N.J.A.C. 7:13-10.2(v)2 also provides for cases where an applicant proposes to construct a public walkway within 25 feet of the top of bank or edge of water. A walkway in this area is permissible, provided it is constructed of permeable material where feasible in order to reduce potential impacts to water quality. Furthermore, the remainder of the area within 25 feet of the top of bank

or edge of water must be replanted with indigenous, non-invasive vegetation.

N.J.A.C. 7:13-10.3 Requirements for a regulated activity in a floodway

Proposed N.J.A.C. 7:13-10.3, which sets forth requirements that must be met for the issuance of an individual permit for any regulated activity in a floodway, consolidates provisions found in existing N.J.A.C. 7:13-2.2(a) and 2.14(a)1, which address prohibited activities as well as certain cases where fill is allowed in the floodway. The proposed rule includes some substantive changes as described below.

Proposed N.J.A.C. 7:13-10.3(a) sets forth the scope of the section. The requirements contained in this section are in addition to any other requirements applicable to the proposed regulated activity under this chapter.

Proposed N.J.A.C. 7:13-10.3(b) provides that the Department shall not allow any regulated activity in a floodway which causes any of four different results, with certain exceptions listed at proposed N.J.A.C. 7:13-10.3(c). No structure, fill, raising of the ground elevation, or obstruction to floodwaters is permissible in a floodway. This provision is taken from existing N.J.A.C. 7:13-2.2(a) where such activities are prohibited in a floodway. Such restrictions are necessary to prevent adverse impacts to flooding and to protect public safety.

Notwithstanding the requirements at existing N.J.A.C. 7:13-2.2(a) and proposed N.J.A.C. 7:13-10.3(b), the Department has found that certain activities justifiably result in fill or a minor obstruction within the floodway, or will result in so little impact to flooding as to be negligible. Furthermore, it may not be possible to construct some activities outside a floodway in certain situations, such as a road crossing, stormwater outfall structure or bank stabilization project. Proposed N.J.A.C. 7:13-10.3(c), therefore, provides that the Department shall permit nine

activities in a floodway which otherwise do not meet the requirements at proposed N.J.A.C. 7:13-10.3(b), provided that specific conditions listed in that N.J.A.C. 7:13-10.3(c) and all other requirements of the chapter are satisfied. This section should not be understood as automatically permitting these nine activities in a floodway. Even if a proposed regulated activity meets the requirements contained in this section, particular conditions on the site may preclude it from satisfying the requirements applicable to the particular type of proposed regulated activity contained in another section of the chapter. For example, proposed N.J.A.C. 7:13-10.3(c)4 allows the construction for a bridge or culvert in a floodway, but further requirements for the construction of a bridge or culvert are contained under proposed N.J.A.C. 7:13-11.7. Instead, the proposed list is meant to include the types of activities which are not specifically prohibited in a floodway, and thus may qualify for approval, provided all other requirements of the chapter are satisfied. An activity not listed in this subsection could not be issued an individual permit for activity in the floodway without a hardship exception.

Existing N.J.A.C. 7:13-2.2(b) lists three exceptions to the prohibition against fill, structures and obstructions at existing N.J.A.C. 7:13-2.2(a). These exceptions are the expansion or enlargement of a lawfully existing land use, the restoration of a lawfully existing building that is damaged and the vertical expansion of a lawfully existing sanitary landfill. The nine activities allowed under proposed N.J.A.C. 7:13-10.3(c) expand and clarify existing N.J.A.C. 7:13-2.2(b) as described below. However, proposed N.J.A.C. 7:13-10.3(c) does not continue the vertical expansion of a sanitary landfill allowed at existing N.J.A.C. 7:13-2.2(b)3. It is the Department's experience that the volume of fill resulting from such an expansion is generally significant and likely to exacerbate flooding. Existing N.J.A.C. 7:13-2.2(b)3 also includes a number of requirements that must be met in order to allow such an expansion, which cannot typically be

met by applicants. Therefore, the expansion of such facilities can only be permitted by satisfying the requirements for a hardship waiver at existing N.J.A.C. 7:13-4.8. The Department has concluded that it is, therefore, not appropriate to allow the vertical expansion of a sanitary landfill in a floodway unless an applicant can demonstrate a hardship. The requirements for the placement, storage or processing of solid waste in the flood fringe, which includes the expansion of a sanitary landfill outside a floodway, are included at proposed N.J.A.C. 7:13-11.18.

Proposed N.J.A.C. 7:13-10.3(c)1 provides for the construction of a building on a pier in the Hudson River, which meets the requirements of the Coastal Zone Management rules at N.J.A.C. 7:7E-3.48. Whereas the construction of a building in a floodway is often unsafe for its intended occupants and can exacerbate flooding, N.J.A.C. 7:7E-3.48 provides for the construction of certain buildings on piers in the Hudson River in such a way that these adverse impacts on both the public and flooding will not occur. New N.J.A.C. 7:13-10.3(c)1 is necessary, therefore, in order to not otherwise prevent safe construction practices along the Hudson River as provided at N.J.A.C. 7:7E-3.48.

Proposed N.J.A.C. 7:13-10.3(c)2 provides for issuance of an individual permit for the reconstruction of a lawfully existing building in a floodway, and proposed N.J.A.C. 7:13-10.3(c)3 provides for issuance of an individual permit for the construction of an addition to a lawfully existing building in a floodway. This is found in the existing rules at N.J.A.C. 7:13-2.2(b)1 and 2. Specific requirements for the reconstruction or enlargement of a lawfully existing structure in a floodway are found at proposed N.J.A.C. 7:13-11.5.

Proposed N.J.A.C. 7:13-10.3(c)4 provides for issuance of an individual permit for the construction in a floodway of a water control structure, such as a bridge, culvert, footbridge, dam or flood control project. These structures typically must be located within or along a watercourse

in order to serve their basic purpose, and often result in some fill or obstruction within the floodway. The Department recognizes that such impacts are often unavoidable, and the requirements at proposed N.J.A.C. 7:13-11.1(g) and (h) and 11.7 ensure that such projects will not increase offsite flooding. That existing N.J.A.C. 7:13-2.2(b) does not specifically allow the construction of a water control structure in a floodway has lead to some confusion, especially since the requirements at existing N.J.A.C. 7:13-2.16 imply that such structures often lie within floodways. The proposed rule eliminates any confusion regarding the placement of water control structures in the floodway. The proposed text directs the reader to proposed N.J.A.C. 7:13-11.7, 11.8, 11.11 and 11.12, which set forth construction standards for various types of water control structures.

Proposed N.J.A.C. 7:13-10.3(c)5 provides for issuance of an individual permit for a stormwater outfall structure in a floodway. Outfall structures must sometimes be located in a floodway in order to function properly, and can be constructed with negligible fill so as to have no adverse impact to flooding. Specific requirements for stormwater outfall structures are found at proposed N.J.A.C. 7:13-11.10.

Proposed N.J.A.C. 7:13-10.3(c)6 provides for issuance of an individual permit for restoration and/or stabilization of an eroded channel bank, which requires the placement of fill in a floodway, provided two requirements are met. First, the placement of the fill must be necessary on order to protect nearby structures or trees from undermining or failure. The Department recognizes that situations sometimes arise where there is no way to restore or stabilize an eroded bank, which is threatening the integrity of nearby structures of trees, without the placement of some fill in a floodway. However, fill is not permitted in the floodway under this provision to simply reclaim land that has been lost due to erosion. The fill must be necessary to protect

nearby structures or trees from undermining or failure. Second, the cross-sectional area of the channel open to flow must not be reduced to less than the pre-eroded condition of the channel. This is necessary in order to ensure that the placement of fill in the floodway to restore and/or stabilize the eroded bank will not exacerbate flooding. This provision is not found in the existing rule, but has been added to accommodate bank stabilization projects that are both necessary and beneficial to the environment. A hardship waiver would be required for such a project under the existing rules. Specific requirements for bank stabilization projects are found at proposed N.J.A.C. 7:13-11.14.

Proposed N.J.A.C. 7:13-10.3(c)7, which provides for issuance of an individual permit for the placement in a floodway of dredged material adjacent to the water from which the material was removed, is derived from similar provisions for disposal of spoils found in existing N.J.A.C. 7:13-2.7(a)1. Specific requirements for the placement of dredged material in a floodway are found at proposed N.J.A.C. 7:13-11.15(f).

Proposed N.J.A.C. 7:13-10.3(c)8 provides for issuance of an individual permit for fill in isolated shallow depressions and other ineffective flow areas in the floodway. It is the Department's experience that small areas can exist within mapped floodways which, due to existing topography or the presence of lawful structures, do not contribute to the flood-carrying capacity of a regulated water and which can, therefore, be filled without adverse impacts to flooding. For instance, a small area may exist immediately downstream of a large bridge abutment which, although mapped as a floodway, does not effectively carry floodwaters and therefore could be filled with no impact on the floodway velocity or water surface elevation. While the placing fill in ineffective flow areas such as this is not specifically allowed under existing N.J.A.C. 7:13-2.2(b), it is not prohibited under existing N.J.A.C. 7:13-2.2(a)1. Since

such activities will have no measurable adverse impact on flooding, there is no reason for the Department to deny an individual permit for such activities. Nevertheless, an applicant should not construe this provision as an automatic approval of such activities, since other provisions of the chapter may prevent filling these areas for environmental reasons.

Proposed N.J.A.C. 7:13-10.3(c)9 provides for issuance of an individual permit for a moderate amount of fill in a portion of a pond or lake, provided compensatory excavation is performed, and provided the fill neither obstructs flood flows nor negatively impacts the environment. This is a new activity that is not listed in existing N.J.A.C. 7:13-2.2(b) as an exception to the prohibition on filling in the floodway. Fill is generally prohibited in a floodway because it often obstructs flood flows and reduces the cross-sectional flow area of the waterway, thus increasing water surface elevations. However, the flow velocity in lakes and ponds is very low and the cross-sectional area of flow is very large. Therefore, minor changes in the cross-sectional area have no impact on water surface elevations. In lakes and ponds, water surface elevations are affected more by the flow capacity of a downstream dam or other water control structure, as well as by the amount of flood storage volume within the impounded area. Since the proposed paragraph requires an equal amount of excavation to offset the placed fill, the total flood storage volume in the lake or pond will not be reduced. Furthermore, the applicant must demonstrate that the fill will not obstruct flood flows (either by narrative or by calculation, as appropriate), and the fill cannot extend further than 20 percent of the width of the water, as measured perpendicularly across the water from the shoreline along which the fill is being placed. Given these requirements, the proposed fill will not adversely affect flooding. The applicant must also demonstrate that partially filling the waterbody will cause no adverse environmental impacts.

N.J.A.C. 7:13-10.4 Requirements for a regulated activity in a flood fringe

Proposed N.J.A.C. 7:13-10.4, which sets forth requirements that must be met for the issuance of an individual permit for a regulated activity in the flood fringe, replaces existing N.J.A.C. 7:13-2.14, with clarifying and substantive changes as outlined below. Existing N.J.A.C. 7:13-2.14 focuses on standards for placing fill within a flood plain and establishes limitations on the amount of "net fill" that can be placed in a flood fringe (that is, the total volume of flood storage displaced as a result of a project after all construction, excavation, filling and grading are done on a site). Like existing N.J.A.C. 7:13-2.14, the general purpose of proposed N.J.A.C. 7:13-10.4 is to restrict the amount of fill material that a person can place within a flood fringe, in order to preserve enough flood storage volume onsite to prevent local flood conditions from being exacerbated.

The flood fringe is the portion of the flood hazard area that lies outside the floodway. Floodwaters generally move more slowly in the flood fringe as compared with the floodway, and the flood fringe serves to temporarily store large volumes of floodwater during a flood, much as a detention basin collects and temporarily stores runoff from a development. Material in a flood fringe, therefore, occupies a space or volume that would otherwise be filled with floodwaters during a flood. The space that floodwaters occupy on a site during a flood is referred to as the "flood storage volume" of that site. Certain construction activities also reduce flood storage volume by preventing floodwaters from entering an area, such as the space inside a building or stormwater management basin, or behind an embankment. Even if the space within a building is empty, the building's walls might be watertight and effectively prevent floodwaters from entering the space inside the building. Since the entire volume enclosed by the building is inaccessible to

floodwaters, the entire volume inside the building displaces flood storage volume.

The loss of flood storage volume increases the depth and velocity of flooding, which can lead to expanded flood hazard areas, as well as increased public safety hazards and loss of property. Furthermore, deeper and faster flows in channels increase the potential for erosion, stream bank failure and sediment deposition, all of which adversely impact fishery resources and other aquatic biota.

The State's earliest settlements were established along navigable waters and, thus, many of New Jersey's older communities lie partially or completely within flood hazard areas. As development continued over the years, more flood storage volume was displaced in flood hazard areas, causing flood conditions to progressively worsen Statewide. In order to protect public safety, the Department, therefore, imposed a no net fill restriction within the Central Passaic Basin in 1977 and a 20 percent net fill limitation along all non-tidal flood hazard areas throughout the rest of the State in 1984, standards which are promulgated at existing N.J.A.C. 7:13-2.14 and 2.15. A more stringent standard was established in the Central Passaic Basin because of the high degree of historical flooding and the number of people that were affected by these floods in that basin.

In spite of these net fill restrictions, flooding in New Jersey has continued to worsen during the years since their implementation. In just the past two years alone, there has been a number of significant flood events that have caused millions of dollars of property damage and have repeatedly placed the State's residents at significant risk. The following table from FEMA indicates the total dollar amount of claims paid through the National Flood Insurance Program in New Jersey since the current Flood Hazard Area Control rules were adopted in 1995:

Year	Total Claim Payments
1995	$2,290,540

1996	$31,149,406
1997	$7,117,495
1998	$22,994,589
1999	$112,914,991
2000	$4,523,032
2001	$2,047,776
2002	$558,633
2003	$2,978,439
2004	$16,050,011
2005	$38,579,864
Total	$241,204,776

The Department's adoption of the Stormwater Management rules in 2004 was a major step in reducing the volume and rate of stormwater runoff reaching New Jersey's waterways. However, the Department has determined that further measures are required in order to prevent increases in the frequency and intensity of flooding. To this end, the Department is proposing three major changes to the net fill restrictions under this chapter as follows (all of which are described in greater detail below):

1. The existing zero-percent net fill rule in the Central Passaic Basin is proposed to be expanded Statewide to all fluvial (non-tidal) flood hazard areas, with certain exceptions at proposed N.J.A.C. 7:13-10.4(d) as discussed below. In this way, the maximum volume of flood storage will be preserved along all of the State's waters, thus providing the greatest level of protection against increases in flooding over time due to development.

2. The proposed Statewide zero-percent net fill standards will be accomplished in one of two ways: (1) requiring that each development balance cut and fill onsite so that no flood storage is lost, as described at proposed N.J.A.C. 7:13-10.4(c)2, or (2) allowing development to displace up to 20 percent of the flood storage onsite, as described at proposed N.J.A.C. 7:13-10.4(c)3, provided all lost flood storage is compensated by the creation of an equal volume of flood

storage offsite. However, all offsite flood storage that is created to compensate for fill must be created in the flood hazard area of the same regulated water as the proposed fill, and must be within close proximity to the proposed fill in order to ensure that the created flood storage is effectual. Thus, the Department intends to eliminate the current practice in the Central Passaic Basin of creating flood storage miles away from a site and/or along entirely different streams or rivers.

3. In order to better protect the public from increases in the frequency and intensity of smaller flood events as well as large flood events, it is proposed that the zero-percent net fill standard be met for both the 10-year flood and the flood hazard area design flood. The existing rules require only that the net fill standards be met for the flood hazard area design flood. However, site grading is sometimes accomplished in such a way that a large volume of flood storage is displaced during smaller flood events, while the overall site still meets the net fill standards for the flood hazard area design flood. This proposed change will ensure that flood storage is preserved for small floods and large floods alike.

In addition to establishing limitations on the amount of flood storage that can be displaced in different geographic areas, proposed N.J.A.C. 7:13-10.4 presents various guidelines for calculating the amount of net fill. The terms "fill" and "net fill," while often used interchangeably in the existing rules, describe different concepts and differ somewhat from the use of the word "fill" in the Freshwater Wetlands Protection Act rules. For example, digging a hole in a freshwater wetland and then filling the hole with cement constitutes fill under the Freshwater Wetlands Protection Act rules because the cement is occupying an area that was previously a freshwater wetland. However, the same action would not constitute net fill under existing N.J.A.C. 7:13-2.14 because only material placed above-ground can possibly displace

floodwaters. Furthermore, fill placed above-ground at one location can be compensated for by excavating below ground at another location. If the volume of above-ground "fill" equals the volume of excavation or "cut," and floodwaters are permitted to enter the "cut" area, there is "fill" on site but no "net" fill, since the total volume of flood storage onsite remains the same. Under this chapter, therefore, in some situations fill may not result in net fill, since "net" refers to a final result after all filling and cutting on site occurs. In order to clarify the use of these terms, proposed N.J.A.C. 7:13-10.4 uses the term "flood storage volume" rather than the term "net fill." This concept is discussed further below.

Proposed N.J.A.C. 7:13-10.4(a) sets forth the scope of the section. The requirements contained in this proposed section are in addition to any other requirements applicable to the proposed regulated activity under this chapter.

Proposed N.J.A.C. 7:13-10.4(b) introduces the concept of the flood storage volume of the flood fringe on a site. When fill is placed in a flood fringe, it will occupy a space that would otherwise be filled with floodwater during a flood, and thus will reduce the flood storage volume on the site. The proposed subsection also explains that fill may additionally reduce the flood storage volume on a site by preventing floodwater from entering a space that it would otherwise occupy, such as the space inside a building or stormwater management basin, or behind an embankment. Furthermore, proposed N.J.A.C. 7:13-10.4(b) provides that activities other than fill, if they have the effect of reducing flood storage volume of a site, will be regulated in the same way as fill. This provision is found in existing N.J.A.C. 7:13-2.14(a)9 and 10 and is described in further detail in proposed N.J.A.C. 7:13-10.4(j) though (l).

Proposed N.J.A.C. 7:13-10.4(c) provides that a regulated activity in a flood fringe must meet one of three conditions with regard to flood storage displacement. First, as discussed in the

summary of proposed N.J.A.C. 7:13-10.4(d) below, certain activities are not subject to the flood storage limitations of this section. In all other cases, the flood storage limitations of this section must be satisfied in one of two ways. Proposed N.J.A.C. 7:13-10.4(c)2 provides for cases where the regulated activity displaces no flood storage volume onsite. Flood storage volumes must be calculated for both the flood hazard area design flood and the 10-year flood, as further described at proposed N.J.A.C. 7:13-10.4(e). Proposed N.J.A.C. 7:13-10.4(c)3 provides for cases where the regulated activity will displace some flood storage volume onsite. In all cases, no more than 20 percent of the flood storage volume can be displaced onsite, and all flood storage displacement onsite must be compensated offsite so that there is no overall displacement of flood storage volume upon completion of the project. As with proposed N.J.A.C. 7:13-10.4(c)2, flood storage volumes must be calculated for both the flood hazard area design flood and the 10-year flood. Furthermore, if the regulated activity is located within the Central Passaic Basin, the requirements at proposed N.J.A.C. 7:13-10.4(g) must be satisfied. If the regulated activity is a Major Highlands Development, the requirements at N.J.A.C. 7:13-10.4(h) must be satisfied. Finally, if the regulated activity is neither located within the Central Passaic Basin nor is a Major Highlands Development, the requirements at proposed N.J.A.C. 7:13-10.4(i) must be satisfied.

Proposed N.J.A.C. 7:13-10.4(d) lists seven regulated activities that are not subject to the flood storage volume displacement limits of this section, unless the regulated activity is located within the Highlands Preservation Area. The Highlands Water Protection and Planning Act at N.J.S.A. 13:20-34f and 13:20-43 establishes a "zero net fill requirement" for Major Highlands Development within flood hazard areas in the Highlands Preservation Area. A Major Highlands Development cannot, therefore, cause any net displacement of flood storage volume within a flood hazard area. Accordingly, no exceptions can be established under this chapter.

Proposed N.J.A.C. 7:13-10.4(d)1, which provides that activities in tidal flood hazard areas are not subject to the requirements of this section, is found in existing N.J.A.C. 7:13-1.3(b)2. Tidal flooding is caused by the Atlantic Ocean, the flood elevation of which is not altered by inland flood storage volumes. As such, there is no need to restrict flood storage displacement in tidal areas.

Proposed N.J.A.C. 7:13-10.4(d)2 excepts activities that displace a total of no more than five cubic yards of flood storage volume. This is a new provision not found in the existing rules. The Department has determined that it is impractical to require flood storage volume compensation for such a small amount of fill, since the environmental and economic costs of compensation often outweigh the benefits of preserving the flood storage volume. Furthermore, this small amount of fill will have a *de minimis* impact on the flood storage volume capacity of a regulated water.

The reason proposed N.J.A.C. 7:13-10.4(d)2 excepts such projects from flood storage volume limitations is similar to the reason for authorizing the placement of no more than five cubic yards of fill which does not result from a structure under a permit-by-rule at proposed N.J.A.C. 7:13-7.2(b)3. The permit-by-rule applies to small amounts of fill material that can be easily measured, such as dumping five cubic yards of topsoil from a truck to create a garden. Such activities do not require an individual permit. However, proposed N.J.A.C. 7:13-7.2(b)3 does not authorize the construction of a building which displaces less than five cubic yards of flood storage volume. Situations can arise where extensive excavation, construction and filling on a site collectively result in the displacement of less than five cubic yards of flood storage volume. In both of these cases, it would be necessary to prepare calculations to prove that the activities will displace less than five cubic yards of flood storage volume. Proposed N.J.A.C.

7:13-10.4(d)2, therefore, deals with cases which do not meet the permit-by-rule at N.J.A.C. 7:13-7.2(b)3, but which nevertheless displace less than five cubic yards of flood storage volume. Since compliance with this chapter can only be determined through the review of calculations in these cases, the activities are not permitted-by-rule. But the flood storage volume displacement is nevertheless demonstrated to be insignificant and not worth requiring compensation.

Proposed N.J.A.C. 7:13-10.4(d)3 excepts the reconstruction, improvement or enlargement of a lawfully existing railroad or public roadway from the limitations at proposed N.J.A.C. 7:13-10.4(c). Under existing N.J.A.C. 7:13-2.14(a)7, the 20-percent limit is waived for public roadways that cannot meet this restriction due to limited rights-of-way, provided net fill is minimized and the public agency demonstrates that there is a need for the project that cannot be otherwise met without the fill. Existing N.J.A.C. 7:13-2.15(a)3 similarly waives the zero-percent net fill criteria for such projects in the Central Passaic Basin.

Whereas the existing rules except all public roadways that meet the criteria at existing N.J.A.C. 7:13-2.14(a)7 and 2.15(a)3 from meeting the net fill limitation, the proposed paragraph limits this exception to only improvements and enlargements of existing railroads and public roadways. Therefore, new railroads and new public roadways are subject to the flood storage displacement limitations set forth in this section. The Department has determined that the existing exception is inappropriately broad and should not apply to such construction.

The proposed paragraph also does not include the requirement for a demonstration of need, because the fact that public funding has been allocated to improve or reconstruct a roadway indicates that the agency has already determined that there is a public need for the activity. The proposed paragraph instead focuses on minimizing the amount of flood storage volume displaced by the project. The proposed paragraph also adds railroads to the list of excepted activities,

because they are similar to roads in terms of their public purpose and likely flood impacts.

In most cases, the existing right-of-way along a railroad or public roadway is usually not much wider than the railroad or roadway itself. Because of the narrow width of most existing rights-of-way, when a railroad or roadway crosses through a flood hazard area, the existing flood storage volume within the right-of-way itself is typically very small. A minor amount of fill within such a right-of-way can, therefore, easily displace a high percentage of the existing flood storage volume within the right-of-way. In order to meet the net fill limitations, additional rights-of-way must, therefore, be purchased or else fill within the right-of-way must be severely limited by using retaining walls or other such means. Since such work often occurs in areas that have already been developed, the cost of acquiring additional rights-of way is often prohibitive. Constructing retaining walls to limit fill is similarly expensive and may also pose a safety hazard to the traveling public. Therefore, the Department has determined that the existing exception from the net fill limitation is appropriate for changes to existing railroads and public roadways, provided fill is minimized.

In the case of a new railroad or public roadway, however, a new right-of-way must be obtained prior to construction. Therefore, an applicant can generally plan to obtain a right-of-way that is wide enough to accomplish all necessary aspects of the work, including the appropriate width of the roadway and providing sufficient area for stormwater management and to balance the loss of flood storage volume. Furthermore, the volume of fill associated with the construction of a new railroad or public roadway is much greater than that which is typically associated with improvements or enlargements to existing railroads or public roadways. The Department, therefore, requires that such projects must meet the flood storage displacement limits of proposed N.J.A.C. 7:13-10.4(c). In cases where this is not possible or practical, the

applicant can apply for a hardship exception under proposed N.J.A.C. 7:13-9.8.

Proposed N.J.A.C. 7:13-10.4(d)4 excepts the construction of a driveway that serves only one private residence, provided the house is not being constructed as part of a larger residential subdivision and provided the flood storage volume displaced by the driveway is minimized. An additional requirement is added for the construction of a new driveway, in which case the applicant must demonstrate that there is developable land onsite that cannot feasibly be accessed without crossing the water, including accessing the site through neighboring properties. The Department has determined that this exemption is appropriate for a number of reasons. First, the volume of fill associated with constructing a driveway is generally small and often unavoidable. Many driveways within flood hazard areas cross streams, in which case some fill is necessary within the flood fringe in order to reach the stream and cross over it with enough clearance to construct an adequately sized bridge or culvert in the channel. Second, the Department prefers that driveways be elevated at or above the flood hazard area design flood elevation so that residents and emergency vehicles can access or evacuate the home during a flood (see proposed N.J.A.C. 7:13-11.6(c)1 and 2). Requiring applicants to meet net fill restrictions often encourages them to construct driveways below the flood hazard area design flood elevation, since this requires less fill. Therefore, the net fill restrictions can sometimes be in conflict with safety considerations. Finally, in order to balance cut and fill, applicants are forced to create addition flood storage through excavation and regrading the site, which encourages more land disturbance and the loss of vegetation. For example, mature forests are sometimes cut so that the ground can be lowered in order to meet the net fill requirements. This runs contrary to the Department's goals of protecting the environment from undue impacts.

Given the above factors, it is Department's experience that the economic and environmental

costs associated with compensating for flood storage displacement for private driveways is unwarranted, provided the fill is minimized to a reasonable extent. This includes constructing the driveway as narrow and low as practical, and choosing a location on site which reduces the need for fill, all without compromising safety. The exception also requires that the house reached by the driveway is not being constructed as part of a larger residential subdivision. This is appropriate since residential subdivisions encompass large tracts of land, which can be configured in a number of ways and which, therefore, typically possess more options for avoiding fill in flood hazard areas and/or meeting the net fill restrictions of this chapter. The exception is, therefore, intended only for one driveway reaching one house, since the options available on one lot are much more limited than would be available with a subdivision. Finally, in the case of the construction of a new driveway, the applicant must demonstrate that there is developable land onsite that cannot feasibly be accessed without crossing the water, including accessing the site through neighboring properties. If there is another feasible means of accessing developable land onsite that does not require crossing the water, an applicant cannot claim an exception from the flood storage displacement requirements of this section. This is appropriate since any flood storage displacement required for the construction of the driveway can clearly be avoided, since the site can already be accessed without crossing the water. Therefore, for the construction of a new driveway, the proposed exception is limited to cases where fill in the flood fringe is unavoidable in order to access the property. The construction of a driveway that does not meet all the standards of proposed N.J.A.C. 7:13-10.4(d)4 is, therefore, subject to the flood storage displacement limitations of the proposed N.J.A.C. 7:13-10.4.

Proposed N.J.A.C. 7:13-10.4(d)5 excepts the construction of one private residence which is not being constructed as part of a larger residential subdivision, under certain conditions. The

area inside the residence beneath the flood elevation must remain open to floodwaters, as described at proposed N.J.A.C. 7:13-11.5(l). Furthermore, the site cannot be graded to accommodate the construction of the residence. The residence must therefore be constructed basically "at grade." These requirements ensure that the construction of the residence displaces only a very small amount of flood storage. The rationale for excepting the construction of one residence is the same as for excepting a private driveway at proposed N.J.A.C. 7:13-10.4(d)4 above. It is Department's experience that the economic and environmental costs associated with compensating for flood storage displacement for one private residence are unwarranted, provided the fill is minimized.

Proposed N.J.A.C. 7:13-10.4(d)6 excepts flood control projects, which are similarly excepted at existing N.J.A.C. 7:13-2.14(a)8. The very nature of flood control projects is to reduce flooding, which is the intent of the flood storage displacement limits of this section. Sometimes a portion of a flood fringe will be filled in order to construct an impoundment or other structure that will ultimately benefit a large number of people by containing or redirecting floodwaters. Even though the zero-percent net fill limitation may be exceeded by the construction of certain structural components of the project, the final result will be reduced flooding conditions overall. Therefore, there is no need to restrict the placement of fill for flood control structures, provided the volume of fill is minimized.

Proposed N.J.A.C. 7:13-10.4(d)7 excepts the deposition of sediment removed from a channel which meets the requirements of N.J.A.C. 7:13-11.15(f). The Department recognizes that certain situations may exist which render the transport of removed sediment outside the flood hazard area impractical. For cases that meet the requirements at proposed N.J.A.C. 7:13-11.15(f), either the volume of fill is negligible or the environmental considerations justify the

placement of the fill without compensation. These cases are discussed further in the summary for proposed N.J.A.C. 7:13-11.15(f).

Proposed N.J.A.C. 7:13-10.4(e) sets forth the requirements for a regulated activity that is designed to displace no flood storage volume in accordance with proposed N.J.A.C. 7:13-10.4(c)2. This is accomplished by creating an equal or greater volume of flood storage onsite than the proposed construction will displace.

Proposed N.J.A.C. 7:13-10.4(e)1 explains how to calculate the existing flood storage volume (V_E) and proposed N.J.A.C. 7:13-10.4(e)2 explains how to calculate the proposed flood storage volume (V_P). The existing flood storage volume is the space within the flood fringe between the flood elevation and the ground surface as it exists on the date of application to the Department, minus the volume occupied by any structures that lawfully exist as of that date. Similarly, the proposed flood storage volume is the space within the flood fringe between the flood elevation and the proposed ground surface, minus the volume occupied by any structures that will lawfully exist once all proposed construction is completed.

Proposed N.J.A.C. 7:13-10.4(e)3 requires that the proposed flood storage volume (V_P) must equal or exceed the existing flood storage volume (V_E) onsite. Proposed N.J.A.C. 7:13-10.4(e)3 also requires that this standard must be met for both the flood hazard area design flood and the 10-year flood, and must be calculated in consideration of the requirements at proposed N.J.A.C. 7:13-10.4(j). Proposed N.J.A.C. 7:13-10.4(e)3 further establishes that flood storage volume can be created onsite to compensate for proposed flood storage displacement in accordance with the requirements at proposed N.J.A.C. 7:13-10.4(m).

Proposed N.J.A.C. 7:13-10.4(f) introduces Table C, which sets forth the allowable percentages of flood storage volume that a project can lawfully displace according to three

geographic regions of the State. Whereas proposed N.J.A.C. 7:13-10.4(e) sets forth standards for projects that balance all proposed flood storage displacement onsite with an equal or greater volume of flood storage created on the same site, proposed N.J.A.C. 7:13-10.4(f) and Table C address situations where flood storage displacement onsite is compensated by an equal or greater volume of flood storage created at an offsite location.

Standards relating to fill within the Central Passaic Basin are continued from existing N.J.A.C. 7:13-2.15, with added detail and no change in meaning, except for changes in what constitutes acceptable offsite compensation for onsite fill as described below. Standards relating to the Highlands Preservation Area derive from the Highlands Water Protection and Planning Act at N.J.S.A. 13:20-34f and 13:20-43, which establishes a "zero net fill requirement" for Major Highlands Development within flood hazard areas in the Highlands Preservation Area. Standards relating to all other areas of the State (outside the Central Passaic Basin and Highlands Preservation Area) are continued from existing N.J.A.C. 7:13-2.14(a)1 with the added requirement that all onsite flood storage displacement be compensated by the creation of an equal or greater volume of offsite flood storage.

In all cases, the maximum onsite percentage of flood storage volume that a project can lawfully displace is 20 percent of the base flood storage volume onsite. The method for calculating whether a proposed project complies with this requirement is specified at proposed N.J.A.C. 7:13-10.4(g), (h) or (i), depending on the geographic location of the project. Within the Central Passaic Basin, the base flood storage volume is the volume of the flood fringe that existed onsite on March 25, 1977. Both the existing and proposed rules reference this date because the Department first began regulating fill within the Central Passaic Basin at that time. Outside the Central Passaic Basin, the base flood storage volume is the volume of the flood

fringe that existing onsite on January 31, 1980. Both the existing and proposed rules reference this date since it is the date the current Flood Hazard Area Control Act was adopted, thus granting the Department the ability to restrict fill in flood hazard areas.

The third column of proposed Table C indicates the maximum total percentage of flood storage volume that a project can lawfully displace, after all offsite credits are considered. The method for calculating whether a proposed project complies with this requirement is specified at proposed N.J.A.C. 7:13-10.4(l). Offsite credits, which are described at proposed N.J.A.C. 7:13-10.4(o), consist of flood storage that is created offsite to compensate for fill onsite. Overall, a project cannot cause any net loss of flood storage volume. Therefore, all flood storage volume that is displaced onsite must be compensated for in either the manner described at proposed N.J.A.C. 7:13-10.4(m) for onsite compensation or the manner described at proposed N.J.A.C. 7:13-10.4(o) for offsite compensation.

Whereas existing flood storage volume is calculated based on two different dates as noted above, the third column of proposed Table C lists three dates for calculating the total percentage of flood storage volume that the project can lawfully displace. Within the Central Passaic Basin, both the existing and proposed rules reference March 25, 1977, since the Department first began regulating fill within the Central Passaic Basin at that time. Within the Highlands Preservation Area, the no net fill standard was established by legislation on August 10, 2004, and so this date is used to determine the ultimate flood storage displacement of a project. Outside the Central Passaic Basin and the Highlands Preservation Area, the existing and proposed rules reference January 31, 1980. However, as this proposal includes a no net fill standard in these areas as well, the effective date of these rules, when adopted, will become the date used to determine the ultimate flood storage displacement of a project

Proposed N.J.A.C. 7:13-10.4(g), (h), and (i) demonstrate how to calculate the onsite and total percentages of flood storage volume that a project displaces, in order to determine compliance with the values presented in the second column of proposed Table C.

Proposed N.J.A.C. 7:13-10.4(g) applies to projects in the Central Passaic Basin. The base flood storage volume is the volume of floodwater that was able to occupy the flood fringe onsite at a given point of time, depending on where the project is located in the State. For example, in the Central Passaic Basin, V_{1977} is the volume of space within the flood fringe between the flood hazard area design flood elevation and the ground surface as it existed on March 25, 1977, taking into account any structures that existed in the flood fringe on March 25, 1977. The base flood storage volume onsite on March 25, 1977 (V_{1977}) is to be calculated according to proposed N.J.A.C. 7:13-10.4(j) and (k), and the proposed flood storage volume (V_P) onsite is to be calculated according to proposed N.J.A.C. 7:13-10.4(j) and (l). Once these values are known, the onsite percentage of flood storage volume that a project displaces is found by subtract V_P from V_{1977} and dividing the result by V_{1977}. This is consistent with the provisions at existing N.J.A.C. 7:13-2.14(a)1 with added detail and no change in meaning. Both the existing and proposed rules provide that no more than 20 percent of the total flood storage volume on a site may be displaced by regulated activities. Determining compliance with this requirement can be complicated and the Department has determined that the addition of greater detail to existing N.J.A.C. 7:13-2.14(a)1 will help describe the concept of flood storage displacement and how to calculate this volume.

Proposed N.J.A.C. 7:13-10.4(g)2 describes how to calculate the total percentage of flood storage volume that a project displaces, in order to determine compliance with the requirements contained in the third column of proposed Table C. The terms and equation utilized are similar to

those set forth in proposed N.J.A.C. 7:13-10.4(g)1, except that provision is made for flood storage volume created offsite, as described at proposed N.J.A.C. 7:13-10.4(o). Fill being placed onsite can be compensated by the creation of new flood storage volume at an offsite location, as described in the summary below for proposed N.J.A.C. 7:13-10.4(o).

Proposed N.J.A.C. 7:13-10.4(h) is identical to proposed N.J.A.C. 7:13-10.4(g) except that it applies to any Major Highlands Development within the Highlands Preservation Area. The base flood storage volume is, therefore, based on the date the Flood Hazard Area Control Act was adopted (January 31, 1980) and the total flood storage volume references the date the no net fill standard was adopted in the Highlands Preservation Area (August 10, 2004).

Proposed N.J.A.C. 7:13-10.4(i) is identical to proposed N.J.A.C. 7:13-10.4(g) and (h), except that it applies to projects that are not in the Central Passaic Basin and which are not a Major Highlands Development. The base flood storage volume is, therefore, based on the date the Flood Hazard Area Control Act was adopted (January 31, 1980) and the total flood storage volume references the date the no net fill standard will become applicable to this area through this proposal.

Proposed N.J.A.C. 7:13-10.4(j) details factors that will be considered in determining the volume of flood storage. Certain activities may prevent floodwaters from entering an area and, therefore, render the area ineffective for flood storage, even though the area itself may be empty. For example, under proposed N.J.A.C. 7:13-10.4(j)2, the volume of stormwater in a detention basin below the water surface elevation will be considered displaced flood storage volume. Since detention basins store stormwater runoff, the portion of the detention basin that is occupied by the stormwater runoff is not available to store floodwaters. Accordingly, that volume has the same effect on flooding as placing fill. Another example is the construction of a building or a

levy that prevents floodwaters from reaching an area. This clarifies the Department's longstanding interpretation of the existing rule provisions regarding flood storage volume displacement, and better explains existing N.J.A.C. 7:13-2.14(a)9 and 10.

Proposed N.J.A.C. 7:13-10.4(j) also explains that the proposed flood storage displacement limits apply to both the flood hazard area design flood and the 10-year flood. Applicants must, therefore, demonstrate that each proposed project meets these net fill limits for both of these floods. Of course, this is not necessary if the entire project lies above the 10-year flood elevation. It is also explained that any flood storage displacement proposed above the 10-year flood must be compensated for by the creation of an equal volume of flood storage above the 10-year flood elevation. Similarly, flood storage displacement proposed below the 10-year flood must be compensated for by the creation of an equal volume flood storage below the 10-year flood elevation. This applies whether the compensation occurs onsite, as described at proposed N.J.A.C. 7:13-10.4(m), or offsite, as described at proposed N.J.A.C. 7:13-10.4(o). This distinction is necessary in order to preserve flood storage for both low frequency and high frequency flood events, as discussed above.

Proposed N.J.A.C. 7:13-10.4(k) explains how to calculate the base flood storage volume (V_{1977}, V_{1980}, V_{2004} and/or V_{2007} depending on the geographic location of the project) for use in proposed N.J.A.C. 7:13-10.4(g), (h) and (i). The base flood storage volume is the volume of floodwater that was able to occupy the flood fringe onsite on the appropriate date shown in Table C. To determine the base flood storage volume, an applicant must calculate the volume of space within the flood fringe between the flood hazard area design flood elevation and the ground surface as it existed on the appropriate date in Table C, and subtract the volume occupied by any structures that lawfully existed on that date. As noted in proposed N.J.A.C. 7:13-10.4(f) and (j),

this must be calculated for both the 10-year flood and flood hazard area design flood.

Proposed N.J.A.C. 7:13-10.4(l) explains how to calculate the proposed flood storage volume onsite (V_P). The proposed flood storage volume is the volume of floodwater that will be able to occupy the flood fringe onsite once all proposed construction, excavation, filling and grading is completed. To determine the proposed flood storage volume, an applicant must calculate the volume of space within the flood fringe between the flood hazard area design flood elevation and the proposed ground surface, and subtract the volume occupied by any structures that will lawfully exist once all proposed construction is completed. As noted in proposed N.J.A.C. 7:13-10.4(f) and (j), the proposed flood storage volume must be calculated for both the 10-year flood and flood hazard area design flood.

Proposed N.J.A.C. 7:13-10.4(m) sets forth two ways by which an applicant can create flood storage volume onsite in order to compensate for proposed flood storage volume displacement. An applicant may either remove certain types of previously placed fill or excavate below the ground surface. The existing rules at N.J.A.C. 7:13-2.15(a)2 provide for the removal of fill and/or excavation to create flood storage volume for projects situated within the Central Passaic Basin. The proposed rules allow these methods to be used Statewide since this is an effective means of creating additional flood storage volume on any site. The proposed text is also more specific and sets additional limits on how these activities must be performed in order to be counted as created flood storage volume.

Proposed N.J.A.C. 7:13-10.4(m)1 explains that flood storage can be increased by removing material that has been previously and lawfully placed within the flood fringe, such as fill or structures, as described at proposed N.J.A.C. 7:13-10.4(q). Proposed N.J.A.C. 7:13-10.4(m)2 explains that excavating material from below the surface of the ground and removing the

material outside of the flood hazard area, as described in proposed N.J.A.C. 7:13-10.4(r), also increases flood storage. In both cases, the action increases the volume that floodwater can occupy onsite.

Proposed N.J.A.C. 7:13-10.4(n) sets forth conditions that are necessary to successfully create onsite flood storage compensation. In order for flood storage created onsite to effectively compensate for fill, floodwaters must be able to access the compensation area without affecting intervening properties and exacerbating local flooding. The proposed conditions at N.J.A.C. 7:13-10.4(n) ensure that the flood storage volume created onsite will be effective.

Proposed N.J.A.C. 7:13-10.4(n)1 requires that the onsite compensation must be situated along either the same water as the proposed fill, or a tributary to that water, provided the flood hazard area of both waters connect on site. This requirement is necessary because the fill and the compensation must lie within the same flood hazard area complex in order to be effectively balanced.

Proposed N.J.A.C. 7:13-10.4(n)2 requires that the onsite compensation is not created in a floodway since, by definition, the floodway is the portion of the flood hazard area that conveys floodwaters and does not provide flood storage. Therefore, it is not possible to create flood storage in a floodway.

Proposed N.J.A.C. 7:13-10.4(n)3 requires that the onsite compensation does not disturb riparian zone vegetation, unless the area in question has already been lawfully disturbed. The Department is proposing strict measures to protect such areas under proposed N.J.A.C. 7:13-10.2 and does not want to encourage the disturbance of these areas simply to compensate for flood storage.

Proposed N.J.A.C. 7:13-10.4(n)4 repeats the existing provision at N.J.A.C. 7:38-3.7(d)4 of

the Highlands Water Protection and Planning Act rules, and prohibits flood storage compensation that would adversely impact environmental resources.

Proposed N.J.A.C. 7:13-10.4(o) provides three options for creating flood storage volume offsite to compensate for fill onsite. Offsite compensation can only be created on land that meets the requirements of proposed N.J.A.C. 7:13-10.4(p) as described below. Compensation can be accomplished either by removing material that has been previously lawfully placed within the flood fringe as described in proposed N.J.A.C. 7:13-10.4(q), or by excavating material from below the surface of the ground and removing the material outside of the flood hazard area, as described in proposed N.J.A.C. 7:13-10.4(r). For projects located in the Central Passaic Basin, an applicant can also purchase fill credits where available, as described in proposed N.J.A.C. 7:13-10.4(s) and (t).

Proposed N.J.A.C. 7:13-10.4(p) sets forth eight conditions that are necessary to ensure that offsite flood storage adequately compensates for onsite fill. Under existing N.J.A.C. 7:13-2.15(a)1, compensation for projects located within the Central Passaic Basin is allowed anywhere within the Central Passaic Basin. It has been the Department's experience, however, that flood storage created miles away from a site along another stream cannot adequately compensate for fill on a site. Accordingly, this proposed subsection restricts offsite compensation to a smaller area, which the Department has deemed necessary to ensure that the mandate of the Flood Hazard Area Control Act to preserve public safety and minimize flood damage potential is satisfied. The proposed requirements for offsite compensation are therefore designed to ensure that created flood storage effectively mitigates the effects of flooding caused by the proposed fill for which the compensation is intended.

Proposed N.J.A.C. 7:13-10.4(p)1 is identical to proposed N.J.A.C. 7:13-10.4(n)1, and

requires that the offsite compensation be situated along either the same water as the proposed fill, or a tributary to the same water as the proposed fill, provided the flood fringe of both waters connect on site. This requirement is necessary because the fill and the compensation must lie within the same flood hazard area complex in order to be effectively balanced.

For similar reasons, proposed N.J.A.C. 7:13-10.4(p)2 requires that the offsite compensation is not separated from the proposed flood storage displacement by a water control structure, such as a bridge, culvert or dam. These structures typically interfere with the hydraulics of a flood hazard area and often change the depth and velocity of flooding. Thus, flood storage created on one side of a water control structure may not adequately compensate for flood storage displacement on the other side, since the proposed compensation may be in an area that has a different flow regime. However, if an applicant demonstrates that a water control structure causes no significant rise in the flood hazard area design flood elevation, flood storage on the other side of the structure would be effective.

In order to further ensure that created flood storage effectively compensates for proposed flood storage displacement, proposed N.J.A.C. 7:13-10.4(p)3 requires the offsite compensation to be located within the same HUC-14 watershed as the project. While it is likely in most cases that an intervening water control structure would prevent compensation very far from a site, as provided under proposed N.J.A.C. 7:13-10.4(p)2 described above, it is possible that a long reach of stream may exist without water control structures. Therefore, to avoid cases where the compensating flood storage is so far removed from a site that it does not adequately balance a project's impacts, offsite compensation must occur within the same watershed as the proposed flood storage displacement.

Proposed N.J.A.C. 7:13-10.4(p)4 is identical to proposed N.J.A.C. 7:13-10.4(n)3, which

requires that the compensation is not created in a floodway. This is necessary because the floodway by definition is the portion of the flood hazard area that conveys floodwaters and does not provide flood storage. Therefore, it is not possible to create flood storage in a floodway.

In order to ensure that the creation of offsite flood storage does not adversely impact the environment, proposed N.J.A.C. 7:13-10.4(p)5 and 6 prevent offsite compensation in undisturbed riparian zones and other sensitive areas. This provision is identical to proposed N.J.A.C. 7:13-10.4(n)4, which continues existing N.J.A.C. 7:38-3.7(d)4 of the Highlands Water Protection and Planning Act rules, and which also references adverse impacts to threatened or endangered species, aquatic biota and fishery resources. The creation of compensatory flood storage cannot adversely affect these resources.

Proposed N.J.A.C. 7:13-10.4(p)7 requires that the land owners where the offsite compensation is proposed must agree in writing to allow the compensation, since the offsite land is not directly under the control of the applicant. Finally, to ensure that flood storage created offsite will be protected against future flood storage displacement, the area involved in the offsite compensation must be deed restricted under proposed N.J.A.C. 7:13-10.4(p)8.

Proposed N.J.A.C. 7:13-10.4(q) sets forth standards for created flood storage volume by removing material previously placed within the flood fringe, such as fill or structures, as referenced by proposed N.J.A.C. 7:13-10.4(m)1 and (o)1. Similar limitations are found in existing N.J.A.C. 7:13-2.15(a)2ii, applicable to projects within the Central Passaic Basin. The proposal rephrases the existing limitation for clarity, with added detail as described below. Furthermore, the proposed text does not limit the creation of flood storage to the Central Passaic Basin, since this method of creating flood storage volume is effective Statewide provided the conditions of this section are met.

The standards in proposed N.J.A.C. 7:13-10.4(q) are necessary to ensure that the material to be removed actually creates effective flood storage. Therefore, the material to be removed cannot have been placed in violation of this chapter, since removing such material would not create any new flood storage overall. Similarly, removing material associated with a permitted-by-rule activity under proposed N.J.A.C. 7:13-7 does not constitute new flood storage. If this were allowed, an applicant would be able to place fill under a permit-by-rule with the sole purpose of using the fill to serve as compensation for a subsequent individual permit application. The removed material must also be properly disposed of outside of any regulated area, since moving material from one flood hazard area to another would not result in creation of any additional flood storage volume. In order to ensure that the created flood storage is effective, the area disturbed by the removal must be graded so that floodwaters can freely enter and exit. Finally, the removal of the material must be approved by the Department and must occur at the same time or prior to the filling for which the compensation is intended. This ensures that flooding isn't exacerbated for any period while construction occurs.

Proposed N.J.A.C. 7:13-10.4(r), which sets forth standards for creating flood storage volume by excavating material from below ground, is a complimentary provision to proposed N.J.A.C. 7:13-10.4(q), which deals with removal of above ground features to create flood storage. These provisions are found in existing N.J.A.C. 7:13-2.15(a)2i, where they apply to projects within the Central Passaic Basin. The existing rule text is rephrased in the proposed rule for clarity, and a requirement is added to ensure that any excavated material is properly disposed of. Furthermore, the proposed subsection does not limit the creation of flood storage to the Central Passaic Basin as in the existing rules, since flood storage created in this manner is effective in any flood hazard area.

Flood storage can be created in a flood fringe or immediately adjacent to a flood hazard area. Excavation of such an area would be an effective way to create flood storage, because floodwater could flow into the newly excavated area as well as into the existing flood hazard area. The existing rule does not specify that the created flood storage volume must be in a flood fringe, as the proposed subsection does. However, flood storage volume can only exist in a flood fringe; it cannot exist in a floodway because the floodway is the area where floodwaters are being carried downstream, whereas the flood fringe is the area where floodwaters are stored. Therefore, the proposed subsection clarifies this point. In order for the created flood storage to be effective, it must be created below the flood hazard area design flood elevation and above the seasonal high water table (and thus unaffected by any groundwater that could seep into the area otherwise intended to be open for flood storage). For similar reasons, the excavation must also be located above the normal water surface elevation of the nearest regulated water. This provision is found at existing N.J.A.C. 7:13-2.15(a)2i, which uses the term "mean low water level" with the same intent. The excavated material must also be properly disposed of outside of any regulated area, since moving material from one flood hazard area to another would not result in creation of flood storage volume. In order to ensure that the created flood storage is effective, the area disturbed by the excavation must be graded so that floodwaters can freely enter and exit. Finally, the excavation must be approved by the Department and must occur at the same time or prior to the filling for which the compensation is intended. This ensures that flooding is not exacerbated for any period while construction occurs.

Proposed N.J.A.C. 7:13-10.4(s) provides for the purchase of Central Passaic Basin fill credits to compensate for proposed flood storage displacement in that basin. Fill credits are units of flood storage volume that have already been created in the Central Passaic Basin by

excavation and/or removal of fill. The person who created the excess flood storage volume may sell "credits" for that flood storage volume to a permittee who must compensate for proposed fill elsewhere in the Central Passaic Basin. The permittee then uses the credits as compensation for diminished flood storage volume on its site. The proposed subsection places limits on the use of fill credits to ensure that the intended compensation occurs.

The Department has previously permitted several facilities to create fill credits in the Central Passaic Basin. However, as of the proposal date of these rules, the Department will not approve the creation of additional fill credits in this manner. As noted above, the existing rules allow flood storage compensation anywhere within the Central Passaic Basin. Thus, the created flood storage could be miles away from the fill it is intended to compensate, and could be located along another stream entirely. The Department has concluded that allowing offsite compensation in such a manner does not constitute effective flood mitigation and, therefore, contradicts the intent of the Flood Hazard Area Control Act. However, the Department has already permitted the creation of fill credits in the Central Passaic Basin, and, therefore, the Department will not prevent the fill credits already approved to be created at these facilities from being used. However, only those fill credits which the Department has approved prior to the proposal date of these rules, as well as any applications to create fill-credits received prior to this date and which are subsequently approved by the Department are valid, provided the fill credits are lawfully created within five years from the proposal date of these rules. Once all approved fill credits have been purchased, offsite compensation in the Central Passaic Basin will no longer be possible through fill credits, and this provision will be removed from this chapter.

Proposed N.J.A.C. 7:13-10.4(t) sets forth the requirements for purchasing fill credits in the Central Passaic Basin under proposed N.J.A.C. 7:13-10.4(s). These standards are necessary to

ensure that the fill credits have been properly created and allotted to the proposed development, thereby constituting effective flood storage volume. Fill credits must be purchased from a person or facility that has been permitted by the Department to create such credits. Furthermore, the fill credits must already be in existence before the Department will allow their use; the Department will not approve the use of fill credits to compensate for a project if the fill credits have not already been created. The Department must also approve the use of the fill credits for a particular project as part of an individual permit, and the applicant must document that the fill credits have actually been purchased. This codifies the longstanding practice of the Department regarding the purchase of fill credits.

Proposed N.J.A.C. 7:13-10.4(u) provides for the issuance of an individual permit for activities on a site that already exceeds a limit in Table C because of activities previously undertaken in accordance with this chapter. New activities can be permitted on site only if flood storage volume equal to the displacement of the newly proposed activities is created onsite, in accordance with the procedure set forth at proposed N.J.A.C. 7:13-10.4(e). No offsite compensation is permissible in such a case. Furthermore, the previous flood storage displacement, although in excess of Table C, can remain on site, since no unlawful activity took place. This codifies the Department's longstanding interpretation of existing N.J.A.C. 7:13-2.14.

Proposed N.J.A.C. 7:13-10.4(v) provides for the issuance of an individual permit for activities on a site that already exceeds a limit in Table C because of activities previously undertaken in violation of this chapter. New activities can be allowed onsite only if the illegal material is permitted by the Department, or else removed from the flood hazard area, and all displaced flood storage volume in excess of the limits in Table C is restored onsite. Furthermore, flood storage volume equal to the displacement of the new proposed activities must be created

onsite. Therefore, after all activities are completed on site, the site will comply with the flood storage displacement limits of Table C. Like proposed N.J.A.C. 7:13-10.4(u), this codifies the Department's longstanding interpretation of existing N.J.A.C. 7:13-2.14.

Proposed N.J.A.C. 7:13-10.4(w) prevents an applicant from increasing the flood storage displacement limit on a site by subdividing a property. This is found in existing N.J.A.C. 7:13-2.14(a)6, and is rephrased in the proposed subsection for clarity, and further detail is added regarding how the provision will be applied in a case where a site is subdivided and transferred to multiple owners.

N.J.A.C. 7:13-10.5 Requirements for a regulated activity in or along a water with fishery resources

Proposed N.J.A.C. 7:13-10.5 sets forth requirements that must be met for the issuance of an individual permit for a regulated activity located in a regulated area along a water with fishery resources. Proposed N.J.A.C. 7:13-10.5 contains the substance of existing N.J.A.C. 7:13-3.5 and 3.6, which apply to projects along trout associated watercourses and projects affecting other fishery resources, respectively.

Proposed N.J.A.C. 7:13-10.5(a) sets forth the scope of the section and notes that additional standards for the construction of a bridge or culvert in or along waters with fishery resources are described at proposed N.J.A.C. 7:13-11.7.

Proposed N.J.A.C. 7:13-10.5(b) explains that Department's Surface Water Quality Standards at N.J.A.C. 7:9B identify the waters that contain fishery resources. The proposed subsection also identifies three Department reports that list further details concerning the regulated waters that are subject to this section. The existing rules regulate waters identified as having fishery

resources, but do not state by whom such an identification is made or how to determine if a particular water has been so identified. The Department's practice has been to refer applications to the Department's Division of Fish and Wildlife to determine whether a water has been identified as having fishery resources. The proposed subsection enables applicants to determine prior to submitting an application if they are subject to restrictions based on the presence of fishery resources. All three of the cited reports will be incorporated into the Flood Hazard Area Technical Manual.

Proposed N.J.A.C. 7:13-10.5(c) sets forth requirements that provide protection for fish and fish habitat. Proposed N.J.A.C. 7:13-10.5(c)1 requires compliance with the timing restrictions at proposed N.J.A.C. 7:13-10.5(d). This requirement is found at existing N.J.A.C. 7:13-3.5(d)1, 3.6(a) and 3.6(b). Proposed N.J.A.C. 7:13-10.5(c)2 stipulates that unset or raw cement cannot come into contact with water in the channel during construction. This requirement is necessary because certain chemicals in unset cement are toxic to aquatic biota and can leach into the water in a channel if not otherwise prevented. When unset cement is submerged, the individual ingredients become suspended, which can lower the dissolved oxygen content of the water and adversely impact aquatic life. Furthermore, lime dissolved from the cement can raise the pH of the water, which may also be damaging to aquatic species. Proposed N.J.A.C. 7:13-10.5(c)3 requires that certain physical characteristics of the channel be maintained so that existing fish habitat is protected, which is found at existing N.J.A.C. 7:13-3.5(f).

Proposed N.J.A.C. 7:13-10.5(c)4 requires that low-flow aquatic passage be maintained both during and after the project. These requirements are found in the existing rules at N.J.A.C. 7:13-2.16(c)3i (where they apply to bridges and culverts), N.J.A.C. 7:13-3.5(j) (where they apply to trout associated waters), and N.J.A.C. 7:13-3.6(c) (where they apply to other fishery resources).

During periods of dry weather, the base flow in a stream can decrease until very little water remains in the channel. During these times, it is important for the channel to be shaped in such a way as to concentrate the water into a continuous rivulet of a certain depth within the channel bed. This rivulet allows fish to travel up and down the channel. Without this sort of low-flow passage, fish can be trapped in one area of the stream and may be unable to feed or spawn.

Proposed N.J.A.C. 7:13-10.5(d) sets forth the activities that are subject to the timing restrictions in this section. Under the existing rules at N.J.A.C. 7:13-3.5(d), 3.6(a) and 3.6(b), timing restrictions apply to any activity that "would" introduce sediment into a regulated water. This provision has been misunderstood, since any activity would or could, in theory, introduce sediment into a regulated water. It has been argued, therefore, that the existing provision effectively prohibits any work within the flood hazard area whatsoever during a restricted time period. In order to clarify the intent of this provision, proposed N.J.A.C. 7:13-10.5(d) applies timing restrictions to construction, grading, excavation or filling within a channel, because those activities have a high likelihood of introducing sediment into a water. This clarification will make it easier for an applicant to determine if timing restrictions apply to a project, without reducing environmental protection. Proposed N.J.A.C. 7:13-10.5(d) also clarifies that these activities are permissible in the riparian zone if certain soil erosion and sediment control measures are in place.

Table D at proposed N.J.A.C. 7:13-10.5(d) sets forth the time periods during which activities are restricted based on fishery resources. The time periods are set forth as a narrative in existing N.J.A.C. 7:13-3.5(d), 3.6(a) and 3.6(b), but are proposed in table form for easier reference. The time periods in the proposed table are equivalent to those in the existing rules, with some updated references that do not change the restricted periods except in one case. In

order to protect American shad along certain tidal creeks and the Delaware River between Interstate Highway 295 and U.S. Highway 1, the timing restriction along those waters is extended by one month.

Proposed N.J.A.C. 7:13-10.5(e) sets forth the conditions under which the Department may modify the timing restrictions at proposed N.J.A.C. 7:13-10.5(d). Proposed N.J.A.C. 7:13-10.5(e)1, 2 and 3 are found at existing N.J.A.C. 7:13-3.5(d)2, which is reworded for clarity and with no substantive change. The exception to the timing restrictions to allow construction to occur at least 183 days (one-half year) is intended to provide an applicant a reasonable amount of time to conduct regulated activities. The 183-day period does not necessarily need to be consecutive. For example, the Department may determine that restricting activities for three months in the spring and three months in the fall best protects fishery resources.

Proposed N.J.A.C. 7:13-10.5(e)4 adds the option for the Department to modify the timing restrictions if the modification would prevent a substantial adverse impact to the fishery resource or to the environment. This option allows the Department to establish alternate timing restrictions to protect fishery resources in cases where the standard timing restrictions are not adequate due to the nature of the project or an unusual circumstance on site.

Proposed N.J.A.C. 7:13-10.5(f) is added to alert applicants that the Delaware River Basin Commission may impose additional timing restrictions on certain activities in waters under their jurisdiction. Contact information is also provided.

N.J.A.C. 7:13-10.6 Requirements for a regulated activity in documented habitat for threatened or endangered species

Proposed N.J.A.C. 7:13-10.6 sets forth requirements that must be met for the issuance of an

individual permit for a regulated activity located in a regulated area with a threatened or endangered species of plant or animal or associated habitat. This proposed section replaces existing N.J.A.C. 7:13-3.9.

Proposed N.J.A.C. 7:13-10.6(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-10.6(b) explains that the Department uses the Landscape Project method to identify threatened or endangered wildlife habitat for those wildlife species for which a landscape model has been developed. Models do not exist for plant species and certain aquatic species, which is addressed in proposed N.J.A.C. 7:13-10.6(c). The Landscape Project method focuses on habitat areas required to support local populations of threatened and endangered wildlife species and is described in more detail in the Flood Hazard Area Technical Manual and in the report entitled New Jersey's Landscape Project. Information is also provided to enable applicants to access both of these documents.

Proposed N.J.A.C. 7:13-10.6(c) establishes the Department's procedure for determining the presence of endangered or threatened plant species, as well as for those wildlife species for which a landscape model in the Landscape Project has not been developed. In such cases, the Department will rely on the New Jersey Natural Heritage Database for site-specific information. Applicants are referred to Appendix IV of the New Jersey Landscape Mapping Project, Version 2.0 report, in order to determine which animal species are not included in the Landscape Project. Information is also provided to enable applicants to access this document.

Proposed N.J.A.C. 7:13-10.6(d) provides for protection of both the species itself, as well as its documented habitat. This section replaces existing N.J.A.C. 7:13-3.9(a) which includes the same basic requirements, except that the existing rule requires that the threatened or endangered species be critically dependent upon the watercourse to survive. While the Department maintains

that the dependency of the wildlife on the watercourse is an appropriate factor in determining the width of the riparian zone (see proposed N.J.A.C. 7:13-4.1), it is not appropriate to fail to protect a threatened or endangered species that may not be critically dependent on the actual watercourse itself, but is dependent upon resources in the flood hazard area or riparian zone. Therefore, the proposed subsection provides protection for all threatened or endangered species located in a regulated area. This is consistent with other Department rules, such as the Freshwater Wetlands Protection Act Rules at N.J.A.C. 7:7A.

Proposed N.J.A.C. 7:13-10.6(e) provides that the Department will require a survey for threatened and endangered species if a project is likely to disturb an area known to contain a threatened or endangered species, or an area containing habitat that could support a threatened or endangered species. This text continues existing N.J.A.C. 7:13-3.9(a), and is reworded for clarity. The specific requirements for the survey are located in proposed N.J.A.C. 7:13-15.5(c).

Proposed N.J.A.C. 7:13-10.6(f), which directs persons seeking information about threatened and endangered species to contact the Department's Natural Heritage Program, is found in the existing rules at N.J.A.C. 7:13-3.9(a). A website has been added as an additional point of contact.

Proposed N.J.A.C. 7:13-10.6(g) provides that the Department will restrict activities that could adversely impact threatened or endangered species during certain times of the year. This provision is similar to the timing restrictions imposed along waters with fishery resources under existing N.J.A.C. 7:13-3.5(d), 3.6(a) and 3.6(b) and proposed N.J.A.C. 7:13-10.5(d). The Department has determined that it is appropriate to create a similar provision to address necessary timing restrictions for threatened or endangered species. The prohibition against restricting construction to fewer than 183 days is taken from similar provisions at proposed N.J.A.C. 7:13-10.5(e) and is intended to provide an applicant a reasonable amount of time to

conduct regulated activities. Similarly, the 183-day period does not necessarily need to be consecutive.

N.J.A.C. 7:13-10.7 Requirements for a regulated activity in an area with acid-producing soils

Proposed N.J.A.C. 7:13-10.7 sets forth requirements that must be met for the issuance of an individual permit for a regulated activity located in an area with acid-producing soils. The proposed section replaces existing N.J.A.C. 7:13-3.7. However, information in existing N.J.A.C. 7:13-3.7(a) and (b), which defines an acid-producing soil, is proposed in the definitions section at N.J.A.C. 7:13-1.2 and is not included in proposed N.J.A.C. 7:13-10.7. In addition, several repetitive provisions found in existing N.J.A.C. 7:13-3.7 have been consolidated and reworded for clarity in the proposed rule.

Proposed N.J.A.C. 7:13-10.7(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-10.7(b), which requires submittal of a plan to minimize the effects of acid-producing soils where they are known or suspected, is found in existing N.J.A.C. 7:13-3.7(d), and is rewritten in the proposed rule for clarity with no change in meaning. Proposed N.J.A.C. 7:13-10.7(b) also outlines the measures for dealing with acid-producing soils that must be included in the plan. The measures listed are found in the existing rules at N.J.A.C. 7:13-3.7(d), (h), and (i).

Proposed N.J.A.C. 7:13-10.7(c), which sets forth requirements that apply when acid-producing soils are unexpectedly exposed during activities in a regulated area, replaces existing N.J.A.C. 7:13-3.7(f). The provision is reworded for clarity with no change in meaning.

Proposed N.J.A.C. 7:13-10.7(d) explains that further information to assist applicants in

preparing the plan required under proposed N.J.A.C. 7:13-10.7(b) and (c) is provided in the Flood Hazard Area Technical Manual.

Subchapter 11. Individual Permit Requirements for Various Regulated Activities

Proposed N.J.A.C. 7:13-11 includes provisions found in existing N.J.A.C. 7:13-2 and 3. As noted at the beginning of the summary of Subchapter 10 above, all substantive requirements for individual permits under the new rules are found in proposed Subchapters 10 and 11. The requirements of Subchapter 10 are called "area-specific" since the particular requirements in that subchapter depend upon the location of a project, such as within a floodway, flood fringe or riparian zone. The requirements in proposed Subchapter 11, however, are "activity-specific" because they apply to distinct regulated activities, such as the construction of a building or a roadway, rather than where in a regulated area the activity is located.

N.J.A.C. 7:13-11.1 Requirements that apply to all regulated activities

Proposed N.J.A.C. 7:13-11.1 sets forth requirements that must be met for the issuance of an individual permit for any regulated activity in any regulated area.

Proposed N.J.A.C. 7:13-11.1(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-11.1(b), which requires that the activity be unlikely to adversely affect the biota or quality of any regulated water, replaces existing N.J.A.C. 7:13-3.1(b)3 and is rephrased for clarity, with no change in meaning.

Proposed N.J.A.C. 7:13-11.1(c) requires that a permittee shall not begin an activity approved under an individual permit until all necessary approvals are first obtained from the local Soil Conservation District (SCD) or its designee. This is similar to existing N.J.A.C. 7:13-3.3(b) and

2.14(a)5, and other provisions throughout the existing rules, which require that the Standards for Soil Erosion and Sediment Control in New Jersey be met. Since the SCD is the lead State agency for promulgating and implementing these standards, it is appropriate for the Department to require approval from the SCD rather than to apply the standards independently as required by the existing rules. For these projects, the proposed subsection replaces detailed soil erosion practices required under existing N.J.A.C. 7:13-3.3(c), because these practices are included in the Standards for Soil Erosion and Sediment Control in New Jersey.

Proposed N.J.A.C. 7:13-11.1(d) requires that a permittee shall not begin an activity approved under an individual permit until all necessary approvals are obtained from the USDA's Natural Resources Conservation Service (NRCS) or its designee. The NRCS has jurisdiction over agricultural activities and other projects not reviewed by the SCD.

Proposed N.J.A.C. 7:13-11.1(e) requires that any project not subject to either SCD nor NRCS review must implement certain basic soil erosion and sediment control measures. Since most large projects fall under the jurisdiction of one of these agencies, this provision will primarily apply to single family homes and small in-stream disturbances. These basic standards will ensure that sediment does not enter waters during and after construction and thereby degrade water quality or negatively affect the riparian zone.

Proposed N.J.A.C. 7:13-11.1(f), which replaces existing N.J.A.C. 7:13-2.18, sets forth the regulated activities which the Department considers to be adverse impacts on a property not owned by the applicant and specifies what must be done to qualify for an individual permit if such impacts would occur as a result of the proposed regulated activity. Five types of adverse impacts are listed. If any of these adverse impacts are anticipated to occur, the applicant must demonstrate that they have obtained authorization to undertake the activity by one of the

methods at proposed N.J.A.C. 7:13-9.2(f). The proposed subsection notes that for the purpose of determining compliance with this requirement, water surface elevation calculations shall be rounded to the nearest 0.1 feet. When engineering calculations are performed, the level of accuracy of the input data determines the level of accuracy of the output data. The accuracy of the answer cannot exceed the accuracy of the data that was used to produce the answer. It is the Department's experience that the accuracy of the topographical and hydrologic data that is used to perform hydraulic calculations limits the accuracy of water surface elevations to the nearest one-tenth of a foot. Requiring a greater level of accuracy for reporting such calculations is therefore not warranted.

Proposed N.J.A.C. 7:13-11.1(f)1 explains that a regulated activity situated on property not owned by the applicant is considered to have an adverse impact on that property. This is found in the existing rules at N.J.A.C. 7:13-2.18(a)2 and is rephrased for clarity.

Proposed N.J.A.C. 7:13-11.1(f)2 provides that if the Department determines that a stormwater discharge will significantly increase overland flow offsite, authorization from the affected party must be obtained. This provision is found at existing N.J.A.C. 7:13-2.18(a)3 and is reworded for clarity with no change in meaning.

Proposed N.J.A.C. 7:13-11.1(f)3 provides that a regulated activity that causes an offsite building to experience increased flooding of any kind is considered to have an adverse impact. This is found in the existing rules at N.J.A.C. 7:13-2.3(c) and applies to impacts caused by water control structures. However, as such impacts can be caused by other regulated activities as well, the proposed paragraph makes this applicable to all regulated activities.

Proposed N.J.A.C. 7:13-11.1(f)4 provides that a regulated activity that spans a channel and which causes the flood hazard area design flood elevation to increase by more than 0.2 feet

offsite is considered an adverse impact which requires authorization. This provision is found at existing N.J.A.C. 7:13-2.18(a)1 and is reworded for clarity with no change in meaning.

Proposed N.J.A.C. 7:13-11.1(f)5 provides that a regulated activity that does not span a channel and which causes the flood hazard area design flood elevation to increase by more than 0.1 feet offsite is an adverse impact which requires authorization. This provision is also found at existing N.J.A.C. 7:13-2.18(a)1 and is reworded for clarity with no change in meaning.

Proposed N.J.A.C. 7:13-11.1(g) creates a presumption that a project which causes a significant change in the cross-sectional area and/or hydraulic capacity of a channel or floodway has the potential to cause adverse offsite impacts. Based on this presumption, the proposed subsection requires the submittal of calculations to either demonstrate that there are no offsite impacts, or to identify any affected offsite properties impacted. In accordance with proposed N.J.A.C. 7:13-9.2(f), authorization for such impacts must be obtained from impacted property owners. The proposed subsection lists examples of activities that can cause a significant change in the cross-sectional area and/or hydraulic capacity of a channel or floodway. This presumption is continued from existing N.J.A.C. 7:13-2.3(c), 2.16(b), and 2.18, and is reworded for clarity with no change in meaning.

N.J.A.C. 7:13-11.2 Requirements for stormwater management

Proposed N.J.A.C. 7:13-11.2(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-11.2(b) requires that any major development that requires an individual permit must comply with the standards of the Stormwater Management rules at N.J.A.C. 7:8. A major development, as defined at existing N.J.A.C. 7:8-1.2, is any project that creates at least 0.25 acres of impervious surface, or which disturbs at least one acre of land. This

requirement is continued from existing N.J.A.C. 7:13-2.8, and is reworded for clarity with no change in meaning.

Proposed N.J.A.C. 7:13-11.2(c) sets forth specific construction standards for stormwater management basins located within or discharging within a flood hazard area. These requirements, which are new, are basic engineering practices necessary to ensure that basins which may be subject to flooding will function as intended during both flood and non-flood conditions. It has been the Department's experience that basins are often designed without considering the effects of flooding on the system. A basin is generally designed to retain or detain certain volumes of stormwater and/or to discharge stormwater at a certain rate under various conditions. However, the rate of discharge from the basin can be seriously affected if the discharge pipe is underwater during a flood or the basin itself is overtopped by floodwaters. Thus, the effects of such flooding must be considered in order to demonstrate that the basin will meet all stormwater management requirements at all times. Proposed N.J.A.C. 7:13-11.2(c), therefore, lists a number of scenarios where special attention is needed in this regard, including various design criteria that will improve the functionality of the basin if it is subject to flooding.

Proposed N.J.A.C. 7:13-11.2(c)1 requires basins to function properly during both flood and non-flood conditions. Generally, this requires that a hydrologic and hydraulic analysis be performed to demonstrate that the basin has sufficient volume to hold excess stormwater runoff from the site in cases where runoff cannot be discharged to a watercourse because the outfall is submerged by floodwaters. Proposed N.J.A.C. 7:13-11.2(c)2 further requires that stormwater calculations must account for the effects that flooding and tailwater conditions could have on any proposed discharge in a flood hazard area, and identifies four situations where the flooding and tailwater conditions are of particular concern. "Tailwater conditions" refer to situations where the

discharge pipe will be submerged during a flood in such a way that floodwaters prevent the basin from draining properly. Proposed N.J.A.C. 7:13-11.2(c)3 requires that the emergency spillway of any basin in a flood hazard area must be constructed above the flood hazard area design flood elevation, where feasible. This is necessary to prevent floodwaters from overtopping the berm and flooding the basin. If the berm fills up with floodwaters in this manner, there will be no room inside the basin to receive and detain stormwater runoff from the development that the basin is constructed to serve. Furthermore, if the elevation of the lowest discharge orifice or weir in the basin lies below the flood hazard area design flood elevation, proposed N.J.A.C. 7:13-11.2(c)4 requires that the discharge pipe is equipped with mechanical devices to prevent floodwater from backing up the pipe into the basin. As with the situation described under proposed N.J.A.C. 7:13-11.2(c)3, floodwaters entering the basin through the discharge pipe can displace volume inside the basin intended to receive and detain stormwater runoff from the site.

N.J.A.C. 7:13-11.3 Requirements for excavation, fill and grading activities

Proposed N.J.A.C. 7:13-11.3, which sets forth requirements that must be met for the issuance of an individual permit for excavation, fill and grading, replaces requirements contained in existing N.J.A.C. 7:13-2.6 and 2.14(a)3 and 4 and is reworded for clarity, with substantive changes outlined below. These standards apply to any topographic alteration in any regulated area. Additional restrictions in a floodway and a flood fringe are proposed at N.J.A.C. 7:13-10.3 and 10.4, respectively.

Proposed N.J.A.C. 7:13-11.3(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-11.3(b)1, which requires that overland stormwater flow remain unimpeded, is similar to existing provisions regarding fill and the creation of flood storage

volume at N.J.A.C. 7:13-2.14(a)3, and 2.15(a)2i, respectively. This proposed paragraph will prevent problems associated with trapping water in excavated areas and will maximize the potential flood storage volume on a site. The proposed paragraph clarifies that the requirement does not apply where the purpose of the grading is to impound water for a stormwater management structure.

Proposed N.J.A.C. 7:13-11.3(b)2 requires that any slope of 50 percent or greater be stabilized using soil bioengineering, retaining walls, rip-rap or other appropriate slope protection. Generally a slope of 50 percent or greater is considered to be unstable for excavated, filled or graded areas, unless the created slope is properly stabilized using one or more of these methods. The existing provisions at N.J.A.C. 7:13-2.6(a)l and 2.14(a)4 prohibit such slopes altogether. However, the Department has determined that the existing provision is inappropriately prohibitive, since slopes of 50 percent or greater can be safely created provided the aforementioned stabilization measures are properly utilized.

Proposed N.J.A.C. 7:13-11.3(b)3 requires that the excavation, fill or grading does not endanger the integrity of any existing structure. This is similar to provisions at existing N.J.A.C. 7:13-2.6(a)3, and is intended to prevent property damage.

Proposed N.J.A.C. 7:13-11.3(b)4, which requires that permanent excavation not extend below, and therefore intersect, the seasonal high water table, is derived from existing N.J.A.C. 7:13-2.6(a)2, which prohibits groundwater pollution and adverse effects on wells. The proposed paragraph is broadened in order to prevent adverse effects on groundwater, in addition to pollution or effects on wells, such as continuous leaching of groundwater onto the site after completion of the project. An exception is made if the excavation is necessary for the creation of a stormwater management basin that meets the requirements of the Stormwater Management

rules at N.J.A.C. 7:8. This is appropriate since the Department recognizes that certain structural stormwater management measures provided for under N.J.A.C. 7:8 require excavation below the seasonal high water table, and which therefore include a number of design and construction requirements necessary to ensure that such excavation will not adversely impact groundwater quality.

Proposed N.J.A.C. 7:13-11.3(b)5 requires that excavated material be disposed of in a lawful manner. This provision is found in the existing rules at N.J.A.C. 7:13-2.5(a)2, which refers to the disposal of material dredged from a watercourse. The proposed paragraph extends this requirement to the disposal of all excavated material since all such deposition of material must be done lawfully. For instance, dredged material can be placed in a flood hazard area or riparian zone only if the deposition of such material meets the requirements of this chapter. Similarly, the placement of dredged material in a freshwater wetlands or wetlands transition area is subject to the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A. Furthermore, dredged materials are sometimes contaminated with pollutants or hazardous substances, which must, therefore, be processed and/or disposed of in accordance with other State and local laws and requirements.

N.J.A.C. 7:13-11.4 Requirements for a structure

This proposed section replaces existing N.J.A.C. 7:13-2.13(a)1 and 2, and sets forth basic requirements that must be met for the issuance of an individual permit for the construction of any structure in any regulated area. As defined at proposed N.J.A.C. 7:13-1.2, a structure is not limited to a building but also includes things such as bridges, fences, retaining walls, stormwater pipes and any other assemblage of materials. This section and the following section (requirements for a building) are cumulative. That is, all structures must comply with proposed

N.J.A.C. 7:13-11.4, and all structures that are buildings must comply with both proposed N.J.A.C. 7:13-11.4 and 11.5.

Proposed N.J.A.C. 7:13-11.4(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-11.4(b) sets forth the requirements for issuance of an individual permit for a structure. Proposed N.J.A.C. 7:13-11.4(b), which contains requirements to ensure that the structure will not be destroyed or dislodged during a flood, is found in existing N.J.A.C. 7:13-2.13(a)1 and 2. The provisions are reorganized and rephrased for clarity, and more detail is provided, but the proposed rule does not change the meaning of the existing provisions.

N.J.A.C. 7:13-11.5 Requirements for a building

Proposed N.J.A.C. 7:13-11.5 replaces existing N.J.A.C. 7:13-2.13(a)3 and 7, and sets forth requirements that must be met for the issuance of an individual permit for the construction of a new building, or the reconstruction or enlargement of an existing building.

Proposed N.J.A.C. 7:13-11.5(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-11.5(b), which sets forth the areas in which the section applies, contains provisions found in existing N.J.A.C. 7:13-2.13(a)3. This section applies to all buildings proposed within the flood hazard area, and also to all buildings proposed or within an area that once was within the flood hazard area, but which is currently not subject to flooding due to some action taken after January 31, 1980. For example, an area that once lay within the flood hazard area could have been filled or raised up above the flood hazard area design flood elevation, or a berm could have been constructed to prevent floodwaters from entering the area. Areas removed from the flood hazard area prior to the adoption of the Flood Hazard Area Control Act on January 31, 1980, are not subject to this requirement, since such an action would not have been

regulated at the time. Having a reasonable cutoff date for this requirement is also important since it is sometimes difficult to determine if an area was flooded at one time but subsequently filled in many years ago.

This provision is necessary because some people have attempted to circumvent the requirements of this chapter by filling in a small pocket of land (with or without a permit) and then claiming that since the land is no longer flooded, any sort of structure can be built on the land without a permit under this chapter. In cases where houses with basements have been constructed within flood hazard areas that have been filled, homeowners have encountered numerous problems with groundwater intrusion and sinking and cracking foundations and walls. Additionally, flood hazard areas that have been filled may or may not have been properly compacted to completely prevent floodwater intrusion. Further, some homeowners have found that FEMA still considers the filled area to lie within an A-Zone, causing the homeowner's flood insurance to be extremely expensive because the home's basement is considered the lowest floor of the building.

Therefore, this provision is necessary to protect the owners of buildings from potential impacts of flooding. Effectively, this subsection, in conjunction with the other requirements contained in this section, requires that buildings constructed within current and previous flood hazard areas will have elevated floors, will be constructed to be stable and will have safe access into and out of the building during a flood where feasible.

An exception is made at proposed N.J.A.C. 7:13-11.5(b)2i and ii for cases where the Department or FEMA revise its flood mapping to remove the area in question from the flood hazard area or 100-year flood plain, respectively. The application process for such a revision ensures that the area in question is clearly no longer subject to flooding and is, therefore, safely

built upon without potential for flood damage or risk of exacerbating flooding.

Proposed N.J.A.C. 7:13-11.5(c) provides that the construction a building subject to this section must meet certain standards to ensure that the building is stable during a flood.

Proposed N.J.A.C. 7:13-11.5(c)1, 2 and 3 are new requirements that all new construction must be located at least 25 feet from any top of bank or edge of water, and that any expansion or reconstruction of an existing building must be located at least 25 feet from any top of bank or edge of water, where possible. These limitations are necessary to prevent the construction of buildings that could threaten the integrity of a bank due to excavation and construction of the building's foundation, and also to protect the building from being undermined if the adjacent surface water migrates over time. Buildings constructed too close to surface waters have historically created unsafe conditions, which have necessitated extensive bank reconstruction or armoring at both great economic expense and environmental compromise. Adding this 25-foot setback also helps preserve vegetation within the riparian zone, which is regulated under proposed N.J.A.C. 7:13-10.2.

Proposed N.J.A.C. 7:13-11.5(c)4 requires all exterior walls of a building to be designed to resist hydrostatic and hydrodynamic pressure caused by flooding up to the elevation of the flood hazard area design flood. This provision expands the requirements at proposed N.J.A.C. 7:13-11.4(b), which apply to all structures including buildings, by clarifying that in the case of a building, the exterior walls must be designed and constructed in this manner. Proposed N.J.A.C. 7:13-11.5(c)5 requires that the applicable standards at proposed N.J.A.C. 7:13-11.5(d) through (q) for buildings under various circumstances are satisfied.

Proposed N.J.A.C. 7:13-11.5(d) provides that the Department shall not permit a new building in a floodway. Under the existing rules, the construction of a structure, including a

building, in a floodway is prohibited under N.J.A.C. 7:13-2.2(a)1. An exception is made for the construction of a building on piers in the Hudson River, which meets the requirements of the Coastal Zone Management rules at N.J.A.C. 7:7E-3.48. Whereas the construction of a building in a floodway is often unsafe for its intended occupants and can exacerbate flooding, N.J.A.C. 7:7E-3.48 provides for the construction of certain buildings on piers in the Hudson River in such a way that these adverse impacts on both the public and flooding will not occur. A parallel provision is also proposed at N.J.A.C. 7:13-10.3(c)1 to allow such construction in floodways.

Proposed N.J.A.C. 7:13-11.5(e) provides that the Department shall permit the reconstruction of an existing building in a floodway only if certain requirements are satisfied. This is found at existing N.J.A.C. 7:13-2.2(b)2, and is rephrased for clarity, with redundant provisions removed. New requirements are furthermore added that the building must not have been unoccupied for more than five years prior to the application submittal, and that a non-residential building must not be converted to residential use. These requirement reflect the fact that the existing provision is intended to allow a person to reconstruct a building that is currently in use, without a change in that use that would relocate people into a floodway. The existing provision was never intended to allow a person to rebuild a building that has been abandoned for many years or to create new habitable areas within the floodway. This would contradict the Department's longstanding policy of trying to reduce risks to life and property by controlling and reducing the placement of buildings in floodways. In this regard, the Department prohibits the placement of new buildings in a floodway, and encourages people with buildings in floodways to relocate outside of the floodway, for example through various "buyout" programs. However, for people already located in a floodway, it is often difficult to relocate. The proposed provision thus balances the important goal of removing human activities from floodways where possible against the difficulties of

relocation for those already living in the floodway. The proposed subsection allows rebuilding even if the building has been abandoned for up to five years, because when a building has been damaged by flooding, it can take years to resolve insurance coverage issues, obtain the local permits and retain the contractors necessary to rebuild.

However, buildings that have been abandoned for greater than five years cannot be reconstructed in a floodway under the proposed subsection. It is the Department's experience that people sometimes attempt to rebuild homes in floodways that have been destroyed and abandoned for decades. The Flood Hazard Area Control Act at N.J.S.A. 58:16A-55.1 provides that "no rule or regulation . . . shall prevent the repair or rebuilding within a flood hazard area of any lawful preexisting structure which was damaged by a flood or by any other means." The Department believes that intent of this statute is to ensure that the owners of buildings that are currently under use in flood hazard areas are not prevented from maintaining and continuing that use. The Department does not believe that the intent is to allow the reconstruction of buildings in floodways that have been abandoned for years or destroyed many years ago. The mere presence of a building in a floodway presents a certain level of risk to public safety and the Flood Hazard Area Control Act is intended to reduce such risks, where possible. Allowing the reconstruction of a building in a floodway that has been destroyed many years ago simply because a building was at one time located there is inconsistent with the goals of the statute. In light of the above, the Department proposes to place a five-year limit on the reconstruction of building in floodways. Furthermore, in order to ensure the reconstructed building does not further obstruct flood flows, all construction must take place within the same footprint as the original building.

Additionally, proposed N.J.A.C. 7:13-11.5(e) omits the requirement at existing N.J.A.C. 7:13-2.2(b)2 that the building must have been in existence prior to March 20, 1995, which is the

adoption date of the existing rules. This provision has been removed because proposed N.J.A.C. 7:13-11.5(e) applies only to lawfully existing buildings. Any building that is lawfully existing in a floodway must have been constructed prior to March 20, 1995, when the existing rules were adopted, or must be permitted under those rules. These concepts are contained in the definition of "lawfully existing." Therefore the existing requirement that the building must have been in existence prior to March 20, 1995, is redundant.

Proposed N.J.A.C. 7:13-11.5(f) provides that the Department shall permit the construction of an addition to an existing building in a floodway only if certain requirements are satisfied. This is found at existing N.J.A.C. 7:13-2.2(b)1, and is rephrased for clarity, with redundant provisions removed and a new requirement added that the building must not have been unoccupied for more than five years prior to the application submittal. The reasons for adding this requirement are identical to those described in proposed N.J.A.C. 7:13-11.5(e) above. The proposed text also requires that the addition cannot result in any further obstruction to the flow of floodwaters, such as if the addition jutted out toward the water or is "wider" than the existing house according to the direction of flow. The existing building, in combination with the addition, must also be demonstrated to be capable of withstanding the hydrodynamic and hydrostatic forces due to flooding either as built or with modification.

Proposed N.J.A.C. 7:13-11.5(g) provides that a private residence may be constructed or reconstructed only if lowest floor requirements at proposed N.J.A.C. 7:13-11.5(k) are satisfied. The existing rule divides buildings into two categories, each with different standards for lowest floor elevation. The first category, addressed in existing N.J.A.C. 7:13-2.13(a)3, includes residences, and public buildings for which safety during flooding is crucial. The second category, described at existing N.J.A.C. 7:13-2.13(a)7, includes commercial and industrial structures. The

proposed rule retains the basic idea of dividing buildings into categories. However, unlike the existing rule, the proposed rule sets standards for three types of buildings: private residences, public buildings, and all other buildings. The list of public buildings in the existing rule is relocated into the proposed definition of "public building" at proposed N.J.A.C. 7:13-1.2. These changes clarify the rule and ensure that there is no confusion as to the standards that apply to a particular building because it is not specifically listed.

Proposed N.J.A.C. 7:13-11.5(h) sets forth requirements for a public building. Proposed N.J.A.C. 7:13-11.5(h)1 provides that a public building must meet the lowest floor elevation requirements found at proposed N.J.A.C. 7:13-11.5(k). Proposed N.J.A.C. 7:13-11.5(h)2 requires a new public building in a fluvial (non-tidal) flood hazard area to be served by at least one roadway, the travel surface of which is constructed at least one foot above the flood hazard area design flood elevation. Proposed N.J.A.C. 7:13-11.5(h)3 requires that a new building in a tidal flood hazard area, as well as any reconstructed building, must be served by such a roadway to the extent feasible. These requirements will increase the likelihood that people can access and/or escape the building in times of flooding. This is crucial for certain buildings such as schools and apartments where people may be trapped by floodwaters, and for buildings that require continued access during emergencies such as police and fire stations and hospitals. A distinction between fluvial and tidal areas is necessary since areas subject to tidal flooding are generally widespread and it may not be possible to create a roadway above the flood hazard area elevation since an entire community could lie in the flood hazard area.

Proposed N.J.A.C. 7:13-11.5(i) sets lowest floor elevation requirements for a building that is neither a public building nor a private residence. Such buildings must meet the lowest floor elevation requirements found at proposed N.J.A.C. 7:13-11.5(k), or must demonstrate that this is

not feasible and that other elevation and flood-proofing requirements will be satisfied. The existing rules require flood-proofing for certain buildings at N.J.A.C. 7:13-2.2(b)1iii, 2.2(b)2iii, and 2.13(a)7i, but do not define the type of flood-proofing required. The proposed subsection clarifies that dry flood-proofing is necessary. Wet flood-proofing protects the structural integrity of a building but allows water to enter, and thus is inadequate to protect inhabitants, whereas dry flood-proofing protects inhabitants as well as the building and its contents. A one-foot factor of safety is also added to the flood hazard area elevation in order to ensure that the proposed building is safe during a flood.

Proposed N.J.A.C. 7:13-11.5(j) establishes standards for the conversion of a building to a private residence or public building. When such a conversion occurs, the building must meet the lowest floor elevation requirements found at proposed N.J.A.C. 7:13-11.5(k). It has been the Department's experience that some people try to circumvent the stricter residential requirements by obtaining a permit for a non-residential structure, building the structure, and then later converting the building to residential use. Others have purchased existing non-residential buildings and have converted them into residences without adding the safeguards that protect against flooding which would normally be required for a dwelling. Since internal renovations are not regulated under the existing rules, such a person in either case does not currently need to obtain the Department's approval for such a change. To remedy this problem, the proposed subsection requires a building converted into a residential or public building to be upgraded to meet the requirements of this section for such a structure. This will ensure that a building that is converted includes the same flood safety features required of a new residence or public building. In the case of a public building, the applicant must demonstrate that the building is served by at least one roadway. A one-foot factor of safety is also added to the flood hazard area elevation so

that safe access on such a roadway during a flood is provided wherever feasible.

Proposed N.J.A.C. 7:13-11.5(k) provides the lowest floor requirements for all buildings. The elevation required depends on whether the building is being newly constructed, enlarged, or reconstructed. This reflects the fact that it is relatively easy and inexpensive to elevate a new building during initial construction, as opposed to elevating an existing building during reconstruction. A further distinction is made based on whether a building is being reconstructed because of damage, such as after a fire, flood or other natural disaster, or is being reconstructed for some other reason. In all cases except for reconstruction after natural damage, the building must be elevated to at least one foot above the flood hazard area design flood elevation. For reconstruction after damage from a fire, flood or other natural disaster, the building must be elevated to at least one foot above the flood hazard area design flood elevation to the extent feasible. It is more likely that an applicant who must reconstruct because of such damage to a building is less likely to have the flexibility, time and resources to elevate the building, whereas an applicant who chooses to reconstruct a building that has not been similarly damaged, but perhaps has fallen into disrepair over time and is no longer habitable, is more likely to be able to meet the lowest floor elevation standards. The existing rules at N.J.A.C. 7:13-2.2(b) set forth the requirements for the replacement, reconstruction or expansion of an existing building located in a floodway. Existing N.J.A.C. 7:13-2.13(a) sets floor elevations for all buildings. The proposed rule clarifies the existing provisions and adds detail. A one-foot factor of safety is added to the flood hazard area elevation in order to ensure that any proposed building is safe during a flood. Proposed N.J.A.C. 7:13-11.5(k)4 provides that the Department shall not issue a permit to enlarge a building that was originally constructed in violation of this chapter unless the applicant first obtains a permit to legalize the existing building and also modifies the existing building to meet

the standards of this chapter as may be required. This provision is necessary because an existing non-conforming building may already be causing increased flooding and risk to the public, and so the Department cannot allow the building to be expanded unless it is altered as necessary to comply with the design and construction standards of these rules.

Proposed N.J.A.C. 7:13-11.5(l) establishes standards for the construction of a building with an enclosed area beneath the flood hazard area design flood elevation. This is a new provision not found in the existing rules. An applicant will often propose such a space as a means to elevate the first floor of a building above the flood hazard elevation, or to provide access below the first floor for maintenance purposes. However, when the ceiling in such a space is high enough to accommodate a standing person, the space is often illegally converted into a living space. Since the floor of such a space is usually below the flood hazard elevation, such conversion can threaten the health, safety and welfare of people and property by exposing them to flooding risk. The Department has also found that some people construct an enclosed area below the lowest floor of a ranch style house and intentionally market the building as having two habitable floors even though there are open flood vents in the partially-aboveground basement. The purchasing homeowner may inappropriately rely on the seller's representations or may otherwise be unaware that the basement should not be converted into a habitable area, and simply plugs up the flood vents to create additional living space. This creates an unsafe condition and exposes the homeowner to greater losses during a flood since the basement (which may now be furnished and inhabited) is likely not covered by flood insurance. Even more seriously, plugging flood vents in this way to prevent floodwaters from entering inside the structure diminishes flood storage volume onsite, and also subjects the building to increased hydrostatic pressure during a flood, which could seriously damage or destroy the structure. This loss of flood

storage volume and increased potential for damage to the structure could cause further flood damage to nearby structures and present an increased risk to public safety.

Given the above, proposed N.J.A.C. 7:13-11.5(l) sets limits on enclosed areas beneath the flood hazard area design flood elevation to prevent such adverse impacts. An enclosed area is permitted only if the one or more of three requirements are satisfied: the enclosed area must meet the requirements for a crawl space at proposed N.J.A.C. 7:13-11.5(m); the enclosed area must meet the requirements for a garage at proposed N.J.A.C. 7:13-11.5(n); or the enclosed area must meet requirements ensuring that it will be permanently open to floodwaters at proposed N.J.A.C. 7:13-11.5(o). These requirements are designed to prevent increased flooding risk as described above by ensuring that the enclosed area will not illegally be converted into a living space after construction.

Proposed N.J.A.C. 7:13-11.5(m) sets forth requirements for a crawl space beneath the lowest floor of a building. These are new requirements not found in the existing rules, which serve two purposes. First, they are intended to prevent flooding risk to people by ensuring that the enclosed area will not be converted into a living space. Second, they protect the integrity of the building during flooding. The proposed standards include a height limit, requirements that ensure the space will be open to allow the free passage of floodwaters, and a requirement that the deed of the property is modified to prohibit habitation of the crawl space to clearly put future owners on notice of the restrictions applicable to the building.

Proposed N.J.A.C. 7:13-11.5(n) allows the construction of a garage that has a lowest floor below the flood hazard elevation, provided certain requirements are satisfied. These limits are not found in the existing rules. In many cases it is very difficult to elevate the garage floor for one dwelling when existing roads are already well below the flood hazard area design flood

elevation. Thus, under the existing rules such a garage could usually be permitted on a case by case basis. These proposed new requirements standardize the requirements for such garages, making it easier to obtain a permit provided the garage is built within these limits. The limits, like those which apply to crawl spaces, are designed to prevent the conversion of the garage into a living space, and to ensure the integrity of the structure.

Under proposed N.J.A.C. 7:13-11.5(n), the garage must serve only one private residence, which is not being constructed as part of a larger residential subdivision. When a number of houses are constructed as part of a subdivision, large areas of land are typically graded and filled in such a way that it is likely that the entire area around the house can be raised above the flood elevation. When only one house is being constructed, however, it is less likely that any significant raising of the ground above the flood elevation is possible. Therefore, this exception for a garage is designed to help owners of single-family homes that are not being constructed as part of a larger development. Furthermore, the size of the garage is limited to 625 square feet, since a 25-foot by 25-foot area is sufficient to create a two-car garage. It has been the Department's experience that allowing the construction of a larger garage presents an opportunity to section off the excess portion of the garage and convert the area into extra living space. The proposed subsection also requires that the garage be permanently open to floodwaters, and require acknowledgement of the flooding risk and a deed restriction. The deed restriction required for a garage includes more detail than for a crawl space under proposed N.J.A.C. 7:13-11.5(m). This difference is necessary because people enter and use a garage on a daily basis whereas a crawl space is entered less frequently and can be used only for storage. Furthermore, since there is no height restriction on a garage, there is increased concern that the garage may eventually be converted into living space as opposed to a crawl space constructed under

proposed N.J.A.C. 7:13-11.5(m). Therefore, it is appropriate that the notice for garages includes more specific detail as to why such conversion is not allowed. Since it is likely that such a garage will eventually be flooded, it is also appropriate to alert any prospective buyer of the house of the potential flooding danger.

Some buildings may need to be elevated by more than six feet in order to meet the lowest floor requirements of this section and, therefore, cannot have a crawl space that meets the requirements of proposed N.J.A.C. 7:13-11.5(m). Proposed N.J.A.C. 7:13-11.5(o), therefore, provides minimum requirements for a building with an enclosed area below the lowest floor that does not meet the requirements for a crawl space or garage. These limits are similar to those for crawl spaces and garages, and are intended to ensure that the area will not be used for habitation and will be permanently open to the flow of floodwaters. The requirement that at least 25 percent of the external wall be left permanently open will prevent the area from being enclosed and inhabited, and will allow floodwaters to freely enter the building to balance hydrostatic pressure during a flood. The requirements for the size and shape of the permanent openings are different than the requirements for flood vents for a crawl space or garage because flood vents are much smaller and are intended for areas which may be heated and/or accessed more frequently. The open area described under this section, however, necessarily prevents any such use.

Proposed N.J.A.C. 7:13-11.5(p) provides minimum requirements for flood vents required under proposed paragraph (m)3 and (n)4. These are new requirements that provide details on how to comply with the Department's longstanding requirements to construct safe and effective flood vents. The invert (bottom) of each flood vent must be no more than 12 inches above the adjoining exterior grade to be able to safely balance hydrostatic pressure from water outside the building during a flood. The invert of at least one flood vent must also be no more than 12 inches

above the floor of the building so that no more than 12 inches of water will be trapped inside the building after the flood recedes. The combined area of the flood vents must be at least one square inch per square foot of the area enclosed by the building (unless a smaller FEMA-approved device with an equivalent effective area is utilized) so that the floodwater will be able to enter and exit the building quickly enough to balance hydrostatic pressure. Finally, the flood vents shall not be blocked at any time, but shall remain permanently accessible to the passage of floodwaters.

Proposed N.J.A.C. 7:13-11.5(q) sets forth requirements for a building that must be dry flood-proofed up to the flood hazard area design flood elevation, as referenced at proposed N.J.A.C. 7:13-11.5(i) and other places in the proposed rule. A dry flood-proofed building must be watertight up to the flood elevation; the proposed subsection explains how this is to be achieved. Proposed N.J.A.C. 7:13-11.5(q) also requires an application for a flood-proofed building to include information described at proposed N.J.A.C. 7:13-9.2(e), which includes drawings, calculations and an engineering certification that demonstrate the structure is flood resistant.

N.J.A.C. 7:13-11.6 Requirements for a railroad, roadway, or parking area

Proposed N.J.A.C. 7:13-11.6, which sets forth requirements that must be met for the issuance of an individual permit for a roadway, railroad, or parking area, contains provisions found in existing N.J.A.C. 7:13-2.13(a)4, 5, 6, and 8. The proposed rule reorganizes the text and adds provisions to require elevation of additional categories of roadways in order to ensure safety in the event of an evacuation during flooding. A general permit is being proposed at N.J.A.C. 7:13-8.11 for certain roadways across waters draining less than 50 acres. The requirements at

proposed N.J.A.C. 7:13-11.6 apply to roadways that do not qualify for this proposed general permit. Elevation standards are appropriate for roadways within the flood hazard area of waters draining over 50 acres, since the potential for flooding increases with the size of the watershed. It is the Department's experience that significant flooding does not occur along waters draining less than 50 acres, and so the general permit at proposed at N.J.A.C. 7:13-8.11 does not require that roadways within the flood hazard area of such waters be elevated.

Proposed N.J.A.C. 7:13-11.6(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-11.6(b) requires a railroad or public roadway to be elevated one foot above the flood hazard area design flood elevation where feasible. This is similar to existing requirements at N.J.A.C. 7:13-2.13(a)4, 5, 6, and 8, which apply to roads serving certain types of buildings or developments. The proposed rule apply those requirements to all public roads. The proposed subsection will improve public safety by ensuring that as many public roadways as possible will be elevated above flood levels. Furthermore, the proposed subsection adds a one-foot factor of safety to the flood hazard area design flood elevation in order to ensure that the roadway provides safe access during a flood. The Department recognizes that there are many cases where certain physical or economic limitations prevent the elevation of some public roadways above this elevation. However, since public safety is at stake, every reasonable effort should be made to elevate public roadways wherever feasible.

Proposed N.J.A.C. 7:13-11.6(c) sets forth requirements for a private driveway for a private residence. The proposed subsection requires that the travel surface of the driveway is constructed at least one foot above the flood hazard area design flood elevation, or else that the applicant demonstrates constructing the driveway at this elevation is not feasible. In such a case, the driveway must be constructed as close to the design elevation as feasible and the applicant must

modify the deed to warn of flood risk. This is found in the existing rules at N.J.A.C. 7:13-2.13(a)6, except that the proposal omits a requirement that the applicant acknowledge in writing the risk of flooding and damage. This requirement is not necessary because the owner of the property must modify the deed and thereby acknowledges awareness of flooding risk.

Proposed N.J.A.C. 7:13-11.6(d) specifies the requirements for the elevation of a private roadway that serves a public building. These are generally the same requirements that apply to the buildings listed at existing N.J.A.C. 7:13-2.13(a)4, and require that the roadway be elevated to reduce flooding danger. As with all other roadways and floor elevation under the proposal, a one-foot factor of safety is proposed in order to ensure safe passage during a flood. An exception is provided if the public building is already served by a least one elevated roadway. Also, a distinction between fluvial and tidal areas is necessary since areas subject to tidal flooding are generally widespread and it may not be possible to create a roadway above the flood hazard area elevation since an entire community could lie in the flood hazard area.

Proposed N.J.A.C. 7:13-11.6(e) sets forth requirements for the construction of a parking area that serves a public building. Existing N.J.A.C. 7:13-2.13(a)8 provides that "recreational areas and non-residential parking lots" need not be elevated one foot above the flood hazard area design flood elevation provided the "applicant demonstrates that no undue risk is posed to persons or property" and signs are posted in prominent locations to warn that the area is subject to flooding. However, where a parking area serves a public building, the Department has found that allowing the parking area to flood does not adequately protect the public. Therefore, a new provision is added which requires the travel surface of parking areas that serves a public building to be constructed at least one foot above the flood hazard area design flood elevation unless such construction is not feasible.

Proposed N.J.A.C. 7:13-11.6(f) sets forth requirements for a private roadway or parking area that serves a building or buildings not covered by proposed N.J.A.C. 7:13-11.6(c), (d) or (e). Examples are given of the types of buildings that fall into this category. The proposed subsection states that one of three requirements must be satisfied before a permit will be issued: the travel surface must be elevated at least one foot above the flood elevation to reduce flooding danger; or there must already be an elevated roadway serving the buildings and each parking area is elevated; or, if neither of these two criteria can be satisfied, an individual permit will be issued only if several criteria are met that ensure public risk is minimized, including elevation of parking areas and internal roadways and posting of the areas subject to flooding. Given the wide range of buildings addressed under this subsection, some flexibility is granted roadways and parking areas that serve these buildings, as reflected in existing N.J.A.C. 7:13-2.13(a)5 and 8.

Proposed N.J.A.C. 7:13-11.6(f)1 presents the first option, which is to elevate each proposed roadway and parking area at least one foot above the flood hazard area elevation.

Proposed N.J.A.C. 7:13-11.6(f)2 provides the second option, which is to prove that there is already at least one elevated roadway reaching the buildings, in which case the travel surface of each proposed roadway must be constructed as close to one foot above the flood hazard area design flood elevation as feasible, provided all proposed parking areas are elevated at least one foot above the flood hazard area design flood elevation.

Proposed N.J.A.C. 7:13-11.6(f)3 offers a third option, which requires the applicant to meet five criteria intended to minimize public risk. Under proposed N.J.A.C. 7:13-11.6(f)3i, the applicant must demonstrate that it is not feasible to construct the travel surface of each private roadway and parking area at least one foot above the flood hazard area design flood elevation. Proposed N.J.A.C. 7:13-11.6(f)3ii requires that the travel surface of each private roadway and

parking area must be constructed as close to this elevation as feasible. These two provisions ensure that there is no reasonable means of elevating the proposed roadways and parking areas and that all reasonable measures are taken to minimize any risk.

Proposed N.J.A.C. 7:13-11.6(f)3iii requires that every effort be taken to provide some parking areas or sections of roadway in the overall development which are at least one foot above the flood hazard area design flood elevation. This provision will allow vehicles to be moved to higher ground during a flood.

Proposed N.J.A.C. 7:13-11.6(f)3iv requires the applicant to demonstrate that no extraordinary risk is posed to any person using each roadway or parking area that will be flooded. This is similar to the requirement at existing N.J.A.C. 7:13-2.13(a)8 that there be no "undue risk" associated with the use of flooded parking areas. However, a roadway or parking area within a flood hazard area necessarily implies some risk to the user. The proposed term "extraordinary" is therefore added to indicate a high level of risk that is created or exacerbated by a particular design or circumstance. Examples of an extraordinary risk include a situation where a person could be trapped by floodwaters simply due to the design of the roadway or parking area, or a situation where a large number of people or emergency vehicles could not enter or leave the site for long periods of time. An extraordinary risk can also be caused by a design which concentrates main roadways or parking areas in portions of the flood hazard area that are particularly deep and therefore forces people to traverse exceptionally hazardous areas. Even locating a very busy shopping center in an area that frequently floods, and thereby drawing a large number of people (who would otherwise not be in a flood hazard area) into a flood hazard area on a regular basis, may constitute an extraordinary risk. In such a case, that applicant would have to demonstrate that the benefits of such a shopping center would outweigh the potential

risks of drawing people into the flood hazard area.

Proposed N.J.A.C. 7:13-11.6(f)3v describes two cases where signs must be posted in prominent locations to indicate which roadways and parking areas are subject to flooding. This is continued from existing N.J.A.C. 7:13-2.13(a)8 and is reworded for clarity with added detail. The proposed subparagraph requires signs only along roadways and parking areas that serve a residential development of two or more private residences, and in parking areas of 10 spaces or more that serve any building or group of buildings subject to this subsection. These are cases where a large number of people are using the roadways and parking areas on a regular basis and where the Department has determined such signs are of greatest assistance. Smaller parking areas and the roadways that serve them do not pose as significant a risk to the public when flooded and therefore do not require the posting of signs.

Proposed N.J.A.C. 7:13-11.6(g) sets forth the procedure for an applicant 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 required in various places throughout the section. In such a case, an applicant must prove that elevating the railroad, roadway or parking area would cause one of four undesirable results. The Department recognizes that there are situations where elevating railroads, roadways or parking areas can cause more problems than elevating is intended to solve. Therefore, this subsection is proposed in order to provide applicants the factors that the Department will consider when determining whether to permit the construction of a railroad, roadway or parking area that is not elevated at least one foot above the flood hazard area design flood elevation. For example, prohibitively high construction costs, or construction costs that are disproportionately high compared with any benefit that would be obtained by elevating, will be considered. Also, elevating the railroad, roadway or parking area

may require excessive volumes of fill in violation of N.J.A.C. 7:13-10.4, or may cause adverse impacts to the environment or significant increases in flooding. In such cases, the Department will seriously consider alternatives to elevating the proposed railroad, roadway or parking area. If public safety is not subjected to exceptional risk, the Department can therefore allow such structures to be constructed at an elevation less than one foot above the flood hazard area design flood elevation provided no feasible alternatives exists.

N.J.A.C. 7:13-11.7 Requirements for a bridge or culvert

Proposed N.J.A.C. 7:13-11.7 sets forth requirements that must be met for the issuance of an individual permit for a bridge or culvert. This section replaces existing N.J.A.C. 7:13-2.16, with detail added and a number of substantive changes described below.

Proposed N.J.A.C. 7:13-11.7(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-11.7(b)1 requires that a bridge or culvert be designed to remain stable and resist displacement or damage during certain flood events. Similar language at existing N.J.A.C. 7:13-2.16(b)3ii requires that such structures be stable during the regulatory flood should the bridge or culvert be overtopped by floodwaters. In addition, existing N.J.A.C. 7:13-2.13(a)1 requires that all structures be designed for stability. The proposed paragraph consolidates these requirements and adds detail and clarity.

Proposed N.J.A.C. 7:13-11.7(b)2 requires a bridge or culvert to be designed to minimize flooding and adverse environmental impacts. One way to achieve this is to match the culvert size to the channel being crossed. For example, a culvert or bridge that is much smaller than the channel would likely obstruct the passage of floodwaters and cause increased flooding and erosion.

Proposed N.J.A.C. 7:13-11.7(c) and (d) set forth requirements to limit the effects that bridges and culverts could have on flood elevations offsite. The construction of a new bridge or culvert within or across a channel can affect flood elevations by causing an obstruction in the channel that results in additional ponding of floodwaters upstream of the structure. Modifications to an existing bridge or culvert can do the same if the bridge or culvert opening is made smaller or is constructed with a different shape. Similarly, if an existing bridge or culvert is replaced with a structure that is much larger, the new structure can allow more floodwaters to pass which could lower upstream flood elevations but also increase downstream flood elevations. The requirements of proposed N.J.A.C. 7:13-11.7(c) and (d) are, therefore, designed to prevent both new structures and modified or replaced structures from worsening flood conditions offsite. Both requirements apply only to effects occurring offsite. An applicant is allowed to construct a bridge or culvert that causes a greater amount of flooding on the applicant's own property, provided all other requirements of this chapter are satisfied. For example, if the extra flooding on the applicant's property puts people or buildings at increased risk, it might not be allowed under proposed N.J.A.C. 7:13-11.6(f)3iv.

Both proposed N.J.A.C. 7:13-11.7(c) and (d) also explain that the Department will round off hydraulic calculations to the nearest 0.1 feet in order to determine compliance with each section. The existing rules do not address whether, and to what degree, hydraulic calculations may be rounded. Consequently, applicants have complained that demonstrating compliance with certain design standards is too difficult. For instance, existing N.J.A.C. 7:13-2.16(b)2i requires that replacement bridges shall not cause any increase in flood elevations. Technically, therefore, a bridge that causes an increase in flooding of 0.0001 feet would not meet this standard, even though such an increase is clearly insignificant. Furthermore, the accuracy of hydraulic modeling

is limited to the accuracy of the inputted topographic, hydrologic and hydraulic data. Given the physical limits on the accuracy of such data, and in consideration of certain engineering assumptions that must be made when performing hydraulic modeling, it is the Department's experience that hydraulic calculations are accurate only to within 0.1 feet. Requiring accuracy for output data beyond this level of significance is not warranted given the accuracy of the input data. It is, therefore, appropriate to state in the proposed rule that for the purpose of determining compliance with the requirements of this section, hydraulic calculations shall be rounded to the nearest 0.1 feet. This allows some flexibility with the limits at proposed N.J.A.C. 7:13-11.7(c)2, (d)2 and (d)3. For example 0.04 feet, rounded to the nearest 0.1 feet, rounds down to zero. Therefore a structure that causes the flood hazard area design flood elevation to rise by 0.04 feet meets the requirement at proposed N.J.A.C. 7:13-11.7(d)3 that there be no increase in flood elevations. However, a structure that causes a rise of 0.05 feet rounds up to 0.1 feet and, therefore, would not meet the proposed requirement.

Proposed N.J.A.C. 7:13-11.7(c) sets forth hydraulic standards for the construction of a new bridge or culvert. Proposed N.J.A.C. 7:13-11.7(c)1 requires that there be no offsite flooding impacts to buildings. This is continued from provisions at N.J.A.C. 7:13-2.3(c), but is reworded for clarity in the proposed rule. Proposed N.J.A.C. 7:13-11.7(c)2 requires that the new structure will not increase offsite flood hazard area design flood elevations by more than 0.2 feet. This is the same standard found in the existing rules at N.J.A.C. 7:13-2.16(b)1. Since water surface elevation calculations are rounded to the nearest 0.1 feet, a structure which raises the flood hazard area design flood elevation by 0.24 feet would, for example, meet this requirement, while a rise of 0.25 feet rounds up to 0.3 feet and is, therefore, unacceptable.

Proposed N.J.A.C. 7:13-11.7(d) sets forth hydraulic standards for the reconstruction of an

existing bridge or culvert. The Department recognizes that reconstruction projects involve additional factors that need to be considered, which are not present in new construction projects. Therefore, specific standards are established for the reconstruction of a bridge or culvert under proposed N.J.A.C. 7:13-11.7(d) which are different from the standards at proposed N.J.A.C. 7:13-11.7(c). This is consistent with the differences between existing N.J.A.C. 7:13-2.16(b)1 and 2, with certain substantive changes described below.

Proposed N.J.A.C. 7:13-11.7(d)1 requires that there be no offsite flooding impacts to buildings, railroads, roadways or parking areas. This is identical to proposed N.J.A.C. 7:13-11.7(c)1 and is continued from existing N.J.A.C. 7:13-2.3(c), which addresses adverse flooding impacts to existing buildings. Proposed N.J.A.C. 7:13-11.7(d)1 is reworded for clarity and further includes a protection against adverse flooding impacts to railroads, roadways and parking areas.

Proposed N.J.A.C. 7:13-11.7(d)2 requires that reconstructing a bridge or culvert must not increase the flood hazard area design flood elevation offsite by more than 0.2 feet within 500 feet of the structure. This is a new requirement. Under existing N.J.A.C. 7:13-2.16(b)2, replacement structures are not allowed to cause offsite flood elevations to change by any amount. Since it is extremely difficult for replacement structures to have the exact shape, size and/or hydraulic capacity as an existing structure, this requirement is nearly impossible to meet. The proposed paragraph acknowledges the practical realities and limitations of construction without compromising flood protection. This is similar to the standards for other in-stream projects, such as new bridges, which are also allowed to cause up to a 0.2 foot rise in the flood hazard area elevation. In this case, however, a rise in the design flood elevation is allowed only within 500 feet of the structure, which allows some flexibility near the structure itself while still affording

protection to upstream and downstream areas, provided no buildings, railroads, roadways or parking areas are subject to increased flooding as provided at paragraph (d)1 described above.

Proposed N.J.A.C. 7:13-11.7(d)3 requires that there will be no increase in the flood hazard area design flood elevation offsite more than 500 feet from the structure. This is the same standard found in the existing rules at N.J.A.C. 7:13-2.16(b)2i. Therefore, proposed N.J.A.C. 7:13-11.7(d)2 as described above allows the structure to raise the design flood elevation by up to 0.2 feet within 500 feet (provided no buildings, railroads, roadways or parking areas are subject to increased flooding as provided at (d)1 above) and proposed N.J.A.C. 7:13-11.7(d)3 requires that the structure cause no rise at all more than 500 feet from the structure.

Proposed N.J.A.C. 7:13-11.7(e) explains that proposed N.J.A.C. 7:13-11.7(f) through (m) establish standards to protect aquatic habitat and maintain low-flow passage for aquatic biota, associated with the construction of a bridge or culvert. This continues provisions found in existing N.J.A.C. 7:13-2.16(c), with added detail and substantive changes described below.

Proposed N.J.A.C. 7:13-11.7(e) also divides all regulated water into three categories for the purpose of this section. Depending on the classification of the regulated water, proposed N.J.A.C. 7:13-11.7(f), (g) and (h) require different levels of protection for aquatic biota. Class A waters include the highest quality waters, such as Category One waters and waters containing certain fishery resources, within which aquatic biota require the highest level of protection. Class B waters include a set of waters that have less ecological value and, therefore, do not warrant the same level of protection as Class A waters. Finally, Class C waters are those of low ecological value, such as those which contain no fishery resources or which are wholly manmade, and which, therefore, do not warrant as much protection as other regulated waters.

Proposed N.J.A.C. 7:13-11.7(f), (g) and (h) require that a bridge or culvert be designed

according to a hierarchy of preferred options, which are intended to maximize the preservation of low-flow aquatic passage and to limit disturbance to the channel. The proposed language differs from the existing provision. Existing N.J.A.C. 7:13-2.16(c)1 requires spanning of the entire flood hazard area, while the proposed language requires spanning of the channel only. Spanning an entire flood hazard area is often not feasible. This is especially true along large watercourses where the land adjacent to the channel is flat, making the flood hazard area very large and wide. In addition, the proposed subsections apply to all regulated waters, whereas existing N.J.A.C. 7:13-2.16(c)3 applies only to "watercourses that are currently populated by fish on a seasonal or permanent basis or which are likely to be so inhabited in the future." It has been the Department's experience that this statement confuses applicants. Nearly every regulated water has some seasonal or permanent fish population, and the likelihood of future inhabitation is difficult to predict.

Proposed N.J.A.C. 7:13-11.7(f), (g) and (h), therefore, establish a hierarchy for determining what type of bridge or culvert can be placed across Class A, B and C waters, respectively. In each case, the hierarchy is the same, but moving down the list of preferred structures is hardest for Class A waters, less difficult for Class B waters, and easier still for Class C waters. Spanning the channel is always preferred, since spanning results in little or no permanent impact to aquatic biota. If spanning cannot be achieved, other means of crossing the channel are allowed provided the reasons for not spanning are acceptable. Depending on the class of the water, different tests are established whereby increasingly intrusive means of crossing the channel can be used. At various places, the applicant is directed to proposed N.J.A.C. 7:13-11.7(m), which establishes specific requirements in order to demonstrate that a given design is not feasible.

Proposed N.J.A.C. 7:13-11.7(f) sets forth standards for constructing or reconstructing a

bridge or culvert in or across a Class A water that has a channel width of five feet or more. Bridge abutments necessarily require footings, the construction of which disturbs a segment of stream channel. If the channel is very narrow, the footings may reach across most of the channel and can sometimes even meet in the middle. Therefore, although the channel is technically "spanned" by the bridge, the footings extend under most of the channel, which means the channel will be disturbed and replaced. Since the reason spanning is preferred is because it preserves the natural channel, there is no advantage if spanning will completely disturb the channel. Thus proposed N.J.A.C. 7:13-11.7(f) covers larger Class A channels, where spanning is generally a practical alternative, while proposed N.J.A.C. 7:13-11.7(g) covers smaller Class A channels, where spanning is less practical.

In all cases under proposed N.J.A.C. 7:13-11.7(f), the applicant must first explore spanning a channel with a bridge, arch culvert or three-sided culvert as described in proposed N.J.A.C. 7:13-11.7(i). If spanning a channel in this manner is not feasible, the applicant must meet the strict waiver requirements at proposed N.J.A.C. 7:13-11.7(m) in order to consider alternatives. If these waiver requirements are satisfied, the applicant is permitted to construct a smaller span and adjoining side-relief culverts as described in proposed N.J.A.C. 7:13-11.7(j) instead of a single span structure as described at proposed N.J.A.C. 7:13-11.7(i). If this is not feasible for reasons described at proposed N.J.A.C. 7:13-11.7(j), the applicant is permitted to construct a system of parallel circular and/or elliptical culverts as described in proposed N.J.A.C. 7:13-11.7(k). However, if constructing parallel culverts is also not feasible, due to hydraulic or structural design constraints, the applicant is permitted to construct a single circular, elliptical or box culvert as described in proposed N.J.A.C. 7:13-11.7(l).

Proposed N.J.A.C. 7:13-11.7(g) sets forth standards for constructing or reconstructing a

bridge or culvert along all Class B waters, as well as Class A waters that have a channel width of less than five feet. In all cases, spanning the channel with one bridge, arch culvert or three-sided culvert is the preferred option. If spanning the channel in this manner is not is not feasible due to excessive cost, unstable substrate, adverse impacts to flooding and/or an irregular channel configuration, the applicant is permitted to construct a smaller span with adjoining side-relief culverts as described in proposed N.J.A.C. 7:13-11.7(j) instead of a single span. Unlike proposed N.J.A.C. 7:13-11.7(f) above, the applicant need not meet the waiver requirements at proposed N.J.A.C. 7:13-11.7(m) in order to consider alternatives to spanning under proposed N.J.A.C. 7:13-11.7(i). However, if constructing a smaller span with adjoining side-relief culverts is also not feasible, the applicant must meet the these waiver requirements in order to consider the construction of one circular or elliptical culvert, or a system of parallel circular and/or elliptical culverts, as described in proposed N.J.A.C. 7:13-11.7(k). If, however, constructing culverts in this manner is also not feasible, due to hydraulic or structural design constraints, the applicant is permitted to construct a single circular, elliptical or box culvert as described in proposed N.J.A.C. 7:13-11.7(l). Thus, the hierarchy is the same under both proposed N.J.A.C. 7:13-11.7(f) and (g), but a waiver is required for anything other than a single span for larger Class A waters, whereas along Class B and smaller Class A waters a waiver is required only if constructing a smaller span with adjoining side-relief culverts is not feasible. This is appropriate since large Class A waters require the highest level of protection for aquatic biota. Therefore, any deviation from spanning a channel, as described at proposed N.J.A.C. 7:13-11.7(i), requires adequate justification under proposed N.J.A.C. 7:13-11.7(m). However, the aquatic resources along Class B and smaller Class A waters are not as sensitive as large Class A waters, and so justification under proposed N.J.A.C. 7:13-11.7(m) is required only if the applicant claims that spanning a

channel under either proposed N.J.A.C. 7:13-11.7(i) or (j) is not feasible.

Proposed N.J.A.C. 7:13-11.7(h) sets forth standards for constructing or reconstructing a bridge or culvert along all Class C waters. As in proposed N.J.A.C. 7:13-11.7(f) and (g) described above, spanning the channel with a bridge, arch culvert or three-sided culvert is always the preferred option. If spanning is not feasible due to excessive cost, unstable substrate, adverse impacts to flooding and/or an irregular channel configuration, the applicant is permitted to construct a smaller span with adjoining side-relief culverts. If also this is not feasible, one circular or elliptical culvert, or a system of parallel circular and/or elliptical culverts, can be constructed. Finally, if constructing culverts in such a manner is also not feasible, due to hydraulic or structural design constraints, the applicant is permitted to construct a single circular, elliptical or box culvert. Since Class C waters are of lower ecological value, applicants are not required to meet the waiver requirements at proposed N.J.A.C. 7:13-11.7(m) in order to move down the list of preferred structures.

Proposed N.J.A.C. 7:13-11.7(i) explains how spanning a channel is to be accomplished, if spanning is utilized to satisfy proposed N.J.A.C. 7:13-11.7(f)1, (g)1 or (h)1. In all cases, the span shall be adequately sized so as not to cause a significant increase in velocity during the flood hazard area design flood. This is consistent with the engineering requirements at existing N.J.A.C. 7:13-2.16. A stable, natural, earthen channel with low-flow aquatic passage must also be provided throughout the structure in order to prevent adverse impacts to aquatic resources. This is continued from existing N.J.A.C. 7:13-2.16(c)3i. For similar reasons, no armoring can be placed in the channel, unless it is necessary to prevent scour along the proposed abutments or footings of the bridge. In such a case, the armoring must be buried beneath at least two feet of native substrate, in order to properly restore a natural channel. This reflects the Department's

experience with such construction practices and represents a reasonable balance between preserving a natural stream corridor while ensuring the construction of safe, scour-resistant bridges.

Proposed N.J.A.C. 7:13-11.7(j) explains how spanning a channel with adjoining side-relief culverts under paragraphs (f)2, (g)2 and (h)2 is to be accomplished. The proposed standards for these culverts reflect the Department's experience with their construction, and are intended to ensure that construction will not adversely affect the environment or exacerbate flooding. A span under this subsection shall consist of a bridge, arch culvert or three-sided culvert that is sized to match the width and cross-sectional area of the channel so as to convey bank-full flow without a significant increase in velocity. This is distinct from proposed N.J.A.C. 7:13-11.7(i), which requires the passage of the flood hazard area design flood. Proposed N.J.A.C. 7:13-11.7(j)1 simply requires the channel itself to be spanned. Under this option, additional culverts shall be constructed outside the channel, and parallel to the span, as needed to convey larger floods and thereby prevent the bridge or culvert for exacerbating flood conditions. The number of culverts used is determined by hydraulic and environmental factors as outlined in this section. Under this system, the main bridge or culvert will carry the normal flow in the stream, while additional culverts outside the channel will carry floodwaters that exceed the channel's capacity, up to and including the flood hazard area design flood. Such a design best mimics the existing conditions of the channel and flood hazard area. As with spans under proposed N.J.A.C. 7:13-11.7(i), a stable, natural, earthen channel with low-flow aquatic passage must be provided throughout the structure, in order to prevent adverse impacts to aquatic resources. This is continued from existing N.J.A.C. 7:13-2.16(c)3i. For similar reasons, no armoring can be placed in the channel, unless it is necessary to prevent scour along the proposed abutments or footings of the bridge. In

such a case, the armoring must be buried beneath at least two feet of native substrate in order to properly restore a natural channel.

Proposed N.J.A.C. 7:13-11.7(k) explains how to construct one circular or elliptical culvert, or a system of parallel circular and/or elliptical culverts. The proposed standards for these culverts reflect the Department's experience with their construction, and are intended to ensure that construction will not adversely affect the environment or exacerbate flooding. Where possible, one culvert shall be constructed, which is adequately sized so to pass the flood hazard area design flood without a significant increase in the velocity of water in the channel. If such construction is not feasible, a system of parallel culverts shall be constructed in accordance with proposed N.J.A.C. 7:13-11.7(k)2. This means two or more culverts placed side-by-side within and/or parallel to the channel. The number of culverts used is determined by hydraulic and environmental factors as outlined in this section. One culvert must be sized to match the width and cross-sectional area of the channel so that it can convey bank-full flow. Additional culverts are then to be constructed outside the channel, parallel to the central culvert, as needed to convey larger floods. Under such a system, one culvert will carry the normal flow in the stream, while additional culverts outside the channel will carry floodwaters that cannot fit into the channel. Such a design best mimics the existing conditions of the channel and flood hazard area. In order to preserve low-flow aquatic passage in the channel, the invert of the in-channel culvert must be installed at least two feet below the invert of the channel. The culvert must then be backfilled with native substrate and the entire disturbed area must be graded and shaped to create a natural condition matching the characteristics of the existing channel. The applicant must also demonstrate that the material placed within the central culvert will remain stable under expected storm flow conditions, since displacement of this material would create erosion, sediment

deposition and an impediment to aquatic passage.

Proposed N.J.A.C. 7:13-11.7(l) explains how to construct a single circular, elliptical or box culvert, in cases where the standards at proposed N.J.A.C. 7:13-11.7(j) are not feasible. The proposed standards reflect the Department's experience and are intended to ensure that construction will not adversely affect the environment or exacerbate flooding. Where possible, in order to preserve low-flow aquatic passage in the channel, the culvert is to be constructed at least two feet below the invert of the channel and properly backfilled as described at proposed N.J.A.C. 7:13-11.7(l)1. If the culvert cannot be constructed in this manner due to unstable substrate or other physical constraints, the culvert is to be constructed to incorporate an artificial low-flow treatment such as a V-notch, key-notch or concave floor which mimics a low-flow channel as described at proposed N.J.A.C. 7:13-11.7(l)2. A reference is made to the Flood Hazard Area Technical Manual which includes drawings of such structures as guidance.

Proposed N.J.A.C. 7:13-11.7(m) establishes a procedure whereby an applicant can obtain a waiver from the requirements at proposed N.J.A.C. 7:13-11.7(f)1 and (g)2 in certain circumstances. Proposed N.J.A.C. 7:13-11.7(f)1 requires that all Class A waters (with a channel width of five feet or more) shall be spanned with a bridge, arch culvert or three-sided culvert as described at proposed N.J.A.C. 7:13-11.7(i). Proposed N.J.A.C. 7:13-11.7(g)2 requires that Class B waters (and the remainder of Class A waters), which cannot practically be spanned, shall be spanned with a smaller structure and adjoining side-relief culverts as described at proposed N.J.A.C. 7:13-11.7(j). In order for an applicant to construct a crossing that is less preferred than these options in the proposed hierarchy, the waiver requirements of proposed N.J.A.C. 7:13-11.7(m) must first be satisfied.

In order to qualify for a waiver under proposed N.J.A.C. 7:13-11.7(m), the applicant must

clearly demonstrate that compliance with either paragraph (f)1 or (g)2 is not physically or economically possible or feasible, and/or that the cost of compliance with paragraph (f)1 or (g)2 would greatly outweigh the environmental benefit that would be achieved. For this subsection, the "cost of compliance" refers not only to economic cost to the applicant but also real or potential adverse impacts to the environment, flooding or public safety. For example, where an extremely unstable channel is present that cannot safely be spanned by a bridge without risking public safety, this requirement would be satisfied. Another example that may qualify involves a road across a small channel at the bottom of an extremely wide ravine. Spanning the entire ravine would likely be economically cost-prohibitive, while spanning only the channel itself and filling the ravine up to the channel would be difficult to construct, as well as possibly unsafe to use, and could cause adverse impacts to flooding or the environment.

Separate standards are set forth if the applicant is a public or private entity, since each carries certain abilities, restrictions and assumptions that need to be considered. In each case, an alternative analysis must be prepared which addresses the particular requirements of the paragraph. If the applicant is a public entity, it must be shown that there is a public need to cross the regulated water and that there is no other means of doing so that would reduce or eliminate adverse impacts to aquatic resources, flooding and public safety. If the applicant is a private entity, it must be shown that there is developable land on the site itself, which cannot feasibly be accessed without crossing the regulated water. To demonstrate this, the applicant must show that there is no means of accessing the site through neighboring properties, which would avoid crossing the channel under this waiver provision. The applicant must also demonstrate that there is no other means of constructing a crossing to access the developable land, which would reduce or eliminate adverse impacts to aquatic resources, flooding and public safety. The Department

has determined that requiring applicants to demonstrate these conditions in order to allow the use of a less-preferred means of crossing a channel is appropriate and necessary to prevent undue impacts to aquatic resources.

N.J.A.C. 7:13-11.8 Requirements for a footbridge

Proposed N.J.A.C. 7:13-11.8 sets forth requirements that must be met for the issuance of an individual permit for a footbridge. Although the existing rules do not specifically address footbridges, the Department has generally approved footbridges without requiring detailed hydrologic and hydraulic calculations on a case-by-case basis. When constructed properly, footbridges will not obstruct flow. The Department's longstanding practice has been to accept footbridges which result in little or no fill, which span the channel and have open handrails instead of solid parapets, and which have a superstructure that is small enough to minimize obstruction to flow. This proposed section standardizes and codifies these requirements so that a footbridge which does not obstruct flow can be easily identified and approved. Footbridges that do not meet the standards of this proposed section are considered bridges and are subject instead to the requirements at proposed N.J.A.C. 7:13-11.7.

Proposed N.J.A.C. 7:13-11.8(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-11.8(b) describes the requirements for a footbridge to qualify for approval under this section. A footbridge must be used exclusively for pedestrians, livestock or light vehicles other than automobiles, have a travel width of no more than 10 feet (if the width is over six feet, the footbridge must include bollards to ensure that automobiles cannot use the footbridge), completely span a channel, be stable (as specified) and not obstruct flow (as specified). If the footbridge provides access to a public building, the surface of the footbridge

must be constructed at least one foot above the design flood elevation, where feasible, or else as close to this elevation as feasible. This requirement is necessary to protect public safety.

Proposed N.J.A.C. 7:13-11.8(c) clarifies that a channel crossing that does not meet the specifications for a footbridge will be subject to the requirements for bridges at proposed N.J.A.C. 7:13-11.7.

N.J.A.C. 7:13-11.9 Requirements for a utility line

Proposed N.J.A.C. 7:13-11.9, which sets forth requirements that must be met for the issuance of an individual permit for the construction of a utility line in a regulated area, continues provisions found in the existing rules at N.J.A.C. 7:13-2.10 and 2.11 for utilities with added detail and substantive changes described below.

Proposed N.J.A.C. 7:13-11.9(a) sets forth the scope of the section. Unlike the existing rules, the provisions for both underground and above ground utility lines are consolidated in one section, which applies to any utility line across, beneath, in, or above a regulated area.

Proposed N.J.A.C. 7:13-11.9(b) sets forth requirements that will apply to a utility line placed across or under a channel or water. First, proposed N.J.A.C. 7:13-11.9(b)1 through 3 require that the applicant show that the utility line cannot be jacked under the channel, placed in an existing road or attached to an existing bridge so as to qualify for permits-by-rule at proposed N.J.A.C. 7:13-7.2(c)3, 4 or 5. These alternatives are more preferable because they have much less impact on the regulated area than cutting an open trench across a channel to place a pipe underground. Technologies such as jacking and directional drilling are making it easier to avoid such disturbances during installation of the utility line.

Proposed N.J.A.C. 7:13-11.9(b)4 will prevent or minimize channel disturbance and water

quality impacts. The requirement is similar to existing N.J.A.C. 7:13-2.10(c), but is more stringent, in that it requires an open trench across flowing water to be avoided if possible, and also sets limits on the width of such a trench. The normal flow of the stream should be piped or diverted around the open trench so that sediment does not enter the waterway.

Proposed N.J.A.C. 7:13-11.9(b)5 through 9 set forth requirements for underground utility lines found in existing N.J.A.C. 7:13-2.10. The proposed requirements, which minimize disturbance and protect against damage during flooding, are essentially the same as the existing ones, although they are reworded for clarity, and there is an added requirement in proposed N.J.A.C. 7:13-11.9(b)8 that the line is sealed to prevent leakage in a regulated area. Also, whereas existing N.J.A.C. 7:13-2.10(b)2 requires encasement of utility lines which convey sewage, petroleum or gas, proposed N.J.A.C. 7:13-11.9(b)6 requires such encasement for a pipe that conveys any type of gas or liquid, including water mains. This change is necessary to ensure that pipes are protected from exposure or leakage due to movement or scouring of the channel over time, or by future construction activities in the channel or sediment removal by machinery. The Department has determined that such encasement is appropriate for all pipes that could discharge a liquid or gas into the regulated water if broken.

Proposed N.J.A.C. 7:13-11.9(c) sets forth requirements for a utility line above a channel or floodway, which does not qualify for the permit-by-rule at N.J.A.C. 7:13-7.2(c)5. In such a case, the utility line must meet requirements at paragraphs (c)1 through 5, which ensure that the utility line will not obstruct floodwaters and will not be swept downstream during a flood. This is derived from existing N.J.A.C. 7:13-2.11.

Proposed N.J.A.C. 7:13-11.9(d) sets forth additional requirements for construction of a manhole. These are found in existing N.J.A.C. 7:13-2.10(b)5, and additional requirements are

added to protect the integrity of the channel and for safety. Manholes in a floodway must be flush with the ground so as not to obstruct flow. Although manholes in the flood fringe would not cause an obstruction to flow, they should be constructed flush with the ground where possible to minimize flood storage displacement.

Proposed N.J.A.C. 7:13-11.9(e) sets forth additional requirements for a cable laid on a channel bed. These are found in existing N.J.A.C. 7:13-2.10(b)6, and reworded for clarity, with no change in meaning.

Proposed N.J.A.C. 7:13-11.9(f) sets forth requirements for an individual permit for periodic repair or replacement of an existing utility line. This is a new provision not found in the existing rules. It provides for an individual permit authorizing periodic repair or replacement of a utility line during the five-year term of the permit without a separate permit application for each event. However, the applicant must provide five working days notice of each maintenance event to the Department, the municipality and affected property owners under proposed N.J.A.C. 7:13-16.3(d). The proposed subsection also requires regrading, replanting, an application fee and annual reports describing all maintenance performed under the permit.

The Department recognizes that utility lines must be maintained regularly. However, in many cases, such maintenance must be done quickly, as soon as a problem in the utility line is discovered. Because fixing these problems cannot safely wait for the permit application process, the Department has developed this option to allow for maintenance as it is needed, rather than repeatedly issuing emergency permits. A fee is required because the Department conducts an annual review of the activities to ensure compliance with the rules. Repair or replacement activities that are found to not meet the requirements of this section will be subject to restoration or other remedial action, as well as enforcement action pursuant to proposed N.J.A.C. 7:13-19.

N.J.A.C. 7:13-11.10 Requirements for a stormwater outfall structure

Proposed N.J.A.C. 7:13-11.10 sets forth requirements that must be met for the issuance of an individual permit for a stormwater outfall structure. These are new provisions, which codify with further detail the more general requirements of the existing rules as they apply to stormwater outfalls, as well as typical Department permit conditions for stormwater outfalls. Proposed N.J.A.C. 7:13-11.10(a) sets forth the scope of the section. Proposed N.J.A.C. 7:13-11.10(b) sets forth requirements that ensure that the outfall will be stable, will not obstruct floodwaters and will not alter the normal flow of any channel into which the discharge is directed. These are new provisions which codify longstanding Department requirements for approving stormwater outfall structures. In addition to the standards for stormwater outfall structures under this section, discharges are also subject to the requirements of the Stormwater Management rules, including certain prohibitions against construction along Category One waters and certain tributaries, if associated with a major development, as defined at N.J.A.C. 7:8-1.2.

N.J.A.C. 7:13-11.11 Requirements for a dam or a low dam

Proposed N.J.A.C. 7:13-11.11 sets forth requirements that must be met for the issuance of an individual permit for a dam or for a low dam. These terms are now defined at proposed N.J.A.C. 7:13-1.2. A dam is an impounding structure that raises the normal water surface by five feet or more, whereas a low dam is an impounding structure that raises the normal water surface by a lesser amount. The provisions at proposed N.J.A.C. 7:13-11.11 are continued from existing N.J.A.C. 7:13-2.12.

Proposed N.J.A.C. 7:13-11.11(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-11.11(b) explains that construction activities that are related to a dam or low dam, but which are not actually part of the dam or low dam structure itself, are regulated separately under the chapter. For example, excavation of a basin behind the dam, the diversion of a stream around the dam, or the construction of storm sewers that tie into the dam are all considered separately and are subject to whatever design and construction standards apply to each activity under this chapter.

Proposed N.J.A.C. 7:13-11.11(c) explains that a dam is subject to this chapter only if the dam is part of a stormwater management basin that is located in, or discharges into, a regulated area. The structural stability, safety and flooding impacts of the dams themselves are reviewed under the Dam Safety Standards at N.J.A.C. 7:20. Thus, there is no need to review these characteristics of a dam under the Flood Hazard Area Control Act rules. However, stormwater management basins often meet the definition of a dam, and they displace flood storage volume when placed in a flood hazard area. Further, if these structures are located in or discharge into a regulated area, they must also meet the stormwater management requirements under proposed N.J.A.C. 7:13-11.2. Since the Dam Safety Standards do not include standards for flood storage volume displacement or stormwater management, it is necessary that basins which act as dams be reviewed under the Flood Hazard Area Control Act rules as well as the Dam Safety Standards.

Proposed N.J.A.C. 7:13-11.11(d) includes requirements to ensure that a dam or low dam will not cause adverse impacts to flooding or the environment. Proposed N.J.A.C. 7:13-11.11(d)1 requires that the dam or low dam does not increase offsite flooding, in accordance with the requirements at proposed N.J.A.C. 7:13-11.1(f).

The construction of a dam in a channel is prohibited under proposed N.J.A.C. 7:13-

11.11(d)2 unless the applicant demonstrates that there is no feasible alternative that would cause less adverse impact to the environment. This is a new requirement that is not found in the existing rules. The Department has determined that placing a dam in a channel often creates significant impacts to flooding and to the environment. However, a channel is sometimes proposed for damming to create on-stream stormwater management basins. Since basins can usually be constructed outside the channel and still function as intended, there is generally no need to disturb the channel itself simply to manage stormwater runoff. However, the creation of a reservoir or public water supply may not be possible without damming a channel. While this section does not imply that damming the channel will be approved under this chapter, since the requirements of all other sections must still be met, it does require that damming the channel be justified.

Proposed N.J.A.C. 7:13-11.11(d)3 prohibits construction of a dam in a channel with fishery resources unless the structure includes a fish ladder or other mechanism that permits fish to pass in either direction. This is similar to existing N.J.A.C. 7:13-2.12(c)2, which prohibits construction of a dam or low dam in a channel that acts as a runway for migratory fish. The existing provision inappropriately limits the requirement for fish-passage to migratory species. Therefore, the proposed paragraph extends the requirement for fish-passage to all waters with fishery resources, since a dam or low dam can significantly impede the normal passage of any fishery resource, not just those fish which are identified as migratory.

N.J.A.C. 7:13-11.12 Requirements for a flood control project

Proposed N.J.A.C. 7:13-11.12, which sets forth requirements that must be met for the issuance of an individual permit for a flood control project, contains new provisions not found in

the existing rules.

Proposed N.J.A.C. 7:13-11.12(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-11.12(b) requires applicants to provide a detailed analysis of the existing flooding problem that is to be mitigated by a proposed flood control project. Since flood control projects are typically large-scale and expensive endeavors that can have far reaching effects on both the environment and regional flooding, it is appropriate that flood control projects be properly justified. Proposed N.J.A.C. 7:13-11.12(b) lists a number of items that should be addressed by the analysis, including the frequency, intensity and extent of historical flooding, a cost-benefit analysis, and a description of which storms the flood control project is designed to mitigate, as well as why these storms were selected. If the flood control project is not designed to alleviate flooding for the 100-year flood or the flood hazard area design flood, the applicant must also explain why. Furthermore, all hydrologic and hydraulic calculations necessary to demonstrate the need for and viability of the project should be submitted so the Department can fully understand the impact of the project.

Proposed N.J.A.C. 7:13-11.12(b) also provides that the Department shall approve a flood control project only if the applicant is a public entity. This is consistent with the proposed definition of a flood control project at proposed N.J.A.C. 7:13-1.2, which limits such projects to public entities for reasons described in the summary of this definition.

Proposed N.J.A.C. 7:13-11.12(c) requires that an applicant for a flood control project that results in disturbance to a channel or a riparian zone demonstrate that there is no feasible alternative project outside the channel and riparian zone that will adequately control flooding. For example, rather than disturbing a channel, the flood control project could instead involve construction of a regional stormwater management basin outside the channel to handle excess

stormwater, thus controlling flooding without placing the project in the channel. This requirement will minimize environmental impact and protect the integrity of channels. Proposed N.J.A.C. 7:13-11.12(c) also details the type of specific information the Department expects to see in this analysis, including a demonstration that the flooding problem cannot feasibly be solved through other structural means or by reducing the flows by regional planning. The applicant must also show that certain steps have been taken to ensure that the flooding problem will not reoccur after the flood control project has been constructed.

Proposed N.J.A.C. 7:13-11.12(d) requires an applicant for a flood control project which involves lining or piping a channel to demonstrate that there is no feasible alternative project which will satisfactorily control flooding without piping or lining the channel. Lining and piping of channels can have major environmental impacts including water quality degradation, increased downstream erosion, loss of riparian zone vegetation, and habitat destruction. Therefore, the proposed subsection requires that there be no practical alternative to the lining or piping.

N.J.A.C. 7:13-11.13 Requirements for a retaining wall or bulkhead

Proposed N.J.A.C. 7:13-11.13 sets forth requirements that must be met for the issuance of an individual permit for a retaining wall or bulkhead.

Proposed N.J.A.C. 7:13-11.13(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-11.13(b) sets forth specific construction standards for any retaining wall or bulkhead that extends four feet or more above the ground in a fluvial flood hazard area. For such a retaining wall or bulkhead, the applicant must provide a stability analysis that demonstrates that the integrity of the structure will be preserved. This is found at existing

N.J.A.C. 7:13-2.13(a)9 and is reworded in the proposed rule for clarity, with no change in meaning. In addition, the structure must be designed with stable footings that extend at least three feet below the ground, unless the applicant demonstrates that such a footing is not possible to construct or is not necessary for stability. If located in a channel, the structure must also be designed to be resistant to erosion as well as the possibility of a shifting bed and/or bank over time. These are basic standards necessary to ensure the retaining wall or bulkhead will not be undermined or fail over time and obstruct channels or threaten the integrity of banks or structures.

Proposed N.J.A.C. 7:13-11.13(c) sets forth standards to construct or reconstruct a retaining wall or bulkhead that extends four feet or more above the ground in a tidal flood hazard area. In such a case, an engineer must certify that the wall is designed to withstand displacement, overturning and failure due to undermining and/or pressure from soil, water and frost. This differs from the standards at proposed N.J.A.C. 7:13-11.13(b), which apply to retaining walls and bulkheads in fluvial flood hazard areas. In fluvial areas, the dynamics of channel flow are such that retaining walls and bulkheads can easily be undermined and can collapse into a channel, causing severe erosion, obstruction to flow and damage to offsite property. It is therefore appropriate to not only require an engineer to design these structures properly, but also for an applicant to submit the actual stability calculations with the individual permit application. In tidal areas, however, it is the Department's experience that requiring a certification from an engineer is sufficient, rather than requesting and reviewing the stability calculations themselves.

Proposed N.J.A.C. 7:13-11.13(d) sets forth standards to construct or reconstruct a retaining wall or bulkhead that extends less than four feet above the ground. These requirements are simplified from proposed N.J.A.C. 7:13-11.13(b) and (c) above, since lower structures have

much less potential for adverse impacts on the environment or flooding. Such structures must be designed with stable footings but no specific standards are included to address this, since the Department recognizes that any number of stabilization methods could be acceptable depending on the size and location of the retaining wall or bulkhead. If located in a channel, the structure must also be designed to be resistant to erosion and migrating channels. As with higher retaining walls and bulkheads under proposed N.J.A.C. 7:13-11.13(b) and (c) above, these are basic standards necessary to ensure the retaining wall or bulkhead will not be undermined or fail over time and obstruct channels or threaten the integrity of banks or structures.

N.J.A.C. 7:13-11.14 Requirements for bank stabilization

Proposed N.J.A.C. 7:13-11.14 sets forth requirements that must be met for the issuance of an individual permit for stream bank stabilization. These specific provisions are not found in the existing rules. However, much of this section codifies the Department's current practice in applying the existing engineering and environmental standards to bank stabilization.

Proposed N.J.A.C. 7:13-11.14(a) sets forth the scope of the section. The requirements for bank stabilization mirror many of the requirements for channel disturbance for flood control projects under proposed N.J.A.C. 7:13-11.12.

Proposed N.J.A.C. 7:13-11.14(b) requires applicants to provide a detailed analysis of the existing erosion that is to be solved. Bank stabilization projects can have far reaching effects on both the environment and regional flooding, and so it is appropriate that they be properly justified. Proposed N.J.A.C. 7:13-11.14(b) lists a number of items that should be addressed by the analysis, including a complete description of the existing erosion problem that discusses its history and likely causes, and a demonstration of why the selected stabilization methods are the

most suitable for the site.

Proposed N.J.A.C. 7:13-11.14(c) sets forth general conditions for bank stabilization and a hierarchy of methods that can be used to stabilize an eroded stream bank. Proposed N.J.A.C. 7:13-11.14(c)1 explains that the project must be designed by an individual with experience in soil bioengineering and channel morphology. Soil bioengineering is a method of bank stabilization that incorporates both vegetation and structures, and which is discussed more fully below. Channel morphology is the science of how the size, shape and other characteristics of streams change over time due to alterations in the upstream watershed. This will ensure that people with the proper training and experience are involved in designing the solution to the erosion problem.

Proposed N.J.A.C. 7:13-11.14(c)2 requires stabilization to be accomplished through cutting the bank to a stable slope and replanting vegetation wherever possible. It is the Department's experience that this approach results in the least amount of environmental damage.

Proposed N.J.A.C. 7:13-11.14(c)3 notes that, if nuisance flooding is a related issue, flood capacity outside the channel should be increased by terracing the overbank areas so that the channel is not forced to convey excessive flows. The Department has determined that increasing the overall capacity of the regulated water in this way best preserves the integrity of the channel.

In cases where cutting the bank and planting vegetation cannot fully prevent erosion due to excessive channel velocity, or if cutting the bank would destroy a large number of existing trees or other vegetation, proposed N.J.A.C. 7:13-11.14(c)4 requires that soil bioengineering must be used to stabilize the eroded channel. This is similar to the last sentence of existing N.J.A.C. 7:13-3.3(b) which requires "geotechnical" materials to be used to stabilize disturbed areas whenever possible. The proposed paragraph updates the terminology with no change in meaning and

applies its use specifically to eroded stream banks.

Soil bioengineering generally involves the use of vegetation and slope adjustment to stabilize banks, often in combination with wood, rock or netting made from natural materials. The USDA has published guidelines which explain how and where to employ these methods (see definition of "soil bioengineering" at proposed N.J.A.C. 7:13-1.2). There is mounting evidence that these techniques are environmentally beneficial, in contrast to other stabilization methods relied upon in past years, which often result in the complete removal of vegetation or the excessive use of concrete or other artificial materials. Also, because soil bioengineering incorporates live vegetation, it is often more effective at stabilizing banks over long periods of time than other means. This provision will reduce the unnecessary use of rip-rap and other higher impact stabilization methods, which can destroy the natural stream bank and its habitat value. Furthermore, new soil bioengineering techniques are being continually developed. Therefore, the proposed paragraph requires their use to stabilize banks, where possible.

Proposed N.J.A.C. 7:13-11.14(c)5 sets forth requirements for an individual permit for a project that uses one or more bank stabilization techniques other than vegetation or soil bioengineering. For such a permit, the applicant must demonstrate that conditions on the site make the use of vegetation or soil bioengineering alone inadequate. This is intended to discourage the use of techniques other than vegetation and soil bioengineering, and to ensure that the adverse impacts of such techniques are minimized.

Proposed N.J.A.C. 7:13-11.14(c)6 sets forth requirements for the lining or piping of a channel in order to stabilize erosion. For such a project, the applicant must demonstrate that there is no other feasible alternative project that would satisfactorily reduce the erosion and thereby avoid lining or piping the channel. The applicant must also demonstrate that lining or piping the

channel is necessary to protect public health, safety and welfare. These requirements are appropriate since lining or piping of a channel can lead to adverse impacts on riparian zone vegetation and aquatic biota. Applicants must therefore demonstrate that the public is at risk unless such lining or piping of the channel occurs. The applicant must also demonstrate that adequate mitigation will be made for all lost vegetation and aquatic biota.

N.J.A.C. 7:13-11.15 Requirements for sediment and debris removal from a water

Proposed N.J.A.C. 7:13-11.15, which sets forth requirements that must be met for the issuance of an individual permit for sediment and debris removal from a water, consolidates provisions found at existing N.J.A.C. 7:13-2.5 and 2.7.

Proposed N.J.A.C. 7:13-11.15(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-11.15(b) clarifies that the section applies only to sediment and debris removal that does not qualify for either of the two general permits that apply to channel cleaning. General permit 1 at N.J.A.C. 7:13-8.3 authorizes the removal of sediment and/or debris by a county or municipality under the provisions of the Stream Cleaning Act at N.J.S.A. 58:16A-67. General permit 2B at proposed N.J.A.C. 7:13-8.4(c)2 further authorizes sediment removal for certain agricultural activities under NRCS purview. Authorization under these two general permits is limited to specific types of sediment removal activities. The requirements of proposed N.J.A.C. 7:13-11.15 apply to all sediment removal activities that are not authorized by either of these two general permits. The proposal also notes that the removal of trash and obstructions from a channel is permitted-by-rule under certain circumstance pursuant to proposed N.J.A.C. 7:13-7.2(a)5 and (d)3.

Proposed N.J.A.C. 7:13-11.15(c) sets forth limits on removal of sediment and debris from a

channel. Requirements for sediment and debris removal from an impounded water (such as a lake or pond) are found at proposed N.J.A.C. 7:13-11.15(e).

Proposed N.J.A.C. 7:13-11.15(c) contains certain provisions found in existing N.J.A.C. 7:13-2.5(a)1 through 4, which limit the adverse environmental impacts of removal of sediment and debris. The provisions are reworded for clarity, and rephrased to focus more specifically on certain environmental impacts. Specifically, the broad requirement at existing N.J.A.C. 7:13-2.5(a)4 that disturbance to vegetation be minimized is replaced with more specific requirements, such as that work be performed from only one bank if possible, and that the vegetation on the southerly and westerly bank be preserved as much as possible, which is found under existing N.J.A.C. 7:13-3.5(a). These requirements ensure that damage to existing near-stream vegetation is minimized. For similar reasons, applicants must justify the project and limit disturbance to the channel wherever possible. The requirements at existing N.J.A.C. 7:13-2.5(a)5 and 6 to avoid adverse impacts to fishery resources and threatened or endangered species have not been carried into the proposed rule because the protection of these resources is required under proposed N.J.A.C. 7:13-10.5 and 10.6.

Proposed N.J.A.C. 7:13-11.15(d) sets forth provisions for certain mosquito control projects pursued by a public entity, if the project does not meet all requirements at N.J.A.C. 7:13-11.15(c). Such projects may be permitted if certain requirements are satisfied, including requirements for notice and the opportunity for a hearing, approval of a plan by the State Office of Mosquito Control Coordination, minimization of impacts and a demonstration of no feasible alternative. This provision is continued from existing N.J.A.C. 7:13-2.5(e) and is reworded for clarity with no change in meaning except that the applicant must be a public entity and that the mosquito problem must be acknowledged by the State Office of Mosquito Control Coordination.

These changes are necessary to ensure that sediment removal under this subsection is being performed in response to a mosquito control problem that is recognized as such by the State.

Proposed N.J.A.C. 7:13-11.15(e) sets forth requirements for the removal of sediment and debris from an impounded water, such as a lake, pond or reservoir. The existing rules do not differentiate between sediment and debris removal projects affecting channels or impounded waters. Since the issues involved with each are different, the appropriate requirements for each are listed separately under the proposal. The requirements at proposed N.J.A.C. 7:13-11.15(e) ensure that sediment will not be carried downstream of the impounded water during dredging, that the Department's Division of Fish and Wildlife approve any lake lowering, that any necessary approvals from the Department's Dam Safety Section are obtained, that dredged material is properly disposed of, and that the dredging does not adversely affect any riparian zone, freshwater wetlands, groundwater or nearby structures.

Proposed N.J.A.C. 7:13-11.15(f) sets limits on the disposal of removed sediment in a regulated area.

Proposed N.J.A.C. 7:13-11.15(f)1 requires a demonstration that transporting the sediment out of the regulated area is not economically or physically feasible, or else would cause greater environmental damage than depositing the sediment in the regulated area. Existing N.J.A.C. 7:13-2.7(a)3 allows onsite disposal of spoils if it is not feasible to remove them. The Department has found that in some cases the deposition of a limited amount of fill in a regulated area can have less adverse impacts than requiring removal of the sediment, due to the destructive effects of the heavy equipment needed to remove the sediment from the area. The proposed provision is, therefore, intended to balance the environmental effects of sediment removal against the need to preserve flood storage volume.

Requirements at proposed N.J.A.C. 7:13-11.15(f)2, requiring compliance with disposal laws, are found in the existing rules at N.J.A.C. 7:13-2.5(a)2.

Proposed N.J.A.C. 7:13-11.15(f)3, which requires disposal at least 25 feet away from the top of the bank, is a new provision that will ensure that sediment is placed sufficiently far from the channel so that it will not likely be carried back into the water. Existing N.J.A.C. 7:13-2.7(b)1 prohibits deposition of excavated material within 25 feet of a channel except for sediment removed from a stream. However, the Department has determined that this exception is not warranted and therefore proposes to extend the prohibition to all deposited materials.

Proposed N.J.A.C. 7:13-11.15(f)4, which requires that the disposal not interfere with overland drainage, is found in the existing rules at N.J.A.C. 7:13-2.7(a)2.

Proposed N.J.A.C. 7:13-11.15(f)5 requires that the deposited sediment must not be more than three inches deep if placed within a floodway. Existing N.J.A.C. 7:13-2.7(a)1 prohibits deposition of sediment in a floodway except as part of a watercourse cleaning project approved by the Department. Sediment deposition is proposed to be limited to a depth of three inches in order to ensure that hydraulic capacity of the floodway will not be significantly reduced.

Proposed N.J.A.C. 7:13-11.15(f)6, which limits deposition of sediment, is a new provision not found in the existing rules. The provision allows placement of sediment on land that lies below either the seasonal high water table or the average water surface elevation of the nearest regulated water. An applicant must comply with proposed N.J.A.C. 7:13-11.15(f)6 unless the applicant demonstrates that this is not feasible. Under existing N.J.A.C. 7:13-2.15(a)2i and proposed N.J.A.C. 7:13-10.4(r), flood storage volume can be created by excavating material from the below the ground, provided the excavated material is located above both the seasonal high water table and the average water surface elevation of the nearest regulated water. This

implies, therefore, that the space that lies below both of these elevations does not constitute flood storage volume. As such, depositing dredged material on land that lies below both of these elevations will not reduce the flood storage volume of the site. A similar limitation on fill exists on major highland development in the Highlands Preservation Area. However, a stream cleaning under this section would not be considered a major highlands development, and so the Highlands Preservation Area is not mentioned in this paragraph.

Proposed N.J.A.C. 7:13-11.15(g) provides for repeated projects to remove sediment and debris from the same water over the five-year term of the permit. This is found in the existing rules at N.J.A.C. 7:13-2.5(b) with added detail as well as clarifying and substantive changes. Applicants must demonstrate a need for repeatedly cleaning the channel and must also show that such cleanings will not adversely impact fishery resources. Applicants must also give the Department 10 calendar days notice prior to each proposed sediment removal activity and must submit a summary of the work within 30 calendar days of the completion of each sediment removal activity. These requirements are necessary so the Department can adequately monitor the activity, alert the applicant to any timing restrictions or other problems that may prevent the activity at the intended time and also to ensure that the project was properly executed.

N.J.A.C. 7:13-11.16 Requirements for storage of unsecured material

Proposed N.J.A.C. 7:13-11.16 sets forth requirements that must be met for the issuance of an individual permit for the storage of unsecured material in a flood hazard area. Unsecured materials include vehicles, firewood, construction materials or any large object that is not connected to the ground and which may become buoyant. The storage of such material in a flood hazard area is dangerous because the material can be swept downstream, causing risk and

damage by impacting structures, and snagging on bridges or fences so that additional flooding occurs. The proposed rule continues the requirements of existing N.J.A.C. 7:13-2.2(a)4, which prohibits the storage of materials or equipment in floodways. However, the existing rule provision is very broad, and the Department's experience has been that it causes confusion over what types of materials may or may not be stored. Therefore, the proposed rule greatly expands the provision in order to provide more detail and guidance regarding the types of material that are prohibited. The proposed rule is intended to protect against two dangers that stem from storage of material in flood hazard areas. First, the fact that the material displaces flood storage volume, and second, the fact that unsecured material can be swept onto nearby or downstream land, as stated in the existing rules at N.J.A.C. 7:13-1.1(c).

Proposed N.J.A.C. 7:13-11.16(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-11.16(b) provides that all storage of unsecured material is subject to the section, except for that which is permitted-by-rule under proposed N.J.A.C. 7:13-7.2(e)1 through 4, or else covered under proposed N.J.A.C. 7:13-11.17 and 11.18, which address the placement of hazardous substances and solid waste in a regulated area, respectively, whether secured or unsecured.

Proposed N.J.A.C. 7:13-11.16(c) bars the issuance of an individual permit for storage of unsecured material in a floodway. The storage of material in a floodway is a prohibited use under existing N.J.A.C. 7:13-2.2(a)4.

Proposed N.J.A.C. 7:13-11.16(d) provides for an individual permit for storage of unsecured material in a regulated area outside a floodway (that is, within the flood fringe, and also within a riparian zone if the riparian zone extends outside the floodway) if certain new requirements are satisfied. The provisions are intended to discourage any unnecessary storage of unsecured

material, while ensuring that any storage that is necessary will be managed so as to minimize the danger of debris being swept downstream during a flood.

Proposed N.J.A.C. 7:13-11.16(d)1 requires that no vegetation is cleared, cut or removed in a riparian zone. Storage of material in a riparian zone is an unnecessary impact on this resource and there is no benefit to storage in a riparian zone that cannot be obtained by storing the material outside the riparian zone.

Proposed N.J.A.C. 7:13-11.16(d)2 requires that the material stored is part of a business that necessarily must store material, such as a lumber yard or car dealership. This provision protects the normal operation of such businesses while preventing unnecessary storage for other purposes.

Proposed N.J.A.C. 7:13-11.16(d)3 requires that the applicant demonstrate that the material cannot feasibly be stored outside of the flood hazard area and riparian zone onsite. If a site lies completely within a flood hazard area or riparian zone, storage outside these areas is obviously not possible on that site. However, a site may only partially lie within a flood hazard area or riparian zone, and an area may exist on that site outside these areas where material can be feasibly stored. In such a case, there would be no need to allow storage within the flood hazard area or riparian zone. Therefore, the applicant must demonstrate that storage onsite is not feasible outside these regulated areas.

Proposed N.J.A.C. 7:13-11.16(d)4 requires that the stored material is either isolated from floodwaters or is somehow prevented from leaving the site during a flood. This is necessary to protect public safety.

Proposed N.J.A.C. 7:13-11.16(d)5 requires that the applicant disclose the maximum volume of material that will be stored on site so that compliance with the flood storage displacement

requirements at proposed N.J.A.C. 7:13-10.4 can be determined. Disclosure of the maximum volume of stored material also enables the Department to evaluate the safety of storing such material in the flood fringe and whether the proposed isolation or containment of material under N.J.A.C. 7:13-11.16(d)4 is sufficient.

Proposed N.J.A.C. 7:13-11.16(d)6 provides that the Department must determine that the storage does not pose a threat to the environment or to public health, safety or welfare. This requirement ensures that the Department will be able to prevent the storage of material in a regulated area, which otherwise meets the requirements of this section, but which will nevertheless pose a threat.

N.J.A.C. 7:13-11.17 Requirements for the placement, storage or processing of hazardous substances

Proposed N.J.A.C. 7:13-11.17 sets forth requirements that must be met for the issuance of an individual permit for the placement, storage or processing of hazardous substances in a regulated area. These activities are prohibited in a floodway under existing N.J.A.C. 7:13-2.2(a)2 and 3, and prohibited in a flood fringe under existing N.J.A.C. 7:13-2.2(c)1. The proposed rule consolidates these provisions and makes their terminology consistent with each other. Furthermore, while the proposed new rules continue to prohibit the placement, storage and processing of hazardous substances in a floodway, these activities are not categorically prohibited in the flood fringe. Specifically, a lawfully existing hazardous waste facility may expand its operation in a flood fringe provided certain safeguards are met. No other placement, storage and processing of hazardous substances is permitted in a flood hazard area, such as the creation of a new hazardous waste facility. Furthermore, the section adds provisions governing

these activities in a riparian zone.

Proposed N.J.A.C. 7:13-11.17(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-11.17(b) explains that existing hazardous waste facilities may be permitted-by-rule under proposed N.J.A.C. 7:13-7.2(e)5 and that fuel tanks are also permitted-by-rule in certain cases under proposed N.J.A.C. 7:13-7.2(b)15 and 16. This is somewhat similar to provisions at existing N.J.A.C. 7:13-2.2(a)3. However, the proposed rule more clearly defines the class of facilities that are permissible.

Proposed N.J.A.C. 7:13-11.17(c) prohibits the issuance of an individual permit for placement, storage or processing of hazardous substances in a floodway. This is consistent with existing N.J.A.C. 7:13-2.2(a) and will prevent the placement of new facilities in areas where there is a substantial danger of contamination due to flooding.

Proposed N.J.A.C. 7:13-11.17(d) sets forth requirements for an individual permit for the placement, storage or processing of hazardous substances in a regulated area outside a floodway (that is, within the flood fringe, and also within a riparian zone if the riparian zone extends outside the floodway). These requirements are necessary to prevent the spreading of dangerous materials by floodwaters. No vegetation may be cleared, cut or removed in a riparian zone, since storing hazardous substances in a riparian zone is an unnecessary impact on this resource and there is no benefit to such storage that cannot be obtained outside the riparian zone. The placement, storage or processing of hazardous substances is limited to lawfully existing facilities as of the date of this rule proposal. A demonstration that the material cannot feasibly be placed outside the flood hazard area and riparian zone onsite and that the material is properly isolated or contained on site during a flood is required. A disclosure of the maximum storage of material on site is required, and the Department must determine that the material will not pose a threat to the

environment or to the public. This requirement ensures that the Department will be able to prevent the placement, storage, or processing of hazardous substances in a regulated area, which otherwise meets the requirements of this section, but which will nevertheless pose a threat.

N.J.A.C. 7:13-11.18 Requirements for placement, storage, or processing of solid waste

Proposed N.J.A.C. 7:13-11.18 sets forth requirements that must be met for the issuance of an individual permit for the placement, storage or processing of solid waste in a regulated area. These activities are prohibited in a floodway under existing N.J.A.C. 7:13-2.2(a)3, except for vertical expansion of an existing "sanitary landfill" under existing N.J.A.C. 7:13-2.2(b)3. These activities are also prohibited in a flood fringe under existing N.J.A.C. 7:13-2.2(c)1. The proposed new rules continue to prohibit the placement, storage and processing of solid waste in a floodway. However, these activities are not categorically prohibited in the flood fringe. Specifically, a lawfully existing solid waste facility may expand its operation in a flood fringe provided certain safeguards are met. No other placement, storage and processing of solid waste is permitted in a flood hazard area, such as the creation of a new solid waste facility.

Proposed N.J.A.C. 7:13-11.18(a) sets forth the scope of the section. The requirements of this section are nearly identical to the proposed requirements at N.J.A.C. 7:13-11.17 for the placement, storage or processing of hazardous substances in regulated areas.

Proposed N.J.A.C. 7:13-11.18(b) provides that existing solid waste facilities are not subject to the section, provided the facility meets the permit-by-rule at proposed N.J.A.C. 7:13-7.2(e)6. This is somewhat similar to provisions at existing N.J.A.C. 7:13-2.2(a)3. However, the proposed rule more clearly defines the class of facilities that are permissible.

Proposed N.J.A.C. 7:13-11.18(c) prohibits the issuance of an individual permit for the

placement storage or processing of solid waste in a floodway. This is consistent with existing N.J.A.C. 7:13-2.2(a) and will prevent the placement of new facilities in areas where there is a substantial danger of the materials washing downstream during a flood.

Proposed N.J.A.C. 7:13-11.18(d) sets forth requirements for an individual permit for the placement, storage or processing of solid waste in a regulated area outside a floodway (that is, within the flood fringe, and also within a riparian zone if the riparian zone extends outside the floodway). These requirements are necessary to prevent the spreading of dangerous materials by floodwaters. No vegetation may be cleared, cut or removed in a riparian zone, since storing solid waste in a riparian zone is an unnecessary impact on this resource and there is no benefit to such storage that cannot be obtained outside the riparian zone. The placement, storage or processing of solid waste is limited to lawfully existing facilities as of the date of this rule proposal. A demonstration that the material cannot feasibly be placed outside the flood hazard area and riparian zone, and that the material is properly isolated or contained on site during a flood is required. A disclosure of the maximum storage of material on site is required, and the Department must determine that the material will not pose a threat to the environment or to the public. This requirement ensures that the Department will be able to prevent the placement, storage, or processing of solid waste in a regulated area, which otherwise meets the requirements of this section, but which will nevertheless pose a threat.

N.J.A.C. 7:13-11.19 Requirements for the removal of existing fill or an existing structure

Proposed N.J.A.C. 7:13-11.19 sets forth requirements that must be met for the issuance of an individual permit for the removal of existing fill or an existing structure. These are new requirements not found in the existing rules. Over the years in which the Department has

administered the flood hazard area permit program, the Department has found that in some cases, removal of a large amount of fill or a structure can substantially affect flooding conditions upstream and/or downstream of the site where the fill or structure is removed. This is especially true if the structure is a dam or other water control structure. The removal of fill or structures can also alter existing flow patterns within and adjacent to channels and create or exacerbate erosion along regulated waters. Therefore, this proposed section is necessary in order to prevent increased flooding, erosion and other similar adverse impacts that can be caused by the removal of fill and structures.

Proposed N.J.A.C. 7:13-11.19(a) sets forth the scope of the section.

Proposed N.J.A.C. 7:13-11.19(b) explains that the removal of fill or structures is subject to the requirements of this section in two cases, namely if it is located in a floodway, or if it is located in a regulated area outside a floodway, but does not qualify for the permit-by-rule at N.J.A.C. 7:13-7.2(b)2. This covers the entire set of projects that could be regulated under this chapter.

Proposed N.J.A.C. 7:13-11.19(c) provides standards for issuance of an individual permit for removal of fill or a structure from a regulated area. Such removal is permissible provided all disturbed areas are stabilized, the removal will not adversely affect an offsite property or structure, the removed material is disposed of lawfully and, if the fill is a structure, it must be disposed of outside the regulated area. All vegetation cleared or cut in the riparian zone must be replanted, except where the removed material will be replaced by a new fill or structure. If the removed fill or structure lies in a floodway, the applicant must demonstrate with calculations that the removal will not adversely impact a property not owned by the applicant unless it is clear to the Department that the proposed removal poses no threat to offsite properties. These

requirements are necessary to ensure the removal of the fill or structure will not adversely impact the environment or public safety, or exacerbate flooding.

Subchapter 12. Emergency Permits

N.J.A.C. 7:13-12.1 Requirements for issuing an emergency permit

Proposed N.J.A.C. 7:13-12.1 sets forth basic information about emergency permits, the conditions under which an emergency permit will be issued, and the application requirements for an emergency permit.

The substance of proposed N.J.A.C. 7:13-12.1(a) through (c) is found in the existing rules at N.J.A.C. 7:13-4.6(a) and (c)1. The provisions are reworded for clarity, and the proposed rule adds the option to use electronic mail to supplement a request for an emergency permit, and also requires that the applicant provide the expected dates that the emergency work will begin and end.

Proposed N.J.A.C. 7:13-12.1(d) provides for a verbal approval of the emergency work, followed by a written Department confirmation of the verbal approval. This reflects the Department's current practice, and ensures that there is a written record of the approval. The confirmation requirement is found in existing N.J.A.C. 7:13-4.6(c)2.

Proposed N.J.A.C. 7:13-12.1(e) provides that there is no fee or public notice required for an emergency permit, but notes that the individual permit or general permit authorization for the work done under the emergency permit, which must be obtained after the emergency permit, will require notice and a fee in most cases. It has been the Department's practice not to charge a fee or require notice for an emergency permit, but this is not expressly stated in the existing rules. The

existing rules at N.J.A.C. 7:13-4.6(c)3 require that a full permit application be submitted after the emergency permit is approved.

N.J.A.C. 7:13-12.2 Procedures after an emergency permit is issued

Proposed N.J.A.C. 7:13-12.2 sets forth requirements that apply after an emergency permit is issued.

Proposed N.J.A.C. 7:13-12.2(a) requires that the work authorized by the emergency permit commence within 30 calendar days after the verbal approval of the emergency permit. The existing rules at N.J.A.C. 7:13-4.6(c)2 require that the work begin "expeditiously." The proposed rules include the 30-day deadline in order to discourage unnecessary requests for emergency permits. If a project can wait more than 30 calendar days to begin construction, the Department does not generally consider the project to be an emergency and the applicant should follow the normal permitting process, which can be expedited under appropriate conditions.

Proposed N.J.A.C. 7:13-12.2(b) requires that the emergency work be completed within 60 calendar days after the verbal approval of the emergency permit. This is not found in the existing rule. However, if a project is so complicated that it cannot be completed within this time frame, the Department does not generally consider that it is appropriate for an emergency permit.

Proposed N.J.A.C. 7:13-12.2(c) requires submittal of an application for an individual permit or general permit authorization, including any necessary fees and public notice, within 90 calendar days after verbal approval of the emergency permit. The requirement for submittal of an application is found in existing N.J.A.C. 7:13-4.6(c)3. However, the deadline for submittal is new, and is intended to ensure that work is completed promptly and that any required restoration or project changes are undertaken in a timely manner. Furthermore, since an activity authorized

under an emergency permit could qualify for either an individual permit or a general permit authorization under the proposed rules, both approvals are referenced at proposed N.J.A.C. 7:13-12.2(c). The proposed subsection also clarifies existing N.J.A.C. 7:13-4.6(c)3, which provides that the Department will review the required stream encroachment permit application for the activities authorized by the emergency permit and, if the activities meet the requirements of this chapter, issue a "formal permit," which means a stream encroachment permit.

Proposed N.J.A.C. 7:13-12.2(d) allows the Department to extend the deadlines in proposed N.J.A.C. 7:13-12.2(a), (b) and/or (c) if they prove to be infeasible on a case-by-case basis. This will provide flexibility in unusual circumstances.

Proposed N.J.A.C. 7:13-12.2(e) requires that the activities performed under an emergency permit must meet non-emergency permit requirements to the fullest extent possible. This is found in the existing rules at N.J.A.C. 7:13-4.6(b). Proposed N.J.A.C. 7:13-12.2(e) also provides that the Department will require modification of the project, as well as restoration and/or stabilization, as necessary to ensure that it meets the requirements of this chapter. This continues existing N.J.A.C. 7:13-4.6(c)3, which provides that the Department may require modifications, including mitigation or stabilization measures, to bring the as-built activities into compliance with the design and construction standards of this chapter. The proposed subsection uses the term "restoration" rather than "mitigation," both here and throughout the new rules. This is necessary to clarify what is meant by "mitigation," which people sometimes understand to refer to freshwater wetlands mitigation under the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A.

Subchapter 13. Revision of an Approval

This new subchapter contains provisions addressing permit revisions, currently called a "modification" or "modification-in-detail," found in the existing rules at N.J.A.C. 7:13-4.9, and in the Ninety-Day Construction Permits rules at N.J.A.C. 7:1C-1.5(d). Since the existing provisions are quite broad, the proposed rules add substantial detail to the existing provisions. The proposed subchapter also includes new provisions for the revision to a verification and to a Department flood hazard area delineation.

N.J.A.C. 7:13-13.1 Revision of a verification

Proposed N.J.A.C. 7:13-13.1 addresses revisions to a verification by an applicant. Since the existing rules do not provide for verifications, these provisions are all new.

Proposed N.J.A.C. 7:13-13.1(a) sets forth the scope of the section, provides that only a valid verification may be revised, and prohibits use of a revision to extend the term of a verification.

Proposed N.J.A.C. 7:13-13.1(b) provides that the Department can revise an entire verification or any portion of a verification. This is important when calculating the fee for a revision under proposed N.J.A.C. 7:13-17, since an applicant need only pay for the portion of the verification being considered for revision.

Proposed N.J.A.C. 7:13-13.1(c) separates verification revisions into two categories: minor and major. The existing fees (found in the Ninety-Day Construction Permits rules, N.J.A.C. 7:1C) require the same fee for all types of revisions, regardless of the amount of Department review required. The fees at proposed N.J.A.C. 7:13-17.1 instead are divided into categories in order to tailor them more closely to the amount of Department review a revision will require.

Proposed N.J.A.C. 7:13-13.1(c)1 describes a minor revision as one that does not require Department review of calculations in order to determine if the change in the verified elevation

and/or line is accurate.

Proposed N.J.A.C. 7:13-13.1(c)2 describes a major revision as one that requires Department review of calculations, and provides that a major revision can be issued only for verifications based on Methods 4 or 6, since these methods include the review of detailed engineering calculations, whereas Methods 1, 2, 3 and 5 do not. A minor revision, however, can be issued for a verification based on any of the methods in this chapter.

Proposed N.J.A.C. 7:13-13.1(d) prohibits issuance of a verification revision which involves a substantial redelineation of a Department-approved elevation or line. If an application involves a substantial redelineation, the original public notice required under proposed N.J.A.C. 7:13-16.2 will no longer be accurate, and extensive Department review will be required. Thus, a substantial redelineation should be processed through an application for a new verification, which will include public notice and a fee that more accurately reflects the level of Department review required. An example would be if the applicant proposes to change a basic hydrologic or hydraulic assumption upon which the original verification was based, such as the amount of water entering a channel, or the effect upon flow of a water control structure that was overlooked or otherwise not properly accounted for in the original verification.

Proposed N.J.A.C. 7:13-13.1(e) provides that a verification revision can cover only the section of a water that was covered by the original verification. Like a substantial redelineation under proposed N.J.A.C. 7:13-13.1(d), a verification covering a different section of water would trigger public notice and a higher fee, reflecting the fact that more extensive Department review is needed.

Proposed N.J.A.C. 7:13-13.1(f) sets forth application requirements for a minor revision to a verification. This is a new provision because verifications are not offered under the existing

rules. The required material includes basic information necessary for the Department to evaluate the proposed revision. A LURP-1 application, copies of the existing verification, an explanation of the proposed changes, revised drawings and the appropriate fee must all be submitted.

Proposed N.J.A.C. 7:13-13.1(g) sets forth application requirements for a major revision to a verification. In addition to the material listed at proposed N.J.A.C. 7:13-13.1(f) for a minor revision, all calculations and supporting information that prove the revised flood hazard area or floodway lines are accurate must be submitted as well.

Proposed N.J.A.C. 7:13-13.1(h) outlines the procedure the Department will follow to review an application for a verification revision. If information is missing from the application, the Department will request the necessary information and continue its review. Otherwise, the Department will either approve or deny the application on its merits and provide the reasons for this decision.

Proposed N.J.A.C. 7:13-13.1(i) provides that workload permitting, the Department will make a final decision on a verification revision application within 60 calendar days. This time frame, while not binding on the Department, is intended to provide applicants with an estimate so that they can better plan projects.

Proposed N.J.A.C. 7:13-13.1(j) sets forth requirements that the applicant must satisfy within 90 calendar days after receiving a revised verification. These requirements relate to recording the verified flood hazard area and/or floodway limits on the deed for the property and are identical to the requirements for verifications at proposed N.J.A.C. 7:13-6.1(g). This will ensure that future buyers of the property will be aware that the site may be subject to flooding under various circumstances and will disclose the location of any flood hazard area and/or floodways onsite.

N.J.A.C. 7:13-13.2 Revision of an general permit

Proposed N.J.A.C. 7:13-13.2 provides for a revision to a general permit by an applicant. The existing rules contain permit modification provisions at N.J.A.C. 7:13-4.9, as do the Ninety-Day Construction Permits rules at N.J.A.C. 7:1C-1.5(d). However, the proposed rule expands these provisions and adds detail to make the provision appropriate for general permits. The provisions of proposed N.J.A.C. 7:13-13.2 are similar to those for revisions to a verification at proposed N.J.A.C. 7:13-13.1.

Proposed N.J.A.C. 7:13-13.2(a) sets forth the scope of the section, provides that only a valid general permit may be revised, and prohibits use of a revision to extend the term of a general permit.

Proposed N.J.A.C. 7:13-13.2(b) describes five types of project changes that the Department will allow under a general permit revision. These changes are equivalent to a minor revision of an individual permit, described at proposed N.J.A.C. 7:13-13.3(c), and include changes that do not require the Department to review detailed engineering calculations to determine whether the revised project complies with the general permit requirements. This is appropriate because activities authorized under general permits are minor in nature and typically do not necessitate the preparation of calculations. Furthermore, for all general permits, a professional engineer must certify to the Department that the proposed activity is authorized under the general permit. Therefore, in the few cases where engineering calculations need to be performed, the professional engineer must first review these calculations to ensure that the requirements of the general permit are satisfied.

Proposed N.J.A.C. 7:13-13.2(c) prohibits issuance of a general permit revision if the proposed change involves a substantial redesign of the project. This is somewhat similar to

existing N.J.A.C. 7:13-4.9(b), which prohibits a modification that affects the hydraulic capacity of the water. However, the proposed subsection instead prohibits a revision for a substantial redesign of the project. The proposed subsection more narrowly targets changes that require the Department to re-review most or all of a project, and for which therefore it is appropriate to require a new permit rather than a revision.

Proposed N.J.A.C. 7:13-13.2(d) lists information required for an application for a general permit revision. This material is similar to that which is listed at existing N.J.A.C. 7:13-4.9(a), with clarifying detail added. The required information includes an application fee, LURP-1 application form, copies of the existing permit and approved drawings (if available), a new certification that the project qualifies for a general permit (including an explanation of the proposed changes) and six sets of revised drawings.

Proposed N.J.A.C. 7:13-13.2(e) outlines the procedure the Department will follow to review an application for a general permit revision. If information is missing from the application, the Department will request the necessary information and continue its review. Otherwise, the Department will either approve or deny the application on its merits and provide the reasons for this decision.

Proposed N.J.A.C. 7:13-13.2(f) provides that, workload permitting, the Department will make a final decision on a general permit revision application within 30 calendar days. This time frame, while not binding on the Department, is intended to provide applicants with an estimate so that they can better plan projects.

N.J.A.C. 7:13-13.3 Revision of an individual permit

Proposed N.J.A.C. 7:13-13.3 provides for a revision to an individual permit by an applicant.

The existing rules contain permit modification provisions at N.J.A.C. 7:13-4.9, as do the Ninety-Day Construction Permits rules at N.J.A.C. 7:1C-1.5(d). However, the proposed rule expands these provisions, divides revisions into minor and major, and adds detail. The requirements of proposed N.J.A.C. 7:13-13.3 are similar to those for revisions to a verification at proposed N.J.A.C. 7:13-13.1 and revisions to a general permit at proposed N.J.A.C. 7:13-13.2.

Proposed N.J.A.C. 7:13-13.3(a) sets forth the scope of the section, provides that only a valid individual permit may be revised, and prohibits use of a revision to extend the term of an individual permit.

Proposed N.J.A.C. 7:13-13.3(b) provides that the Department may revise an entire individual permit or any project element in an individual permit, in response to an applicant's request. While this is true under the existing rules, the existing fee schedule for modifications is based on the entire original fee paid, while the proposed revision fee is based on the project elements being revised. Therefore, it is necessary to clarify that all or a portion of an approval can be revised.

Proposed N.J.A.C. 7:13-13.3(c) separates individual permit revisions into two categories: minor and major. As with verification revisions, this will ensure that application fees accurately reflect the level of review required.

Proposed N.J.A.C. 7:13-13.3(c)1 describes a minor revision as a change in a project element which does not require Department review of calculations in order to determine whether the revised element complies with the chapter. Proposed N.J.A.C. 7:13-13.3(c)2 describes a major revision as one that does require Department review of calculations.

Proposed N.J.A.C. 7:13-13.3(d) prohibits issuance of an individual permit revision if the proposed change involves a substantial redesign of the project. This is somewhat similar to

existing N.J.A.C. 7:13-4.9(b), which prohibits a modification that affects the hydraulic capacity of the water. However, the proposed subsection instead prohibits a revision for a substantial redesign of the project. Some hydraulic changes do not involve major redesigns, and are, therefore, appropriate for processing as a revision rather than as a new individual permit. For example, a minor change in the dimensions of a proposed bridge or culvert may slightly alter the hydraulics of a stream, but would not require a complete re-review of all hydraulic calculations for the site in order to determine that the proposed revision meets the requirements of this chapter. However, proposing to completely relocate a new bridge along a different stream on the same site, for example, would likely cause a large change in the hydraulics of both streams, as well as potentially affecting safe access into the site and creating a number other issues, which could necessitate a re-review of much of the project. The proposed subsection, therefore, more narrowly targets changes that require the Department to re-review most or all of a project, and for which, therefore, it is appropriate to require a new permit rather than a revision.

Proposed N.J.A.C. 7:13-13.3(e) and (f) list information required for an application for an individual permit revision. This application material is similar to that which is required at existing N.J.A.C. 7:13-4.9(a), with clarifying detail added. The required information includes an application fee, a LURP-1 application form, copies of the existing permit and approved drawings (if available), an explanation of the proposed changes and six sets of revised drawings. In the case of a major revision, calculations and supporting information that prove the revised project meets the requirements of the chapter must be submitted as well.

Proposed N.J.A.C. 7:13-13.3(g) outlines the procedure the Department will follow to review an application for an individual permit revision. If information is missing from the application, the Department will request the necessary information and continue its review. Otherwise, the

Department will either approve or deny the application on its merits and provide the reasons for this decision.

Proposed N.J.A.C. 7:13-13.3(h) provides that, workload permitting, the Department will make a final decision on an individual permit revision application within 60 calendar days. This time frame, while not binding on the Department, is intended to provide applicants with an estimate so that they can better plan projects.

N.J.A.C. 7:13-13.4 Revision of a Department delineation by application

This new section contains provisions addressing the revision of the flood hazard area design flood elevation or floodway limit of a regulated water which has been adopted by the Department as an official delineation. Department delineations are described in proposed N.J.A.C. 7:13-3.3, and the regulated waters for which delineations exist are listed in detail in proposed chapter Appendix 2.

Department delineations consist of a series of maps and stream profiles which show the flood hazard area design flood elevation, the floodway limits and/or the approximate extent of the flood hazard area for various sections of regulated waters. The existing rules do not contain a procedure by which to revise these maps or profiles. Applicants sometimes present revised topography or calculations to the Department and request that a delineation be revised. Furthermore, the Department sometimes discovers errors in its mapping due to incorrect elevations or hydrologic or hydraulic data.

Existing N.J.A.C. 7:13-7 (proposed for repromulgation in Appendix 2) identifies the waters throughout the State for which the Department has adopted flood hazard area maps. Because this list of waters in included in the existing rule, the Department has historically initiated a rule

proposal each time it intends to change an adopted flood hazard area map. This rulemaking is undertaken regardless of whether the revision is initiated by the Department itself or requested by an applicant.

However, the list of waters at existing N.J.A.C. 7:13-7 does not in any way describe the flood hazard area design flood elevation, floodway limit or extent of the flood hazard area along these waters. Since the flood hazard area maps are not described by the rule text, a rule proposal to revise a map does not amend any rule text and does not include a copy of the map being revised. Instead, a rule proposal simply explains the purpose and impacts of the proposed revision and initiates a public hearing to discuss the revision in detail with interested parties. The only benefit of rulemaking, therefore, is to provide public notice and public input into proposed map revisions. Additionally, since there is currently no administrative process in the existing rules to initiate a map revision, applicants are often confused regarding what material must be submitted to the Department to revise a map or even how to go about initiating a map revision.

Given the above, the Department believes that it is more appropriate to create a detailed administrative process in this chapter to allow the Department to revise inaccurate flood mapping, which preserves public input and establishes clear requirements for acceptable map revisions, rather than to undertake a rulemaking each time a map must be revised. The process introduced in this proposed section allows for more efficient revision of inaccurate flood mapping while preserving the level of public notification and opportunity for public input as the existing rulemaking process, and is described more fully below.

Proposed N.J.A.C. 7:13-13.4(a) sets forth the scope of the section, which applies to the revision of a flood hazard area design flood elevation, flood hazard area limit, floodway limit and/or other related feature on a flood hazard area delineation, and explains that Department

delineations are listed in proposed Appendix 2.

Proposed N.J.A.C. 7:13-13.4(b) separates delineation revisions into two categories: minor and major. These categories are similar to the minor and major revisions to a verification under proposed N.J.A.C. 7:13-13.1. Proposed N.J.A.C. 7:13-13.4(b)1 describes a minor revision as one that does not require Department review of calculations in order to determine if the proposed change in the design flood elevation and/or floodway limit is accurate. Proposed N.J.A.C. 7:13-13.4(b)2 describes a major revision as one that does require Department review of calculations.

Proposed N.J.A.C. 7:13-13.4(c) provides that a delineation revision can cover only a section of a water that is adopted as an official Department delineation. The Department cannot add or remove a portion of delineated water from the approved list through the procedure in this proposed section.

Proposed N.J.A.C. 7:13-13.4(d) sets forth the application requirements for a minor revision to a Department delineation. This is a new provision since delineation revisions are not specifically addressed under the existing rules. The information required is similar to that which is required for a minor revision to a verification under proposed N.J.A.C. 7:13-13.1(f) as described above.

Proposed N.J.A.C. 7:13-13.4(e) outlines the procedure the Department will follow to review an application for a minor delineation revision. Under the existing rules, in cases where only minor errors need to be corrected, such as adding notes, fixing drafting errors or moving the approximate flood hazard area limit due to improved topography, the Department simply makes the necessary change without a rule proposal, since there is no potential for adverse impacts from these changes. The proposed subsection codifies this practice. If information is missing from the application, the Department will request the necessary information and continue its review.

Otherwise, the Department will either approve or deny the application on its merits and provide the reasons for this decision.

Proposed N.J.A.C. 7:13-13.4(f) provides that, workload permitting, the Department will make a final decision on a minor delineation revision application within 60 calendar days. This time frame, while not binding on the Department, is intended to provide applicants with an estimate so that they can better plan projects.

Proposed N.J.A.C. 7:13-13.4(g) sets forth the application material required for a major revision to a Department delineation. All material required for a minor revision at proposed N.J.A.C. 7:13-13.4(d) is required, as well as an application fee pursuant to proposed N.J.A.C. 7:13-17 and all calculations and supporting information that prove the revised flood hazard area or floodway lines are accurate.

Proposed N.J.A.C. 7:13-13.4(h) outlines the procedure the Department will follow to review an application for a major delineation revision. If information is missing from the application, the Department will request the necessary information and continue its review. Otherwise, the Department will either approve or deny the application on its merits and provide the reasons for this decision. If the Department proceeds with approval of the revision, the Department will follow the procedure detailed in proposed N.J.A.C. 7:13-13.4(i).

Proposed N.J.A.C. 7:13-13.4(i) establishes the procedure that the Department will follow if it determines that it will approve an application for a major revision of a delineation. This procedure is intended to provide the same level of public notice and opportunity for public involvement in the revision process as a formal rule proposal would provide.

First, the Department shall publish notice of its intent to revise the delineation in the New Jersey Register, as well as in one newspaper of local circulation and one newspaper of regional

circulation. This notice shall include relevant information related to the proposed revision, an invitation for interested parties to attend a public hearing and contact information within the Department. During the public hearing, the Department shall explain the proposed revision, including any impacts the Department expects from revising the delineation, and shall collect public comments. Upon consideration of the available information and public comments, if the Department concludes that revising the delineation is in the best interest of public health, safety and welfare, the Department will revise the delineation as appropriate, publish a description of the revision in the New Jersey Register as well as in one newspaper of local circulation and one newspaper of regional circulation. The Department shall also provide the applicant with a copy of the revised flood hazard area and/or floodway map. This procedure preserves public participation in the revision process and reduces the time and effort necessary to initiate a revision.

Proposed N.J.A.C. 7:13-13.4(j) provides that, workload permitting, the Department will make a final decision on a major delineation revision application within 180 calendar days. This time frame, while not binding on the Department, is intended to provide applicants with an estimate so that they can better plan projects.

N.J.A.C. 7:13-13.5 Revision or suspension of a Department delineation by the Department

Proposed N.J.A.C. 7:13-13.4 described above sets forth situations and procedures by which an applicant can request the Department to revise an adopted flood hazard area design flood elevation and/or floodway limit. There are, however, cases in which the Department itself determines that a delineation is inaccurate and in need of revision. This, section, therefore, proposes to formalize a process by which the Department may revise and/or suspend a

delineation under its own initiative.

Proposed N.J.A.C. 7:13-13.5(a) provides that in cases where the Department determines that an existing delineation underestimates the extent of the floodway and/or flood hazard area, and that it is in the best interest of public health, safety and welfare to revise a delineation, the Department take one of two actions described in proposed N.J.A.C. 7:13-13.5(a)1 and 2.

Proposed N.J.A.C. 7:13-13.5(a)1 provides that if the Department has sufficient topographic, hydrologic and hydraulic data to adequately revise the delineation, the Department shall initiate a revision. For a minor delineation revision (described in N.J.A.C. 7:13-13.4(b)1), the Department shall simply revise the delineation as necessary, which is the longstanding practice of the Department. For a major delineation revision (described in N.J.A.C. 7:13-13.4(b)2), the Department shall follow the procedure described in proposed N.J.A.C. 7:13-13.4(i).

Proposed N.J.A.C. 7:13-13.5(a)2 describes situations where the Department does not have sufficient topographic, hydrologic and hydraulic data to adequately revise the delineation, or where the Department determines that the revision process cannot be done quickly enough to adequately protect public health, safety and welfare. In such cases, the Department will initiate an emergency suspension of the delineation for a one-year period under proposed N.J.A.C. 7:13-13.5(b) as described below.

Proposed N.J.A.C. 7:13-13.5(b) establishes the procedure by which the Department will initiate an emergency one-year suspension of a delineation as described in proposed N.J.A.C. 7:13-13.5(a)2.

Proposed N.J.A.C. 7:13-13.5(b)1 requires the Department to publish notice of its intent to suspend the delineation in the New Jersey Register, as well as in one newspaper of local circulation and one newspaper of regional circulation. This notice shall include relevant

information related to the proposed suspension and contact information within the Department.

Proposed N.J.A.C. 7:13-13.5(b)2 explains that the Department shall consider the affected portion of the delineation to be suspended for a one-year period, as of the publication of the notice in the New Jersey Register.

Proposed N.J.A.C. 7:13-13.5(b)3 provides that within one year of the suspension date, the Department must reinstate the delineation (with an explanation) or revise the delineation in accordance with proposed N.J.A.C. 7:13-13.5(a)1. This procedure preserves public participation in the process while also protecting public safety in cases where the Department recognizes that a delineation is inaccurate but does not readily have information necessary to revise it properly. This one-year suspension, therefore, is proposed so that the Department can collect the necessary data to adequately correct the errors on the delineation. If, upon review of the data, the Department finds that the delineation is in fact accurate, the delineation shall be reinstated. Finally, if the Department fails to take any action at all, the delineation will be automatically reinstated. This prevents situations where the Department does not take any action and the public does not know whether a delineation can be used.

Proposed N.J.A.C. 7:13-13.5(c) establishes the Department's procedure to deal with new applications and existing approvals within the suspended flood hazard area. Since the delineation is being suspended because it has been found to be inaccurate, applications made to the Department during the suspended period cannot reference the elevations and limits in the suspended delineation in order to protect public safety. Furthermore, the Department will initiate a review of all currently valid verifications, general permits and individual permits that have been issued in the flood hazard area of the suspended delineation to determine whether the public is at risk due to the inaccuracies of the suspended delineation. The Department can subsequently

suspend or terminate approvals where necessary to protect public safety under proposed N.J.A.C. 7:13-14.

Proposed N.J.A.C. 7:13-13.5(d) is identical to proposed N.J.A.C. 7:13-13.4(c), which provides that a delineation revision can cover only a section of a water that is adopted as an official Department delineation. The Department cannot add or remove a portion of delineated water from the approved list through this section. A rule proposal is required, since the list in Appendix 2 would change as a result of such an action.

Proposed N.J.A.C. 7:13-13.5(e) provides for cases where the Department approves an individual permit under this chapter for an activity which alters the flood hazard area design flood elevation, flood hazard area limit and/or floodway limit of a regulated water. Such projects include the construction of a flood control project, or the construction, modification or removal of a bridge or culvert. In such cases, the Department shall automatically revise the delineation as necessary. This codifies the longstanding practice of the Department. Since an individual permit cannot be granted under this chapter for projects which adversely impact flooding on a property not owned by the applicant (see proposed N.J.A.C. 7:13-11.1(f)), the approval of an individual permit for an activity indicates either that no significant change in the design flood elevation or floodway limit will occur offsite, or that changes will occur that would only affect the applicant. Thus, there is no need for public notice or participation as provided in proposed N.J.A.C. 7:13-13.4(i).

Subchapter 14. Transfer, Suspension and Termination of an Approval

This proposed subchapter introduces a process by which an applicant can transfer an approval to the new owner of a site, and a process by which the Department can suspend or

terminate an approval. This is a new provision not found in the existing rules.

N.J.A.C. 7:13-14.1 Transfer of an approval

The proposed new rules introduce a process by which the owner of a site who has received an approval under N.J.A.C. 7:13 can transfer the approval at the time of the sale of the site to a new owner. Although not specifically addressed in the existing rules, it has been the longstanding practice of the Department to consider an approval to be valid only for the original applicant. In cases where the site is sold to a new owner, the Department has required the new owner to obtain a new approval. This often creates an unnecessary burden on both the Department and the applicant, since the identity of the owner of the site generally has no bearing on whether an application is approved. Therefore, the proposed rules include a means by which an applicant can simply transfer the approval to a new owner, through a written request and a nominal fee, provided certain conditions are met as described below.

Proposed N.J.A.C. 7:13-14.1(a) provides that any approval authorized under this chapter can be transferred at the time of the sale of a site to a new owner, provided four conditions are satisfied. The approval to be transferred must be valid, and cannot be an emergency permit or an individual permit based on a hardship exception. Requests for emergency permits and hardship exceptions are often based on situations that are unique to the owner. The sale of the property to a new owner may alter these conditions, and, therefore, eliminate, the grounds upon which the emergency permit or hardship exception was granted. Proposed N.J.A.C. 7:13-14.1(a)3 further provides that the Department shall not transfer an approval to a person or persons who do not own or purchase the site.

Proposed N.J.A.C. 7:13-14.1(a)4 provides that the Department must determine that the

transfer would not alter a basic condition upon which the approval was granted or would otherwise circumvent a requirement of this chapter, as described in proposed N.J.A.C. 7:13-14.1(b), where an example is given of an applicant who proposes to construct a road across a channel. In such a case, the Department considers whether there is another means of accessing the site which would reduce the amount of disturbance to the channel, or which would avoid crossing the channel altogether. If there is no other feasible means of accessing an otherwise developable portion of a site without crossing the channel, the Department would grant an individual permit, provided the road crossing meets all other standards of this chapter. But if the owner of the lot first obtains an individual permit for a road crossing, and then sells the lot to an adjacent land owner who already has a roadway across the stream, the basic premise upon which the individual permit was granted would no longer exist. In other words, if the new owner of the lot had been the person to apply for the permit to cross the stream, the Department may have concluded that the disturbance to the stream was not justified because another access into the property already existed. By combining the two properties into one, the justification for the road crossing under the individual permit becomes invalid. This example illustrates the complications that can arise over transferring an approval to a new owner. The Department must, therefore, determine that transferring the approval to a new owner would not circumvent any standard of the rules that would otherwise apply.

Proposed N.J.A.C. 7:13-14.1(c) explains that, in cases where a property is sold, an approval under this chapter must be transferred to the new owner before he or she can commence or continue work onsite. If the new owner does undertake work without transferring the approval, the approval will be voided and the new owner shall be in violation of this chapter and subject to enforcement action under N.J.A.C. 7:13-19.

Proposed N.J.A.C. 7:13-14.1(d) establishes the process for requesting a transfer of an approval. An applicant shall submit a written request to the Department, which includes the notarized signature of each original owner of the site, the name and address of each new owner of the site, and the date the property will change (or has changed) ownership, as well as an application fee at proposed N.J.A.C. 7:13-17.

Proposed N.J.A.C. 7:13-14.1(e) provides that the Department will, workload permitting, approve a transfer within 30 calendar days after receiving the application materials listed in proposed N.J.A.C. 7:13-14.1(c). This time frame, while not binding on the Department, is intended to provide applicants with an estimate so that they can better plan projects.

Proposed N.J.A.C. 7:13-14.1(f) provides that a person who receives a transferred approval must comply with all the conditions of the original approval being transferred.

N.J.A.C. 7:13-14.2 Suspension of an approval

This section provides a process for the Department to suspend an approval under this chapter for cause. This is a new provision not found in the existing rules. Proposed N.J.A.C. 7:13-14.2(a) describes five causes for the Department to suspend an approval. Three proposed causes for suspension relate to unlawful or deceptive actions by the permittee. Proposed N.J.A.C. 7:13-14.2(a)1, 2 and 3 provide that the Department can suspend an approval if the permittee has not complied with any condition of the approval, if the permittee has undertaken activities in violation of the chapter, and if the permittee has either misrepresented or failed to fully disclose all relevant facts pertaining to the approval. Proposed N.J.A.C. 7:13-14.2(a)4 provides that an approval can be suspended if the approval was based on false or inaccurate information. This is independent of whether the permittee was aware of such inaccuracies during or after the

Department's review of the approval. These causes for suspension are self-explanatory. Non-compliance by the permittee can lead to environmental damage and public harm, and the Department has a responsibility to prevent such effects. Any approval based on faulty or incomplete information may also lead to such negative effects.

Proposed N.J.A.C. 7:13-14.2(a)5 provides that the Department can suspend any approval which has caused significant flooding or unanticipated negative environmental impacts which have become apparent during the performance of the regulated activities. Examples of unanticipated negative environmental impacts are also provided, including excessive erosion and subsequent siltation, destruction of vegetation not authorized by the permit and the destruction of aquatic biota or habitat. It has been the Department's experience that some projects, although otherwise appearing to comply with this chapter, nevertheless result in significant flooding or unanticipated negative environmental impacts. As noted above, the Department has a responsibility to prevent such adverse effects.

Proposed N.J.A.C. 7:13-14.2(b) explains that the Department shall immediately suspend an approval if it determines that cause exists for suspension pursuant to proposed N.J.A.C. 7:13-14.2(a). The Department shall provide written notice of suspension by certified mail to the permittee, which states the reasons for suspension, orders the permittee to immediately cease all activities authorized by the suspended approval and notifies the permittee of the right to request a meeting with the Department within 10 calendar days of receipt of the notice.

Proposed N.J.A.C. 7:13-14.2(c) provides that the permittee whose approval has been suspended must submit a plan to the Department within 30 calendar days which proposes to remedy the reasons for the suspension stated in the notice. Once approved by the Department, the permittee must immediately begin implementing this plan, and must remedy all

noncompliance and unanticipated impacts within 60 calendar days of the approval of the plan.

Proposed N.J.A.C. 7:13-14.2(d) explains that the Department, within 15 calendar days of receiving a remediation plan under proposed N.J.A.C. 7:13-14.2(c), shall either approve the remediation plan and reinstate the suspended approval, or else determine that the remediation plan is inadequate and terminate the approval pursuant to proposed N.J.A.C. 7:13-14.3. If the Department approves the remediation plan, it may do so with conditions or revision where necessary to ensure compliance with this chapter.

Proposed N.J.A.C. 7:13-14.2(e) explains that the Department can take enforcement action pursuant to N.J.A.C. 7:13-19 independent of the provisions of this section.

N.J.A.C. 7:13-14.3 Termination of an approval

This section provides a process for the Department to terminate an authorization under this chapter for cause. This is a new provision not found in the existing rules. Proposed N.J.A.C. 7:13-14.3(a) lists four causes for the Department to terminate an approval which has been suspended under N.J.A.C. 7:13-14.2, as follows: if the permittee has not ceased all regulated activities authorized by the suspended approval as required at proposed N.J.A.C. 7:13-14.2(b)2; if the permittee has not submitted a remediation plan as required at proposed N.J.A.C. 7:13-14.2(c); if the Department has determined that the remediation plan submitted under proposed N.J.A.C. 7:13-14.2(c) is inadequate; or if the applicant fails to remedy non-compliance with a condition of the approval. These provisions ensure that unsafe or environmentally damaging projects do not continue. As proposed, termination of an approval can only occur after the permittee has been given every reasonable opportunity to present and act on a plan to correct the problems the project has caused.

Proposed N.J.A.C. 7:13-13.14.3(b) provides that the Department shall notify the permittee by certified mail of its intent to terminate an approval where the Department determines that cause exists to do so. This notice will require that all regulated activities onsite must cease immediately, and will also explain that the permittee must, within 10 days after receiving the notice, submit a plan to the Department proposing to remediate the causes for the termination or else request an adjudicatory hearing. If a permittee fails to take one of these actions, proposed N.J.A.C. 7:13-14.3(c) provides that the subject approval will automatically terminate. Furthermore, the permittee must remedy any violations and/or unanticipated adverse impacts to flooding or the environment, and must restore the site to its pre-activity condition where feasible. These provisions ensure that any negative effects of the project will be eliminated and/or properly mitigated. Proposed N.J.A.C. 7:13-14.3(c) also provides that the Department may either reinstate the approval, or require the permittee to apply for a new approval, once the noncompliance and negative impacts are remedied to the Department's satisfaction. It is anticipated that in most cases the Department will reinstate the terminated approval. However, the Department reserves the right to require the permittee to apply for a new approval, with modifications as necessary, in order to ensure that the project complies with this chapter.

Proposed N.J.A.C. 7:13-14.3(d) explains that the Department can take enforcement action pursuant to N.J.A.C. 7:13-19 independent of the provisions of this section.

Subchapter 15. Application Requirements

This proposed subchapter describes the application requirements for a number of approvals issued under this chapter. All approvals which require the submittal of an application, with the exception of emergency permits, general permits and the transfer of an approval, are included in

this subchapter.

N.J.A.C. 7:13-15.1 General provisions

Proposed N.J.A.C. 7:13-15.1 contains basic application provisions that apply to most applications. Most of these provisions codify current Department practice.

Proposed N.J.A.C. 7:13-15.1(a) sets forth the scope of the section and requires that an application include all information necessary for the Department to determine if the requirements of the chapter are satisfied, and provides general information regarding application checklists. Existing N.J.A.C. 7:13-4.1(b) discusses a completion checklist that is provided by the Department for permits. Under the proposed rules, the Department will create application checklists for all approvals, which will be posted on the Department's website. These checklists will provide guidance and detail regarding the application requirements of this chapter. For example, the proposed rules require the submittal of six sets of drawings that describe the proposed project, whereas the application checklist for individual permits will provide detail regarding the recommended size and scale of these drawings and level of detail required for different projects.

Proposed N.J.A.C. 7:13-15.1(b) encourages, but does not require, a single, consolidated application for a project for which multiple Division of Land Use Regulation approvals are required. Consolidated applications are encouraged because it is more efficient and environmentally beneficial for the Department to review all aspects of a project simultaneously.

Proposed N.J.A.C. 7:13-15.1(c) encourages applicants to keep all information related to the preparation and submittal of an application, and to the issuance of an approval, for at least 10 years. These documents may be necessary if the applicant has to submit a new application or

obtain a revision.

Proposed N.J.A.C. 7:13-15.1(d) stresses that all calculations must be performed at the applicant's expense. It has been the Department's experience that some applicants are confused over who is responsible for providing calculations for some applications. The provision also requires that calculations be signed and sealed by an engineer, which is defined at proposed N.J.A.C. 7:13-1.2 as a professional engineer who is licensed to practice in New Jersey. This codifies current Department practice and will maximize the accuracy of calculations submitted.

Proposed N.J.A.C. 7:13-15.1(e) requires that all drawings submitted with an application be signed and sealed by an architect, engineer or land surveyor, as appropriate. An exception to this is provided where the applicant proposes a building for his or her own personal, residential use. In such a case, the applicant may prepare the drawings, provided no calculations or topography are necessary to demonstrate compliance with this chapter. Calculations and/or topography would necessitate the involvement of an engineer or surveyor. Architects, engineers and land surveyors must be licensed to practice in New Jersey, as defined at proposed N.J.A.C. 7:13-1.2.

Proposed N.J.A.C. 7:13-15.1(f) requires that all applications accompanied by a LURP-1 application form shall also include the State plane coordinates for the project. The coordinates shall be for the approximate center of the site, except for linear projects which have a different procedure. LURP-1 forms must be completed and include original signatures.

N.J.A.C. 7:13-15.2 Pre-application conference

Proposed N.J.A.C. 7:13-15.2, which provides for pre-application conferences, contains provisions found in the existing rules at N.J.A.C. 7:13-4.3.

Proposed N.J.A.C. 7:13-15.2(a) describes the purpose of a pre-application conference. Such

a conference is optional but recommended for large or complicated projects. This is found in existing N.J.A.C. 7:13-4.3(a).

Proposed N.J.A.C. 7:13-15.2(b) provides for an applicant to request a pre-application conference by telephone, electronic mail or by letter. The proposed subsection includes the options of telephone and electronic mail requests for a pre-application conference in order to provide more flexibility to the applicant and facilitate more expeditious scheduling of conferences. The request need not be written.

Proposed N.J.A.C. 7:13-15.2(c) provides for the Department to request certain information in advance of the pre-application conference if a project is large and/or complicated. Existing N.J.A.C. 7:13-4.3(b) requires such submittals for all projects, but the Department has found that this submitting information is not always necessary for small or simple projects. The required information involves basic attributes of the site and the proposed project.

Proposed N.J.A.C. 7:13-15.2(d) describes pre-application conferences and clarifies that Department discussions and/or guidance at such conferences is not binding. This is found at existing N.J.A.C. 7:13-4.3(a).

Proposed N.J.A.C. 7:13-15.2(e) addresses projects requiring a flood hazard area permit in addition to one or more permits from other Department programs. The proposed subsection recommends that an applicant with such a project contact the Department's Office of Pollution Prevention and Right to Know, which will help the applicant to coordinate the various permit applications. This is found at existing N.J.A.C. 7:13-4.3(e) with clarifying changes.

Proposed N.J.A.C. 7:13-15.2(f) recommends that an applicant with a project that may affect freshwater wetlands obtain a freshwater wetlands letter of interpretation to ensure compliance with the Department's freshwater wetlands rules. This provision is included because many

projects that require a flood hazard area permit also require a freshwater wetlands approval.

Proposed N.J.A.C. 7:13-15.2(g) provides that the Department will in most cases hold a pre-application conference within three weeks after receiving a request for one. However, the Department is not obligated to hold a pre-application conference in person, since it may be determined that the questions raised by the prospective applicant can be adequately addressed by telephone instead.

N.J.A.C. 7:13-15.3 Application report

Proposed N.J.A.C. 7:13-15.3 describes the material required for an application report. This report includes basic information about the site and the proposed project, including a description of the project, various maps that will aid the Department in locating the site, copies of previous Department approvals and color photographs. These items are similar to that which is required for permits at existing N.J.A.C. 7:13-4.1. Since these are basic materials that are required for nearly every type of application provided in the proposed rules, they have been consolidated into one section for ease of reference and to eliminate redundancy.

N.J.A.C. 7:13-15.4 Engineering report

Proposed N.J.A.C. 7:13-15.4 describes the requirements for an engineering report, which must be submitted with applications for verifications and certain individual permits. The existing rules do not refer to a single document entitled "engineering report" that must be submitted with particular applications. However, the existing rules do require the submittal of calculations and other technical information for a number of proposed activities in order to demonstrate that a given project meets the requirements of the chapter. Proposed N.J.A.C. 7:13-15.4, therefore,

consolidates the requirements found throughout the existing rules for calculations and other technical information into one report, and furthermore clarifies the content and focus of the report.

Proposed N.J.A.C. 7:13-15.4(a)1 requires that an engineering report must include the signature and seal of an engineer, a term which is defined at proposed N.J.A.C. 7:13-1.2 as a professional engineer who is licensed to practice in New Jersey. This is a requirement of the New Jersey State Board of Professional Engineers and Land Surveyors and reflects the Department's longstanding practice of requiring engineering calculations to be signed and sealed by a licensed professional.

Proposed N.J.A.C. 7:13-15.4(a)2 requires that an engineering report must include the name, mailing address and telephone number of the engineer who signed and sealed the report, as well as any other person designated by the engineer to answer questions about the report. This contact information is helpful to the Department if any questions about the contents of the report should arise during the review of an application.

Proposed N.J.A.C. 7:13-15.4(a)3 requires that an engineering report must include all supporting hydrologic, hydraulic, flood storage volume, stormwater and structural calculations necessary to demonstrate that an application meets the requirements of this chapter. This requirement is proposed so that applicants provide the Department with all supporting calculations in order to facilitate the Department's review of an application.

Proposed N.J.A.C. 7:13-15.4(a)4 requires that an engineering report must include a narrative that explains all submitted calculations and describes why each particular calculation or methodology was used in the report. It is the Department's experience that calculations are sometimes submitted as part of an application without any explanation from the applicant. This

creates an unnecessary burden on the Department, since a certain amount of review time must be expended simply to determine the need, purpose and scope of these undefined calculations. This requirement is, therefore, proposed to advise applicants that a narrative is necessary, as it facilitates the Department's review of their application.

Proposed N.J.A.C. 7:13-15.4(a)5 requires that an engineering report must include all maps, references and other supporting materials that were used to prepare the submitted calculations. This provision is necessary so that applicants provide the Department with all supporting technical materials in order to facilitate the Department's review of an application.

Proposed N.J.A.C. 7:13-15.4(a)6 requires that, in the case of a verification application, an engineering report must include all flood maps, drainage area maps and other material used to determine the flood hazard area and/or floodway limits, since this information is necessary to demonstrate which methodology under proposed N.J.A.C. 7:13-3 was used and so that the Department can verify the accuracy of the verification.

Proposed N.J.A.C. 7:13-15.4(a)7 requires that, in the case of an individual permit application, the total area of impervious surface proposed and the total land area that will be disturbed must be disclosed in the engineering report. This information is necessary to determine whether the project is subject to the Department's stormwater management rules at N.J.A.C. 7:8, as provided at proposed N.J.A.C. 7:13-11.2.

In cases where stormwater management is required for an individual permit pursuant to N.J.A.C. 7:13-11.2, proposed N.J.A.C. 7:13-15.4(a)8 requires that the report must include an explanation of how various requirements of the Stormwater Management rules at N.J.A.C. 7:8 are satisfied, including whether nonstructural stormwater management strategies have been maximized, a demonstration of how the project meets groundwater recharge standards, a table

comparing existing and proposed stormwater discharges for various storm events to demonstrate compliance with runoff quantity standards, and an explanation of how the project meets water quality standards. Various citations to the Stormwater Management rules are also provided to help applicants find details on these requirements.

N.J.A.C. 7:13-15.5 Environmental report

Proposed N.J.A.C. 7:13-15.5(a) includes basic requirements for an environmental report, which must be submitted with applications for certain individual permits pursuant to proposed N.J.A.C. 7:13-9.2(b)4 and 10.6(e). The material required in the environmental report is similar to the material listed in existing N.J.A.C. 7:13-4.1(j) with added detail as well as clarification of the content and focus of the report.

The material required for an environmental report falls into three basic categories: a written narrative that describes the proposed design and the construction techniques that will be employed, as discussed in proposed N.J.A.C. 7:13-15.5(a)1; maps providing an environmental inventory of the site, as discussed in proposed N.J.A.C. 7:13-15.5(a)2; and an analysis that focuses on any potential adverse environmental impacts the project may cause and describes how these potential impacts will be minimized, as discussed in proposed N.J.A.C. 7:13-1 5.5(a)3.

The narrative required at proposed N.J.A.C. 7:13-15.5(a)1 continues and simplifies the requirement at existing N.J.A.C. 7:13-4.1(j) and (j)1 for a description of the scope and nature of the proposed activity. A further requirement at existing N.J.A.C. 7:13-4.1(j)1 for an explanation of why the proposed structures and their location are the most appropriate for the site and why they minimize to the greatest extent possible any adverse affects upon the pre-construction character of the site, is relocated to proposed N.J.A.C. 7:13-15.5(b), which applies to projects

that are likely to cause an adverse impact to any resource listed in proposed N.J.A.C. 7:13-15.5(a)3.

The requirement at proposed N.J.A.C. 7:13-15.5(a)2 for maps of the site continues the requirement at existing N.J.A.C. 7:13-4.1(j) for the submittal of a soil survey, and adds a requirement for a freshwater wetlands map, since the Department has found such maps to be helpful in its evaluation of projects.

The analysis required at proposed N.J.A.C. 7:13-15.5(a)3 continues the requirement at existing N.J.A.C. 7:13-4.1(j), (j)2, (j)4 and (j)7, and consolidates them into one analysis that address all environmentally sensitive areas under the jurisdiction of this chapter. Specifically, the analysis required in proposed N.J.A.C. 7:13-15.5(a)3 specifies that all temporary and permanent adverse impacts of each proposed activity on any channels, riparian zones, fishery resources, threatened or endangered species, and regulated waters must be discussed.

Certain requirements for an environmental report under existing N.J.A.C. 7:13-4.1(j) are proposed for relocation to other sections of this chapter, as the Department has determined that these items are more appropriately included elsewhere. Specifically, the requirement at existing N.J.A.C. 7:13-4.1(j)3 that the environmental report identify the State plane coordinates of the site is instead included in the materials required for a LURP-1 application form at proposed N.J.A.C. 7:13-15.1(f). Similarly, the requirement at existing N.J.A.C. 7:13-4.1(j)5 that the environmental report address environmental impacts of any proposed stormwater management basins is instead included at proposed N.J.A.C. 7:13-11.2, which sets forth requirements for stormwater management. Finally, the requirement at existing N.J.A.C. 7:13-4.1(j)6 that the environmental report include a mitigation plan for any potential exposure of acid-producing soils is instead included at proposed N.J.A.C. 7:13-10.7(b) and (c), which sets forth specific guidelines for

properly managing these soils during construction.

Proposed N.J.A.C. 7:13-15.5(b) sets forth additional information required in an environmental report for a project that is determined to likely cause a significant level of environmental damage, based on the material submitted under proposed N.J.A.C. 7:13-15.5(a). Justification for the project, an alternatives analysis and a description of methods to minimize such impacts must be submitted. This is continued from existing N.J.A.C. 7:13-4.1(j)1 and 2, and is rewritten for clarity.

Proposed N.J.A.C. 7:13-15.5(c) addresses requirements for a survey for threatened or endangered species, including requirements governing the timing and techniques for such a survey, and the necessary education and experience for a person performing such a survey. These requirements are found at existing N.J.A.C. 7:13-3.9(b) and 4.1(j)7, are rephrased and simplified in the proposed rule for clarity.

Subchapter 16. Notice of Applications

Proposed Subchapter 16 includes public notice requirements for applications, found in existing N.J.A.C. 7:13-4.2 and in the Ninety-Day Construction Permits rules, N.J.A.C. 7:1C. The proposed rules require notice for certain verifications and for all individual permits (except for certain individual permits related to private residences and appurtenant structures), whereas no notice is required under existing rules for certain minor permits. However, the proposed rules in some cases reduce the number of persons who must receive notice.

The subchapter first sets forth general notice requirements at proposed N.J.A.C. 7:13-16.1, then specifies the persons who must receive notice depending on the type of application in proposed N.J.A.C. 7:13-16.2 and 16.3. Provisions specifying how an applicant must document

that notice has been performed are set forth at proposed N.J.A.C. 7:13-16.4, and provisions for newspaper notice under certain conditions are set forth at proposed N.J.A.C. 7:13-16.5. The contents of the notice of an application are addressed at proposed N.J.A.C. 7:13-16.6.

N.J.A.C. 7:13-16.1 General requirements for public notice of applications

Proposed N.J.A.C. 7:13-16.1(a) sets forth the scope of the subchapter, and lists the applications to which the notice requirements apply. As described at proposed N.J.A.C. 7:13-16.2, notice is required for verifications that are based on either hydraulic analysis or approximation. Proposed N.J.A.C. 7:13-16.3 requires notice for individual permits that are not solely associated with the construction of a private residence or appurtenant structure. Notice is required for these activities under the existing rules, and it is the Department's experience that public input during the review of these applications is useful.

Proposed N.J.A.C. 7:13-16.1(a) also lists the approvals for which noticing is not required. Notice requirements do not apply to an application for an applicability determination, since this determination represents the Department's decision on whether the proposed activity in the proposed location is subject to this chapter. Public comment would not impact the Department's analysis of jurisdiction. Notice requirements do not apply to permits-by-rule or general permits, since the conditions of these approvals are contained in the proposed rules and will have already been subject to public notice and comment through the rulemaking process. Notice requirements do not apply to an application for an emergency permit, since this would hamper the quick approval necessary in an emergency situation. However, notice is required for the application for an individual permit that must be submitted as a follow-up to the emergency permit. Notice is not required for an application for a revision to a verification or an individual permit. The

Department has limited the types of changes that can be made through a revision to those which do not alter the basic project and therefore do not need notice.

Proposed N.J.A.C. 7:13-16.1(b) provides that notice must be provided no more than 30 calendar days prior to submittal of the application. This is a new requirement, designed to ensure that the notice of an activity is given in a time frame that allows meaningful input from the public.

Proposed N.J.A.C. 7:13-16.1(c) addresses the situation where an application is originally found to be incomplete and is later resubmitted to the Department. In such a case, the notice must be repeated unless the resubmission is made within 90 calendar days of the original notice. It is the Department's experience that site conditions and other factors relevant to public noticing can change if a substantial amount of time passes between the original application and its resubmission. A 90-day limit is, therefore, proposed as a reasonable amount of time to resubmit the application without a significant risk of altered conditions. Noticing must also be repeated if the Department determines that the application has been substantially altered upon resubmission. It is appropriate for the public to be notified of a substantially redesigned project, since the nature of the comments received may change as a result of the redesign of the site.

Proposed N.J.A.C. 7:13-16.1(d) addresses the situation where an application covers both a verification and an individual permit. In such a case, notice requirements for both approvals must be satisfied, although under proposed N.J.A.C. 7:13-16.5, one combined notice may be used for an application that requests more than one approval.

Proposed N.J.A.C. 7:13-16.1(e) provides that notice must be by certified mail, with return receipts requested, and must be documented as set forth at proposed N.J.A.C. 7:13-16.4. An exception is made for cases where newspaper notice is permitted under proposed N.J.A.C. 7:13-

16.2(a)3, 16.3(c) and 16.3(d).

N.J.A.C. 7:13-16.2 Public notice requirements for an application for a verification

Proposed N.J.A.C. 7:13-16.2 specifies who must be notified of an application for a verification. The persons provided notice under the proposed rule are similar to those provided notice of the establishment of certain types of stream encroachment lines at existing N.J.A.C. 7:13-4.2(a). Under the existing rules, notice is required for major elements, which includes establishing stream encroachment lines based on calculations. Similarly, notice is required for verifications that are based on Methods 4 and 6, which require a hydraulic analysis. Notice is also required for verifications based on Method 5, which relies on the new approximate method at proposed N.J.A.C. 7:13-3.5. This is consistent with the existing rules in that stream encroachment lines based on State or FEMA maps are considered minor elements and do not require noticing.

Since a verification only establishes flood elevations and boundaries, and does not include authorization for construction, the list of persons provided notice has been simplified. Three copies are to be sent to the municipal clerk in each municipality in which the site is located as well as one copy to the county clerk in each county in which the site is located. Notice must also be made to any property within 200 feet of the boundary of the site. However, any property within 200 feet of the site, which is located outside the flood hazard area, can be notified by newspaper rather than by certified mail. This provision is proposed so that applicants are not required to provide certified mail notice to properties that are so removed from a site and the flood hazard area that the proposed verification cannot affect them.

N.J.A.C. 7:13-16.3 Public notice requirements for an application for an individual permit

Proposed N.J.A.C. 7:13-16.3 sets forth requirements regarding who must receive notice of an application for an individual permit. In general, these requirements are simpler than those in the existing rules at N.J.A.C. 7:13-4.2. However, the proposed rule requires some type of notice for all applications for an individual permit (except private residences and appurtenant structures under proposed N.J.A.C. 7:13-16.3(c)1), whereas the existing rules do not require notice of an application for some minor projects.

Under proposed N.J.A.C. 7:13-16.3(a)1 and 3, as with a verification application, both the municipal and county clerk must receive notice of an application for an individual permit. However, proposed N.J.A.C. 7:13-16.3(a)2 also requires notice to any municipality within one mile of the site. This is similar to the requirement at existing N.J.A.C. 7:13-4.2(a)1 that notice be provided to "the municipality across the watercourse and the municipality next downstream on both sides of the waterway, if within one mile."

Proposed N.J.A.C. 7:13-16.3(a)4 requires notice to the local Soil Conservation District if the project comes under its jurisdiction. This provision is continued from existing N.J.A.C. 7:13-4.2(a)4, which requires that the local Soil Conservation District be notified for many projects. The proposed rule limits notification to those projects which would actually fall under the Soil Conservation District's jurisdiction. For instance, Soil Conservation Districts do not generally regulate or review construction activities that disturb less than 5,000 square feet of land. As such, there is no benefit in requiring applicants who are proposing projects below this threshold to notify the local Soil Conservation District.

Proposed N.J.A.C. 7:13-16.3(a)5 requires that nearby property owners must be given notice, except for cases described in proposed N.J.A.C. 7:13-16.3(c).

Proposed N.J.A.C. 7:13-16.3(b) provides that public notice under proposed N.J.A.C. 7:13-16.3(a) does not need to be provided for projects that involve only one private residence or an appurtenant structure. This is continued from existing N.J.A.C. 7:13-4.2(a) which does not require notice for minor projects such as these.

Proposed N.J.A.C. 7:13-16.3(c) sets forth two exceptions to the certified mail public notice requirements to property owners within 200 feet of the site at proposed N.J.A.C. 7:13-16.3(a)5. It has been the Department's experience that notice to neighboring landowners can be onerous in situations where the site is very large, or where a linear development covers more than one-half mile. Especially in heavily developed areas with multi-family housing, providing direct notice can be very time consuming and expensive, even though it often results in little or no response from the public. Therefore, the proposed subsection provides alternative notice methods for some of these cases. Some of the proposed provisions are continued from the existing provisions for applications for linear development at N.J.A.C. 7:13-4.2(b).

Proposed N.J.A.C. 7:13-16.3(c)1 provides that newspaper notice can be made instead of certified mail notice to any property located outside the flood hazard area and at least 500 feet from any proposed regulated activity. It has been the Department's experience that properties located outside the flood hazard area and at a significant distance from the project area itself (as opposed to the property line, which may be some distance from the actual portion of the site to be developed) will not be affected by permitted activities. This is a new provision, intended to relieve applicants from unnecessary notice that would otherwise be required under proposed N.J.A.C. 7:13-16.3(a)5.

Proposed N.J.A.C. 7:13-16.3(c)2 sets forth special notice provisions for an application for a linear development that is more than one-half mile long. Examples of linear development include

roadways, railroads, utility lines and channel cleaning projects. The proposed provision allows newspaper notice to some neighboring landowners and is similar to existing N.J.A.C. 7:13-4.2(b). These provisions are also similar to those for individual permit applications for large sites in proposed N.J.A.C. 7:13-16.3(c)1, in that the special notice requirements satisfy only the requirement at proposed N.J.A.C. 7:13-16.3(a)5 with respect to nearby properties, and not notice requirements to municipal or county clerks.

Proposed N.J.A.C. 7:13-16.3(d) sets forth special notice requirements for an application for the periodic maintenance, repair or replacement of a utility line over a five-year period under proposed N.J.A.C. 7:13-11.9(f). Separate notice requirements apply for the initial application and for each subsequent maintenance event. These special requirements are intended to relieve the applicant from multiple notices for such projects. A number of utility companies in New Jersey have large pipeline networks that cover hundreds of municipalities. The maintenance permit under proposed N.J.A.C. 7:13-11.9(f) is designed to facilitate the normal upkeep of these pipelines, which is beneficial to both public safety and the environment. It has been the Department's experience, however, that while a pipeline network may exist in hundreds of municipalities, only a small number of municipalities may actually be impacted by maintenance events occurring over the term of the permit. To require the applicant to send certified mail notice to hundreds of municipalities, when work will actually occur in only a few of them, is wasteful and burdensome to the applicant and serves no environmental purpose. Therefore, only newspaper notice is required upon application for the individual permit, and the applicant is instead required to provide certified mail notice to the municipality five working days prior to the maintenance event.

N.J.A.C. 7:13-16.4 Documenting public notice of an application

Proposed N.J.A.C. 7:13-16.4 sets forth requirements by which an applicant must document that the public notice requirements for an application have been satisfied. An applicant must submit certified mail return receipts for each notice sent, a list of the persons to whom notice was provided, and a copy of any newspaper notice published. This is not detailed in the existing rules, but codifies current Department practice. Applicants sometimes submit a handful of receipts with no list of addresses or other means of documentation. Sorting through these receipts to determine whether the notice requirements are met needlessly slows down the processing of the application. An applicant may either submit the white receipts (which demonstrates that the mail was sent by the applicant) or the green return receipt cards (which demonstrates that the mail was delivered). However, if only the white receipts are submitted with an application, the applicant must subsequently supply the green cards to the Department once they are received from the post office.

N.J.A.C. 7:13-16.5 Newspaper notice

Proposed N.J.A.C. 7:13-16.5 sets forth requirements for the newspaper notices required under this section. The newspaper notice must include information pertinent to the proposed project as well as contact information for any questions. This is not detailed in the existing rules, but codifies current Department practice.

N.J.A.C. 7:13-16.6 Contents of public notice of an application

Proposed N.J.A.C. 7:13-16.6(a) sets forth requirements for the contents of a notice of an application, except for a newspaper notice under the special provisions for large sites and linear

developments at proposed N.J.A.C. 7:13-16.5. Each notice must include a copy of the LURP-1 form and a letter providing certain basic information. Model letters are supplied in proposed N.J.A.C. 7:13-16.6(c), (d) and (e) which must be filled out and included as appropriate for the particular approval sought from the Department. Finally, if an application for an individual permit includes a request for a hardship exception, additional information must be provided. This is the same information required under the existing rules at N.J.A.C. 7:13-4.8, but the proposed rule adds more detail.

Proposed N.J.A.C. 7:13-16.6(b) specifies that any notice sent to a municipal or county clerk must include three copies of the notice and a letter requesting that the clerk send copies of the notice to other municipal entities. This is consistent with the Municipal Land Use Law and will save applicants the burden and expense of sending separate notices to different branches of the same governmental entity.

Proposed N.J.A.C. 7:13-16.6(c), (d) and (e) provide model letters that must be sent under proposed N.J.A.C. 7:13-16.6(a)2. Proposed N.J.A.C. 7:13-16.6(c) contains the letter that must be sent for a verification application, proposed N.J.A.C. 7:13-16.6(d) contains the letter that must be sent for an individual permit application and proposed N.J.A.C. 7:13-16.6(e) contains the letter that must be sent for a joint verification and individual permit application.

Subchapter 17. Application Fees

The proposed subchapter on application fees in large part continues provisions found in the existing Ninety-Day Construction Permits rules at N.J.A.C. 7:1C-1.5(a)4. The provisions in the Ninety-Day Construction Permits rules at N.J.A.C. 7:1C-1.5(a)4 are being repealed, as described previously in this Summary. The fee provisions are proposed to be relocated into the Flood

Hazard Area Control Act rules from the Ninety-Day Construction Permits rules at N.J.A.C. 7:1C. This will consolidate all requirements that apply to flood hazard area permits into one chapter. The stream encroachment fees were most recently amended effective January 3, 2006 (see 38 N.J.R. 134(a)) and only minor modifications to the fee schedule are proposed herein. The reference to major and minor permits is removed, since this distinction is not continued in these proposed new rules. A new fee schedule is also proposed for verifications (the fees for which match the existing fees for stream encroachment lines), general permits, the transfer of an approval to a new owner of a property, and the revision of a Department flood hazard area delineation.

N.J.A.C. 7:13-17.1 Application fees

Proposed N.J.A.C. 7:13-17.1 sets forth basic provisions that apply to all application fees. Proposed N.J.A.C. 7:13-17.1(a) lists the applications covered by the subchapter. Proposed N.J.A.C. 7:13-17.1(b) lists applications for which no fees are required.

Proposed N.J.A.C. 7:13-17.1(c) provides that an application fee is calculated by summing the separate fees for each project element of any individual permit, any verification being sought and any other approval for which an application is submitted. This is the same method used to determine the overall application review fee provided by the existing fee schedule.

Proposed N.J.A.C. 7:13-17.1(d) sets forth the acceptable means of payment.

Proposed N.J.A.C. 7:13-17.1(e) provides the method of determining the application fee for a project that requires Coastal Area Facilities Review Act (CAFRA), waterfront development, coastal wetlands and/or freshwater wetlands approval in addition to a flood hazard area approval. In such a case, the total application fee is the sum of the highest fee among the required

approvals and 75 percent of the fees for all other required approvals. This is found in the Ninety-Day Construction Permits rules at N.J.A.C. 7:1C-1.5(c).

Proposed N.J.A.C. 7:13-17.1(f) provides that, if a fee under this chapter is subject to N.J.A.C. 7:1L, it may be paid in installments.

Proposed N.J.A.C. 7:13-17.1(g) explains how to determine the application fee for the review of certain linear projects where the fee is based on the length of the project. In such cases, the length of the feature shall be measured along the centerline of the channel. Along intermittent streams and impounded areas such as lakes or ponds where no channel is discernible, the length of the channel (for calculating fees under this section) shall be determined by measuring the approximate centerline of the feature.

Proposed Table E sets forth the proposed application fees for all approvals under this chapter as follows.

Application fees for a verification

Application fees for a verification are identical to the fees currently established at N.J.A.C. 7:1C-1.5(a)4 Table 1 for stream encroachment lines. The fee for lines based on calculations is currently $ 3,000 plus $ 300.00 per each 100 linear feet of channel (or portion thereof) being delineated. The fee for lines not based on calculations is $ 500.00 regardless of the length of the delineation. This approach is continued in the proposed fees for verifications based on the six proposed methods of delineation set forth at proposed N.J.A.C. 7:13-3.

A note in the table indicates that the verification fee does not apply for certain verifications that are submitted concurrently with any general permit authorization for which verification of the flood hazard area is required to determine compliance with the general permit, or with an

individual permit application that is solely for the construction of a private residence or the construction of a building appurtenant to a private residence, such as a garage, barn or shed. The verifications for which no fee is required are those which do not require the Department to review calculations in order to determine whether the verification complies with the requirements of this chapter. This is consistent with the current fee schedule at N.J.A.C. 7:1C-1.5(a)4. It is the Department's experience that the effort required to review an application for this type of verification is minor when submitted concurrently with a permit application for such activities. Therefore, the $ 1,000 individual permit application fee sufficiently covers the review of both the verification and the individual permit applications and no separate verification fee is required. For similar reasons, the note also indicates that the verification fee does not apply for these verifications that are submitted with an application for a general permit authorization. As in the cases described above, the general permit application fee is sufficient to include the review of this type of verification in those few cases when a verification is required concurrent with a general permit authorization.

Application fees for a general permit authorization

The Department is proposing fees for 14 of the 16 general permits that will be established under these new rules (see Subchapter 8). A $ 500.00 application fee is proposed for all general permits except proposed general permits 1 and 6. The Department anticipates the review effort for these general permits to be equivalent to the review effort needed for a flood hazard area verification that is not based on calculations (as described above). Proposed general permit 6, however, is intended to allow homeowners to safely and easily rebuild damaged or destroyed homes. In order to facilitate and encourage this proposed general permit, the Department is not

proposing an application fee for these general permits. Furthermore, proposed general permit 1 implements the provisions of the Flood Hazard Area Control Act at N.J.S.A. 58:16A-67, which establishes application and review procedures for certain stream cleaning projects. Since the statute does not provide for an application fee for stream cleaning projects that meet the requirements of the Act, there is no fee proposed for the review of an application for authorization under this general permit.

Application fees for an individual permit

The proposed fees for individual permits are continued from the existing fee rules. However, the reference to major and minor elements is deleted since this distinction is not made in the proposed new rules. The proposed additional fees if a permit is for a major development (requiring a stormwater review) are also continued without change from the existing fee rules.

Application fees for a revision of a verification or individual permit

As set forth at proposed N.J.A.C. 7:13-13.1 and 13.3, there are two types of revisions, major and minor. A major revision requires the review of calculations whereas the review of a minor revision does not. This distinction is continued from existing N.J.A.C. 7:1C-1.5(d)1, which sets forth these two types. The proposed rules give the name "major" and "minor" to these types of revisions for easier identification. The proposed fee table simply relocates the existing fees into a table format.

A new provision is proposed for a revision of a Department delineation at proposed N.J.A.C. 7:13-13.4, which is not provided under the existing rules. There is no proposed fee for a minor revision, as described at proposed N.J.A.C. 7:13-13.4(b)1. This reflects the Department's

longstanding policy of making simple amendments to delineations at no cost. However, the proposed fee for a major revision, as described at proposed N.J.A.C. 7:13-13.4(b)2, is equal to the proposed fee for a verification based on Methods 4 and 6, since the revision of a Department delineation involves the same level of review effort. In all three cases (Method 4, Method 6 and the revision of a Department delineation), a review of hydrologic and/or hydraulic calculations must be performed in order to determine whether the proposed flood hazard area and/or floodway limits are accurate. Although the source of the data used in these three methods may vary, the actual calculations themselves are equivalent and so the Department's review effort is equivalent. It is therefore appropriate to assess equivalent application review fees for these three methods.

Application fees to transfer a verification or individual permit

The proposed fee table includes an application fee for the transfer of an approval to a new owner of a property, pursuant to proposed N.J.A.C. 7:13-14.1. The proposed fee to transfer an approval is $ 200.00. The Department has determined that this fee is appropriate to cover the relatively minimal time necessary to review and approve a transfer request, and is equal to the existing fee for a minor revision to an individual permit.

Proposed N.J.A.C. 7:13-17.1(h), (i) and (j) establish a procedure whereby application fees under this chapter are to be determined and annually adjusted to cover the cost of running the flood hazard area regulatory program. These provisions are continued from the existing Ninety-Day Construction Permits rules at N.J.A.C. 7:1C-1.5(h), (i) and (j), respectively, and are proposed for relocation to N.J.A.C. 7:13 in order to consolidate all flood hazard area fee provisions in one chapter.

Subchapter 18. Requests for Adjudicatory Hearings

N.J.A.C. 7:13-18.1 Requests for adjudicatory hearings

Proposed Subchapter 18, which establishes the procedures for hearing requests, replaces existing N.J.A.C. 7:13-4.10, with the revisions described below.

Proposed N.J.A.C. 7:13-18.1(a) explains that a hearing may be requested for verifications, general permit authorizations and individual permits.

Proposed N.J.A.C. 7:13-18.1(b) and (c) include requirements for the content and timing of a submittal requesting an adjudicatory hearing. The substance of these provisions is continued from the existing rules at N.J.A.C. 7:13-4.10. The proposed rule provides more specificity regarding the content of the hearing request, and also changes the process and timeframe for filing the hearing request. Under the existing rules, a hearing request must be filed within 10 calendar days after publication of the permit decision in the DEP Bulletin, or within 10 calendar days of publication of the decision by the permittee, whichever occurs first. Within 14 days of the date the initial request was postmarked, the requester must submit an additional statement describing how the requester is aggrieved by the decision, and which findings of fact and conclusions of law are being challenged. This two-stage approach has proved complex and confusing to applicants and difficult to administer. The proposed rule does not include the option for the permittee to publish notice of the decision, and changes the two-stage hearing request process to require a single request, submitted within 30 calendar days of publication of notice of the decision in the DEP Bulletin. The Department believes that this will provide adequate time for requesting a hearing, and align the hearing request process under these rules with those of

other Land Use permitting programs.

Proposed N.J.A.C. 7:13-18.1(d) is a new provision not included in the existing rule. It provides that alternative dispute resolution may be requested as part of a hearing request. The Department's Office of Dispute Resolution mediates disputes between the Department and other parties in an effort to resolve these disputes with less cost and acrimony than may be attendant on formal appeal proceedings. The Department determines which matters are appropriate for mediation by the Office of Dispute Resolution.

Proposed N.J.A.C. 7:13-18.1(e) continues, with modifications, provisions at existing N.J.A.C. 7:13-4.10(c) regarding the stay of a permit for which a hearing is requested. Under the new rule, if the hearing request is filed by the permittee, the hearing request will automatically stay the permit, and all permitted activities must stop unless the Department issues an exception to the stay, for cause. The automatic stay will prevent a permittee from undertaking activities while contesting permit conditions that are integral to the Department's finding that the permit application met the standards for approval under the rules. There is no need to stay a verification for which a hearing is requested, since a verification merely establishes flood hazard area and/or floodway limits on a site and does not authorize the undertaking of regulated activities. If a hearing request is filed by a person other than the applicant, that person may also request a stay. The Department will impose a stay under appropriate circumstances for good cause.

Proposed N.J.A.C. 7:13-18.1(f) continues, with clarifications, part of existing N.J.A.C. 7:13-4.10(d), and establishes that the Department will notify the requester if the hearing request is granted or denied. If it is granted, the Department will refer the matter to the Office of Administrative Law for proceedings consistent with the Administrative Procedure Act.

Proposed N.J.A.C. 7:13-18.1(g) establishes the procedures for the publication of notice for

public comment of a proposed settlement where agreement has been reached between the parties on a matter for which a hearing was requested and a Department approval of a regulated activity will result. This is a new provision, reflecting the Department's current practice for settlements and corresponds to the public notice and opportunity for comment provided on permit applications.

Proposed N.J.A.C. 7:13-18.1(h) continues, with clarifications, part of existing N.J.A.C. 7:13-4.10(d) regarding issuance by the Commissioner of a final decision after receipt of an initial decision from the Office of Administrative Law.

Proposed new N.J.A.C. 7:13-18.1(i) states that the final decision is final agency action under the Administrative Procedure Act and therefore is appealable only to the Appellate Division of the New Jersey Superior Court, in accordance with the applicable court rules.

Proposed N.J.A.C. 7:13-18.1(j) provides that the section does not provide a right to a hearing in contravention of the Administrative Procedure Act, specifically, N.J.S.A. 52:14B-3.1 through 3.3, which pertain to requests for hearings by "third parties." This is found in existing N.J.A.C. 7:13-4.10(e).

Subchapter 19. Enforcement

N.J.A.C. 7:13-19.1 Penalties

The existing rules at N.J.A.C. 7:13-5.4 provide that violations of the rules are subject to penalties under the Flood Hazard Area Control Act, N.J.S.A. 58:16A-63, and the New Jersey Water Pollution Control Act. Proposed new N.J.A.C. 7:13-19.1 tracks the language of the Flood Hazard Area Control Act, N.J.S.A. 58:16A-63. Proposed N.J.A.C. 7:13-19.1(a) provides that the

Department may seek a civil penalty and/or injunctive relief for violations, and establishes a penalty of up to $ 2,500 for knowing violations, and up to $ 1,500 for other violations. Violations determined to be minor will be subject to a grace period, in accordance with proposed new N.J.A.C. 7:13-19.2, as described below.

Proposed N.J.A.C. 7:13-19.1(b) provides that penalties accrue on a daily basis for continuing violations, and that each day a violation continues is considered a separate offense.

N.J.A.C. 7:13-19.2 Grace period applicability; procedures

Proposed new N.J.A.C. 7:13-19.2 categorizes violations of the Flood Hazard Area Control Act and this chapter as either minor or non-minor for the purpose of providing grace periods in accordance with N.J.S.A. 13:1D-125 et seq., commonly known as the Grace Period Law.

On December 22, 1995, the Legislature enacted the Grace Period Law, N.J.S.A. 13:1D-125 et seq., which requires the establishment of procedures to ensure the consistent application of grace (compliance) periods for minor violations of certain environmental statutes. Pursuant to the Grace Period Law, the Department is required to designate, as minor or non-minor violations, violations of rules contained in 16 environmental statutes. Under the Grace Period Law, any person responsible for a minor violation is afforded a period of time to correct the violation. This period of time is known as a grace period. If the minor violation is corrected as required, then the Department will not seek to impose a penalty. In those cases where a violation is not corrected within the grace period, the Department may pursue enforcement action in accordance with its statutory authority including, but not limited to, the imposition of penalties as may be appropriate within the exercise of the Department's traditional, judicially recognized enforcement discretion.

The Grace Period Law does not affect the Department's enforcement authority, including the

exercise of enforcement discretion, to treat a violation as minor. In those situations where a violation is labeled as minor in this proposed rule, but in fact the specific violation as it occurred does not fulfill all the statutory requirements for a minor violation (N.J.S.A. 13:1D-129(b) and proposed N.J.A.C. 7:13-19.2(d)), the Department reserves its discretion to treat the violation as non-minor.

The Department interprets the Grace Period Law to give it the flexibility to re-classify a minor violation as non-minor if one or more of the Grace Period Law requirements have not been met. For instance, the Department believes that the Legislature did not intend for a violation which actually results in serious harm to the public, the environment or to natural resources to be considered minor for grace period purposes. This is because one of the criteria for a minor violation is that it impose minimal risk to public health, safety and natural resources. Since the statute intends that the Department consider the circumstances of a particular violation to determine, for example, whether there has been a similar or the same violation in the preceding twelve months or a pattern of illegal conduct, it is not inconsistent with the legislative intent to allow the Department the flexibility to re-classify a violation as non-minor under the particular circumstances of a violation.

In designating, through rulemaking, types or categories of violations as minor, the Department must apply the criteria set forth in the law at N.J.S.A. 13:1D-129(b). These criteria are as follows:

(1) The violation is not the result of the purposeful, knowing, reckless or criminally negligent conduct of the person responsible for the violation;

(2) The violation poses minimal risk to the public health, safety and natural resources;

(3) The violation does not materially and substantially undermine or impair the goals of the

regulatory program;

(4) The activity or condition constituting the violation has existed for less than 12 months prior to the date of discovery by the Department or a local government agency;

(5) In the case of a permit violation, the person responsible for the violation has not been identified in a previous enforcement action by the Department or a local government agency as responsible for a violation of the same requirement of the same permit within the preceding 12 month period;

(6) In the case of a violation that does not involve a permit, the person responsible for the violation has not been identified in a previous enforcement action by the Department or a local governmental agency as responsible for the same or a substantially similar violation at the same facility within the preceding 12 month period;

(7) In the case of a violation of the Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq.; the Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq.; The Wetlands Act of 1970, N.J.S.A. 13:9A-1 et seq.; the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq., or any rule or regulation promulgated thereunder, or permit issued pursuant thereto, the person responsible for the violation has not been identified in a previous enforcement action by the Department or a local government agency as responsible for the same or a substantially similar violation at the same site or any other site within the preceding 12-month period;

(8) In the case of any violation, the person responsible for the violation has not been identified by the Department or a local government agency as responsible for the same or substantially similar violation at any time that reasonably indicates a pattern of illegal conduct and not isolated incidents on the part of the person responsible; and

(9) The activity or condition constituting the violation is capable of being corrected and

compliance achieved within the period of time prescribed by the Department.

The Grace Period Law also requires the Department to establish the length of the grace period, which may be no fewer than 30 days or more than 90 days (unless extended), based upon the nature and extent of the minor violation and a reasonable estimate of the time necessary to achieve compliance. The Department may establish a special class of minor violations that, for public health and safety reasons or regulatory mandates, must be corrected within a period of 30 days or less. The Department has determined that none of the violations proposed to be designated as minor would have health and safety ramifications requiring a special class of minor violations necessitating less than 30 days to comply. Therefore, the Department is not proposing to establish such a special class of minor violations for the Flood Hazard Area Control Act Rules.

Of the criteria provided by the Grace Period Law, only criteria (2), (3) and (9), as listed above, may pertain to all violations of a particular regulatory requirement. Therefore, the Department determined that those violations of the Flood Hazard Area Control Act and rules that pose minimal risk to public health, safety, and the environment, do not undermine or impair the goals of the program, and can be corrected within a time period of up to 30 days should be designated as minor. See Table F at N.J.A.C. 7:13-19.2(f), as described below.

The additional statutory criteria, (1), (4), (5), (6), (7), and (8) above, regarding, respectively, the intent of the violator, the duration of the violation, and whether it is a repeat offense, are fact-specific for each violation and must be considered on a case-by-case basis. Thus, each violation listed at N.J.A.C. 7:13-19.2(f) Table F that is identified as minor will be eligible for a grace period only if it meets the additional statutory criteria set forth in proposed rule N.J.A.C. 7:13-19.2(d)1 through 6.

To implement the Grace Period Law and develop proposed N.J.A.C. 7:13-19.2, the Department utilized the criteria established by the Grace Period Law and the priorities of the flood hazard area control program to review potential violations of the Flood Hazard Area Control Act and rules to determine if they should be classified as minor. The Department initiated an informal process to discuss potential grace period provisions and receive input from interested parties. As part of this process, the Department developed a discussion document, which set forth a proposed list of non-minor violations of the existing Flood Hazard Area Control Act rules. Any violations not identified in the discussion document as non-minor would be designated as minor by default. The discussion document was posted on the Department's Compliance and Enforcement website on January 3, 2005 as a Compliance Advisory. On January 24, 2005, the Department conducted an informal workshop regarding the discussion document and accept public comment. The Department accepted written comments on the discussion document until February 4, 2005. The Department received several written comments. The most frequent comments received questioned the appropriateness of the promulgation of any grace period rules for land use programs, and questioned the Department's decision to identify only non-minor violations and designate all other violations as minor by default.

In response to the comments regarding the inappropriateness of establishing any land use grace period rules, the Department notes that the Grace Period Law mandates that the Department promulgate rules designating minor and non-minor violations for enumerated environmental laws, including the Freshwater Wetlands Protection Act, CAFRA, the Wetlands Act of 1970, and the Flood Hazard Area Control Act. In response to the comments questioning the Department's identification of only non-minor violations in the discussion document, the Department in proposed N.J.A.C. 7:13-19.2 has identified violations of these proposed new

Flood Hazard Area Control Act rules and designated them as either minor or non-minor pursuant to the criteria identified in the Grace Period Law. (See proposed N.J.A.C. 7:13-19.2(f) Table F.) If a person commits a violation not specifically identified in Table F, the Department will determine whether the violation is minor or non-minor by comparison with the violations identified in Table F in accordance with proposed N.J.A.C. 7:13-19.2(c).

Violations identified by the Department as having the potential to impact the physical resource in any way are proposed to be classified as non-minor. Violations designated as non-minor comprise the majority of potential violations of the Flood Hazard Area Control Act and rules. Violations proposed to be classified as minor include the failure to submit certain documents to the Department in a timely manner. For example, a permit issued pursuant to these proposed new Flood Hazard Area Control Act rules may require a permittee to submit documents to the Department as prescribed in the permit. Generally, submittal of documents is an administrative requirement. While the information contained in the document is important, a short delay in filing of the document will not have immediate environmental consequences. Therefore, it is appropriate under the Grace Period Law for the Department to allow a grace period to enable the violator to come into compliance by submitting the documents. If the permittee responsible for submitting the documents fails to produce and submit the required documents within the grace period, the Department may, in accordance with the provisions of the Act and this chapter, seek to impose a penalty that is retroactive to the date the notice of violation was issued.

It should be noted that even violations designated as minor must be corrected. However, in accordance with the Grace Period Law, those responsible for minor violations are afforded a period to come into compliance prior to the imposition of penalties.

Proposed N.J.A.C. 7:13-19.2(a) specifies that a violation of the rules that qualifies as a "minor violation" shall not result in imposition of a penalty provided the violation is corrected during the applicable grace period in accordance with the requirements of the section.

Proposed N.J.A.C. 7:13-19.2(b) specifies that each violation identified in Table F by an "NM" is a non-minor violation and does not qualify for a grace period.

Proposed N.J.A.C. 7:13-19.2(c)1 through 5 set forth the procedure for determining the minor or non-minor designation of a violation that is not listed in Table F. The Department proposes that where a violation is comparable to a violation listed in Table F, the Department will ascertain whether the violation is eligible for grace period treatment based upon whether the comparable violation is a minor or non-minor violation. If the comparable violation is minor, then the violation at hand will also be minor and will be subject to a grace period as provided at N.J.A.C. 7:13-19.2(e). Proposed N.J.A.C. 7:13-19.2(c)2 provides that if a violation is not comparable to a violation on Table F, then the violation must meet the criteria at (d)1 through 9 to be considered minor. Proposed N.J.A.C. 7:13-19.2(c)5 describes how comparability is determined and clarifies that in no case will a violation be considered comparable to a violation designated as minor if it has impacts that would lead to a determination that it does not satisfy the statutory criteria that pertain to all minor violations of a particular regulatory requirement, as explained previously.

Proposed N.J.A.C. 7:13-19.2(d)1 through 6 set forth the statutory criteria of N.J.S.A. 13:1D-129 that apply on a fact-specific basis to determine if a violation is minor, as discussed previously.

Proposed N.J.A.C. 7:13-19.2(d)7 through 9 set forth the statutory criteria of N.J.S.A. 13:1D-129 that apply to all violations considered minor.

Proposed N.J.A.C. 7:13-19.2(e)1 requires the Department to issue a notice of violation to the person responsible for the minor violation. The notice must identify the violation, the statutory or regulatory provision violated, and the length of the grace period. The notice is necessary to advise the person responsible for the violation of the applicability of the grace period and the need to correct the violation.

If the person responsible for a minor violation demonstrates that he or she has corrected the violation within the applicable grace period, then proposed N.J.A.C. 7:13-19.2(e)2 provides that no penalty will be sought for the violation.

Proposed N.J.A.C. 7:13-19.2(e)3 provides that a person responsible for a minor violation must submit information describing corrective action taken prior to expiration of the grace period to achieve compliance within the grace period. The responsible person must submit, in writing, information certified to be accurate detailing the corrective action taken or how compliance was achieved. The Department may perform an investigation to determine that the information submitted is accurate and that compliance has been achieved.

The Grace Period Law recognizes that, in certain limited circumstances, it may be appropriate to allow additional time for compliance to be achieved without penalty. Under proposed new N.J.A.C. 7:13-19.2(e)4, if a person responsible for a minor violation seeks additional time beyond the standard grace period of 30 days to achieve compliance, the person responsible for the violation must submit a written request for an extension to the Department at least one week prior to the expiration of the initial grace period, and explain why additional time is needed. The Department may, in its discretion, issue a written extension to the grace period specified in the notice of violation. No more than 90 additional days may be granted. In exercising its discretion to approve a request for an extension, the Department may consider

whether the violator has taken reasonable measures to achieve compliance in a timely manner, whether the delay has been caused by circumstances beyond the control of the violator, whether the delay will pose a risk to the public health, safety and natural resources, and whether the delay will materially or substantially undermine or impair the goals of the Flood Hazard Area Control Act.

If the person responsible for the violation fails to demonstrate to the Department that compliance has been achieved within the period of time specified in the notice of violation, or any approved extension of the grace period, then under proposed new N.J.A.C. 7:13-19.2(e)5, the Department may seek to impose a penalty retroactive to the date on which the notice of violation was issued.

A person responsible for a violation may submit no more than one extension request for a violation specified in a notice of violation pursuant to proposed N.J.A.C. 7:13-19.2(e)6.

Proposed N.J.A.C. 7:13-19.2(f) provides that the descriptions of violations in Table F at proposed N.J.A.C. 7:13-19.2(f) is provided for informational purposes only and if there is a conflict between a violation description in the table and the rule to which the violation description corresponds, then the rule governs.

Table F at proposed N.J.A.C. 7:13-19.2(f) sets forth the rule citation, the violation description, and the Grace Period "Type of Violation" designation. The "Type of Violation" column identifies the violation as either minor (M) or non-minor (NM). A violation of the specific provision identified in Table F at N.J.A.C. 7:13-19.2(f) as minor would qualify for a grace period, provided that the violation meets the statutory criteria of N.J.S.A. 13:1D-129(b)(1), (4), (5), (6), (7), and (8) which are set forth in proposed N.J.A.C. 7:13-19.2(d)1 through 6.

N.J.A.C. 7:13 Appendix 1 Approximating the Flood Hazard Area Design Flood Elevation

Proposed chapter Appendix 1 sets forth the procedure by which an applicant can approximate the flood hazard area limits on a site under Method 5, which is described at proposed N.J.A.C. 7:13-3.5. Appendix 1 includes directions for using the method, two tables for determining the approximate flood depth along a regulated water, and five figures to illustrate the method.

The directions on the first page of the proposed Appendix explain that this method only provides an approximate flood elevation on a site. The floodway limit on site remains unknown under this method. Since many activities are restricted within floodways (see proposed N.J.A.C. 7:13-10.3), and as some calculations cannot be performed if the floodway limit is unknown, the Department may not be able to determine if certain projects meet the requirements of the rules. Therefore, the directions explain that the Department will issue an individual permit for a regulated activity within an approximated flood hazard area only if the regulated activity meets the requirements at proposed N.J.A.C. 7:13-9.6. Proposed N.J.A.C. 7:13-9.7 explains the cases when an individual permit can be issued within an approximate flood hazard area.

Step 1 directs the applicant to determine the Watershed Management Area in which the project is located. New Jersey is divided into 20 Watershed Management Areas as shown in Appendix 1, Figure 5. If an applicant is unable to determine the appropriate Watershed Management Area from Figure 5, the Department will assist in this determination. Contact information for the Department is listed at proposed N.J.A.C. 7:13-1.1(f). Step 1 also directs the reader to Note 2, which explains the procedure if a project spans more than one Watershed Management Area. In such a case, the approximate flood hazard area must be determined separately within each Watershed Management Area.

Step 2 directs the applicant to determine the drainage area of the water in question. Proposed N.J.A.C. 7:13-1.2 defines "drainage area" as the total area of land from which stormwater runoff will drain to a given point. The directions explain that USGS provides topographical mapping that can be used to make this determination and that the Department can also help in this determination at the applicant's request.

Step 3 directs the applicant to determine the approximate depth of flooding from Table 1. Table 1 lists approximate flood depths based on Watershed Management Area and drainage area. Watershed Management Areas are listed in the first column of the table. Going from left to right in any row, each number represents the upper drainage area limit for the flood depth shown at the bottom of that column.

For example, in the row for Watershed Management Area 10, a water with a drainage area of 70 acres or less has a flood depth of five feet. Similarly, any water draining between 70 and 110 acres has a flood depth of six feet. In the example illustrated with arrows on the table, a water with a drainage area of between 19.4 and 30.0 square miles in Watershed Management Area 10 has a flood depth of 18 feet. Flood depths are rounded to whole feet for ease of use and for an added factor of safety. Drainage areas in shaded boxes are measured in acres, while drainage areas is unshaded boxes are measured in square miles. The table does not give flood depths for drainage areas over 30 square miles because proposed N.J.A.C. 7:13-3.5 does not allow the approximate method to be used for streams that drain over 30 square miles.

Step 4 directs the user to find the low point elevation of each roadway crossing or other water control structure that crosses the stream in question within one mile downstream of the site. The presence of any roadways that cross downstream of the site is an important factor in determining the approximate flood depth. A culvert or bridge located downstream of a site may

be too small to effectively pass water during a flood. In such a case, the roadway will act like a dam and cause floodwaters to back up and possibly overtop the roadway. If this occurs near a site, the depth of flooding on site would be higher than Table 1 indicates.

In absence of hydraulic calculations, the assumption must therefore be made that any downstream roadway crossing will impede flow in the stream to the point that the roadway overtops. This is illustrated in Figures 1 through 4. The applicant must determine the elevation of the low-point (the lowest point) of each roadway that crosses within one mile downstream of the site. Based on the drainage area of the water, the flood depth will be between one and three feet higher than the low-point of the roadway as shown in Table 2 in Figure 1. It is unlikely that roadways crossing a stream more than one mile downstream of a site will affect flooding on that site. The depth of flooding over the roadway is measured above the lowest point in the roadway, since that is the point where floodwater will begin to overtop the road. Figure 1 also illustrates a typical roadway profile with a low point. Note 3 on the first page of Appendix 1 explains that the Department may determine that a large bridge across a stream will not affect flooding on a particular site. In such a case, the low-point of that bridge does not need to be determined.

Step 5 explains that the approximate flood elevation will be equal to the depth shown in either Table 1 or Table 2, whichever is higher. It is necessary, then, to determine how these two elevations relate to one another. An applicant must be able to determine which of these two depths is higher, and therefore must measure both elevations from a common reference point. Elevations are typically measured according to an agreed upon datum, such as the National Geodetic Vertical Datum (NGVD) of 1929, which is approximately sea level. Although approximate flood depths need not be measured from NGVD, they must nevertheless be measured from the same datum as the topography onsite in order to be able to compare the

approximated flood elevations with the elevation of the site. This is explained further as follows.

Table 1 gives flood depths measured above the average streambed elevation. The average streambed is the general "smooth" grade of the bottom the channel, and does not include small pockets of erosion, individual boulders, or minor irregularities. The average streambed always has a positive slope toward downstream.

Table 2 gives flood depths measured above the travel surface of any roadway that may cross the channel. The approximate flood depth is measured above the lowest point of the road surface as it crosses over the channel. The assumption is that the roadway embankment across the channel acts like a dam during a flood and that floodwaters will rise up and spill over the roadway to a certain depth. Table 2 provides the approximate flood depth above the low-point of the roadway based on the drainage area of the regulated water. If more than one roadway crosses a channel, the roadway with the highest low-point must be used, since that roadway will have the biggest impact on flooding. Figure 3 shows a profile of a stream with accompanying flood elevations from both Table 1 and Table 2. The flood elevation derived from Table 1 is measured above the streambed and the flood elevation derived from Table 2 is measured above the roadway.

The following example illustrates the use of the approximate method. Assume an applicant wishes to construct a house at a particular location along a stream and wants to determine the approximate flood depth at that location. The stream has a drainage area of 1.9 square miles. The site is located in Watershed Management Area 5. Table 1 therefore gives a flood depth of nine feet above the average stream bed. The average stream bed elevation nearest to the house has been found to be 100 feet NGVD. Therefore, the approximate flood elevation according to Table 1 would be 109 feet NGVD at the proposed house site.

However, two roads cross the stream within one mile downstream of the site. The low point of the first is 105 feet NGVD and the low point of the second is 108 feet NGVD. For a drainage area of 1.9 square miles, Table 2 gives a flood depth of two feet over the low-point of the roadway. The approximate flood depths for these roadways would therefore be 107 feet NGVD and 110 feet NGVD, respectively. Of all three elevations, 110 feet NGVD is the highest. Therefore, the approximate flood elevation at the proposed house site is 110 feet NGVD.

Figure 1 shows a profile of a typical roadway that is overtopped by floodwaters. This view is basically a slice down the centerline of a roadway, seen as if standing in the channel and looking at the roadway.

Figure 2 shows a three-dimensional view of a typical flood plain with a roadway across a channel downstream of a house. The flooding associated with the stream itself (the depth of which is determined from Table 1) is exacerbated by the presence of a roadway, which creates an obstruction in the flood plain that causes additional ponding of floodwaters (the depth of which is determined from Table 2).

Figure 3 shows a profile view of Figure 2. This view is basically a slice down the center of the streambed, seen as if standing along side the channel. The average streambed and the actual streambed are both illustrated. The roadway is shown crossing the stream, and from this perspective a car would be driving into (or out from) the page. The depths of flooding derived from both Table 1 and Table 2 are shown as well. Notice that immediately upstream of the roadway, the elevation of floodwaters due to the presence of the roadway (the depth of which is determined from Table 2) is greater than the elevation of floodwaters in the channel alone (the depth of which is determined from Table 1). However as the streambed rises in elevation upstream of the roadway, the flood elevation determined from Table 1 eventually exceeds the

flood elevation determined from Table 2.

Figure 4 shows a plan view (aerial view) of Figures 2 and 3. Topography is shown on this view. Note that the flooding from the roadway (from Table 2) is a constant elevation while the stream's actual flood elevation (from Table 1) rises as the stream bed rises.

Figure 5 depicts New Jersey's Watershed Management Areas for use with Table 1.

N.J.A.C. 7:13 Appendix 2 List Of Department Delineated Waters

Proposed chapter Appendix 2 is a complete list of the Department delineations. Department delineations are discussed at proposed N.J.A.C. 7:13-3.3. The proposed list of delineated streams is organized by county and municipality. For each municipality in the State, the sections of delineated streams in that municipality are listed. The proposed list does not add or remove any stream or section of stream that is delineated, it merely reorganizes the existing information into a more readily accessible format.

This proposed appendix replaces existing N.J.A.C. 7:13-8.1, which includes a list of the Department delineations somewhat organized by date of adoption and watershed. The proposed list is organized in a manner designed to make it easier to search for a stream. As a result, applicants will be able to more readily determine whether a particular stream has been delineated by the Department.

In addition, the list at existing N.J.A.C. 7:13-8.1 describes the delineated section of a stream only by its end points. The existing list does not describe each municipality that the delineated stream flows through. For example, the list may indicate that a particular stream is delineated between Route 46 in Denville Township and Main Street in Rockaway Borough. However, the list does not indicate whether these municipalities are adjacent, and so the study could include

several municipalities in between them. It is, therefore, difficult to determine whether a particular stream is studied in a given municipality without consulting USGS and county maps and perhaps tracing the stream from beginning to end to see which municipalities it flows through.

The proposed list also corrects a number of errors in existing N.J.A.C. 7:13-8.1. Sections of the existing list were compiled many years ago, and in some cases the names of roads and other landmarks that are referenced have since changed or been removed. The existing list incorrectly identifies the watershed of some streams and includes a number of duplications and spelling errors. The proposed list simply corrects these errors, updates the references, and presents the Department delineations in a more readable format.

Social Impact

The proposed new rules and amendments will have a positive social impact in several ways. The new rules and amendments will strengthen the Department's flood hazard area program, which regulates land uses in flood prone areas to protect health, safety and the environment, by incorporating more stringent construction standards designed to reduce the potential for loss of life and property in flood hazard areas. Furthermore, whereas the existing rules limit the chapter's jurisdiction in many tidal areas, the proposed rules and amendments expand the Department's authority to regulate activities to all flood hazard areas of the State, thereby ensuring a consistently stringent level of flood damage protection Statewide. Homes and businesses, as well as public buildings and infrastructure, which are constructed according to the proposed stricter standards of the proposed rules and amendments will experience less flood damage than under the existing rules. This provides a positive social benefit, since the public will realize fewer impacts from flooding as a result of the proposed more stringent standards. The proposed new

rules provide additional social benefit by strengthening the protection of important environmental resources associated with the State's surface waters, which is essential to maintaining a healthy ecosystem.

The proposed new rules and amendments will also substantially improve the flood hazard area permitting process. The rules are clearer and better organized, making them easier for the regulated public to understand and to use in determining what is regulated, and to use in preparing applications. The rules provide more detail to guide the reader through the permitting process. Finally, the rules and amendments create several new options to better serve the regulated community. These options include a process by which the applicant can obtain a verification of the limits of the flood hazard area and/or floodway on a site without having to obtain a permit and a simple method of approximating the flood hazard area where no flood mapping is available. A number of general permits and permits-by-rule are also introduced to facilitate projects in the public interest and encourage the elevation and relocation of flood prone buildings in order to reduce flood damage potential. These options will make it easier for the regulated community to comply with the proposed new rules and will better protect the public from the risks and damages associated with flooding in New Jersey.

Economic Impact

The proposed new rules and amendments will have an overall positive economic impact. First, they will continue to prevent and minimize the substantial economic impacts that can result from flooding. Each year, New Jersey sustains millions of dollars of flood damage, which is borne not only by those directly affected by flooding but also by taxpayers through relief measures and increased insurance premiums. Without Statewide regulations governing minimum

construction standards in flood hazard areas, each individual county and municipality would have its own standards, or would have no standards whatsoever beyond the minimum requirements established by local building codes and the National Flood Insurance Program. By providing a stringent Statewide standard, the system of approval becomes more predictable for individuals designing and constructing within flood hazard areas and provides the highest level of protection for the public.

The Department also expects to realize a positive economic benefit by establishing the improved construction standards and safety factors of the proposed new rules, which are designed to further reduce the potential for loss of life and property as compared with the existing rules. Improper construction in flood hazard areas can subject housing, businesses and public infrastructure to flood damage and other related problems many years after construction, leaving home and business owners, or taxpayers, to pay for correction and remediation rather than the original developer. Furthermore, unrestricted development within flood hazard areas causes flooding to exacerbate. As the depth and frequency of flooding increases, so does the economic impact of such floods. As such, the new rules and amendments will help to ensure that future development will not exacerbate flooding over time by establishing a Statewide zero-percent net fill requirement, which is designed to preserve flood storage to a much greater degree than the existing rules. In addition, the proposed increases in the size and scope of the riparian zone around surface waters, and the establishment of stringent measures designed to preserve natural vegetation in these areas, will further reduce the amount of development that will occur within and adjacent to flood hazard areas. The proposed new rules and amendments are, therefore, expected to both reduce the amount of development within flood hazard areas and to ensure more flood-resistant construction for any development that does occur in flood hazard

areas. Accordingly, the proposed rules and amendments will result in a positive economic impact by reducing long-term costs related to disaster assistance, infrastructure repair and insurance claims.

The proposed new rules also introduce several process improvements that will reduce expense for applicants and the Department, such as permits-by-rule, general permits, the option for a verification of the flood hazard area limits and more flexible and simpler methods for determining the location of regulated areas on a property. Sixteen general permits are proposed for certain common activities, which include reduced application fees, minimized application requirements and a shortened processing time. Forty-six free permits-by-rule are also proposed for various minor activities that cannot adversely impact flooding or the environment, and therefore do not require the submittal of an application to the Department. Some activities that currently require a permit under the existing rules are now eligible for free general permits or permits-by-rule. Additionally, the proposed new methods of determining the extent of the flood hazard area based on FEMA mapping or by approximation will reduce engineering and application costs for some projects.

Although application costs are expected to decrease in many cases as a result of the new rules and amendments, the proposed new rules and amendments may nevertheless result in a negative economic impact for the building industry. Compliance with the more stringent requirements of the proposed new rules will often require a person seeking to construct within a flood hazard area to incur increased costs related to site evaluation, engineering, design and construction as compared with the existing rules. However, the exact costs will depend upon conditions at the particular site and the magnitude of the proposed development. Overall, however, demonstrating compliance with the proposed new rules is expected to incur more

engineering and design costs than the existing rules. For example, many projects that meet the existing net fill limitations without requiring the Department to review net fill calculations must include these calculations in order to demonstrate compliance with the new rules.

Furthermore, the proposed expansion of the width of riparian zones and the implementation of the zero-percent net fill limitation Statewide will likely reduce the level and type of development that will be possible adjacent to surface waters. Similarly, whereas the existing rules limit the chapter's jurisdiction in many tidal areas, the proposal expands the Department's jurisdiction to regulate activities to all flood hazard areas of the State, thereby ensuring a consistently stringent level of flood damage protection Statewide. As a result, the proposed rules and amendments are likely to further restrict development in many tidal areas. The proposed new rules may, therefore, reduce the expected monetary return that a developer could otherwise have made on a given parcel under the existing rules. Furthermore, the more stringent requirements of the proposed new rules may cause some development to relocate outside the flood hazard area altogether. This does not necessarily incur costs to the regulated community so much as it is likely to reduce the profit margin on potential development in flood hazard areas. Consequently, it is possible that the proposed new restrictions on development in flood hazard areas and riparian zones will reduce the value of existing property in these areas, but may also cause property values outside these areas to rise.

Given the above, the Department anticipates that implementing the proposed new rules will result in increased public safety, minimization of property damage and reduced need for flood relief, which will outweigh the negative economic impacts that may be caused by the new more stringent construction standards contained in these proposed rules and amendments.

Therefore, the Department believes the overall economic benefits of the proposed rules and

amendments outweigh the potential negative impacts.

Environmental Impact

The proposed new rules and amendments will have a positive environmental impact by continuing and expanding the environmental benefits of the Department's existing flood hazard area program. Similarly, whereas the existing rules limit the chapter's jurisdiction in many tidal areas, the proposal expands the Department's regulation of activities to all flood hazard areas of the State, thereby ensuring a consistently stringent level of flood damage protection Statewide. This is likely to reduce the amount of development that will occur in some tidal flood hazard areas and, therefore, reduce potential adverse environmental impacts in these areas. The existing rules benefit the environment by preventing potentially destructive activities so as to decrease flooding, erosion, sedimentation and water quality impacts. The proposed expansion of the riparian zone along regulated waters will help preserve the State's stream corridors, which are essential for maintaining bank stability and water quality. The indiscriminate disturbance of such vegetation destabilizes channels, which leads to increased erosion and sedimentation that exacerbates the intensity and frequency of flooding. The loss of vegetation adjacent to channels also reduces filtration of stormwater runoff and thus degrades the quality of surface waters. Such impacts adversely affect the health and habitat of fish and wildlife that depend upon clean surface waters and therefore disrupt the ecological balance that is necessary for life. Humans are ultimately affected by this imbalance, since clean water is essential for all life. Clearer and more stringent standards designed to protect fishery resources, threatened or endangered species and the integrity of stream channels are therefore also proposed. The proposed Statewide zero-percent net fill limitation will also result in an environmental benefit in that it will likely reduce

the level and type of development that will be possible along waterways, and thereby result in less potential adverse impacts within the State's stream corridors.

The proposed new rules and amendments will also increase the effectiveness of the existing flood hazard area program through improvements that will make compliance easier for the public. The 16 proposed general permits and will have a positive environmental impact similar to the impact that has resulted from general permits under the Department's Freshwater Wetlands Protection Act rules. By authorizing very minor impacts through general permits, the proposed rules will encourage the regulated public to design projects in such a way as to reduce impacts to below the limits in the general permits. Similarly, 46 permits-by-rule are proposed for minor activities that will not exacerbate flooding or adversely impact the environment. The establishment of these permits-by-rule will encourage applicants to downsize activities in order to avoid the need for a general permit or individual permit, and thereby reduce potential environmental impacts. The proposed rules and amendments also provide requirements and incentives to use soil bioengineering for erosion control rather than more environmentally damaging methods. Given the above, the Department anticipates that implementing the proposed new rules and amendments will effect a significant positive environmental impact to the State.

Federal Standards Statement

Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq. (P.L. 1995, c.65) require State agencies that adopt, readopt or amend State regulations that exceed any Federal standards or requirements to include in the rulemaking document a comparison with Federal law.

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 Flood Hazard Area Control 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 proposed new rules have two components: they provide for delineation of the limits of flood hazard areas and/or floodways, and they regulate certain activities in these areas and alongside waters in order to minimize flooding and related problems. The delineation portion of the State program has a comparable Federal counterpart, but the regulatory component of the State program does not.

The Federal Emergency Management Agency (FEMA) delineates some flood hazard areas in the State for the purposes of the Federal flood insurance program. 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 National Flood Insurance Program (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.

While the Federal flood reduction standards include design and construction requirements for buildings, there are no restrictions on flood storage volume displacement comparable to this chapter. Whereas the Federal regulations are designed primarily to protect structures from the effects of flooding, the proposed new rules and amendments are also designed to ameliorate the effects of development on flooding itself. These additional standards tend to reduce the size and

scope of some developments in the flood hazard area and also cause some developments to relocate outside the flood hazard area completely. This does not necessarily incur costs to the regulated community so much as it is likely to reduce the profit margin on potential development of the flood hazard area. It is the Department's opinion that this impact is outweighed by the increased public safety and reduced property damage and need for flood relief that results from implementing these rules.

The delineation portion of the State program is comparable to the FEMA flood hazard area delineation program. In fact, the Flood Hazard Area Control Act, at N.J.S.A. 58:16A-52b, requires the Department to make floodway delineations identical to the floodway delineations approved by FEMA wherever practicable. The Department does this as regards floodways. However, in delineating flood hazard areas, the Department adds a factor of safety that makes Department delineations somewhat more stringent than FEMA delineations. This is appropriate in New Jersey for several reasons. First, New Jersey is unique in having the highest population density in the nation, which gives rise to heavy development pressure. Second, in light of recent flooding problems across the State, it is appropriate for the Department to take a conservative approach. Finally, since the Department not only uses its own delineations but also accepts and verifies delineations performed by applicants on a site-by-site basis, it is important to retain a factor of safety to protect against possible errors.

Persons affected by this rule include property owners situated in flood hazard area and along stream corridors. Property owners outside these areas are only incidentally affected by the rules, in as much as reduced flood relief efforts will lower taxes while restrictions on land uses may increase property values outside the flood hazard area. N.J.A.C. 7:13 also increases the cost of design and construction for roadways (both public and private) but also increases the life span of

such roadways and reduces flood damage potential. Therefore, while the rules do place some additional burden on local governments and developers proposing roads and buildings in flood hazard areas, the added cost of compliance is necessary and appropriate to offset loss of life and property.

Jobs Impact

The rules associated with this proposal play a significant role in the planning and construction of residential, commercial, industrial and public development in the State. The rules increase the Department's oversight of activities in flood hazard areas and riparian zones, expand the width of riparian zones, and extend regulation into a number of tidal areas that are not regulated by the existing rules. As a result, a greater number of development projects will be subject to the new rules as compared with the existing rules. Furthermore, demonstrating compliance with the more stringent standards of the proposed new rules and amendments will likely require a person seeking to construct within riparian zones and flood hazard areas to employ consultants to a greater degree as compared with the existing rules. Therefore, the implementation of the proposed rules may lead to additional jobs for consultants, engineers and attorneys for projects seeking approval to construct under the expanded regulated area and more stringent standards of the proposal.

However, since the proposed rules further expand the area regulated and prohibits development in flood hazard areas and riparian zones, the proposed new rules and amendments may reduce the overall amount of development that will occur in these areas. As a result, the proposed rules and amendments may have a negative impact on jobs in construction, since some projects may not be allowed under the proposed new rules, and other projects may need to be

constructed on a smaller scale than would otherwise be allowed under the existing rules. It is also likely, however, that investors will be more attracted to invest in areas that are well planned to reduce flood damage potential and the subsequent loss of life and property that results from inappropriate construction in flood hazard areas. The proposed rules may, therefore, increase the value of land outside flood hazard areas and riparian zones, thus generating more investment potential and job opportunities related to construction outside these areas.

Given the above, the Department does not believe that the proposed new rules and amendments will result in a significant impact on jobs.

Agriculture Industry Impact

Pursuant to N.J.S.A. 52:14B-4, the Department has evaluated this rulemaking to determine the nature and extent of the impact of the proposed new rules and amendments on the agriculture industry. The Department believes that the proposed rules and amendments will have an overall positive impact on agriculture for a number of reasons as discussed below.

The proposed new rules will expand the benefits of the existing rules as regards minimizing erosion and flood damage. The benefits of reduced flood-damage potential afforded by the implementation of these new rules will be realized by all landowners in flood hazard areas, including farmers, since the inappropriate development of flood hazard areas causes the frequency and extent of flooding to be exacerbated. Furthermore, the implementation of stringent new standards for development in riparian zones will reduce erosion and increase the quality of the State's surface waters, which will create a positive impact on the agriculture industry.

The proposed rules also include seven general permits specifically created to facilitate certain environmentally responsible agricultural practices. These general permits include reduced

application fees, minimized application requirements and a shortened processing time, which will reduce the administrative burden of the existing rules for these projects. Additionally, a number of proposed permits-by-rule will ensure that existing agricultural practices can continue within flood hazard areas and riparian zones without further approval from the Department.

In cases where agricultural activities are proposed for expansion into these areas, however, the proposed rules limit the placement of fill material in flood hazard areas and the destruction of riparian zone vegetation. Since agricultural activities can often be undertaken in flood hazard areas without requiring the placement of fill, the proposed new rules are not anticipated to prohibit the expansion of new agricultural activities into flood hazard areas. However, given the stringent new requirements designed to protect riparian zone vegetation, the proposed new rules will likely limit the expansion of new agricultural activities into undisturbed riparian zones as compared with the existing rules. The Department believes this is appropriate, however, since increased agricultural development adjacent to streams can lead to increased sedimentation and pollution of surface waters. Nevertheless, the Department does not anticipate a significant number of farmers requesting to expand agricultural activities into riparian zones, since many riparian zones on existing agricultural lands are either currently farmed, and therefore not subject to the proposed riparian zone restrictions, or else cannot be farmed due to the presence of steep slopes, freshwater wetlands or other factors that make farming difficult or impractical.

Given the above, the Department anticipates that the proposed new rules and amendments will result in an overall positive impact on the agriculture industry.

Regulatory Flexibility Analysis

In accordance with the New Jersey Regulatory Flexibility Act, N.J.S.A. 52:14B-15 et seq.,

the Department has determined that a number of builders and property owners that will be affected by the proposed new rules and amendments are "small businesses" as defined by the Regulatory Flexibility Act. The rules involved in this proposal apply to any person owning property containing a flood hazard area and/or riparian zone, who intends to engage in a regulated activity. It is not possible for the Department to accurately estimate the number of small businesses situated within the jurisdiction of, or otherwise affected by, these rules and amendments. However, the Department has determined that the proposed new rules and amendments, taken as a whole, will not impose additional reporting or recordkeeping requirements on small businesses, as defined by N.J.S.A. 52:14B-16 et seq.

The rules involved in this proposal regulate based on environmental impacts and will generally have the same impact on a small business as on any other person. The existing rules require persons intending to build within flood hazard areas and riparian zones to first apply for construction permits where appropriate, which requires a certain amount of reporting and recordkeeping during the initial design and construction phase. Furthermore, a copy of the permit and approved drawings must be maintained at the worksite and available for inspection, and the existing rules require reporting to the Department if unanticipated environmental damage occurs during or after construction, as well as any change in construction plans, transfer of ownership or any noncompliance with the rules. Permittees are also required to furnish within a reasonable time any information that the Department requests to determine compliance with a permit or to determine whether cause exists for suspension or termination of a permit. These are basic requirements intended to ensure that permitted activities are undertaken in accordance with the requirements of the rules as well as any conditions that may be placed on a permit. The proposed new rules and amendments do not add any additional reporting or recordkeeping requirements

for small businesses or any other person, but simply consolidate the requirements found throughout the existing rules for such reporting and recordkeeping and, furthermore, clarify the content and intent of such requirements.

The costs to small businesses are the same as to any person or entity seeking to construct within flood hazard areas or riparian zones, including engineering and environmental consultant fees, as well as permit application fees. The actual costs vary depending upon the size of the development and the particular site conditions. While some provisions in the proposed new rules and amendments (such as stricter construction requirements in the flood hazard area and riparian zone) may impose additional compliance requirements on small businesses along with the rest of the regulated community, these are offset by other provisions (such as new permits-by-rule, general permits and simplified jurisdictional provisions) that will simplify compliance requirements in many cases. Because the minimization of flood damage and adverse environmental impacts caused by development in flood hazard areas and riparian zones is important to all persons, and the proposed permit criteria are necessary to maintain appropriate protection from such adverse impacts, no lesser requirements for small businesses are provided.

Smart Growth Impact

Executive Order No. 4 (2002) requires State agencies that adopt, amend or repeal State regulations to include in the rulemaking document a Smart Growth Impact statement that describes the impact of the proposed rule on the achievement of smart growth and implementation of the New Jersey State Development and Redevelopment Plan (State Plan). The Department has evaluated this rulemaking to determine the nature and extent of the proposed new rules and amendments impact on smart growth and the implementation of the State Plan.

The proposed new rules and amendments are consistent with the law and policy of New Jersey to promote smart growth and to reduce the negative effects of sprawl and disinvestment in older communities, as described in Executive Order No. 4 (2002). Executive Order No. 4 states that New Jersey requires sound and integrated planning, as well as coordination with local planning, in order to conserve natural resources, revitalize urban centers, protect the environment and provide needed housing and adequate public services, all at a reasonable cost, and all while promoting beneficial economic growth, development and renewal. The Executive Order also encourages redevelopment, repair, rehabilitation and replacement of existing facilities. These goals are reflected in a number of existing provisions that will be continued in the proposed new rules.

The proposed new rules and amendments promote State Plan General Policy 4, Prevention of Water Pollution, and General Policy 5, Water Quality/Individual and Community On-site Wastewater Treatment Systems. Without the regulatory framework to establish design and construction standards within flood hazard areas and riparian zones, there would be no method to ensure that developments are constructed to any minimum criteria that is protective of public safety and the environment.

The State Plan policy also identifies the protection and enhancement of water resources through coordinated planning efforts aimed at reducing sources of pollution and other adverse effects of development, encouraging designs in hazard-free areas that will protect the natural function of stream and wetland systems, and optimizing sustainable resource use. The rules establish provisions to achieve this State Plan policy, including stringent design and construction standards for development, which protect natural waterways, often reducing the size and impacts of development. Furthermore, by limiting flood storage displacement in flood hazard areas and

preventing obstructions in floodways, the rules encourage development to relocate outside flood hazard areas. The inclusion of specific requirements for development in channels and riparian zones discourages incompatible development of these environmentally sensitive features, and therefore encourages development outside these areas as well. This is consistent with the order's goals of protecting the quality of the environment, encouraging growth in areas suitable for growth, and promoting reinvestment in older communities where such features are not present.

The rules further advance the State's Smart Growth policies by providing clear technical standards and guidance to the regulated public. This promotes more predictable and expeditious review and approval processes. Furthermore, a number of exemptions and design standards are geared to facilitate the rehabilitation and reconstruction of existing structures in flood hazard areas.

Therefore, the proposed new rules and amendments comport with the goals of smart growth and implementation of the State Plan as required in Executive Order No. 4.

PROPOSAL

Full text of the proposed repeals can be found in the New Jersey Administrative Code at N.J.A.C. 7:7E Appendix 1, Figure 6 and 7:13.

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

CHAPTER 1C

NINETY-DAY CONSTRUCTION PERMITS

7:1C-1.2 Definitions

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

"Appropriate agency" means:

1. [The Land Use Regulation Program, PO Box 439, Trenton, NJ 08625-0439 for:

   i-iii. (Reserved)

   iv. Stream encroachment permits under N.J.S.A. 58:16A-50 et seq.] **(Reserved)**

2. (No change.)

"Construction permit" means:

1.-[3.] **4.** (Reserved)

[4. A permit issued pursuant to the "Flood Hazard Area Control Act," N.J.S.A. 58:16A-50 et seq. and the "Flood Hazard Area Control Regulations," N.J.A.C. 7:13; and]

5. (No change)

Note: (No change.)

7:1C-1.3 Pre-application procedure and requirements

(a) (No change.)

(b) Prior to submitting an application to the Department, the applicant shall, if required by the appropriate agency, notify the [following] local agencies **listed in (b)1 through 4 below** of intent to file an application by mailing them the completed application form, and shall obtain an acknowledgement of receipt of notification by certified mail return receipt requested[:]**. The requirements of this subsection may be postponed or modified by the appropriate agency in cases of emergency as the public interest dictates.**

1.-2. (No change.)

3. County environmental commission, if there is no municipal environmental commission; **and**

4. Municipal planning board**.**[;

5. If applicable, those agencies which are required to be notified in accordance with the provisions of N.J.A.C. 7:13-4.2.

Note: the foregoing requirements may be postponed or modified by the appropriate agency in cases of emergency as the public interest dictates.]

(c) [Applicants for stream encroachment permits shall follow the procedures set forth in the Flood Hazard Area Control Rules at N.J.A.C. 7:13.] **(Reserved)**

(d)-(e) (No change.)

7:1C-1.5 Fees

(a) Fees shall be charged for the review of any application for a construction permit in

accordance with the following schedule:

1.-3. (No change.)

[4. Stream encroachment permits:

i. For the purposes of this paragraph a "major" element is any activity for which the Department must review the following:

(1) Stormwater management calculations in order to determine compliance with the requirements of the Stormwater Management rules at N.J.A.C. 7:8; and/or

(2) Hydrologic, hydraulic, net-fill and/or stability calculations in order to determine compliance with the requirements of the Flood Hazard Area Control rules at N.J.A.C. 7:13, other than net-fill calculations associated solely with one single-family residence and/or any appurtenant structure(s).

ii. For the purposes of this paragraph a "minor" element is any activity that is not classified as a "major" element at (a)4i above.

iii. The application fee for a stream encroachment permit shall be determined by adding the individual fees for each project element proposed on a site as identified in Tables 1 and 2 below. Table 1 also identifies each activity as either a major or minor element, in accordance with (a)4i and ii above. For the purposes of a stream encroachment permit application submitted under N.J.A.C. 7:13, any application that includes at least one major element constitutes a major project. Furthermore, in cases where fees are based on the length of a channel but no channel is discernible (such as along intermittent streams or through impounded areas such as lakes and ponds), the fee shall be based on the length of the centerline of the feature.

Table 1
Stream Encroachment Application Fees for Activities Regulated under N.J.A.C. 7:13

Project Element	Qualifier	Type	Fee
Bank stabilization, reestablishment, or protection	Review of hydrologic and/or hydraulic calculations necessary	Major	$3,000 plus $300.00 per each 100-foot segment of channel (or portion thereof)
	Review of hydrologic and/or hydraulic calculations not necessary	Minor	$1,000
Bridge, culvert, footbridge, low dam or other water control structure	Review of hydrologic and/or hydraulic calculations necessary (except as noted below)	Major	$4,000
	Review of hydrologic and/or hydraulic calculations necessary for a bridge or culvert that provides access to one private residence (which is not being constructed as part of a larger residential subdivision)	Major	$2,000
	Review of hydrologic and/or hydraulic calculations not necessary	Minor	$1,000
Channel modification	Review of hydrologic and/or hydraulic calculations necessary	Major	$3,000 plus $300.00 per each 100-ft segment of channel (or portion thereof)
	Review of hydrologic and/or hydraulic calculations not necessary	Minor	$1,000
Excavation, fill and/or grading	Review of net-fill calculations necessary (except as noted below)	Major	$4,000
	Review of net-fill calculations not necessary and project consists solely of excavation, fill and/or grading	Minor	$1,000
	Review of net-fill calculations necessary and project consists solely of one private residence that is not being constructed as part of a larger residential subdivision (including any appurtenant structure such as a garage, barn or shed)	n/a	No fee
	Review of net-fill calculations necessary for a bridge or culvert that is a major element	n/a	No fee

Hardship waiver	Request associated with one private residence that is not being constructed as part of a larger residential subdivision (including any appurtenant structure such as a garage, barn or shed)	n/a	No fee
	All other requests	Major	$4,000
Private residence	One private residence that is not being constructed as part of a larger residential subdivision (including any appurtenant structure such as a garage, barn or shed)	Minor	$1,000
	Addition and/or new appurtenant structure to an existing private residence, such as a garage, barn or shed	Minor	$1,000
Retaining wall	Extends 4 feet or more above the ground	Major	$4,000
	Extends less than 4 feet above the ground	Minor	$1,000
Sediment removal from a channel	Each sediment removal project	Minor	$1,000 plus $100.00 per each 100-ft segment of channel (or portion thereof) not to exceed $4,000
Stormwater discharge structure	Each stormwater discharge structure (including any conduit outlet protection and/or conveyance channel)	Minor	$1,000
Stream encroachment line and/or establishing a flood hazard elevation	Review of hydrologic and/or hydraulic calculations necessary	Major	$3,000 plus $300.00 per each 100-ft segment of channel (or portion thereof)
	Review of hydrologic and/or hydraulic calculations not necessary	Minor	$500.00
	Review of hydrologic and/or hydraulic calculations not necessary and project consists solely of one private residence that is not being constructed as part of a larger residential subdivision (including any appurtenant structure such as a garage, barn or shed)	Minor	No fee
Utility line	Each crossing	Minor	$1,000

Any other activity	Each project element	Minor	$1,000

Table 2
Additional Fee for Major Developments pursuant to N.J.A.C. 7:8-1.2

Qualifier	Area of Impact	Fee
Base fee for all major developments	Any size project	$2,000
Additional fee for the review of groundwater recharge calculations (pursuant to N.J.A.C. 7:8-5.4(a)2) per area of land disturbed by the project:	Up to 3 acres	$500
	More than 3 acres and up to 10 acres	$1,000
	More than 10 acres and up to 100 acres	$2,000
	More than 100 acres	$4,000
Additional fee for the review of runoff quantity calculations (pursuant to N.J.A.C. 7:8-5.4(a)3) per area of land disturbed by the project:	Up to 3 acres	$500
	More than 3 acres and up to 10 acres	$1,000
	More than 10 acres and up to 100 acres	$2,000
	More than 100 acres	$4,000
Additional fee for the review of water quality calculations (pursuant to N.J.A.C. 7:8-5.5) per area of impervious surface under review:	Up to 1 acre	$500
	More than 1 acre and up to 3 acres	$1,000
	More than 3 acres and up to 10 acres	$2,000
	More than 10 acres	$4,000
Additional fee if any vegetation is removed within a special water resource protection area (pursuant to N.J.A.C. 7:8-5.5(h))	Any size project	$2,000]

(Reserved)

5. (No change)

(b) (No change.)

(c) [The Department shall assess a single permit fee for a project which requires more than one of the following permits, if the permit applications are submitted and processed simultaneously: CAFRA permits; waterfront development permits; coastal wetlands permits; stream encroachment permits; or freshwater wetlands permits (including individual permits, general permits, and transition area waivers) issued under N.J.A.C. 7:7A. The permit fee for the project

is equal to the sum of the following:

1. The single highest permit fee for the above listed permits required for the project; and
2. Seventy-five percent of the sum of the permit fees for all other permits required for the project.] (Reserved)

(d) For the purposes of this section, a modification to an issued permit will be processed for modified projects which will not result in a significant change in the scale, use, or impact of the project as approved. The determination as to what constitutes a significant change is within the sole discretion of the Department and will be based on a review of the original application file and the new information submitted by the applicant. A change that will cause less environmental impact than the original project will not constitute a "significant change." Significant changes generally include, but are not limited to, increased clearing, grading, filling or impervious coverage, reduction in buffers[,] **and a** change in foot print location[, and a change in the hydraulics of a stream].

1. [The fee for a request to modify a stream encroachment permit is:
   i. Fifty percent of the original permit application fee for each modified project element for which the Department must review calculations in order to determine that the proposed modification meets the requirements of N.J.A.C. 7:8 and/or N.J.A.C. 7:13; and/or
   ii. $200.00 for each modified project element for which the Department does not need to review calculations in order to determine that the proposed modification meets the requirements of N.J.A.C. 7:8 and N.J.A.C. 7:13.] **(Reserved)**
2. (No change)

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

[(h) The Department shall annually adjust the fees for each activity provided in this section for stream encroachment permits. The Department shall calculate a fee adjustment factor annually, and multiply each fee by that fee adjustment factor. The Department shall calculate the fee adjustment factor by taking the following steps:

1. Project the total amount of money required to fund each 90-day permit program in the coming year. This projection shall be based upon the following data:
    i. The number and type of Department staff required to perform each activity for which fees are charged;
    ii. The total salaries of those staff members;
    iii. The cost of fringe benefits for those staff members, calculated as a percentage of salaries, which percentage is set by the New Jersey Department of the Treasury based upon costs associated with pensions, health benefits, workers' compensation, disability benefits, unused sick leave, and the employer's share of FICA;
    iv. Indirect costs attributable to those staff members. "Indirect costs" means costs incurred for a common or joint purpose, benefiting more than one cost objective, and not readily assignable to the cost objective specifically benefited without effort disproportionate to the results achieved. Indirect costs shall be calculated at the rate negotiated annually between the Department and the United States Environmental Protection Agency, multiplied by the total of salaries and fringe benefits;
    v. Operating expenses (including, without limitation, expenses for postage, telephone, travel, supplies and data system management) attributable to those staff members; and
    vi. The budgeted annual cost of legal services rendered by the Department of Law and

Public Safety, Division of Law, in connection with each of the permit programs listed in the introductory language of (h) above.

2. Project the total amount to be available from sources other than fees, such as State appropriations or Federal grants;
3. Subtract the amount in (h)2 above from the amount in (h)1 above. The remainder is the fee revenue necessary for the coming year;
4. Divide the fee revenue necessary for the coming year by the fee revenue which was necessary for the current year;
5. Divide the volume of permit applications the Department received in the current year by the volume it expects to receive in the coming year. In projecting the expected volume of permit applications, the Department shall consider the following factors:
   i. The volume of permit applications received in previous years;
   ii. Based on (h)5i above, any trends toward an increasing or decreasing volume of permit applications;
   iii. Information indicating a trend toward increasing or decreasing construction activity in various areas of the State; and
   iv. Other data concerning economic trends reasonably likely to influence the volume of permit applications; and
6. Multiply the number provided in (h)5 above by the number provided in (h)4 above. This result is the fee adjustment factor.

(i) Each year, the Department shall prepare an Annual Ninety-Day Construction Permit Fee Schedule Report. Promptly after completing the report, the Department shall publish in the New Jersey Register a notice of opportunity for public input setting forth the adjusted fees. The notice

shall state that the report is available and direct interested persons to contact the Department for a copy of the report and to provide comments within 45 days of the notice date. The Department shall promptly provide a copy to each person requesting a copy. The Department will evaluate the comments submitted and publish its findings and the final adjusted fees with their operative dates in a notice of administrative change, pursuant to N.J.A.C. 1:30-2.7(c).

(j) The Department will not make the adjustment of fees provided in (h) above or prepare the report described in (i) above for any one-year period ending June 30, if in that period the Department proposes or promulgates amendments to any fees for stream encroachment permits.]

7:1C-1.7 Review of application

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

(c)-**(d)** (Reserved)

[(d) Notwithstanding the requirements of (a) above, applications for stream encroachment permits shall be reviewed in accordance with the procedures set forth in the Flood Hazard Area Control Rules at N.J.A.C. 7:13.]

(e) (No change.)

7:1C-1.9 Appeals

(a)-**(b)** (Reserved)

[(b) An appeal of an approval or denial of a stream encroachment permit shall be to the Commissioner in accordance with the procedures of N.J.A.C. 7:13-4.10.]

(c)-(g) (No change.)

7:1C-1.12 Related regulations

(a) (No change.)

(b) [For a stream encroachment permit, reference should be made to the following:

1. For the pre-application conferences, the requirements of N.J.A.C. 7:13-4.3 are in addition to 7:1C-1.3; and
2. For application information, the requirements of N.J.A.C. 7:13-4.1 are in addition to N.J.A.C. 7:1C-1.4.] **(Reserved)**

(c) (No change.)

CHAPTER 7

COASTAL PERMIT PROGRAM RULES

SUBCHAPTER 7. GENERAL PERMITS AND PERMITS-BY-RULE

7:7-7.2 Permits-By Rule

(a) This section details the activities authorized by a Permit-By-Rule.

1. Single family Home or Duplex Expansion: The expansion of a legally constructed, habitable single family home or duplex on the non-waterward sides of the single family home or duplex, provided that [the]:
   i. The expansion is not proposed on a beach, dune, or wetland;
   ii. The expansion meets the requirements of N.J.A.C. 7:7E-3.25; and
   iii. The expansion does not exceed a cumulative surface area of 400 square feet on the property constructed after July 19, 1994[, and provided that such expansion is not proposed on a beach, dune, or wetland]**.** For example, a 200 square foot expansion

of a single family home or duplex could be authorized under this permit-by-rule and an additional 200 square foot expansion could later be authorized under this permit-by-rule, since the cumulative footprint of the development for both expansions would not exceed 400 square feet on the property. However, a property on which a 300 square foot expansion was already constructed pursuant to a permit-by rule would not be eligible for another permit-by-rule subsequently for an additional 200 square foot expansion since the cumulative total footprint of development for both expansions would exceed 400 square feet.

2. (Reserved)

3. 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 that the proposed single family home or duplex and/or accessory structures comply with all of the following:

   i.-vii. (No change.)

   viii. The development shall [comply with the elevation and flood proofing requirements of the National Flood Insurance Program regulations at 44 CFR Chapter 1] **meet the requirements of N.J.A.C. 7:7E-3.25**;

   ix.-x. (No change.)

4.-6. (No change.)

7. Voluntary Reconstruction: The voluntary reconstruction of a non-damaged legally constructed, currently habitable residential or commercial development within the same

footprint, provided that such reconstruction is in compliance with existing requirements or codes of municipal, State and Federal law and provided:

i.-ii. (No change.)

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

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

Recodify existing iv.-v. as **v.-vi.** (No change in text.)

8.-10. (No change.)

(b)-(c) (No change.)

7:7-7.7 Coastal general permit for voluntary reconstruction of certain residential or commercial development

(a) This coastal 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.-4. (No change.)

5. The reconstruction does not result in additional impacts to Special Areas as defined at N.J.A.C. 7:7E-3; [and]

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

7. The reconstruction meets the requirements of N.J.A.C. 7:7E-3.25 and 3.26.

(b)-(c) (No change.)

7:7-7.8 Coastal general permit for the development of a single family home or duplex

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

(c) Development under this coastal general permit shall comply with N.J.A.C. 7:7E-3.22, Beaches, **7:7E-3.25, Flood hazard areas, 7:7E-3.26, Riparian zones,** 7:7E- 3.27, Wetlands, 7:7E-3.28, Wetland buffers, and 7:7E-3.38, Endangered or threatened wildlife or vegetation species habitats.

(d)-(i) (No change.)

(j) [The development shall comply with the elevation and flood proofing requirements of the National Flood Insurance Program regulations at 44 CFR Chapter 1] **(Reserved)**

(k)-(n) (No change.)

7:7-7.9 Coastal general permit for the expansion, or reconstruction (with or without expansion), of a single family home or duplex

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

(c) Development under this coastal general permit shall comply with N.J.A.C. 7:7E-3.22, Beaches, **7:7E-3.25, Flood hazard areas, 7:7E-3.26, Riparian zones,** 7:7E-3.27, Wetlands, 7:7E-3.28, Wetland buffers, and 7:7E-3.38, Endangered or threatened wildlife or vegetation species habitats;

(d)-(i) (No change.)

(j) [The development shall comply with the elevation and flood proofing requirements of the National Flood Insurance Program regulations at 44 CFR Chapter 1] **(Reserved)**

(k)-(n) (No change.)

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

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

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

1.-2. (No change.)

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

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

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

(d) (No change.)

7:7-7.27 Coastal general permit for geotechnical survey borings

(a) This coastal 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.-5. (No change.)

6. Any acid-producing soils encountered shall be managed in accordance with [Projects Exposing Deposits of Acid-producing Soils (N.J.A.C. 7:13-3.7)] **the requirements for a regulated activity in an area with acid-producing soils in the Flood Hazard Area**

Control Act rules (N.J.A.C. 7:13).

7. (No change.)

(b) (No change.)

CHAPTER 7E

COASTAL ZONE MANAGEMENT

SUBCHAPTER 3. SPECIAL AREAS

7:7E-3.17 Overwash areas

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

(d) A single story, beach/tourism oriented commercial development located within a commercial boardwalk area existing on July 19, 1993 is conditionally acceptable provided that it meets the following conditions:

1.-3. (No change.)

4. The facility meets all the [flood proofing] requirements of the Flood Hazard Area Rule, N.J.A.C. 7:7E-3.25.

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

7:7E-3.18 Coastal high hazard areas

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

(d) Beach use related commercial development in coastal high hazard areas is conditionally acceptable within areas that are already densely developed, provided that:

1.-3. (No change.)

4. The facility complies with all the [flood proofing] requirements at N.J.A.C. 7:7E-3.25, Flood hazard areas.

(e)-(h) (No change.)

7:7E-3.19 Erosion hazard areas

(a) (No change.)

(b) Development is prohibited in erosion hazard areas, except for:

1.-2. (No change.)

3. Single story, beach/tourism oriented commercial development located within a commercial boardwalk area existing on July 19, 1993 is conditionally acceptable provided that it meets the following conditions:

i.-iii. (No change.)

iv. The facility meets all the [flood proofing] requirements of the Flood Hazard Areas rule (N.J.A.C. 7:7E-3.25); and

v. (No change.)

4.-7. (No change.)

(c) (No change.)

7:7E-3.25 Flood hazard areas

(a) Flood hazard areas are [the floodway and flood fringe area around rivers, creeks and streams as delineated] **areas subject to flooding from the flood hazard area design flood, as defined** by the Department under the Flood Hazard Area Control Act **rules at N.J.A.C. 7:13.** [(N.J.S.A. 58:16A-50 et seq.);] **Flood hazard areas include those areas mapped as such by the**

Department, [and] areas defined or delineated as an A or a V zone by the Federal Emergency Management Agency (FEMA)**, and any unmapped areas subject to flooding by the flood hazard area design flood**. [They are] **Flood hazard** areas **are** subject to either tidal or fluvial flooding **and the extent of flood hazard areas shall be determined or calculated in accordance with the procedures at N.J.A.C. 7:13-3**. [Where flood hazard areas have been delineated by both the Department and FEMA, the Department delineations shall be used. Where flood hazard areas have not been delineated by the Department or FEMA, limits of the 100 year floodplain will be established by computation on a case-by-case basis. The seaward boundary shall be the mean high water line (see Appendix 1, Figures 6 and 7, incorporated herein by reference).

1. A complete list of streams for which the Department has delineated the flood hazard area can be found in N.J.A.C. 7:13 (Rules Governing Flood Hazard Areas).
2. The Federal Emergency Management Agency has delineated the tidal floodplain for all Coastal Zone municipalities.
3. Where portions of the flood hazard areas meet the definition of another Special Water's Edge type (Filled Water's Edge, Lagoon Edge, Beaches, Dunes, Overwash Areas, Erosion Hazard Areas, Coastal High Hazard Areas, Barrier Island Corridor, Bay Islands, Wetlands, Wetlands Buffer, Coastal Bluffs, and Intermittent Stream Corridors), the Special Water's Edge rules shall apply in terms of location acceptability and the flood hazard areas rule shall apply in terms of setback and flood proofing requirements.]

(b) In a tidal flood hazard area below the mean high water line, this section shall apply only to the following activities:

1. Development of habitable buildings; and

2. Construction of railroads, roadways, bridges and/or culverts.

Recodify existing (b)-(d) as **(c)-(e)**. (No change in text.)

[(e) Retention and detention basins developed specifically for storm water management purposes are conditionally acceptable provided they are constructed in accordance with the Stormwater Management rule (N.J.A.C. 7:7E-8.7).]

(f) Development in **flood hazard** areas [subject to fluvial flooding must conform with the Flood Hazard Area Control Act and rules adopted thereunder. Development in areas subject to tidal flooding must conform with applicable Federal flood hazard reduction standards as found at 44 C.F.R. Part 60 and the Uniform Construction Code, N.J.S.A. 52:27D-1 et seq.] **shall conform with the applicable design and construction standards of the following:**

1. The Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq., and implementing rules at N.J.A.C. 7:13, except in lands regulated under the Wetlands Act of 1970, N.J.S.A. 13:9A-1 et seq., pursuant to N.J.S.A. 58:16A-60;

2. The Uniform Construction Code, N.J.A.C. 5:23; and

3. The Federal flood reduction standards, 44 C.F.R. Part 60.

(g) (No change.)

(h) If endangered and/or threatened wildlife or species habitat is present in the flood hazard area such that the area is also an endangered or threatened wildlife or plant species habitat special area in accordance with N.J.A.C. 7:7E-3.38, then the requirements of N.J.A.C. 7:7E-3.38, Endangered or threatened wildlife or plant species habitats, shall apply.

(i) For the purposes of this section, if a term is defined in this chapter and in the Flood Hazard Area Control Act rules at N.J.A.C. 7:13, the definition in N.J.A.C. 7:13 shall

govern. For any term used in this section that is not defined or otherwise described in this chapter but that is defined or described in the Flood Hazard Area Control Act rules at N.J.A.C. 7:13, the definition or description in N.J.A.C. 7:13 shall apply.

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

7:7E-3.26 [(Reserved)] **Riparian zones**

(a) A riparian zone exists along every regulated water, except there is no riparian zone along the Atlantic Ocean nor along any manmade lagoon or oceanfront barrier island, spit or peninsula. Regulated waters are defined in the Flood Hazard Area Control Act rules at N.J.A.C. 7:13-2.2.

(b) The riparian zone includes the land and vegetation within each regulated water described in (a) above, as well as the land and vegetation within a certain distance of each regulated water as described in (c) below. The portion of the riparian zone that lies outside of a regulated water is measured landward from the top of bank. If a discernible bank is not present along a regulated water, the portion of the riparian zone outside the regulated water is measured landward as follows:

1. **Along a linear fluvial or tidal water, such as a stream or swale, the riparian zone is measured landward of the feature's centerline;**
2. **Along a non-linear fluvial water, such as a lake or pond, the riparian zone is measured landward of the normal water surface limit;**
3. **Along a non-linear tidal water, such as a bay or inlet, the riparian zone is measured landward of the mean high water; and**
4. **Along an amorphously-shaped feature, such as a wetland complex, through which**

a regulated water flows but which lacks a definable channel, the riparian zone is measured landward of the feature's centerline.

(c) The width of the riparian zone along each regulated water described in (a) above is as follows:

1. **The riparian zone is 300 feet wide along both sides of any Category One water, and all upstream tributaries situated within the same HUC-14 watershed;**
2. **The riparian zone is 150 feet wide along both sides of the following waters not identified in (c)1 above:**
   i. **Any upstream tributary to a trout production water;**
   ii. **Any trout maintenance water and all upstream tributaries within one mile;**
   iii. **Any segment of a water flowing through an area that contains documented habitat for a threatened or endangered species of plant or animal, which is critically dependent on the regulated water for survival, and all upstream tributaries within one mile; and**
   iv. **Any segment of a water flowing through an area that contains acid producing soils; and**
3. **The riparian zone is 50 feet wide along both sides of all waters not identified in (c)1 or (c)2 above.**

(d) The riparian zones established by this chapter are separate from and in addition to any other similar zones or buffers established to protect surface waters. For example, the Stormwater Management rules at N.J.A.C. 7:8 establish 300-foot Special Water Resource Protection Areas along certain waters. Furthermore, the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A establish 50-foot and 150-foot transition areas along freshwater

wetlands and other features that are also regulated under this chapter. Compliance with the riparian zone requirements of this chapter does not constitute compliance with the requirements imposed under any other Federal, State or local statute, regulation or ordinance.

(e) Development in riparian zones shall conform with the requirements for a flood hazard area individual permit under the Flood Hazard Area Control Act rules at N.J.A.C. 7:13-9, 10 and 11 or, in the alternative as applicable, a flood hazard area permit-by-rule at N.J.A.C. 7:13-7 or a flood hazard area general permit at N.J.A.C. 7:13-8.

(f) If endangered and/or threatened wildlife or species habitat is present in the riparian zone such that the area is also an endangered or threatened wildlife or plant species habitat special area in accordance with N.J.A.C. 7:7E-3.38, then the requirements of N.J.A.C. 7:7E-3.38, Endangered or threatened wildlife or plant species habitats, shall apply.

(g) For the purposes of this section, if a term is defined in this chapter and in the Flood Hazard Area Control Act rules at N.J.A.C. 7:13, the definition in N.J.A.C. 7:13 shall govern. For any term used in this section that is not defined or otherwise described in this chapter but that is defined or described in the Flood Hazard Area Control Act rules at N.J.A.C. 7:13, the definition or description in N.J.A.C. 7:13 shall apply.

(h) Rationale: Healthy riparian systems are essential to the natural environment. Loss of soil and plant life that occurs adjacent to regulated waters not only threatens public and private property, but directly impacts water quality and the health of fish and wildlife. The extreme importance of preserving and restoring adequate stream corridor buffers has been well documented in recent decades. Riparian zone functions include stream bank stabilization, removal of sediment, nutrients and contaminants, flood storage, wildlife

habitat, aesthetics, and recreation and education.

7:7E-3.34 Steep slopes

(a) (No change.)

(b) Development on steep slopes is discouraged where wetlands, wetland buffers, intermittent stream corridors, threatened and endangered species habitats**, riparian zones** or water areas are located adjacent to or at the base of the slope and on steep slopes which are forested as defined at N.J.A.C. 7:7E-5.5(c).

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

7:7E-3.48 Hudson River Waterfront Area

(a) The following terms, when used in this section, shall have the following meanings:

1.-4. (No change.)

5. "Pier deck level" means the lowest deck surface that is at or above [base flood elevation (the water surface elevation of a 100-year flood as defined by the Federal Emergency Management Agency)] **the flood hazard area design flood elevation as defined at and determined in accordance with N.J.A.C. 7:13**.

6.-8. (No change.)

(b)-(c) (No change.)

(d) The following standards apply to all developments proposed on piers and will be used by the Department as a guide for developments proposed on platforms. In some cases, a platform may, in effect, function as upland and, thus, be more appropriately reviewed under rules that regulate upland development.

1. Non-industrial development upon piers is conditionally acceptable provided that specific amounts of usable landscaped public open space are incorporated into the project, as provided below:

   i.-viii. (No change.)

   ix. All pier structures shall [conform with applicable Federal flood hazard reduction standards as found in 44 C.F.R. Part 60 and in the Uniform Construction Code, N.J.S.A. 52:27D-1 et seq.] **meet the requirements of the Flood hazard areas rule at N.J.A.C. 7:7E-3.25**.

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

SUBCHAPTER 7. USE RULES

7:7E-7.2 Housing use rules

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

(e) Standards relevant to the development of a 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. 7:7-2.1(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.-7. (No change.)

8. The development shall comply with the [elevation and flood proofing] requirements of [the National Flood Insurance Program regulations at 44 CFR Chapter 1] **the Flood hazard areas rule at N.J.A.C. 7:7E-3.25**;

9.-12. (No change.)

(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. 7:7-2.1(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.-7. (No change.)

8. The development shall comply with the [elevation and flood proofing] requirements of the [National Flood Insurance Program regulations at 44 CFR Chapter 1] **Flood hazard areas rule at N.J.A.C. 7:7E-3.25.**

9.-12. (No change.)

(g) (No change.)

7:7E-7.5 Transportation use rule

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

(c) Standards relevant to bicycle and foot paths are as follows:

1. (No change.)

2. Linear bicycle and foot paths are encouraged along the edges of all water bodies, and from the water body to the nearest public road, provided they would not disturb Special Areas**, excluding flood hazard areas (N.J.A.C. 7:7E-3.25) and riparian zones (N.J.A.C. 7:7E-3.26),** or subject the user to danger.

3.-4. (No change.)

(d) (No change.)

7:7E-7.8 Mining [Use] **use** rule

(a) (No change.)

(b) The proposed mining, extension of existing mining or associated mining activities in freshwater wetlands or freshwater wetlands transition areas is subject to the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 et seq.) In addition, proposed mining extension of existing mining or associated mining activities within the 100-year floodplain is subject to the [Flood Hazard Control Act (N.J.S.A. 58:16A-50 et seq.)] **flood hazard areas rule at N.J.A.C. 7:7E-3.25**.

(c) (No change.)

SUBCHAPTER 8. RESOURCE RULES

7:7E-8.21 Subsurface sewage disposal systems

(a) (No change.)

(b) Acceptability conditions for subsurface sewage disposal systems are as follows:

1.-2. (No change.)

3. Construction of subsurface sewage disposal systems must comply with [all applicable standards of the National Flood Insurance Program Regulations (44 CFR 60) prepared by the Federal Emergency Management Agency (FEMA)] **the requirements of the flood hazard areas rule at N.J.A.C. 7:7E-3.25**.

(c) (No change.)

CHAPTER 13

FLOOD HAZARD AREA CONTROL ACT RULES

SUBCHAPTER 1. GENERAL PROVISIONS

7:13-1.1 Purpose and scope

(a) This chapter sets forth requirements governing human disturbance to the land and vegetation in the following areas:

1. **The flood hazard area of a regulated water, as described at N.J.A.C. 7:13-3; and**
2. **The riparian zone of a regulated water, as described at N.J.A.C. 7:13-4.**

(b) This chapter implements the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq.; and, in addition, relevant aspects of the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq.; the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq.; the Highlands Water Protection and Planning Act, N.J.S.A. 13:20-1 et seq.; the Ninety-Day Construction Permits Law, N.J.S.A. 13:1D-29 et seq.; and N.J.S.A. 13:1D-1 et seq.

(c) The purpose of this chapter is to minimize damage to life and property from flooding caused by development within fluvial and tidal flood hazard areas, to preserve the quality of surface waters, and to protect the wildlife and vegetation that exist within and depend upon such areas for sustenance and habitat.

1. **Unless properly controlled, development within flood hazard areas increases the intensity and frequency of flooding by reducing flood storage, increasing stormwater runoff and obstructing the movement of floodwaters. Damage also occurs from fallen structures, unsecured materials and other debris carried by floodwaters. Furthermore, improperly built structures are subject to flood damage**

and threaten the health, safety and welfare of those who use them. Increased flooding results in increased risk of loss of life and property damage.

2. Healthy vegetation adjacent to surface waters is essential for maintaining bank stability and water quality. The indiscriminate disturbance of such vegetation destabilizes the banks of channels and other surface waters, which leads to increased erosion and sedimentation that exacerbates the intensity and frequency of flooding. The loss of vegetation adjacent to surface waters also reduces filtration of stormwater runoff and thus degrades the quality of these waters. Such impacts adversely affect the health and habitat of fish and wildlife that depend upon clean surface waters and therefore disrupt the ecological balance that is necessary for life. Humans are ultimately affected by this imbalance, since clean water is essential for all life.

(d) Except where authority has been delegated to a county governing body under N.J.A.C. 7:13-1.4, the Department shall be the agency that implements this chapter.

(e) Activities regulated under this chapter may also be subject to other Federal, State and/or local rules, plans and ordinances. Authorization to undertake a regulated activity under this chapter does not indicate that the activity also meets the requirements of any other rule, plan or ordinance. It is the applicant's responsibility to obtain all necessary approvals for a proposed project.

(f) Information and forms relating to this chapter can be obtained from:

Street address (for meetings and hand delivery of material):

State of New Jersey

Department of Environmental Protection

Division of Land Use Regulation

501 East State Street

Station Plaza 5, 2nd Floor

Trenton, New Jersey 08609

Postal address:

State of New Jersey

Department of Environmental Protection

Division of Land Use Regulation

P.O. Box 439

Trenton, New Jersey 08625-0439

Telephone: (609) 292-0060

Fax: (609) 777-3656

Website: www.nj.gov/dep/landuse/

(g) USGS quad maps and Flood Hazard Area Technical Manuals can be obtained from the Department's Office of Maps and Publications at the following address:

State of New Jersey

Department of Environmental Protection

Office of Maps and Publications

428 East State Street

P.O. Box 438

Trenton, New Jersey 08625-0438

Telephone: (609) 777-1039

Fax: (609) 292-3285

7:13-1.2 Definitions

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

"Acid producing soils" means soils that contain geologic deposits of iron sulfide minerals (pyrite or marcasite) which, when exposed to oxygen from the air or from surface waters, oxidize to produce sulfuric acid. Acid producing soils, upon excavation, generally have a pH of 4.0 or lower. After exposure to oxygen, these soils generally have a pH of 3.0 or lower. Information regarding the location of acid producing soils in New Jersey can be obtained from local Soil Conservation District offices.

"Actively farmed" means currently and continually in use for cultivation, grazing or other agricultural purposes, provided such activities are recognized as agricultural by the USDA. An area that lies fallow as part of a conventional rotational cycle that does not exceed five years is considered to be actively farmed. Farms that have been abandoned for more than five years are not actively farmed.

"Anadromous water" means a water that supports anadromous fish, as identified by the New Jersey Department of Environmental Protection, Division of Fish and Wildlife. Anadromous fish travel between salt water and fresh water or upstream to spawn, and N.J.A.C. 7:13-10.5(b) indicates how to determine which waters support anadromous fishery resources.

"Applicability determination" is the Department's official statement of whether an activity requires permit under this chapter, as described at N.J.A.C. 7:13-5.1.

"Architect" means a professional architect who is licensed to practice in New Jersey.

"Bank" means the inclined side of a channel, an excavated or impounded area or a topographic depression, which confines and/or conducts water.

"Bed" means the floor of a channel over which water flows continuously or intermittently. Bed also means the floor of an excavated or impounded area or of a topographic depression that confines and/or conducts water.

"Building" means a structure with walls and a roof, which is designed, constructed and/or intended for storage, shelter or occupation. A building that is intended for regular human occupation is considered a habitable building.

"Category One water" means a water designated as such in the Department's Surface Water Quality Standards at N.J.A.C. 7:9B.

"Central Passaic Basin" means the regulated area along the following waters:

1. **Beaver Dam Brook, downstream of Jacksonville Road in Montville Township, Morris County;**
2. **Black Brook in Florham Park Borough, East Hanover Township and Hanover Township, Morris County;**
3. **Dead River, downstream of Liberty Corner Road in Bernards Township, Somerset County;**
4. **East Ditch, downstream of Jacksonville Road in Pequannock Township, Morris County;**
5. **Harrison Brook, downstream of Lake Road in Bernards Township, Somerset County;**
6. **Passaic River, between U.S. Route 202 in Bernards Township, Somerset**

County, and Harding Township, Morris County, and Beatties Dam in Little Falls Township, Passaic County;

7. **Pequannock River, downstream of Paterson-Hamburg Turnpike in Riverdale Borough, Morris County, and Pompton Lakes Borough, Passaic County;**
8. **Pompton River;**
9. **Ramapo River, downstream of the Pompton Lake dam in Pompton Lakes Borough, Passaic County;**
10. **Rockaway River, downstream of the Boonton Reservoir dam in Boonton Town and Parsippany-Troy Hills Township, Morris County;**
11. **Wanaque River, downstream of Paterson-Hamburg Turnpike in Pompton Lakes Borough, Passaic County;**
12. **West Ditch, downstream of Jacksonville Road in Lincoln Park Borough, Morris County; and**
13. **Whippany River, downstream of State Route 10 in East Hanover and Hanover Townships, Morris County;**

"Channel" means a linear topographic depression that continuously or intermittently confines and/or conducts surface water. A channel can be naturally occurring or can be of human origin through excavation or construction. A channel includes both bed and banks.

"Channel modification" means the reconfiguration or reconstruction of all or part of a channel, such as by straightening, relocating, lining or excavating the channel, or by enclosing the channel within a structure such as a pipe or culvert. The removal of accumulated sediment and debris in accordance with N.J.A.C. 7:13-8.3, 8.4(c)2 or 11.15 is not a channel modification.

"Commissioner" means the Commissioner of the Department of Environmental Protection.

"Crawl space" means an enclosed area beneath a building's lowest finished floor, in which the vertical distance between the floor of the enclosed area and the building's lowest finished floor is no more than six feet.

"Dam" means a structure defined as such in the Department's Dam Safety Standards at N.J.A.C. 7:20.

"Department" means the New Jersey Department of Environmental Protection.

"Department delineation" means the flood profiles, flood elevations and/or detailed mapping of the flood hazard area and/or floodway, promulgated by the Department. Appendix 2 of this chapter, incorporated herein by reference, lists the Department delineated waters of New Jersey.

"Documented habitat for threatened or endangered species" means an area for which:

1. **There is recorded evidence of past use by a threatened or endangered species of flora or fauna for breeding, resting or feeding. Evidence of past use by a species can include, but is not limited to, sightings of the species or of its sign (for example, skin, scat, shell, track, nest, herbarium records, etc.), as well as identification of its call; and**
2. **The Department makes the finding that the area remains suitable for use by the specific documented threatened or endangered species during the normal period(s) the species would use the habitat.**

"Drainage area" means a geographic area within which water, sediments and dissolved materials drain to a particular receiving waterbody or to a particular point along

a receiving waterbody.

"Drawing" means a graphic depiction of land, water and/or structures on paper, such as a blueprint, construction plan, cross-section, topographic map, architectural rendering or other similar illustration, which is submitted to the Department to describe an existing or proposed activity or condition.

"Dry flood-proofing" means a modification to a building designed to eliminate or reduce potential flood damage to the building and its contents by preventing floodwaters from entering the building up to a certain elevation.

"Emergency permit" means an authorization to undertake a regulated activity, which is issued by the Department when certain conditions exist that warrant immediate action to protect the environment and/or public health, safety and welfare, as described at N.J.A.C. 7:13-12.

"Engineer" means a professional engineer who is licensed to practice in New Jersey.

"Erosion" means the detachment and movement of soil or rock fragments by water, wind, ice and/or gravity.

"Excavation" means removal or recovery of soil, minerals, mineral substances or organic substances other than vegetation, from the land surface or beneath the land surface, whether the land surface is exposed or submerged. Excavation does not include the movement of material due to erosion.

"FEMA" means the United States Federal Emergency Management Agency.

"FEMA flood insurance study" means a document providing various information regarding the potential for a water to flood, published by FEMA for certain waters in certain municipalities. A FEMA study can include flood profiles, floodway maps, flow rates

and other information related to flooding along the water covered by the FEMA study. Requests for copies of the available FEMA flood insurance studies or flood profiles, as well as any questions regarding their use, derivation or modification, should be directed to FEMA at (800) 358-9616.

"FEMA flood profile" means a graphic depiction of the 100-year water surface elevation of a given water, published by FEMA as part of a FEMA flood insurance study. FEMA flood profiles are not included in all FEMA flood insurance studies.

"FEMA floodway map" means a map showing the limits of the floodway for a given water, published by FEMA as part of a FEMA flood insurance study. FEMA floodway maps are not included in all FEMA flood insurance studies.

"FEMA flow rate" means the calculated peak rate at which floodwaters would flow in a given water during a 100-year flood, published by FEMA as part of a FEMA flood insurance study. FEMA flow rates are not included in all FEMA flood insurance studies.

"Fill" means to deposit or place material on the surface of the ground and/or under water. "Fill" also means the material being deposited or placed. Fill includes, but is not limited to, concrete, earth, pavement, rock, sand, soil, structures or any stored material such as building material, construction equipment, landscaping material, piles of soil, stone or wood, trash, vegetation in planters and/or root balls, and vehicles. Fill does not include vegetation rooted in the ground, whether naturally occurring or planted.

"Fish habitat enhancement device" means a device placed within and/or adjacent to a channel to enhance fish habitat, typically consisting of boulders, brush, deflectors, felled shoreline trees, low-flow channel structures, mud sills, rubble reefs, spawning/nursery structures and/or tire structures.

"Flood control project" means a structural or topographic modification to a channel, flood hazard area and/or riparian zone, performed for the public benefit and undertaken by a public entity, which is designed primarily to reduce flood elevations, reduce the risk of damage from flooding and/or protect an area from flooding or flood damage.

"Flood fringe" means the portion of the flood hazard area that is outside the floodway.

"Flood hazard area" means land, and the space above that land, which lies below the flood hazard area design flood elevation. Structures, fill and vegetation that are situated on land that lies below the flood hazard area design flood elevation are described as being "in" or "within" the flood hazard area. The inner portion of the flood hazard area is called the floodway and the outer portion of the flood hazard area is called the flood fringe. Figures A and B at N.J.A.C. 7:13-2.3 illustrate these areas as well as the riparian zone along a typical water. The flood hazard area on a particular site is determined using the methods set forth at N.J.A.C. 7:13-3. There are two types of flood hazard areas:

1. **Tidal flood hazard area. Flooding in a tidal flood hazard area may be influenced or contributed to by stormwater runoff from inland areas, but is primarily the result of elevated water levels generated by the tidal rise and fall of the Atlantic Ocean; and**
2. **Fluvial flood hazard area. Flooding in a fluvial flood hazard area may be influenced or contributed to by elevated water levels generated by the tidal rise and fall of the Atlantic Ocean, but is primarily the result of stormwater runoff from inland areas.**

"Flood hazard area design flood" means a flood equal to the 100-year flood plus an additional amount of water in fluvial areas to account for expected runoff increases due to

future development of the drainage area. This additional amount of water also provides a factor of safety in cases when the 100-year flood is exceeded. N.J.A.C. 7:13-3 describes the various methods of determining the flood hazard area design flood for a particular water as well as the additional amount of water to be added in various situations.

"Flood hazard area design flood elevation" means the peak water surface elevation that will occur in a water during the flood hazard area design flood.

"Flood Hazard Area Technical Manual" means the version of the Department publication entitled "Flood Hazard Area Technical Manual" in effect at the time an application is submitted. The manual can be obtained from the Department at the address listed at N.J.A.C. 7:13-1.1(g). The manual includes a copy of this chapter, various application checklists and other information helpful for understanding the requirements of this chapter and the application review process.

"Floodway" means land, and the space above that land, which lies within the inner portion of the flood hazard area, and which is mathematically determined to be required to carry and discharge floodwaters resulting from the 100-year flood under certain conditions. The floodway always includes the channel and often includes land adjacent to the channel. The floodway is normally characterized by faster and deeper flows than the flood fringe, which is the portion of the flood hazard area outside the floodway.

"Freshwater wetlands" means an area defined as such under the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A-1.4.

"General permit" means a flood hazard area permit to undertake a regulated activity for which the terms and conditions are established in a rule promulgated under this chapter at N.J.A.C. 7:13-8, and for which a person must submit an application for

authorization.

"Grace period" means the period of time afforded under the Grace Period Law, N.J.S.A. 13:1D-125 et seq., for a person to correct a minor violation in order to avoid imposition of a penalty that would otherwise be applicable for such violation.

"Grading" means the movement of soil or other material on the surface of the ground by humans resulting in a change in topography.

"Habitable building" means a building that is intended for regular human occupation. Examples of a habitable building include a private residence or public building as defined below; a commercial building such as a retail store, restaurant, office building or gymnasium; an appurtenant structure that is regularly occupied, such as a garage, barn or workshop; and any other building that is regularly occupied, such as a house of worship, community center or meeting hall. Examples of a non-habitable building include a bus stop shelter, utility building, storage shed, self-storage unit or an individual shelter for animals such as a doghouse.

"Hazardous substance" means material defined as such in the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11.

"Hazardous waste facility" means a facility that is licensed by the State to receive, store and/or process hazardous substances, and which is operating in accordance with all applicable Federal, State and local laws.

"Highlands Preservation Area" means that geographic portion of the State described in the Highlands Water Protection and Planning Act at N.J.S.A. 13:20-7(b)1.

"Hydraulic capacity" means the ability of a channel, flood hazard area or structure to conduct water. Hydraulic capacity is a function of cross-sectional area, hydraulic friction,

shape, skew, slope and the presence or absence of obstructions.

"Impervious surface" means a surface that is covered with a layer of material so that it is highly resistant to infiltration by water. Examples of an impervious surface include asphalt, brick, buildings, concrete, metal and most structures. In some instances, the Department will also consider densely packed gravel or stone roadways and parking areas to be impervious for the purposes of this chapter.

"Individual permit" means a flood hazard area permit to undertake a regulated activity issued by the Department after submittal of an application, and after the Department conducts a project-specific review under the applicable requirements at N.J.A.C. 7:13-9, 10 and 11.

"Invert" means the lowest point in a given cross-section of a channel, as well as the lowest point on the inside of a pipe, culvert or any other structure with an opening such as a flood vent.

"Jacking" means the placement of an underground utility line beneath a channel by means of horizontally pushing, drilling or otherwise forcing through the earth below the channel in such a way that the channel is not disturbed.

"Land surveyor" means a professional land surveyor who is licensed to practice in New Jersey.

"Lawfully existing" means an existing fill, structure and/or use, which meets all Federal, State and local laws, and which is not in violation of this chapter because it was established:

1. **Prior to January 31, 1980; or**
2. **On or after January 31, 1980, in accordance with the requirements of this**

chapter as it existed at the time the fill, structure and/or use was established.

"Low dam" means an artificial dike, levee or other barrier, which is constructed for the purpose of impounding water on a permanent or temporary basis, but which does not raise the water surface elevation enough to meet the definition of a dam.

"Low-flow aquatic passage" means the ability of aquatic species to travel upstream and downstream in a waterway without impediment during low-flow conditions in a channel. Natural channel beds often possess small rivulets that serve to provide aquatic passage in this way during low-flow conditions, which can occur during dry periods of the year. Bridges, culverts and other man-made structures may also be designed to provide low-flow aquatic passage by inclusion of a linear depression throughout the bottom of the structure in the direction of flow, which collects water during low-flow conditions and allows aquatic species to pass through the structure without impediment.

"Lowest floor" means the lowest floor of a building, including a basement or any other area that can be occupied by humans, except for a crawl space, garage or other enclosed area that meets the requirements at N.J.A.C. 7:13-11.5(m), (n) or (o), respectively.

"Method 1" or the "Department delineation method" means the method of determining the flood hazard area design flood elevation and floodway limit from State adopted delineations, as described at N.J.A.C. 7:13-3.3.

"Method 2" or the "FEMA tidal method" means the method of determining the tidal flood hazard area design flood elevation and floodway limit from FEMA Flood Insurance Studies, as described at N.J.A.C. 7:13-3.4(d).

"Method 3" or the "FEMA fluvial method" means the method of determining the fluvial flood hazard area design flood elevation and floodway limit from FEMA Flood

Insurance Studies, as described at N.J.A.C. 7:13-3.4(e).

"Method 4" or the "FEMA hydraulic method" means the method of determining the flood hazard area design flood elevation and floodway limit by calculation using flow rate data from FEMA Flood Insurance Studies, as described at N.J.A.C. 7:13-3.4(f).

"Method 5" or the "approximation method" means the method of determining the flood hazard area design flood elevation from the charts in chapter Appendix 1, incorporated herein by reference, as described at N.J.A.C. 7:13-3.5.

"Method 6" or the "calculation method" means the method of determining the flood hazard area design flood elevation and floodway limit by calculation using flow rates provided by an applicant for a verification under this chapter, as described at N.J.A.C. 7:13-3.6.

"NGVD" means the national geodetic vertical datum of 1929, which is the reference datum for all surveying, topography and elevations described in this chapter.

"Non-trout water" means a water that is defined as such in the Department's Surface Water Quality Standards at N.J.A.C. 7:9B. A non-trout water is a water that is not trout production, trout maintenance or trout stocked.

"NRCS" means the United States Department of Agriculture Natural Resource Conservation Service.

"Obstruction" means material placed and/or situated in a flood hazard area that can impede or change the direction of the flow of water, either by itself or by catching or collecting debris carried by such water.

"100-year flood" in fluvial areas means a flood that is expected to occur as a result of a 100-year storm, which is a storm event estimated to have a one percent probability of being

equaled or exceeded within a one-year period for a given geographic location and/or watershed. In tidal areas, a "100-year flood" means a flood caused by a tidal surge in the Atlantic Ocean, which has a one percent probability of being equaled or exceeded within a one-year period.

"Permit-by-rule" means a flood hazard area permit to undertake a regulated activity for which the terms and conditions are established in a rule promulgated under this chapter at N.J.A.C. 7:13-7 and that is effective without prior written approval from the Department, provided all requirements established for that activity in the applicable permit-by-rule are satisfied.

"Person" means an individual, corporation, corporate officer, partnership, association, the Federal government, the State, a municipality, a commission or political subdivision of the State or any interstate body.

"Private residence" means a one or two-family dwelling.

"Private roadway" means a roadway for use by vehicles, including a driveway or access road, which is not a public roadway as defined in this section.

"Public building" means a habitable building that serves as one or more of the following:

1. **An assisted living facility or nursing home;**
2. **A day care center;**
3. **A dormitory;**
4. **A hospital or medical clinic;**
5. **A jail or detention facility;**
6. **A police station, fire station or emergency response center;**

7. A public shelter;

8. A residential rental unit of three or more units, such as an apartment, hotel or motel;

9. A school or college; and

10. Any other building designed for a public use that is similar to 1 through 9 above.

"Public roadway" means a roadway for use by vehicles, including a driveway or access road, which is constructed for public use and is maintained by the Federal, State, county or municipal government.

"Reconstruct" means to patch, mend, replace, rebuild and/or restore a lawfully existing structure to a usable condition after decay or damage has occurred, in which greater than 50 percent of the structure is replaced and/or the size, shape or location of the structure is altered. For habitable buildings, the percentage of replacement shall be determined by comparing the cost of the reconstruction to the replacement value of the building. For all other structures, the percentage of replacement shall be determined by comparing the area of the structure being reconstructed to the total area of the structure.

"Regulated activity" means an activity that is regulated under this chapter as described at N.J.A.C. 7:13-2.4. Some regulated activities, when performed in a certain manner or to a specified degree, are permitted-by-rule at N.J.A.C. 7:13-7. All regulated activities which are not permitted-by-rule require a general permit under N.J.A.C. 7:13-8, an individual permit under N.J.A.C. 7:13-9, 10 and 11, an emergency permit under N.J.A.C. 7:13-12, or a coastal permit under N.J.A.C. 7:7 and N.J.A.C. 7:7E, prior to commencement.

"Regulated area" means the flood hazard area and riparian zone along a regulated water, as described at N.J.A.C. 7:13-2.3.

"Regulated water" means a water subject to this chapter as described at N.J.A.C. 7:13-2.2.

"Repair" means to patch, mend, replace, rebuild and/or restore a lawfully existing structure to a usable condition after decay or damage has occurred, in which no more than 50 percent of the structure is replaced and the size, shape or location of the structure is not altered. For habitable buildings, the percentage of replacement shall be determined by comparing the cost of the repair to the replacement value of the building. For all other structures, the percentage of replacement shall be determined by comparing the area of the structure being reconstructed to the total area of the structure.

"Revision" means a document issued by the Department to revise a valid, previously issued verification, general permit authorization, individual permit or Department delineation as described at N.J.A.C. 7:13-13.

"Riparian zone" means the land and vegetation within and adjacent to a regulated water as described at N.J.A.C. 7:13-4.1 and illustrated at N.J.A.C. 7:13-2.3.

"Sediment" means solid material, mineral or organic, that is in suspension, is being transported or has been moved from its site of origin by air, water, ice or gravity as a product of erosion.

"Site" means the area within the legal boundary of the property, properties or right-of-way upon which any action under this chapter is requested, proposed, occurring or has occurred, plus any contiguous land owned or controlled by the same person(s). The legal boundary of a property is set forth in the deed(s) of the property. The legal boundary of a

right-of-way is set forth in the document creating the right-of-way.

"Soil bioengineering" means the method of stabilizing eroded banks using vegetation, and sometimes in conjunction with other natural materials, as described at section 650.1601(d)(2) of Chapter 16 in the USDA Natural Resource Conservation Service Engineering Field Handbook, published December 1996, incorporated herein by reference. Copies of the Engineering Field Handbook can be obtained from local NRCS offices.

"Soil Conservation District" means a division of the New Jersey Department of Agriculture (NJDA), authorized under N.J.S.A. 4:24-1 et seq. Each Soil Conservation District administers NJDA programs for one or more counties. Soil Conservation Districts are overseen by the New Jersey State Soil Conservation Committee in the NJDA, which promulgates the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90.

"Solid waste" means any garbage, refuse, sludge or any other material defined as solid waste in the Solid Waste Rules at N.J.A.C. 7:26-1.6.

"Solid waste facility" means a facility that is licensed by the State to receive, store and/or process solid waste.

"Stormwater" means water resulting from precipitation (including rain and snow) that runs off the land's surface, is transmitted to the subsurface or is captured by separate storm sewers or other sewage or drainage facilities.

"Stormwater management basin" means an impoundment created by constructing an embankment, excavating a pit and/or erecting or placing a structure, for the purpose of managing stormwater runoff. A stormwater management basin can be designed to be normally dry (as in a detention or infiltration basin), retain a permanent pool of water (as

in a retention basin or wet pond), and/or be planted mainly with vegetation suitable for freshwater wetlands (as in most constructed stormwater wetlands).

"Stormwater runoff" means water flow on the surface of the ground or in storm sewers, resulting from precipitation.

"Structure" means any assemblage of material by humans, including, but not limited to, a berm, bridge, bulkhead, building, cable, causeway, culvert, dam, dike, embankment, fence, jetty, levee, pavement, piling, pipe, post, railroad, retaining wall, roadway, stormwater management basin, tower or wire. Vegetation is not a structure. Soil bioengineering material that includes vegetation as well as other material is a structure.

"Suitably anchored" means secured to resist flotation, collapse and displacement due to floodwaters. A structure shall be considered to be suitably anchored if the structure is erected in accordance with the requirements for flood-resistant construction in the International Building Code, incorporated herein by reference. Copies of the International Building Code can be obtained at the following address:

International Code Council, Inc.

4051 West Flossmoor Road

Country Club Hills, Illinois 60477

Telephone: (888) 422-7233

"Temporary" means a regulated activity that occupies, persists and/or occurs on a site for no more than six months. For example, a fill or structure is temporary if, within six months of its placement, the fill or structure is removed from the site and all disturbed regulated areas are restored to their original topography and vegetative cover.

"Threatened or endangered species" means a species identified pursuant to the

Endangered and Nongame Species Conservation Act, N.J.S.A. 23:2A-1 et seq., the Endangered Species Act of 1973, 16 U.S.C. § § 1531 et seq. or the Endangered Plant Species List, N.J.A.C. 7:5C-5.1, and any subsequent amendments thereto.

"Trout maintenance water" means a section of water designated as trout maintenance in the Department's Surface Water Quality Standards at N.J.A.C. 7:9B.

"Trout production water" means a section of water identified as trout production in the Department's Surface Water Quality Standards at N.J.A.C. 7:9B.

"Trout stocked water" means a section of water stocked with trout by the Department's Division of Fish and Wildlife and listed in N.J.A.C. 7:25-6.

"Unsecured material" means the following:

1. **A structure that is not suitably anchored; and**
2. **Material placed on the surface of the ground, which would likely become buoyant, mobile or lifted by water during a flood, or otherwise be transported offsite by floodwaters. Examples include building material, construction equipment, landscaping material, patio furniture, piles of soil, stone or wood, trash, vegetation in planters or root balls, and vehicles.**

"USDA" means the United States Department of Agriculture.

"USGS quad map" means a topographic quadrangle map issued by the United States Geologic Survey (USGS), 7.5 minute series, drawn at a scale of 1:24,000, available from the Department at the address listed in N.J.A.C. 7:13-1.1(g).

"Utility line" means a pipe, cable, line or wire for the transport or transmission of gases, liquids, electrical energy or communications. This term includes a pole or tower required to support a utility line, but does not include a tower that only transmits or

receives electromagnetic waves through the air, such as for radio, television or telephone transmission.

"Verification" means a document issued by the Department under N.J.A.C. 7:13-6, which establishes the flood hazard area design flood elevation, flood hazard area limit and/or the floodway limit on a site.

"Water" means a collection of water on the surface of the ground, including, but not limited to, a bay, brook, creek, ditch, lake, pond, reservoir, river, stream or swale. A water also includes the path or depression through which the water flows or is confined. A water that is piped, relocated or otherwise modified remains a water. A storm sewer is not a water unless it was constructed to replace or divert a previously existing water.

"Water control structure" means a structure within or adjacent to a water, which intentionally or coincidentally alters the hydraulic capacity, design flood elevation, flood hazard area limit and/or floodway limit of the water. Examples of a water control structure include a bridge, culvert, dam, embankment, ford (if above grade), retaining wall and weir.

"Water surface elevation" means the elevation of the surface of a water, measured in feet NGVD, and determined either by special calculation or gauge. For the purposes of determining compliance with a requirement of this chapter, a water surface elevation is rounded to the nearest 0.1 feet.

7:13-1.3 Types of permits and approvals

(a) This chapter establishes procedures and requirements for the following permits and approvals:

1. An applicability determination, in accordance with N.J.A.C. 7:13-5;

2. A verification, in accordance with N.J.A.C. 7:13-6;

3. A permit-by-rule, in accordance with N.J.A.C. 7:13-7;

4. A general permit, in accordance with N.J.A.C. 7:13-8;

5. An individual permit, in accordance with N.J.A.C. 7:13-9, 10 and 11;

6. An emergency permit, in accordance with N.J.A.C. 7:13-12;

7. A revision of a verification, general permit authorization, individual permit or Department delineation, in accordance with N.J.A.C. 7:13-13; and

8. A transfer of an approval to another person, in accordance with N.J.A.C. 7:13-14.1.

(b) Only the following persons or entities may qualify to obtain or operate under the permits and approvals listed at (a) above:

1. The owner(s) of the site on which the regulated activity is proposed or conducted. If the regulated activity is proposed or conducted within a right-of-way or easement, the Department shall be provided written consent for the regulated activity from the owner(s) of the right-of-way or easement;

2. An agent that has been designated by the owner(s) of the site on which the regulated activity is proposed or conducted to obtain or operate under a permit or approval on behalf of the owner(s); or

3. A public entity that is proposing work within an existing or proposed right-of-way or easement, which is owned or controlled by that entity or which will be appropriated by that entity under the power of eminent domain.

(c) The Department shall review an application for a permit or approval listed in (a) above according to this chapter in effect on the day that a complete application is received

by the Department. Any amendments to this chapter that are promulgated after the receipt of a complete application (as described by the application requirements for each type of permit or approval under this chapter) shall not affect the Department's review of that application, unless otherwise agreed to in writing by both the Department and the applicant.

(d) A person submitting an application under this chapter shall, to the extent that the person is aware, notify the Department of all facts relevant to the review of the application including, but not limited to, the presence of regulated areas and of threatened or endangered species onsite, history of flooding and previous flood damages onsite and the location of easements and other encumbrance on the property. Failure to provide all necessary information of which the applicant, its consultants, engineers, surveyors or agents is aware may result in the denial of an application or the suspension or termination of an approval, and may subject the applicant, its consultants, engineers, surveyors or agents to enforcement action under N.J.A.C. 7:13-19 for submittal of false information.

(e) No Department decision made under this chapter shall obligate the Department to approve or deny any future application under this or any other Department program or rule.

7:13-1.4 Delegation of authority

(a) Except as specified in (e) below, the Department may delegate authority to take action under this chapter to a county governing body. A county governing body seeking to assume all or a portion of the Department's authority under this chapter shall do the following:

1. Retain employees with professional training and education capable of properly

administering the permitting program established by this chapter; and

2. Submit to the Department a written request for delegation that includes the following:

i. A description of the aspects of the Department's authority that the county governing body seeks to assume;

ii. An agreement to uphold the requirements of this chapter;

iii. A written statement by the county governing body agreeing to apply for and accept delegation of authority, pursuant to N.J.S.A. 58:16A-55.6, and agreeing to adopt, in the event the request is approved, an ordinance or resolution enabling the body to carry out the delegation. A copy of the proposed ordinance or resolution shall also be provided; and

iv. A detailed description of the personnel, the physical resources and the source and amount of funding the county governing body shall use to fulfill the obligations it seeks to assume.

(b) Within 60 calendar days of receipt of a request by a county governing body in accordance with (a)2 above, the Department shall:

1. Delegate all or a portion of the authority sought by the county governing body. Such delegation may include conditions to ensure compliance with this chapter, and may be for a specified period of time, as the Department deems appropriate; or

2. Deny the request for delegation and provide the reasons why the Department has determined such delegation is not appropriate.

(c) A county governing body that has assumed delegation shall permanently retain, and

make available for Department review, a copy of all documents, plans, maps, memoranda and notes necessary to document that it has discharged its delegated duties for each application it processes. The Department shall review these records at least annually. The Department can at any time terminate delegation if it determines that the county governing body has failed to properly administer the authority delegated to it, or has failed to maintain the necessary documentation.

(d) A county governing body that has assumed delegation shall not charge fees greater than those provided at N.J.A.C. 7:13-17.

(e) The Department shall not delegate authority to approve any of the following:

1. **An application under this chapter by a State agency;**
2. **An application under this chapter by the county governing body itself; and**
3. **An application under this chapter for an individual permit that involves a hardship exception pursuant to N.J.A.C. 7:13-9.8.**

7:13-1.5 Creation of a county water resources association

(a) A county governing body can create, by ordinance or resolution, a county water resources association, the purpose of which shall be to:

1. **Establish county flood control and water management programs, and coordinate these with State and Federal programs;**
2. **Advise the county governing body on issues related to flood control and water management; and**
3. **Undertake other duties concerning flood control and water management that the county governing body delegates to the association by ordinance or resolution.**

(b) The county governing body shall appoint the members of the county water resources association. Appointed members may include the chief administrative officer or executive of a county planning agency, office of the county engineer, county utility authority, county health department, county mosquito commission, county Soil Conservation District, county parks agency and any other person with relevant experience or training.

7:13-1.6 Liberal construction

This chapter shall be liberally construed to enable the Department to fulfill its statutory obligations. The Commissioner can amend, repeal or rescind this chapter or any part thereof in accordance with the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq.

7:13-1.7 Severability

If any section, subsection, provision, clause or portion of these rules or the application thereof to any person or circumstance is judged unconstitutional or invalid by a court of competent jurisdiction, the remainder of these rules and their application to persons and circumstances other than those to which they have been held invalid shall not be affected thereby.

SUBCHAPTER 2. EXTENT OF REGULATORY AUTHORITY

7:13-2.1 Permit requirement

(a) No person shall engage in a regulated activity in a regulated area without a flood hazard area permit as required by this chapter, or a coastal permit as required by N.J.A.C.

7:7 and 7:7E, as set forth in (b) and (c) below. Initiation of a regulated activity in a regulated area without a flood hazard area or coastal permit as set forth at (b) below (except as provided in (c) below) shall be considered a violation of this chapter and shall subject the party or parties responsible for the regulated activity to enforcement action, as set forth at N.J.A.C. 7:13-19. Regulated areas are set forth at N.J.A.C. 7:13-2.3 and regulated activities are set forth at N.J.A.C. 7:13-2.4.

(b) Except as provided in (c) below, a person undertaking any regulated activity in a regulated area shall do so only in accordance with one of the following:

1. **A permit-by-rule, pursuant to N.J.A.C. 7:13-7;**
2. **An authorization under a general permit, pursuant to N.J.A.C. 7:13-8;**
3. **An individual permit, pursuant to N.J.A.C. 7:13-9, 10 and 11;**
4. **An emergency permit, pursuant to N.J.A.C. 7:13-12; or**
5. **A CAFRA or waterfront development permit, pursuant to N.J.A.C. 7:7 and N.J.A.C. 7:7E, provided:**
    i. **The CAFRA or waterfront development permit was accepted by the Department as complete for final review on or after (effective date of these rules); and**
    ii. **If activities are proposed in a fluvial flood hazard area, the applicant meets one of the four conditions at N.J.A.C. 7:13-9.6(a) regarding the need for a verification of the flood hazard area and/or floodway onsite.**

(c) Undertaking a regulated activity in a regulated area does not require an approval listed at (b) above in the following cases:

1. **The regulated activity is currently approved under a valid stream encroachment**

permit pursuant to this chapter, provided the stream encroachment permit was accepted by the Department as complete for review prior to (effective date of these rules);

2. The regulated activity is currently approved under a valid CAFRA or waterfront development permit, pursuant to N.J.A.C. 7:7 and N.J.A.C. 7:7E, provided the CAFRA or waterfront development permit was accepted by the Department as complete for final review prior to (effective date of these rules); or

3. The regulated activity was not subject to the requirements of this chapter prior to (effective date of these rules) and one of the following applies:

i. The regulated activity is currently approved under a valid final municipal building or construction permit, which was approved prior to (effective date of these rules); or

ii. The regulated activity does not require a municipal building or construction permit and one or more of the following construction activities were completed onsite prior to (effective date of these rules):

(1) The foundation for at least one building or structure;

(2) All of the subsurface improvements for a roadway; or

(3) The installation of all of the bedding materials for a utility line.

(d) If a regulated activity is approved under a qualifying approval listed at (c) above, and the regulated activity is subsequently revised by the issuing entity, the original approval continues to satisfy the requirements of (c) above provided the Department determines that the revision will not result in one or more of the following:

1. An increase in the area of vegetation disturbed in a riparian zone;

2. An increase in flood storage displacement in a flood hazard area;

3. New regulated activities onsite that have not been reviewed by the Department under N.J.A.C. 7:7, 7:7E and/or this chapter, as applicable; and/or

4. A change in land use and/or an alteration of the basic purpose and intent of the project, such as converting a residential development into a commercial development.

7:13-2.2 Regulated waters

(a) All waters in New Jersey are regulated under this chapter except for the following:

1. Any manmade canal;

2. In accordance with N.J.S.A. 58:16A-60, any coastal wetland regulated under the Wetlands Act of 1970 (N.J.S.A. 13:9A-1 et seq.); and

3. Any segment of water that has a drainage area of less than 50 acres, provided one or more of the following applies:

i. The water has no definable channel;

ii. The water is confined within a lawfully existing, manmade conveyance structure or drainage feature, such as a pipe, culvert, ditch, channel or basin, not including natural channels that were previously modified; and/or

iii. The water is not connected to a regulated water by a channel or pipe, such as an isolated pond or depression that has no outlet.

7:13-2.3 Regulated areas

(a) For each regulated water, as described at N.J.A.C. 7:13-2.2, the Department identifies

and regulates the water and the area surrounding it in two different ways, resulting in the regulated areas described at (a)1 and 2 below:

1. **A flood hazard area exists along every regulated water that has a drainage area of 50 acres or more. If a regulated water has a drainage area of less than 50 acres, the water does not have a flood hazard area that is regulated under this chapter. The flood hazard area is comprised of a flood fringe and a floodway, except for the Atlantic Ocean and other non-linear tidal waters such as bays and inlets, which do not have a floodway. Therefore, the entire flood hazard area along these tidal waters is considered to be a flood fringe for the purposes of this chapter. The methods for determining the limits of the flood fringe and floodway are described at N.J.A.C. 7:13-3; and**
2. **A riparian zone exists along every regulated water, except there is no riparian zone along the Atlantic Ocean nor along any manmade lagoon or oceanfront barrier island, spit or peninsula. The regulated water itself is also part of the riparian zone. The methods for determining the limits of the riparian zone are described at N.J.A.C. 7:13-4.1.**

(b) The areas described at (a)1 and 2 above generally overlap. Figures A and B below illustrate a typical water and its regulated areas. This chapter sets forth the specific requirements applicable to activities in each regulated area.

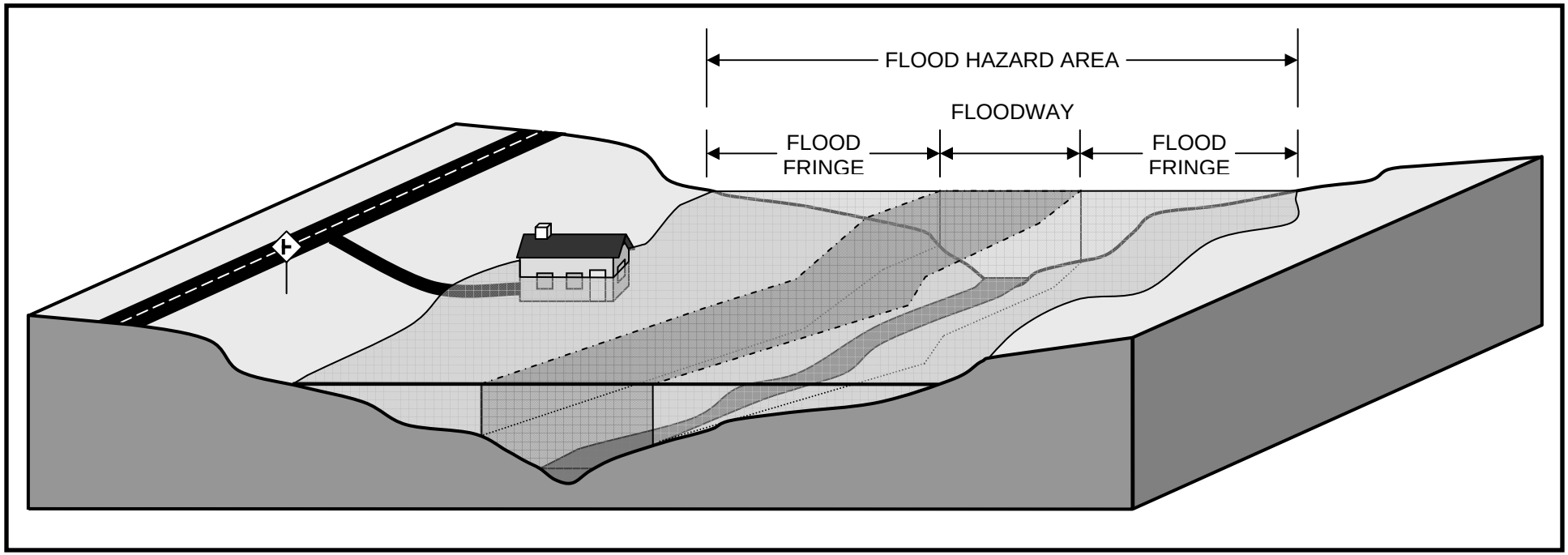


FIGURE A: THE FLOOD HAZARD AREA IS COMPRISED OF THE FLOODWAY AND FLOOD FRINGE

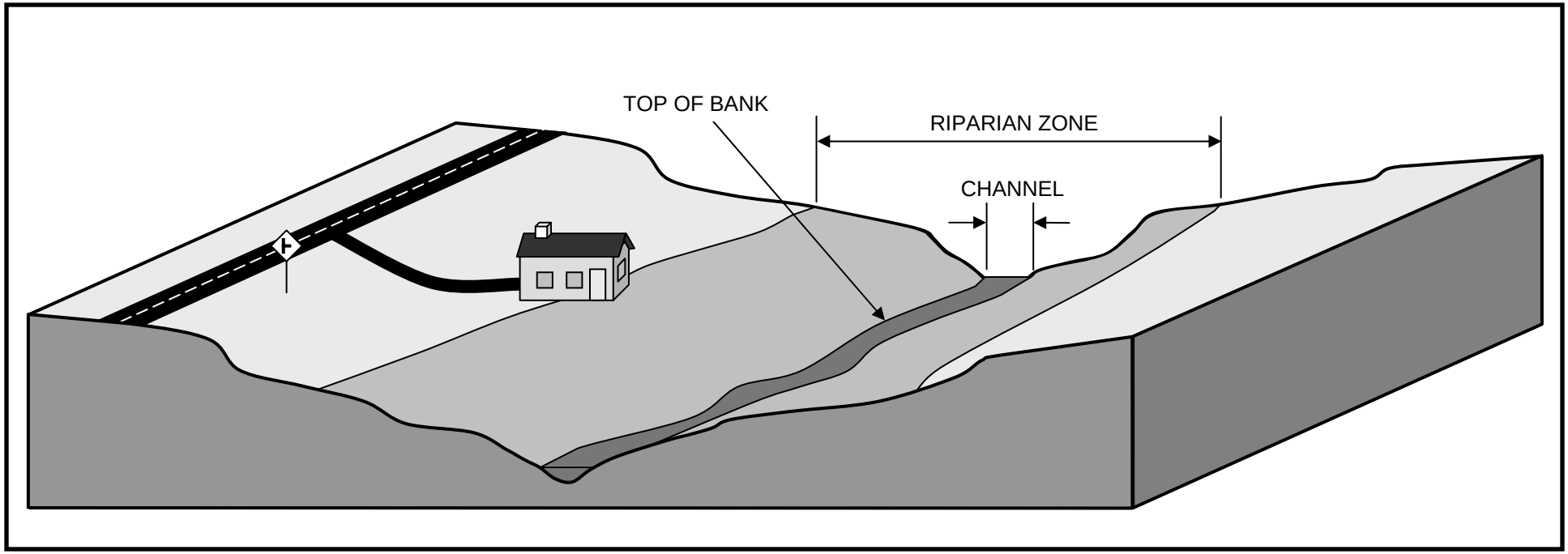


FIGURE B: THE RIPARIAN ZONE IS COMPRISED OF THE CHANNEL AND LAND WITHIN 50, 150 OR 300 FEET OF THE CHANNEL

7:13-2.4 Regulated activities

(a) Any action that includes or results in one or more of the following constitutes a regulated activity under this chapter if undertaken in a regulated area, as described at N.J.A.C. 7:13-2.3:

1. **The alteration of topography through excavation, grading and/or placement of fill;**
2. **The clearing, cutting and/or removal of vegetation in a riparian zone;**
3. **The creation of impervious surface;**
4. **The storage of unsecured material;**
5. **The construction, reconstruction and/or enlargement of a structure; and**
6. **The conversion of a building into a private residence or a public building.**

SUBCHAPTER 3. DETERMINING THE FLOOD HAZARD AREA AND FLOODWAY

7:13-3.1 General provisions for determining the flood hazard area and floodway along a regulated water

(a) This subchapter provides six methods for determining the flood hazard area and floodway along a regulated water as follows:

1. **Method 1 (Department delineation method) as described at N.J.A.C. 7:13-3.3;**
2. **Method 2 (FEMA tidal method) as described at N.J.A.C. 7:13-3.4(d);**
3. **Method 3 (FEMA fluvial method) as described at N.J.A.C. 7:13-3.4(e);**
4. **Method 4 (FEMA hydraulic method) as described at N.J.A.C. 7:13-3.4(f);**
5. **Method 5 (approximation method) as described at N.J.A.C. 7:13-3.5; and**
6. **Method 6 (calculation method) as described at N.J.A.C. 7:13-3.6.**

(b) The flood hazard area is the land, and the space above that land, which lies below the flood hazard area design flood elevation, as defined at N.J.A.C. 7:13-1.2. The six methods described in (a) above provide the flood hazard area design flood elevation, from which the flood hazard area limit on a site is determined. In some cases, the limits of the floodway can also be determined using these methods.

(c) In most cases, the Department shall issue an individual permit under this chapter only if the applicant has determined the flood hazard area and floodway limits on the site, and has received a verification for these limits from the Department pursuant to N.J.A.C. 7:13-6.1. However, under certain conditions as set forth at N.J.A.C. 7:13-9.6, the flood hazard area and/or floodway limits need not be verified in order for the Department to be able to determine whether a regulated activity complies with this chapter. Furthermore, a verification is not required prior to obtaining a general permit authorization under this chapter, except for certain cases as noted under general permits 5, 6 and 7 at N.J.A.C. 7:13-8.7, 8.8 and 8.9, respectively.

(d) The flood hazard area and floodway described in this subchapter may differ from areas identified as a "flood hazard area," "flood zone," "floodplain" or "floodway" by another public entity such as FEMA or a local government. The methods listed at (a) above are specifically designed and intended for determining compliance with the construction standards and requirements of this chapter.

7:13-3.2 Selecting a method for determining the flood hazard area and floodway along a regulated water

(a) This section establishes the methods by which the flood hazard area and floodway shall

be determined along a regulated water. The flowchart at the end of this section illustrates the correct use of this process. The Flood Hazard Area Technical Manual, available from the Department at the address listed at N.J.A.C. 7:13-1.1(g), also provides further guidance on how to perform calculations for those methods that require calculations.

(b) There are a number of factors that influence the selection of a method for determining the flood hazard area and floodway. These factors include the existence of a Department delineation or FEMA flood insurance study, whether the applicant proposes a regulated activity in the flood hazard area and what type of project is proposed. Furthermore, each method has certain limitations on its usefulness and availability as described in this subchapter. Applicants are encouraged to carefully review the entire subchapter before selecting a method.

(c) The flood hazard area and floodway limits along a regulated water shall be determined as follows:

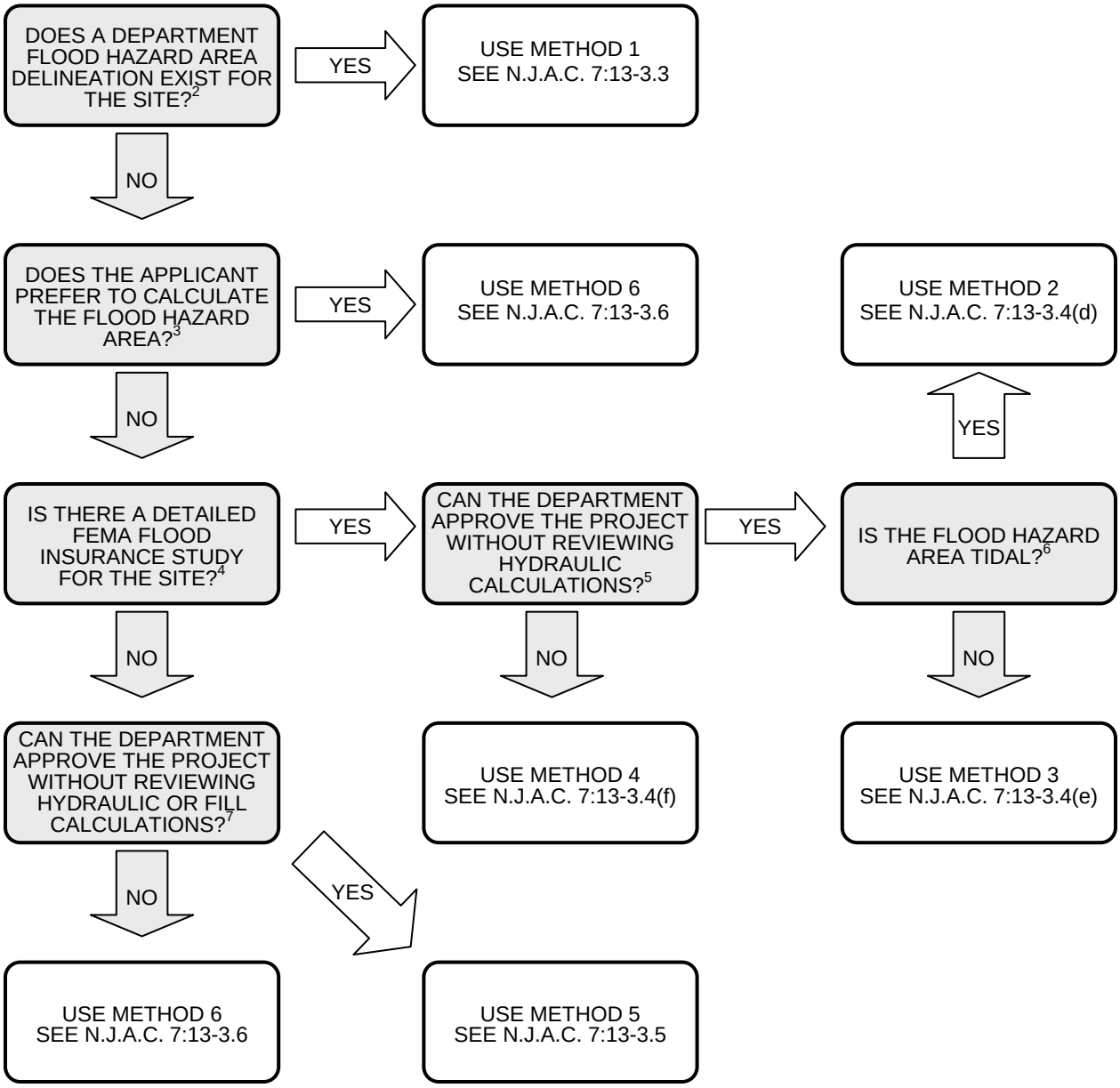
1. **If a Department delineation exists for a regulated water, an applicant shall use Method 1 as described at N.J.A.C. 7:13-3.3. Appendix 2 of this chapter lists the Department delineated waters of New Jersey.**
2. **If no Department delineation exists for a regulated water, an applicant may:**
    i. **Determine the flood hazard area and/or floodway from FEMA mapping, if such mapping exists for the section of regulated water in question, using Methods 2, 3 or 4 as described at N.J.A.C. 7:13-3.4(d), (e) and (f), respectively;**
    ii. **Determine the approximate limit of the flood hazard area using Method 5 as described at N.J.A.C. 7:13-3.5 if no FEMA mapping is exists for the section of regulated water in question; or**

iii. Determine the flood hazard area and/or floodway by calculation using Method 6 as described at N.J.A.C. 7:13-3.6.

(d) The flood hazard area and floodway shall be determined using only one method for each regulated water on a site, except in the following cases:

1. **If a Department delineation or FEMA flood insurance study terminates within a site, the flood hazard area on the remainder of the site may be delineated using another applicable method described in this subchapter; and**
2. **If Method 3 is used to delineate the flood hazard area but no FEMA floodway map exists for the section of regulated water in question, and determining the floodway is necessary to demonstrate compliance with the requirements of this chapter, the applicant shall use Method 4 to calculate the floodway.**

FLOW CHART FOR DETERMINING THE FLOOD HAZARD AREA ON A SITE[1]



1. This chart is provided for information purposes only as an aid to applicants who are deciding which method is most appropriate for determining the flood hazard area and floodway on a site. This chart supplements, but does not supersede, the text at N.J.A.C. 7:13-3. If there is any discrepancy between this chart and N.J.A.C. 7:13-3, the rule text shall govern.
2. A complete list of Department delineated waters can be found in Appendix 2.
3. As noted at N.J.A.C. 7:13-3.2(c), an applicant may choose to submit hydrologic and hydraulic calculations to delineate the flood hazard area and floodway where no Department delineation exists.
4. N.J.A.C. 7:13-3.4 describes the requirements which a FEMA study must meet in order to be used to determine the flood hazard area and floodway on a site. Not all FEMA studies may be used.
5. As noted at N.J.A.C. 7:13-10.1(f) and (g), certain projects such as bridges and culverts alter the hydraulic capacity of a channel or flood hazard area. It therefore may be necessary to provide a hydraulic analysis for such projects to demonstrate that flood elevations will not be increased offsite.
6. Flood hazard areas are either tidal or fluvial. See the definitions at N.J.A.C. 7:13-1.2 for more detail.
7. See note 5 above. Calculations are also sometimes necessary to demonstrate compliance with fill restrictions at N.J.A.C. 7:13-10.4. Method 5 does not provide the information needed for such calculations. Therefore in absence of a State delineation or FEMA study, Method 6 must be used.

7:13-3.3 Flood hazard area and floodway based on a Department delineation (Method 1)

(a) This section sets forth the procedure for determining a flood hazard area and floodway from a Department delineation. Appendix 2 of this chapter lists the Department delineated waters of New Jersey. Requests for copies of a Department delineation, including flood profiles and maps, as well as any questions regarding the use, derivation or modification of these delineations, should be directed to the Department's Office of Floodplain Management at the following address:

State of New Jersey

Department of Environmental Protection

Bureau of Dam Safety and Flood Control

P.O. Box 419

Trenton, New Jersey 08625-0419

Telephone: (609) 984-0859

(b) The following apply if a Department delineation has been promulgated under this chapter for a regulated water:

1. **The flood hazard area design flood elevation is that which is shown on the flood profile adopted as part of the Department delineation; and**
2. **The floodway limit is that which is shown on the flood maps adopted as part of the Department delineation.**

(c) An applicant seeking to modify a Department delineation shall submit an application for a revision as provided at N.J.A.C. 7:13-13.4.

(d) If an applicant proposes construction in a Department delineated floodway, and must prepare hydraulic calculations to demonstrate that the construction meets the

requirements of this chapter, the applicant shall base the calculations on the original data used by the Department to determine the delineation. Such data is available from the Department at the address listed in (a) above.

7:13-3.4 Flood hazard area and floodway based on a FEMA flood insurance study (Methods 2 through 4)

(a) This section sets forth the procedure for determining a flood hazard area design flood elevation and floodway limit from a FEMA flood insurance study where no Department delineation exists. Requests for copies of the available FEMA flood insurance studies or flood profiles, as well as any questions regarding their use, derivation or modification, should be directed to FEMA at (800) 358-9616.

(b) The methods set forth in this section for determining the flood hazard area and floodway along a regulated water may be used only if the following requirements are satisfied:

1. **No Department delineation exists for the section of regulated water in question; and**
2. **A FEMA flood insurance study exists for the section of regulated water in question, which meets the following:**
    i. **The FEMA flood insurance study includes the information needed for the Method that is being used. For example, Methods 2 and 3 below require that the FEMA study includes the regulated water's 100-year flood elevation, and Method 4 below requires that the FEMA study includes the regulated water's 100-year flow rate;**

ii. The flood insurance study used is dated January 31, 1980, or later; and

iii. The flood insurance study used is the most recent study published by FEMA for that municipality.

(c) There are three methods by which a FEMA flood insurance study may be used to determine the flood hazard area and floodway limit along a regulated water as follows:

1. Method 2 (FEMA tidal method), set forth at (d) below, which applies to a tidal flood hazard area for which a FEMA flood profile exists for the section of regulated water in question. If the FEMA flood insurance study does not provide a 100-year flood elevation, it is not possible to use this method;

2. Method 3 (FEMA fluvial method), set forth at (e) below, which applies to a fluvial flood hazard area for which a FEMA flood profile exists for the section of regulated water in question. If the FEMA flood insurance study does not provide a 100-year flood elevation, it is not possible to use this method; and

3. Method 4 (FEMA hydraulic method), set forth at (f) below. This method may be used only if the following requirements are satisfied:

i. The FEMA flood insurance study provides a 100-year flow rate for the regulated water. In most tidal flood hazard areas a large area is inundated due to flooding from the Atlantic Ocean, and therefore FEMA does not provide a 100-year flow rate for the regulated water itself. In such a case, it is not possible to use this method; and

ii. The applicant proposes a regulated activity in the flood hazard area and applies for an individual permit under this chapter, for which the Department requires hydraulic calculations comparing pre-construction and post-

construction water surface elevations within the regulated water, in order to demonstrate that the regulated activity complies with this chapter. Examples of activities that require such an analysis are detailed at N.J.A.C. 7:13-11.1(f), 11.1(g), 11.7(c) and 11.7(d).

(d) Under Method 2 (FEMA tidal method):

1. The flood hazard area design flood elevation shall be equal to the FEMA 100-year flood elevation; and

2. The floodway limit shall be determined as follows:

i. If a FEMA floodway map exists for the section of regulated water in question, the floodway limit shall be equal to the floodway limit shown on the FEMA floodway map; or

ii. If no FEMA floodway map exists for the section of regulated water in question, the floodway limit shall be equal to the limits of the channel. The Atlantic Ocean and other non-linear tidal waters such as bays and inlets do not have a floodway.

(e) Under Method 3 (FEMA fluvial method):

1. The flood hazard area design flood elevation shall be equal to one foot above the FEMA 100-year flood elevation; and

2. The floodway limit shall be determined as follows:

i. If a FEMA floodway map exists for the section of regulated water in question, the floodway limit shall be equal to the floodway limit shown on the FEMA floodway map; or

ii. If no FEMA floodway map exists for the section of regulated water in

question, the floodway limit cannot be determined using this method. The applicant shall instead calculate the floodway limit using Method 4 as described in (f) below. In such a case, applicants are encouraged to first contact the Department to discuss whether it is necessary to determine the floodway limit on a site for a given project.

(f) Under Method 4 (FEMA hydraulic method):

1. The flood hazard area design flood elevation and floodway limit shall be based on a standard step backwater analysis and determined as follows:

i. For a tidal flood hazard area, a hydraulic analysis shall be performed to determine the flood hazard area design flood elevation using the 100-year flow rate reported by FEMA for the regulated water (see (c)3i above);

ii. For a fluvial flood hazard area, a hydraulic analysis shall be performed to determine the flood hazard area design flood elevation using 125 percent of the 100-year flow rate reported by FEMA for the regulated water; and

iii. A hydraulic analysis shall be performed to determine the floodway limit using the 100-year flow rate reported by FEMA for the regulated water, based on equal conveyance reduction assuming a maximum rise of 0.2 feet in the 100-year flood elevation.

7:13-3.5 Flood hazard area determined by approximation (Method 5)

(a) This section sets forth the procedure for approximating a flood hazard area using the method described in chapter Appendix 1. This method does not provide a floodway limit. Therefore, the Department shall issue an individual permit for a regulated activity within

an approximated flood hazard area only if the project meets the requirements at N.J.A.C. 7:13-9.7.

(b) The flood hazard area design flood elevation for a regulated water can be approximated under Method 5, provided the following requirements are satisfied:

1. **Method 1 (Department delineation method) set forth at N.J.A.C. 7:13-3.3 cannot be used because no Department delineation exists for the section of regulated water in question;**
2. **Methods 2 through 4 (FEMA fluvial, FEMA tidal and FEMA hydraulic methods) set forth at N.J.A.C. 7:13-3.4 cannot be used because no qualifying FEMA flood insurance study exists for the section of regulated water in question; and**
3. **The drainage area of the water at the project site does not exceed 30 square miles.**

(c) An applicant may elect to establish the approximate flood hazard area limit at an elevation higher than that which is provided by Method 5 in order to match an existing topographic feature onsite, such as the top of an embankment, or to run concurrent with a verified freshwater wetland or transition area line.

(d) Method 5 is intended to be conservative and may in some cases overestimate the actual limits of flooding onsite to ensure that public health, safety and welfare is adequately protected in absence of a Department delineation or FEMA flood insurance study. Note that an applicant may use Method 6 under N.J.A.C. 7:13-3.6 to determine the flood hazard area and floodway along any regulated water for which no Department delineation exists.

(e) If the Department determines that using Method 5 to approximate a flood hazard area will significantly underestimate the depth of flooding on a particular site due to an unusual hydrologic or hydraulic condition within the drainage area, or due to a unique feature on

or near the site, the Department shall not approve a general permit authorization or an individual permit for any regulated activity in the approximated flood hazard area if such approval is determined to constitute a threat to public safety. Should the applicant choose to apply for a permit in such a case, the flood hazard area limit shall first be calculated according to Method 6, as described at N.J.A.C. 7:13-3.6.

7:13-3.6 Flood hazard area and floodway determined by calculation (Method 6)

(a) This section sets forth the procedure for determining a flood hazard area and floodway via hydrologic and hydraulic calculations. An applicant may use Method 6 to determine the flood hazard area and floodway along any regulated water for which no Department delineation exists. If a Department delineation does exist on a site, the applicant shall use Method 1 as set forth at N.J.A.C. 7:13-3.3.

(b) If the following conditions exist, Method 6 is the only method by which an applicant may determine the flood hazard area and floodway along a regulated water:

1. **Method 1 (Department delineation method) set forth at N.J.A.C. 7:13-3.3 cannot be used because no Department delineation exists for the section of regulated water in question;**
2. **Methods 2 through 4 (FEMA fluvial, FEMA tidal and FEMA hydraulic methods) set forth at N.J.A.C. 7:13-3.4 cannot be used because no qualifying FEMA flood insurance study exists for the section of regulated water in question; and**
3. **Method 5 (approximation method) set forth at N.J.A.C. 7:13-3.5 cannot be used for one of the following reasons:**
   i. **The requirements for using the approximate method at N.J.A.C. 7:13-3.5(b)**

are not satisfied;

ii. The Department determines that the approximate method will significantly underestimate the depth of flooding on the site in question, pursuant to N.J.A.C. 7:13-3.5(e); or

iii. The applicant is proposing a regulated activity for which the requirements at N.J.A.C. 7:13-9.7 are not satisfied.

(c) Under Method 6, the flood hazard area design flood elevation and floodway limit shall be based on a standard step backwater analysis and determined as follows:

1. A hydrologic analysis shall be performed to determine the peak flow rate for the 100-year flood for the regulated water. The hydrologic analysis shall assume existing development conditions in the drainage area, as of the date of the application to the Department;

2. A hydraulic analysis shall be performed to determine the flood hazard area design flood elevation using 125 percent of the 100-year flow rate determined under (c)1 above; and

3. A hydraulic analysis shall be performed to determine the floodway limit using the 100-year flow rate determined under (c)1 above, based on equal conveyance reduction assuming a maximum rise of 0.2 feet in the 100-year flood elevation.

SUBCHAPTER 4. DETERMINING THE RIPARIAN ZONE

7:13-4.1 The riparian zone

(a) A riparian zone exists along every regulated water, except there is no riparian zone along the Atlantic Ocean nor along any manmade lagoon or oceanfront barrier island, spit or peninsula.

(b) The riparian zone includes the land and vegetation within each regulated water described in (a) above, as well as the land and vegetation within a certain distance of each regulated water as described in (c) below. The portion of the riparian zone that lies outside of a regulated water is measured landward from the top of bank. If a discernible bank is not present along a regulated water, the portion of the riparian zone outside the regulated water is measured landward as follows:

1. **Along a linear fluvial or tidal water, such as a stream or swale, the riparian zone is measured landward of the feature's centerline;**
2. **Along a non-linear fluvial water, such as a lake or pond, the riparian zone is measured landward of the normal water surface limit;**
3. **Along a non-linear tidal water, such as a bay or inlet, the riparian zone is measured landward of the mean high water; and**
4. **Along an amorphously-shaped feature, such as a wetland complex, through which a regulated water flows but which lacks a definable channel, the riparian zone is measured landward of the feature's centerline.**

(c) The width of the riparian zone along each regulated water described in (a) above is as follows:

1. **The riparian zone is 300 feet wide along both sides of any Category One water, and all upstream tributaries situated within the same HUC-14 watershed;**
2. **The riparian zone is 150 feet wide along both sides of the following waters not**

identified in (c)1 above:

i. Any upstream tributary to a trout production water;

ii. Any trout maintenance water and all upstream tributaries within one mile;

iii. Any segment of a water flowing through an area that contains documented habitat for a threatened or endangered species of plant or animal, which is critically dependent on the regulated water for survival, and all upstream tributaries within one mile; and

iv. Any segment of a water flowing through an area that contains acid producing soils; and

3. The riparian zone is 50 feet wide along both sides of all waters not identified in (c)1 or 2 above.

(d) The riparian zones established by this chapter are separate from and in addition to any other similar zones or buffers established to protect surface waters. For example, the Stormwater Management rules at N.J.A.C. 7:8 and the Highlands Water Protection and Planning Act rules at N.J.A.C. 7:38 establish 300-foot Special Water Resource Protection Areas and buffers, respectively, along certain waters. Furthermore, the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A establish 50-foot and 150-foot transition areas along freshwater wetlands and other features that are also regulated under this chapter. Compliance with the riparian zone requirements of this chapter does not constitute compliance with the requirements imposed under any other Federal, State or local statute, regulation or ordinance.

SUBCHAPTER 5. APPLICABILITY DETERMINATIONS

7:13-5.1 General provisions for applicability determinations

(a) A flood hazard area applicability determination is the Department's statement of whether an activity is regulated and, therefore, requires a permit under this chapter.

(b) An applicability determination is optional. However, if it is unclear whether a particular activity is regulated, the Department encourages applicants to obtain an applicability determination prior to commencing work since unauthorized regulated activities may result in enforcement action pursuant to N.J.A.C. 7:13-19.

(c) An application for an applicability determination shall contain the following:

1. **One copy of an application report, as described at N.J.A.C. 7:13-15.3; and**
2. **One set of drawings, signed and sealed by a engineer, land surveyor or architect, as appropriate, detailing the proposed activities. If fill or grading is proposed, the drawing shall show existing and proposed topography unless the Department determines that topography is not necessary to determine compliance with this chapter. All topography shall reference NGVD, or include the appropriate conversion factor to NGVD, unless the applicant demonstrates that such reference is not necessary.**

(d) After reviewing an application for an applicability determination, the Department shall:

1. **Notify the applicant that the application did not include all the material required at (c) above and request the missing information. The Department may cancel the request for an applicability determination if the missing information is not**

provided within 60 calendar days. Otherwise, when the requested material is received, the Department shall take one of the actions in (d)2 below; or

2. Inform the applicant in writing that:

i. The Department is unable to determine whether this chapter applies to the proposed activities because the limit of the flood hazard area onsite cannot be determined without additional information. Therefore, the Department shall not issue an applicability determination until the applicant obtains a flood hazard area verification under N.J.A.C. 7:13-6;

ii. This chapter does not apply to the proposed activity and no permit is required pursuant to N.J.A.C. 7:13-2.1, provided the chapter is not amended to establish stricter standards or conditions; or

iii. This chapter does apply to the proposed activities and the regulated activities must be conducted in accordance with a permit pursuant to N.J.A.C. 7:13-2.1. The Department will also inform the applicant whether the proposed activities qualify for a permit-by-rule or whether an application for a general permit authorization or individual permit is necessary, provided the application contains sufficient detail regarding the proposed activities for the Department to make such a determination.

(e) Workload permitting, the Department shall make a final decision on an application for an applicability determination within 30 calendar days of receiving a complete application.

(f) Except as provided in (g) below, an applicability determination is valid for five years from its issuance date and shall not be extended. However, an applicant may request a new applicability determination to replace an expired one by submitting an application under

(c) above. An applicability determination may also be transferred upon the sale of a property to which it applies to a new owner pursuant to N.J.A.C. 7:13-14.1.

(g) If the Department determines under (d)2ii above that this chapter does not apply to a proposed activity, and this chapter is subsequently amended to put in place stricter standards or conditions such that the proposed activity becomes regulated, or else the Department amends the flood hazard area or riparian zone onsite such that the proposed activity now lies within one of these regulated areas, the applicability determination shall become void and the applicant shall obtain a permit pursuant to N.J.A.C. 7:13-2.1 prior to commencing the regulated activities onsite.

SUBCHAPTER 6. VERIFICATIONS

7:13-6.1 General provisions for verifications

(a) A flood hazard area verification is a document containing the Department's approval of the flood hazard area design flood elevation on a site, includes either a flood hazard area limit or an indication that the entire site is in a flood hazard area, and may also include a floodway limit.

(b) The flood hazard area design flood elevation, flood hazard area and/or floodway limits on a site shall be determined in accordance with the procedures outlined in N.J.A.C. 7:13-3.

(c) An application for a verification shall include the following:

1. **Three copies of an application report, as described at N.J.A.C. 7:13-15.3. If a hydrologic and/or hydraulic model is submitted with the application, the photographs required in the application report shall depict any water control**

structures, as well as a representative sampling of the locations of any cross-sections, which are referenced by the models;

2. **One copy of an engineering report, as described at N.J.A.C. 7:13-15.4, which includes all necessary supporting calculations, maps and other documentation and a description of which delineation method under N.J.A.C. 7:13-3 was used;**
3. **Documentation that the applicable public notice requirements of N.J.A.C. 7:13-16 have been met;**
4. **The appropriate application fee required at N.J.A.C. 7:13-17; and**
5. **Six sets of drawings, signed and sealed by an engineer, land surveyor or architect, as appropriate, which include the following:**
   i. **Topography that references NGVD, or includes the appropriate conversion factor to NGVD, unless the applicant demonstrates that such reference is not necessary;**
   ii. **The limit of the flood hazard area under existing conditions on the site. If the entire site is in a flood hazard area, the drawings shall include a note to this effect, as well as the elevation(s) of the flood hazard area design flood on the site;**
   iii. **The limit of any floodway under existing conditions on the site, if the applicant seeks verification of the floodway limits. If the entire site is in a floodway, the drawings shall include a note to this effect;**
   iv. **A metes and bounds description of any flood hazard area limit and floodway limit under existing conditions onsite. If the verification is submitted concurrently with a permit application that proposes to affect one or both of**

these limits, the drawings shall also include a metes and bounds description of the proposed flood hazard area and/or floodway limits;

v. The following statement: "NOTE: All or a portion of this site lies in a flood hazard area. Certain activities in flood hazard areas are regulated by the New Jersey Department of Environmental Protection and some activities may be prohibited on this site or may first require a permit. Contact the Division of Land Use Regulation at (609) 292-0060 for more information prior to any construction onsite.";

vi. A note indicating which method described at N.J.A.C. 7:13-3 was used to determine the limit of the flood hazard area and/or floodway;

vii. The limit of any riparian zone onsite as described at N.J.A.C. 7:13-4.1; and

viii. An indication of the location of any cross-section and water control structure referenced in the engineering report as well as a graphic depiction of each cross-section.

(d) The Department shall review an application for a verification according to the same procedure established for individual permit applications at N.J.A.C. 7:13-9.3.

(e) A verification is valid for five years from its issuance date and shall not be extended. However, a verification can be reissued automatically with the issuance of a permit for a regulated activity at that site pursuant to (f) below and can be transferred at the time of sale of a property to which the verification applies to a new owner pursuant to N.J.A.C. 7:13-14.1.

(f) If the Department issues a verification for a site, and within five years issues a general permit authorization or an individual permit for a regulated activity that references or

relies upon the verification at that site, the Department shall automatically reissue the verification upon approval of the permit or authorization so that the verification and permit or authorization have the same expiration date. This automatic reissuance shall occur only once per verification and there is no fee for this reissuance. The reissued verification shall reflect any alterations to the flood hazard area design flood elevation, flood hazard area limit and/or floodway limit that will result from the regulated activities authorized under the individual permit or general permit authorization. All pre-construction and post-construction elevations and limits shall be demarcated on drawings approved under the verification.

(g) Within 90 calendar days after the Department issues a verification on a privately owned lot, or on a publicly owned lot other than a right-of-way, the applicant shall submit the following information to the clerk of each county in which the site is located, and shall send proof to the Department that this information is recorded on the deed of each lot referenced in the verification. Failure to have this information recorded in the deed of each lot and/or to submit proof of recording to the Department constitutes a violation of this chapter and may result in suspension or termination of the verification and/or subject the applicant to enforcement action under N.J.A.C. 7:13-19:

1. **The Department file number for the verification;**
2. **The approval and expiration dates of the verification;**
3. **A metes and bounds description of any flood hazard area limit and/or floodway limit approved under the verification;**
4. **The flood hazard area design flood elevation, or range of elevations if variable, approved under the verification; and**

5. **The following statement: "The State of New Jersey has determined that all or a portion of this lot lies in a flood hazard area. Certain activities in flood hazard areas are regulated by the New Jersey Department of Environmental Protection and some activities may be prohibited on this site or may first require a permit. Contact the Division of Land Use Regulation at (609) 292-0060 for more information prior to any construction onsite."**

SUBCHAPTER 7. PERMITS-BY-RULE

7:13-7.1 General provisions for permits-by-rule

(a) This subchapter establishes permits-by-rule for certain regulated activities. Each permit-by-rule specifically describes the regulated activity authorized, including the size and type of regulated activity and in some cases where in the flood hazard area and riparian zone the regulated activity may be conducted. The Department may, by rulemaking in accordance with the Administrative Procedure Act, rescind or modify an existing permit-by-rule, or establish new ones. The flood hazard area permits-by-rule are set forth at N.J.A.C. 7:13-7.2, and are summarized, for informational purposes only, in Table A below.

(b) The following requirements apply to every permit-by-rule at N.J.A.C. 7:13-7.2:

1. **Each limit or condition of a particular permit-by-rule shall be satisfied without requiring a review of detailed engineering calculations; and**
2. **All structures shall be suitably anchored.**

(c) A regulated activity that meets the requirements of a permit-by-rule may be conducted

without prior Department approval. However, if it is unclear whether a particular activity meets a permit-by-rule, the Department encourages applicants to obtain an applicability determination under N.J.A.C. 7:13-5.1 prior to commencing work, since unauthorized regulated activities may result in enforcement action under N.J.A.C. 7:13-19. Furthermore, a person may wish to obtain an applicability determination in order to demonstrate to a local government that a proposed activity meets a permit-by-rule.

(d) A person intending to undertake a regulated activity under any of the eight permits-by-rule at N.J.A.C. 7:13-7.2(a) shall, at least 14 days prior to initiating the activity, provide written notification to the Department (via letter, electronic mail, fax or in person) as follows:

1. **The notification shall include:**
   - i. **The property owner's name and contact information;**
   - ii. **The contractor's name (if applicable) and contact information;**
   - iii. **The street address and lot, block, municipality and county for the site at which the regulated activity will be conducted;**
   - iv. **Which permit-by-rule applies to the activity;**
   - v. **The proposed start and end date for the activity; and**
   - vi. **A brief description of the activity.**
2. **The notification shall be submitted to:**

   Attn: Permit-By-Rule Notification

   New Jersey Department of Environmental Protection

   Bureau of Coastal and Land Use Compliance and Enforcement

   P.O. Box 422

401 East State Street

Trenton, New Jersey 08625-0422

Fax: (609) 633-6798

Electronic mail: address@dep.state.nj.us

Website: www.nj.gov/dep/enforcement/clue

(e) Prior to undertaking a regulated activity that fails to comply with any limit, condition or requirement of a permit-by-rule in this subchapter, the applicant must first obtain a general permit authorization (pursuant to N.J.A.C. 7:13-8), an individual permit (pursuant to N.J.A.C. 7:13-9, 10 and 11), an emergency permit (pursuant to N.J.A.C. 7:13-12) or a CAFRA or waterfront development permit (pursuant to N.J.A.C. 7:7 and 7:7E) for the regulated activity. Furthermore, a person may undertake a regulated activity under a permit-by-rule only up to any given limit specified by the permit-by-rule. For example, the placement of no more than five cubic yards of fill under the permit-by-rule at N.J.A.C. 7:13-7.2(b)3 means either the one-time placement of five cubic yards of fill or multiple placements of fill over time that cumulatively do not exceed five cubic yards. A person may also concurrently undertake activities under two or more permits-by-rule provided all activities meet the requirements of this subchapter. For example, a person could elevate a building under the permit-by-rule at N.J.A.C. 7:13-7.2(a)3, construct an addition to the building under the permit-by-rule at N.J.A.C. 7:13-7.2(a)4, and build a fence around the building under the permit-by-rule at N.J.A.C. 7:13-7.2(b)5, without requiring another approval under this chapter, provided each activity meets the descriptions of each applicable permit-by-rule.

Table A
SUMMARY OF PERMITS-BY-RULE

This Table is for informational purposes only. See N.J.A.C. 7:13-7.2(a) through (f) for specific applicable limits and requirements for each permit-by-rule

(a) Activities that require 14-day prior notice to the Department
1. Reconstructing a lawfully existing structure in a flood fringe
2. Constructing at or below grade
3. Elevating a building above the flood hazard area design flood elevation
4. Constructing an addition to a building of no more than 300 square feet in a flood fringe
5. Removing a major obstruction from a regulated water with machinery
6. Constructing a boat launching ramp of no more than 1,000 square feet
7. Constructing a fish habitat enhancement device
8. Constructing a USGS-approved flow gauge or weir

(b) General construction and maintenance activities
1. Conducting normal property maintenance in a riparian zone
2. Removing a lawfully existing structure from a flood fringe
3. Placing no more than 5 cubic yards of fill material in a flood fringe
4. Repairing a lawfully existing structure
5. Constructing a fence
6. Construction in a tidal flood fringe that does not need a coastal permit
7. Constructing an addition above a building in a flood fringe
8. Constructing a non-habitable building of no more than 150 square feet in a flood fringe
9. Constructing an open structure with a roof in a flood fringe (e.g., car port, patio, pole barn)
10. Constructing an aboveground recreational structure (e.g., bleacher, picnic table, backstop)
11. Constructing an aboveground swimming pool in a flood fringe
12. Constructing an in-ground swimming pool
13. Constructing an open deck attached to a building
14. Constructing an open dock of no more than 1,000 square feet on an impounded water
15. Placing an aboveground fuel tank of no more than 2,000 gallons in a flood fringe
16. Placing an underground fuel tank
17. Filling an abandoned raceway
18. Maintaining a manmade canal that passes through a regulated area

(c) Activities associated with utilities
1. Placing a utility pole
2. Placing an open-frame utility tower in a flood fringe
3. Jacking an underground utility line beneath a water
4. Placing an underground utility line beneath existing pavement
5. Attaching a utility line to the downstream face of a roadway that crosses a water
6. Placing an underground utility line in a flood hazard area outside a riparian zone

(d) Activities associated with roadways and parking areas
1. Repaving a roadway or parking area in a flood fringe
2. Placing an open guardrail along a public roadway
3. Removing sediment by hand adjacent to a bridge, culvert or outfall along a public roadway
4. Reconstructing a bridge superstructure above a flood hazard area

(e) Activities associated with the storage of unsecured material
1. Temporary storage of construction material in a flood fringe
2. Incidental storage of material associated with a residence in a flood fringe
3. Incidental storage of material associated with a non-residence in a flood fringe
4. Operating an existing business that stores and distributes material
5. Operating an existing hazardous waste facility
6. Operating an existing solid waste facility

(f) Agricultural activities
1. Continuing ongoing agricultural activities that result in no fill
2. Commencing new agricultural activities that result in no fill
3. Undertaking soil conservation practices in a flood fringe
4. Constructing an agricultural building of no more than 1,000 square feet in a flood fringe

7:13-7.2 Permits-by-rule

(a) The permits-by-rule at (a)1 through 8 below apply to the specified construction and maintenance activities listed therein. Pursuant to N.J.A.C. 7:13-7.1(d), prior written notice to the Department is required for each of these permits-by-rule.

1. The reconstruction of a lawfully existing structure in a flood fringe, provided:

i. The structure is not a habitable building;

ii. The structure is not a retaining wall that extends four feet or more above the ground;

iii. The reconstructed structure lies within the footprint of the existing structure and is not enlarged;

iv. The reconstruction is not a major development, as defined at N.J.A.C. 7:8-1.2, and is, therefore, not subject to the requirements of the Stormwater Management rules at N.J.A.C. 7:8;

v. No vegetation is cleared, cut or removed in a riparian zone, except for vegetation within 20 feet of the structure if such disturbance is necessary to facilitate its reconstruction; and

vi. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

2. Any construction activity at or below grade (such as a bicycle path, driveway, fishing or hunting area, garden, lawn, nature preserve, outdoor recreation area, park, parking area, picnic ground, playground, playing field, roadway, sidewalk or trail), provided:

i. The existing ground elevation is not raised;

ii. No disturbance related to the regulated activity is located within 25 feet of any top of bank or edge of water;

iii. The construction activity is not a major development, as defined at N.J.A.C. 7:8-1.2, and is therefore not subject to the requirements of the Stormwater Management rules at N.J.A.C. 7:8;

iv. No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area maintained as a lawn or garden or an abandoned parking area that has partially revegetated); and

v. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

3. The elevation of a lawfully existing building in order to reduce flood damage potential, provided:

i. The building to be elevated is not relocated;

ii. The building is not located in a floodway;

iii. The lowest finished floor of the building is raised to at least one foot above the flood hazard area design flood elevation;

iv. The area below the lowest finished floor of the building is not used for habitation and remains open to floodwaters, in accordance with N.J.A.C. 7:13-11.5(l);

v. No vegetation is cleared, cut or removed in a riparian zone, except for vegetation within 20 feet of the building if such disturbance is necessary to facilitate its elevation; and

vi. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

4. The construction of an addition that is connected to a lawfully existing building in a flood fringe, provided:

i. The addition has a footprint of no more than 300 square feet;

ii. No disturbance related to the regulated activity is located within 25 feet of any top of bank or edge of water;

iii. No part of the addition extends into a floodway;

iv. No vegetation is cleared, cut or removed in a riparian zone, except for vegetation within 20 feet of the addition if such disturbance is necessary to facilitate its construction; and

v. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the

regulated activity;

5. **The use of machinery to remove a major obstruction from a regulated water that cannot be removed by hand, such as a fallen tree, abandoned vehicle, furniture and other large debris, provided:**
   i. **No trees are disturbed in the riparian zone to provide access to the channel and/or obstruction;**
   ii. **The machinery is situated outside the regulated water where possible;**
   iii. **The timing restrictions set forth at N.J.A.C. 7:13-10.5(d) are observed; and**
   iv. **No fill material or accumulated sediment is removed from the regulated water;**
6. **The construction of a boat launching ramp, provided:**
   i. **The ramp has a footprint of no more than 2,000 square feet;**
   ii. **The ramp is constructed at or below grade;**
   iii. **The timing restrictions set forth at N.J.A.C. 7:13-10.5(d) are observed;**
   iv. **No more than 2,000 square feet of vegetation, including permanent and temporary disturbance, is cleared, cut or removed in a riparian zone; and**
   v. **All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;**
7. **The construction of a fish habitat enhancement device provided:**
   i. **The device is approved by the Department's Division of Fish and Wildlife, Bureau of Freshwater Fisheries;**
   ii. **The device will not cause erosion in the regulated water;**

iii. The device will not cause any rise in the flood hazard area design flood elevation outside the regulated water;

iv. The device will not cause any existing building to be subject to increased flooding during any flood event up to and including the flood hazard area design flood;

v. The timing restrictions set forth at N.J.A.C. 7:13-10.5(d) are observed;

vi. No more than 2,000 square feet of vegetation, including permanent and temporary disturbance, is cleared, cut or removed in a riparian zone; and

vii. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity; and

8. The construction of a gauge, weir or other device to measure the depth, velocity and/or rate of flow in a regulated water provided:

i. The device is approved by the United States Geological Survey;

ii. The device will not cause erosion in the regulated water;

iii. The device will not cause any rise in the flood hazard area design flood elevation outside the regulated water;

iv. The device will not cause any existing building to be subject to increased flooding during any flood event up to and including the flood hazard area design flood;

v. The timing restrictions set forth at N.J.A.C. 7:13-10.5(d) are observed;

vi. No more than 2,000 square feet of vegetation, including permanent and temporary disturbance, is cleared, cut or removed in a riparian zone; and

vii. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity.

(b) The permits-by-rule at (b)1 through 18 below apply to the specified construction and maintenance activities listed therein.

1. The disturbance of vegetation in a riparian zone for normal property maintenance.

i. Normal property maintenance means an activity necessary to maintain a lawfully existing structure, lawn and/or garden and includes:

(1) Pruning;

(2) Selective tree cutting;

(3) Planting indigenous, non-invasive vegetation;

(4) Mowing a field, lawn, park and/or easement that was lawfully established prior to October 2, 2006 and that has been periodically mowed since that date;

(5) The removal of trash, debris and dead vegetation by hand; and

(6) Maintaining a garden that was lawfully established prior to October 2, 2006.

ii. Normal property maintenance does not include any activity that would result in any clearing, cutting or removal of vegetation not described in (b)1i above, such as:

(1) Mowing an area that was not lawfully mowed prior to October 2, 2006 or which was lawfully mowed prior to this date but has since been allowed to revert to its natural vegetative state;

(2) Removing vegetation to create a new lawn, garden, field or park;

(3) Burning vegetation;

(4) Applying herbicide;

(5) Grading and other changes in topography; and

(6) Constructing structures, or placing fill or impervious surfaces;

2. The removal of any lawfully existing structure from a flood fringe, provided:

i. The structure is disposed of outside of any regulated area and in accordance with all applicable Federal, State and local laws;

ii. All disturbed regulated areas are properly stabilized;

iii. No vegetation is cleared, cut or removed in a riparian zone, except for vegetation within 20 feet of the structure if such disturbance is necessary to facilitate its removal; and

iv. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity, except where the removed material is to be replaced by new fill or a structure. (Note that any replacement fill or structure is subject to the requirements of this chapter and may require a permit.);

3. The placement of no more than five cubic yards of fill in a flood fringe, provided:

i. No fill is placed within 25 feet of any top of bank or edge of water;

ii. The fill is not a structure. For example, five cubic yards of stone, topsoil, wood chips or other landscaping material can be placed under this permit-by-rule but the construction of a building that displaces five cubic yards of flood storage volume cannot;

iii. No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area maintained as a lawn or garden or an abandoned parking area that has partially revegetated); and

iv. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

4. The repair of a lawfully existing structure, provided:

i. The timing restrictions set forth at N.J.A.C. 7:13-10.5(d) are observed if the structure is located in a regulated water;

ii. No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area maintained as a lawn or garden or an abandoned parking area that has partially revegetated); and

iii. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

5. The construction of a fence, provided:

i. No disturbance related to the regulated activity is located within 25 feet of any top of bank or edge of water;

ii. No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area maintained as a lawn or garden or an abandoned parking area that has

partially revegetated);

iii. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity; and

iv. One of the following conditions is satisfied:

(1) The fence is located outside a floodway; or

(2) The fence is located in a floodway and has sufficiently large openings so as not to catch debris during a flood and thereby obstruct floodwaters, such as a barbed-wire, split-rail or strand fence. A fence with small or no openings, such as a chain link, lattice or picket fence, does not meet this requirement;

6. Any construction activity in a tidal flood hazard area that is not regulated under N.J.A.C. 7:7 and 7:7E, provided:

i. The existing ground elevation is not raised in any floodway;

ii. No aboveground structure is placed in a floodway;

iii. No habitable building is constructed;

iv. No disturbance related to the regulated activity is located within 25 feet of any top of bank or edge of water;

v. The construction activity is not a major development, as defined at N.J.A.C. 7:8-1.2, and is therefore not subject to the requirements of the Stormwater Management rules at N.J.A.C. 7:8;

vi. No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area

maintained as a lawn or garden or an abandoned parking area that has partially revegetated); and

vii. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

7. The construction of an addition above a lawfully existing building in a flood fringe, provided:

i. The addition is completely supported by the existing building;

ii. The lowest finished floor of the addition is constructed at least one foot above the flood hazard area design flood elevation;

iii. No part of the addition extends into a floodway;

iv. No vegetation is cleared, cut or removed in a riparian zone, except for vegetation within 20 feet of the building if such disturbance is necessary to facilitate the construction of the addition; and

v. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

8. The construction of a non-habitable building in a flood fringe, such as a shed, animal shelter or storage area, provided:

i. The building has a footprint of no more than 150 square feet;

ii. No disturbance related to the regulated activity is located within 25 feet of any top of bank or edge of water;

iii. No vegetation is cleared, cut or removed in a riparian zone, except where

previous development or disturbance has occurred (such as an area maintained as a lawn or garden or an abandoned parking area that has partially revegetated); and

iv. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

9. The construction of an open structure with a roof in a flood fringe, such as a car port, covered patio or pole barn, provided:

i. The structure is not enclosed with walls on any side below the flood hazard area design flood elevation;

ii. No disturbance related to the regulated activity is located within 25 feet of any top of bank or edge of water;

iii. The roof is supported solely by poles or is cantilevered from an adjoining structure;

iv. No fill is placed in the flood hazard area except for any poles necessary to support the roof;

v. No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area maintained as a lawn or garden or an abandoned parking area that has partially revegetated); and

vi. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

10. The construction of an aboveground recreational structure (such as a backstop, bleacher, picnic table or playground equipment), provided:

i. The structure is not a building;

ii. No obstruction to flow is placed in a floodway;

iii. The existing ground elevation is not raised;

iv. No disturbance related to the regulated activity is located within 25 feet of any top of bank or edge of water;

v. No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area maintained as a lawn or garden or an abandoned parking area that has partially revegetated); and

vi. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

11. The construction of an aboveground swimming pool in a flood fringe associated with residential use, provided:

i. The swimming pool does not displace more than 100 cubic yards of flood storage volume (see N.J.A.C. 7:13-10.4);

ii. No disturbance related to the regulated activity is located within 25 feet of any top of bank or edge of water;

iii. No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area maintained as a lawn or garden or an abandoned parking area that has

partially revegetated); and

iv. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

12. The construction of an in-ground swimming pool associate with residential use, provided:

i. The pool lies completely at or below existing grade;

ii. If the pool is located in a floodway, and the construction of a safety fence around the pool is required by local ordinances, the size and height of the fence is minimized and the fence is as open as possible to allow the passage of floodwaters;

iii. Any material excavated to construct the pool is removed from the flood hazard area;

iv. No disturbance related to regulated activity is located within 25 feet of any top of bank or edge of water;

v. No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area maintained as a lawn or garden or an abandoned parking area that has partially revegetated); and

vi. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

13. The construction of an deck that is connected to a lawfully existing building,

provided:

i. The deck is not enclosed with walls either above or below its floor, except for protective or decorative fencing, banisters or latticework that allow floodwaters to pass freely;

ii. No disturbance related to the regulated activity is located within 25 feet of any top of bank or edge of water;

iii. No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area maintained as a lawn or garden or an abandoned parking area that has partially revegetated); and

iv. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

14. The construction of a dock along an impounded water, such as a lake, pond or reservoir, provided:

i. The dock is built on pilings and remains open underneath to allow floodwaters to pass freely;

ii. The dock covers no more than 1,000 square feet including all decking and pilings;

iii. The impounded water has a surface area of one acre or more;

iv. The dock does not extend more than 20 percent across the width of the impounded water;

v. No more than 1,000 square feet of vegetation, including permanent and

temporary disturbance, is cleared, cut or removed in a riparian zone; and

vi. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

15. The construction of an aboveground fuel tank of no more than 2,000 gallons in a flood fringe, within or adjacent to the building it serves, provided:

i. The tank is designed to remain watertight during a flood;

ii. No disturbance related to the regulated activity is located within 25 feet of any top of bank or edge of water;

iii. No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area maintained as a lawn or garden or an abandoned parking area that has partially revegetated); and

iv. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

16. The construction of an underground fuel tank within or adjacent to the building it serves, provided:

i. The tank is designed to remain watertight during a flood;

ii. No disturbance related to the regulated activity is located within 25 feet of any top of bank or edge of water;

iii. No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area

maintained as a lawn or garden or an abandoned parking area that has partially revegetated); and

iv. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

17. The filling of an abandoned raceway adjacent to a regulated water, provided:

i. The raceway is a manmade conveyance structure that was created to divert water from a channel for the purpose of providing hydrology or hydraulic power before returning the water to the channel;

ii. The raceway is currently blocked at one or both ends so that water from the channel is not able to flow through the raceway under normal flow conditions;

iii. The raceway does not supply hydrology to an otherwise isolated freshwater wetlands complex;

iv. The raceway is filled up to, but not above, the surrounding topography and the entire disturbed area is properly graded so as not to interfere with overland drainage; and

v. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity; and

18. The repair, maintenance or dredging of the channel and/or embankments of a manmade canal, which passes through a regulated area, provided:

i. A public entity having jurisdiction over the canal determines that the proposed regulated activity is necessary for the proper operation of the canal;

ii. No fill or dredged spoils are placed in the flood hazard area;

iii. No trees are cleared, cut or removed in a riparian zone; and

iv. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity

(c) The permits-by-rule at (c)1 through 6 below apply to the specified activities associated with utility lines listed therein.

1. The placement of one or more utility poles (which are not open-frame towers as described in (c)2 below) for utility lines, provided:

i. No disturbance related to the regulated activity is located within 25 feet of any top of bank or edge of water;

ii. All wires or cables connected to the utility poles are situated at least one foot above the flood hazard area design flood elevation;

iii. No trees are cleared, cut or removed in a riparian zone; and

iv. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

2. The placement of one or more open-frame towers in a flood fringe to support a utility line, provided:

i. Each tower's footing is constructed at or below grade;

ii. No disturbance related to the regulated activity is located within 25 feet of any top of bank or edge of water;

iii. All wires or cables connected to the towers are situated at least one foot above

the flood hazard area design flood elevation;

iv. No trees are cleared, cut or removed in a riparian zone; and

v. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

3. The placement of an underground utility line beneath a regulated water through directional drilling or "jacking," provided:

i. The regulated water is not disturbed in any way;

ii. No trees are cleared, cut or removed in a riparian zone;

iii. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

iv. All disturbed areas in the flood hazard area are restored to their original topography upon completion of the regulated activity;

v. If the line is jacked or drilled beneath a bridge or culvert, all work is accomplished without displacing or damaging the bridge or culvert;

vi. If the line is jacked or drilled beneath an open channel, the top of the line is placed at least four feet below the channel invert and remains horizontal at this depth at least 10 feet beyond the top of each bank;

vii. The line is sealed to ensure that there will be no leakage or discharge in a regulated area;

viii. No manhole is constructed within 10 feet of any top of bank or edge of water (unless situated within a paved roadway);

ix. The top of any manhole in a floodway is flush with the ground;

x. The top of any manhole in a flood fringe is flush with the ground where possible; and

xi. Any manhole along a sanitary sewer has a watertight cover in the flood hazard area;

4. The placement of an underground utility line beneath existing pavement within a regulated area (such as under an existing parking lot in the flood hazard area or under an existing roadway that crosses a regulated water), provided:

i. The regulated water is not disturbed in any way;

ii. No vegetation is cleared, cut or removed in a riparian zone;

iii. All disturbed areas in the flood hazard area are restored to their original topography upon completion of the regulated activity;

iv. If the line is placed under a roadway, either above or below a culvert or within a bridge, all work is accomplished without displacing or damaging the bridge or culvert;

v. If the line is placed under a roadway, either above or below a culvert, the line is encased within a larger steel pipe, or is placed with at least one foot vertical clearance above or below the culvert;

vi. The line is sealed to ensure that there will be no leakage or discharge in a regulated area;

vii. No manhole is constructed within 10 feet of any top of bank or edge of water (unless situated within a paved roadway);

viii. The top of any manhole in a floodway is flush with the ground;

ix. The top of any manhole in a flood fringe is flush with the ground where possible; and

x. Any manhole along a sanitary sewer has a watertight cover in the flood hazard area;

5. The attachment of a utility line to a lawfully existing roadway that crosses a regulated water, provided:

i. The regulated water is not disturbed in any way;

ii. No more than 1,000 square feet of vegetation, including permanent and temporary disturbance, is cleared, cut or removed in a riparian zone, and all such vegetation lies within an existing right-of-way that is periodically mowed and/or cleared:

iii. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

iv. All disturbed areas in the flood hazard area are restored to their original topography upon completion of the regulated activity;

v. The line is firmly attached to the roadway's bridge or culvert so that no part of the line, its encasement or any attachment device extends above the roadway profile or across the bridge or culvert opening;

vi. Where possible, the line is situated at least one foot above the flood hazard area design flood elevation;

vii. If a predominant direction of flow in the regulated water is discernible, the line is attached to the downstream face of the roadway crossing;

viii. All work is accomplished without displacing or damaging any bridge or culvert in any way;

ix. The line is sealed to ensure that there will be no leakage or discharge in a regulated area;

x. No manhole is constructed within 10 feet of any top of bank or edge of water (unless situated within a paved roadway);

xi. The top of any manhole in a floodway is flush with the ground;

xii. The top of any manhole in a flood fringe is flush with the ground where possible; and

xiii. Any manhole along a sanitary sewer has a watertight cover in the flood hazard area; and

6. The placement of an underground utility line in a flood hazard area outside a riparian zone, provided:

i. All disturbed areas in the flood hazard area are restored to their original topography upon completion of the regulated activity;

ii. The line is sealed to ensure that there will be no leakage or discharge in a regulated area;

iii. The top of any manhole in a floodway is flush with the ground;

iv. The top of any manhole in a flood fringe is flush with the ground where possible; and

v. Any manhole along a sanitary sewer has a watertight cover in the flood hazard area.

(d) The permits-by-rule at (d)1 through 4 below apply to the specified activities associated

with roadways and parking areas listed therein.

1. **The repaving and/or resurfacing of a lawfully existing paved roadway or paved parking area in a flood fringe, provided:**
   i. **The surface of the existing roadway or parking area is raised by no more than three inches. Multiple repaving and/or resurfacing is permissible provided the cumulative impact of the activity does not result in raising the pavement by more than three inches;**
   ii. **The existing roadway is not expanded; and**
   iii. **No vegetation is cleared, cut or removed in a riparian zone;**
2. **The construction of a guardrail along a public roadway by a public entity, provided:**
   i. **No trees are cleared, cut or removed in a riparian zone; and**
   ii. **All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;**
3. **The removal of accumulated sediment and/or debris from a regulated water, within and/or immediately adjacent to a lawfully existing bridge, culvert or stormwater discharge pipe along a public roadway and/or on public property, provided:**
   i. **All work is performed by hand, such as by shovels, hoses, hydraulic pumps and other similar equipment. No backhoes or other heavy machinery shall be used in the regulated water;**
   ii. **The sediment and debris removal is necessary to maintain positive flow**

through the structure;

iii. The sediment and debris removal is limited to within 100 feet of the structure;

iv. All work is performed under the supervision of the public entity that is responsible for maintaining the roadway and/or public property;

v. Vegetation outside the regulated water is not disturbed;

vi. No trees are cleared, cut or removed in a riparian zone;

vii. The timing restrictions set forth at N.J.A.C. 7:13-10.5(d) are observed;

viii. Excavation consists solely of accumulated sediment and does not alter the natural bed and banks of the channel; and

ix. The material removed is disposed of outside of any regulated area and in accordance with all applicable Federal, State and local laws; and

4. The reconstruction of all or part of a lawfully existing bridge superstructure over a regulated water, provided the reconstructed portion lies above the flood hazard area design flood elevation. The reconstruction need not be in-kind.

(e) The permits-by-rule at (e)1 through 6 below apply to the specified activities associated with the storage of secured and/or unsecured material listed therein.

1. The temporary storage of unsecured material in a flood fringe, which is necessary for a lawful construction activity, provided:

i. No hazardous substances are stored;

ii. No storage is located within 25 feet of any top of bank or edge of water;

iii. No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area maintained as a lawn or garden or an abandoned parking area that has

partially revegetated); and

iv. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity;

2. The storage in a regulated area of unsecured material incidental to a lawfully existing private residence (such as lawn and garden equipment and materials, shelters for animals, trash receptacles, toys, vehicles and wood piles), provided:

i. No hazardous substances are stored;

ii. The unsecured material is of an amount and nature typical for a residence. For example, this permit-by-rule does not authorize construction debris, roll-off containers, an inordinate number of vehicles or machinery or large piles of refuse;

iii. No unsecured material is located within a floodway unless the material was lawfully situated there prior to October 2, 2006;

iv. No unsecured material is located within 25 feet of any top of bank or edge of water unless the material was lawfully situated there prior to October 2, 2006; and

v. No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area maintained as a lawn or garden or an abandoned parking area that has partially revegetated);

3. The storage in a regulated area of unsecured material incidental to a lawfully existing business or other non-residential facility (such as dumpsters, vehicles and

equipment), provided:

i. No hazardous substances are stored unless:

(1) The storage of hazardous substances is essential to the operation of the business or facility;

(2) The hazardous substances are isolated from potential contact with floodwaters where possible; and

(3) The hazardous substances are stored in accordance with all Federal, State and local laws;

ii. The unsecured material is of an amount and nature typical for the subject business or non-residential facility. For example, this subparagraph does not permit construction debris, roll-off containers, an inordinate number of vehicles or machinery or large piles of refuse;

iii. No unsecured material is located within a floodway unless the material was lawfully situated there prior to October 2, 2006;

iv. No unsecured material is located within 25 feet of any top of bank or edge of water unless the material was lawfully situated there prior to October 2, 2006; and

v. No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area maintained as a lawn or garden or an abandoned parking area that has partially revegetated);

4. The storage in a regulated area of unsecured material that is necessary for the operation of a lawfully existing business or other non-residential facility, the

primary function of which is to store and distribute material (such as a gravel pit, junk yard, landscaping business, lumber yard or vehicle dealership, rental facility or impoundment area), provided:

i. No hazardous substances are stored unless;

(1) The storage of hazardous substances is essential to the operation of the business or facility;

(2) The hazardous substances are isolated from potential contact with floodwaters where possible; and

(3) The hazardous substances are stored in accordance with all Federal, State and local laws;

ii. The business or facility was established prior to October 2, 2006;

iii. The business or facility has been in continuous operation since October 2, 2006; and

iv. The size of the business or facility and the peak volume of material stored in the flood hazard area have not increased since October 2, 2006. Any increase in size or peak volume requires that an individual permit be obtained pursuant to N.J.A.C. 7:13-11.16;

5. The placement, storage or processing of hazardous waste at a lawfully existing hazardous waste facility located in a regulated area, provided:

i. The facility was established prior to October 2, 2006;

ii. The facility has been in continuous operation since October 2, 2006;

iii. The facility is operating in compliance with all Federal, State and local requirements; and

iv. The size of the facility and the peak volume of hazardous waste in the flood hazard area have not increased since October 2, 2006. Any increase in size or peak volume requires that an individual permit be obtained pursuant to N.J.A.C. 7:13-11.17; and

6. The placement, storage or processing of solid waste at a lawfully existing solid waste facility (such as a composting facility, landfill or recycling center), located in a regulated area, provided:

i. The facility was established prior to October 2, 2006;

ii. The facility has been in continuous operation since October 2, 2006;

iii. The facility is operating in compliance with all Federal, State and local requirements; and

iv. The size of the facility and the peak volume of solid waste in the flood hazard area have not increased since October 2, 2006. Any increase in size or peak volume requires an individual permit pursuant to N.J.A.C. 7:13-11.18.

(f) The permits-by-rule at (f)1 through 4 below apply to the specified agricultural activities listed therein.

1. The continuation of lawfully existing agricultural activities (such as grazing, harvesting, horticulture, irrigation, planting, tilling, viticulture and watering, as well as forestry under an approved forestry management plan that does not allow clear cutting), provided:

i. The activities are undertaken on land that has been actively farmed since October 2, 2006; and

ii. The activities do not result in the displacement of flood storage volume or the

construction of an aboveground structure;

2. **The commencement of new agricultural activities (such as grazing, harvesting, horticulture, irrigation, planting, tilling, viticulture and watering, as well as forestry under an approved forestry management plan that does not allow clear cutting) on land that is not actively farmed provided:**
   i. **The activities do not result in the displacement of flood storage volume or the construction of an aboveground structure; and**
   ii. **No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area maintained as a lawn or garden or an abandoned parking area that has partially revegetated);**
3. **The continuation or commencement of soil conservation practices in a flood fringe, such as terracing, subsurface tile drainage or construction of a diversion, a grassed swale or an excavated pond, provided:**
   i. **The activities are undertaken on land that has been actively farmed since October 2, 2006;**
   ii. **The activities are approved in writing by the local Soil Conservation District or the USDA Natural Resource Conservation Service;**
   iii. **No disturbance related to the regulated activity is located within 25 feet of any top of bank or edge of water;**
   iv. **No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area maintained as a lawn or garden or an abandoned parking area that has**

partially revegetated); and

v. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity; and

4. The construction of a building with no foundation in a flood fringe on land that has been actively farmed, provided:

i. The building is not located on land that has been actively farmed since October 2, 2006;

ii. The building has a footprint of no more than 1,000 square feet;

iii. The building is designed for agricultural use. Examples of such buildings include a plastic covered greenhouse, a roadside farm stand and a tool shed placed on an existing farm field;

iv. No disturbance related to the regulated activity is located within 25 feet of any top of bank or edge of water;

v. No vegetation is cleared, cut or removed in a riparian zone, except where previous development or disturbance has occurred (such as an area maintained as a lawn or garden or an abandoned parking area that has partially revegetated); and

vi. All vegetated areas temporarily disturbed within the riparian zone are replanted with indigenous, non-invasive species upon completion of the regulated activity.

SUBCHAPTER 8. GENERAL PERMITS

7:13-8.1 Standards applicable to all general permits

(a) This subchapter establishes general permits for certain regulated activities. Each general permit describes the regulated activity authorized, including the size and type of regulated activity and in some cases where in the flood hazard area or riparian zone the regulated activity may be conducted. The Department may, by rulemaking in accordance with the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq., rescind or modify an existing general permit or establish new ones. The flood hazard general permits established in this subchapter are set forth as follows:

1. **General permit 1, set forth at N.J.A.C. 7:13-8.3, for sediment and debris removal from channels by public entities, pursuant to the "Stream Cleaning Act" at N.J.S.A. 58:16A-67;**
2. **General permits 2A through 2G, set forth at N.J.A.C. 7:13-8.4, for certain agricultural activities designed by the NRCS;**
3. **General permit 3, set forth at N.J.A.C. 7:13-8.5, for scour protection for bridges along public roadways by a public entity;**
4. **General permit 4, set forth at N.J.A.C. 7:13-8.6, for the maintenance and repair of stormwater management structures and conveyance features by a public entity;**
5. **General permit 5, set forth at N.J.A.C. 7:13-8.7, for the relocation of a building on a site to reduce flood damage;**
6. **General permit 6, set forth at N.J.A.C. 7:13-8.8, for the reconstruction of a private residence damaged or destroyed by fire, flood or other natural disaster;**
7. **General permit 7, set forth at N.J.A.C. 7:13-8.9, which allows the construction of a**

private residence, a residential addition or a structure appurtenant to a residence in a tidal flood hazard area;

8. **General permit 8, set forth at N.J.A.C. 7:13-8.10, for the construction of a utility line across or along a water draining less than 50 acres;**
9. **General permit 9, set forth at N.J.A.C. 7:13-8.11, for the construction of a roadway or footbridge across a regulated water that has a drainage area of less than 50 acres; and**
10. **General permit 10, set forth at N.J.A.C. 7:13-8.12, for the construction of a stormwater outfall structure along a regulated water that has a drainage area of less than 50 acres.**

(b) A regulated activity shall be authorized under a general permit only if the Department determines that following requirements are satisfied:

1. **The regulated activity is not undertaken in the channel or riparian zone of a regulated water with fishery resources during a restricted time period as described at N.J.A.C. 7:13-10.5(d), unless otherwise approved by the Department's Division of Fish and Wildlife;**
2. **The regulated activity does not adversely affect low-flow aquatic passage within any regulated water;**
3. **The regulated activity will not adversely affect a threatened or endangered species, or a documented habitat for a threatened or endangered species;**
4. **All structures are suitably anchored;**
5. **The regulated activity is performed in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90;**

6. Prior to undertaking the regulated activity, all necessary approvals are obtained from the local Soil Conservation District in cases where the district has jurisdiction over the project;

7. The regulated activity does not require review for compliance with the Stormwater Management rules at N.J.A.C. 7:8 because:

i. The overall project with which the general permit activity is associated is not a major development, as defined at N.J.A.C. 7:8-1.2; or

ii. The Department has already determined through the approval of a CAFRA, Waterfront Development or Freshwater Wetlands Protection Act permit that the overall project with which the general permit activity is associated complies with the Stormwater Management rules at N.J.A.C. 7:8;

8. If the regulated activity is proposed in a regulated area known or suspected to contain acid producing soils, a plan is established and implemented to minimize the adverse effects of exposing these soils as described at N.J.A.C. 7:13-10.7; and

9. The regulated activity complies with the specific requirements of the applicable general permit(s) set forth in this subchapter.

(c) Except for general permit 1, the application and review procedures for which are described at N.J.A.C. 7:13-8.3, an application for a general permit shall be submitted to the Department to the address listed in N.J.A.C. 7:13-1.1(f), and shall include the following:

1. One completed certification (available from the Department's website at www.nj.gov/dep/landuse), signed and sealed by an engineer, which lists each requirement of (b) above, as well as each requirement for the particular general permit under which authorization is sought and explains how each requirement is

met;

2. **Six sets of drawings, signed and sealed by an engineer, land surveyor or architect, as appropriate, which detail the proposed activities, including existing and proposed topography if fill or grading is proposed. All topography shall reference NGVD, or include the appropriate conversion factor to NGVD, unless the applicant demonstrates that such reference is not necessary. The limit of any riparian zone onsite shall also be shown, as well as any areas where riparian zone vegetation will be cleared, cut or removed;**
3. **Three copies of an application report, as described at N.J.A.C. 7:13-15.3; and**
4. **An application fee of $ 500.00 in accordance with N.J.A.C. 7:13-17.1, except for general permit 6, which requires no application fee.**

(d) Within 20 working days following the receipt of an application for an authorization under a general permit, the Department shall:

1. **Determine that all necessary information required by this chapter for a complete general permit application has been provided, and declare the application complete for review;**
2. **Determine that all necessary information required by this chapter for a complete general permit application has not been provided, or that one or more submitted items are deficient, and request in writing that the applicant submit the missing or incomplete information within a reasonable time period. The Department may cancel the application if the missing information is not provided within 60 calendar days. The Department shall declare the application complete for review within 20 working days of receiving the requested information; or**

3. If the Department does not take action under (d)1 or 2 above within 20 working days, the general permit application shall be deemed complete for review. In such a case, the Department may to request additional information, which is necessary to bring the application into compliance with the requirements of this chapter during the review of the application.

(e) Within 45 calendar days after receiving a complete application for an authorization under a general permit, the Department shall:

1. Determine that the application meets the requirements of this chapter and approve the general permit authorization in writing; or

2. Determine that the application does not meet the requirements of this chapter and deny the general permit authorization in writing.

(f) If the Department fails to take written action on an application in accordance with (e) above, the general permit application shall be deemed to have been automatically approved. This default approval is subject to any applicable conditions set forth in this chapter for the activities covered by the application for general permit authorization. Furthermore, default approval under this section shall not prevent the Department from taking enforcement action pursuant to N.J.A.C. 7:13-19 for any activity undertaken in violation of this chapter.

(g) An authorization to perform a regulated activity under a general permit is subject to the conditions listed at N.J.A.C. 7:13-8.2.

(h) Multiple or repeated activities proposed to be undertaken on a site that would individually qualify for authorization under a general permit shall require an individual permit if the cumulative impacts exceed any limit contained in the applicable general

permit.

(i) Except as provided in (j) below, a general permit authorization is valid for five years from its issuance date and shall not be extended. However, a new general permit authorization to replace an expired one may be requested by submitting an application under this section. A general permit can also be transferred with the sale of a property to a new owner pursuant to N.J.A.C. 7:13-14.1.

(j) If the rule in this subchapter establishing a particular general permit is repealed, then any person with a valid authorization issued under such general permit shall immediately cease any authorized activities and apply for an individual permit in accordance with N.J.A.C. 7:13-9, 10 and 11. If the rule in this subchapter establishing a particular general permit is amended to put in place stricter standards or conditions, then any person with a valid authorization issued under the original general permit shall immediately cease any authorized activities under the authorization and either apply for authorization under the amended general permit in accordance with this subchapter or else apply for an individual permit in accordance with N.J.A.C. 7:13-9, 10 and 11.

(k) A verification of the flood hazard area design flood elevation, flood hazard area and/or floodway limits, pursuant to N.J.A.C. 7:13-6, is not required prior to obtaining a general permit authorization under this chapter, except for certain cases as noted under general permits 5, 6 and 7 at N.J.A.C. 7:13-8.7, 8.8 and 8.9, respectively.

7:13-8.2 General permit conditions

(a) The standard conditions that apply to all general permit authorizations are described in (b) below. Site-specific conditions are described in (c) through (e) below. If a permittee

undertakes any regulated activity approved under a general permit authorization, such action shall constitute the permittee's acceptance of the general permit authorization in its entirety and the permittee's agreement to abide by the general permit authorization and all applicable conditions.

(b) The following conditions apply to all general permit authorizations issued under this chapter:

1. **Duty to comply: The permittee, its contractors and subcontractors shall comply with all conditions of the permit authorization, supporting documents and approved drawings. Any noncompliance with a permit authorization constitutes a violation of this chapter, and is grounds for enforcement action under N.J.A.C. 7:13-19, as well as suspension and/or termination of the permit authorization.**
2. **Duty to reapply: If the permittee wishes to continue an activity covered by the permit after the expiration date of the permit authorization, the permittee must apply for and obtain a new permit authorization.**
3. **Duty to halt or reduce activity: It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit authorization.**
4. **Duty to minimize environmental impacts: The permittee shall take all reasonable steps to prevent, minimize or correct any adverse impact on the environment resulting from activities conducted pursuant to the permit, or from noncompliance with the permit authorization.**
5. **Proper operation and maintenance: The permittee shall at all times properly**

operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used to achieve compliance with the permit authorization. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. The operation of back-up or auxiliary facilities or similar systems is only required when necessary to achieve compliance with the permit authorization. The permittee must also properly execute any approved mitigation compensation and/or restoration proposal designed to mitigate losses caused by the permitted activity. The permittee shall maintain the authorized work areas in good condition and in accordance with the permit authorization.

6. **Proper oversight: The permittee shall ensure that all approved activities are undertaken using the best management practices available under the supervision and direction of an engineer.**
7. **Proper site maintenance: While the regulated activities are being undertaken, neither the permittee nor its agents shall cause or permit any unreasonable interference with the free flow of a regulated water by placing or dumping any materials, equipment, debris or structures within or adjacent to the channel. Upon completion or abandonment of the work, the permittee and/or its agents shall remove and dispose of in a lawful manner all excess materials, debris, equipment, silt fences and other temporary soil erosion and sediment control devices from all regulated areas.**
8. **Permit actions: A permit authorization can be revised, suspended or terminated**

for cause. The filing of a request by the permittee for a revision, or a notification of planned changes or anticipated noncompliance does not stay any condition of a permit authorization.

9. **Property rights: A permit authorization does not convey any property rights or any exclusive privilege.**
10. **Duty to provide information: A copy of the general permit authorization and other authorizing documents including all approved plans and drawings shall be maintained at the authorized site at all times and made available to Department representatives or their designated agents immediately upon request. The permittee shall also furnish to the Department within a reasonable time any information that the Department requests to determine compliance with a permit authorization or to determine whether cause exists for suspension or termination of a permit authorization. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by the permit authorization.**
11. **Inspection and entry: The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to:**
    i. **Enter upon the permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of the permit authorization;**
    ii. **Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit authorization; and**
    iii. **Inspect at reasonable times any facilities, equipment, practices or operations regulated or required under the permit authorization. Failure to allow**

reasonable access under this section shall be considered a violation of this chapter and subject the permittee to enforcement action under N.J.A.C. 7:13-19.

12. Reporting requirements: The permittee shall provide reports to the Department as follows:

i. Planned changes: The permittee shall give notice to the Department prior to any planned physical alterations or additions to the permitted project or activity;

ii. Transfers: The permit authorization is not transferable to any person unless the transfer is approved by the Department, pursuant to N.J.A.C. 7:13-14.1;

iii. Noncompliance: The permittee shall immediately report to the Department by telephone at (877) 927-6337 any noncompliance that may endanger health or the environment. The permittee shall report all other noncompliance to the Division of Land Use Regulation by telephone at (609) 292-0060 within two business days of the time the permittee becomes aware of the noncompliance, and in writing within five business days of the time the permittee becomes aware of the noncompliance. The written notice shall include: a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated length of time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. Such notice shall not, however, serve as a defense to enforcement action if the project is found to be in violation of this chapter; and

iv. Other information: Where the permittee becomes aware that it failed to submit any relevant facts in an application, or submitted incorrect information in an application or in any report to the Department, it shall promptly submit such facts or information.

(c) In addition to the conditions that apply to all general permit authorizations under (b) above, the Department shall establish conditions in a general permit, as required on a case-by-case basis, to assure compliance with all applicable requirements of this chapter and its enabling statutes.

(d) The Department may in some cases include in a general permit authorization a condition requiring a pre-construction meeting on the site of permitted activities. Such a condition shall specify how many days prior to construction the permittee must notify the Department so that the pre-construction meeting can be scheduled.

(e) All conditions of a general permit authorization shall be incorporated either expressly or by reference. If incorporated by reference, a specific citation to the applicable rules or regulations or requirements shall be included in the general permit authorization.

7:13-8.3 General permit 1 for channel cleaning under the Stream Cleaning Act

(a) General permit 1 authorizes a county, municipality or a designated agency thereof to desnag a channel and/or remove accumulated sediment, debris and garbage which are obstructing flow in a channel. This section implements the provisions of the "Stream Cleaning Act" at N.J.S.A. 58:16A-67.

(b) The receipt of a freshwater wetlands general permit 26 authorization, issued pursuant to N.J.A.C. 7:7A-5.26, which authorizes stream cleaning, clearing or desnagging by local

governments, shall constitute authorization to conduct activities qualifying for a general permit 1 authorization under this chapter without further application or approval under this chapter. However, the receipt of a general permit 1 authorization under this section shall not relieve an applicant from the need to obtain a freshwater wetlands general permit 26 authorization, since the freshwater wetlands general permit has notice requirements that must be satisfied pursuant to N.J.A.C. 7:7A-10.

(c) Except where the applicant has obtained a freshwater wetlands general permit 26 authorization as described in (b) above, applicants for a general permit 1 authorization must follow the application requirements and procedures at (f) through (j) below. There is no application fee for general permit 1 authorization.

(d) In addition to satisfying the requirements applicable to all general permits at N.J.A.C. 7:13-8.1(b), to qualify for general permit 1 authorization, a channel cleaning, clearing or desnagging project shall satisfy of the following requirements:

1. **The project's sole purpose is to remove obstructions to flow or desnag a channel;**
2. **The project is necessary and in the public interest;**
3. **The project consists solely of either:**
    i. **The removal of accumulated silt, sediment, debris and/or garbage from a channel with a natural bed. This general permit does not authorize removal of material below the natural bottom of the channel; or**
    ii. **The removal of any accumulated material from a channel previously lined with concrete or similar artificial material;**
4. **The project does not disturb the channel bank or the riparian zone, unless such disturbance is unavoidable, necessary to gain access to the channel and minimized;**

5. The project does not alter the natural banks of the channel. This general permit does not authorize the straightening or realignment of a channel. Straightening or realignment constitutes channel modification and requires an individual permit pursuant to N.J.A.C. 7:13-10.1(c);

6. The project is conducted from only one bank where possible;

7. The use of heavy equipment in the channel is avoided;

8. Vegetation and tree canopy on the more southerly or westerly bank is preserved in order to shade the channel; and

9. If the project involves sediment removal from a channel with a natural bed, the following requirements are satisfied:

i. The channel reach is less than 500 feet in length;

ii. The channel bed does not exceed 15 feet in average width;

iii. The channel has a documented history of severe flooding that has resulted or can result in property damage, therefore necessitating the proposed cleaning, clearing or desnagging;

iv. The channel is not classified as a Pinelands water or Category One water under the Department's Surface Water Quality Standards at N.J.A.C. 7:9B; and

v. The channel is not a documented habitat for threatened or endangered species.

(e) All materials, including dredged material, removed from a channel during activities authorized under this general permit shall be disposed of outside of any regulated area and also any freshwater wetlands, transition areas and State open waters, as those terms are

defined in the Department's Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A-1.4, unless the applicant demonstrates that this would cause more environmental harm or flooding risk than disposing of the material in these areas. For example, if removal of dredged material requires construction of a long temporary roadway through a very wet area to enable trucks to transport the dredged material offsite, this might cause more environmental harm than using a large blower to spread the dredged material thinly over a large area.

(f) An application for authorization under this general permit shall be submitted to the Department by mail at the address listed in N.J.A.C. 7:13-1.1(f), and shall include the following (photocopies of maps and documents are acceptable):

1. **Three sets of drawings, signed and sealed by a engineer or land surveyor, as appropriate, that clearly depict the segments of channel to be cleaned;**
2. **Three copies of an application report, as described at N.J.A.C. 7:13-15.3. The narrative required in the application report shall include the following:**
    i. **A description of the proposed cleaning methods and disposal locations for all dredged material; and**
    ii. **The classification, under the Department's Surface Water Quality Standards, N.J.A.C. 7:9B, of the affected portion of the channel; and**
3. **One completed certification (available from the Department's website at www.nj.gov/dep/landuse) that meets the following requirements:**
    i. **The certification is signed and sealed by the county or municipal engineer, or an engineer who is employed by the local Soil Conservation District; and**
    ii. **The certification lists each requirement in (d) above that applies to the project,**

and states how the requirement has been or will be satisfied.

(g) Within 15 calendar days of the Department's receipt of an application submitted under (f) above for a project that does not involve sediment removal, the Department shall:

1. **Notify the applicant that the application did not include the information required at (f) above, or that supplemental information is needed to determine if the activity complies with the general permit, and request the additional information. The Department may cancel the request for a general permit if the missing information is not provided within 60 calendar days. When the additional information is received, the Department shall, within 15 calendar days after receiving the additional information, take one of the actions in (g)2 or 3 below;**
2. **Notify the applicant in writing that the project does not qualify for authorization under this general permit, pursuant to (j) below; or**
3. **Approve the general permit authorization.**

(h) Within 60 calendar days of the Department's receipt of an application submitted under (f) above for a project that does involve sediment removal, the Department shall:

1. **Notify the applicant that the application did not include information required at (f) above, or that supplemental information is needed to determine if the activity complies with the general permit, and request the additional information. The Department may cancel the request for a general permit if the missing information is not provided within 60 calendar days. When the additional information is received, the Department shall, within 60 calendar days after receiving the additional information, take one of the actions in (h)2 or 3 below;**
2. **Notify the applicant in writing that the project does not qualify for authorization**

under this general permit, pursuant to (j) below; or

3. Approve the general permit authorization.

(i) If the Department fails to take written action on an application in accordance with (g) or (h) above, the application for general permit authorization shall be deemed to be approved. This default approval is subject to any applicable conditions set forth in this chapter for the activities covered by the application. Furthermore, default approval under this section shall not prevent the Department from taking enforcement action pursuant to N.J.A.C. 7:13-19 for any activity undertaken in violation of this chapter.

(j) If the Department notifies the applicant under (g)2 or (h)2 above that a channel cleaning, clearing or desnagging project is not authorized under this general permit, the Department shall provide the applicant with the technical reasons for the decision. If the Department's technical reasons are based upon an inability to determine the natural channel bed, the Department shall, at the request of the applicant, assist in identifying the natural channel bed.

(k) Within 15 calendar days after the completion of a project under this general permit that involves the removal of sediment, the permittee shall submit to the Department a written notice that the project has been completed. The notice shall contain one completed certification (available from the Department's website www.nj.gov/dep/landuse) that satisfies the following requirements:

1. The certification is signed and sealed by the county or municipal engineer, or an engineer who is employed by the local Soil Conservation District; and

2. The certification states each requirement in (d) above that applies to the project, and states how the requirement has been satisfied.

7:13-8.4 General permits 2A through 2G for agricultural activities designed by the NRCS

(a) This section sets forth general permits for seven agricultural activities in a regulated area. In addition to satisfying the requirements applicable to all general permits at N.J.A.C. 7:13-8.1(b), to qualify for a general permit under this section, an activity shall satisfy the requirements applicable to the specific general permit and shall:

1. **Occur on land that is actively farmed;**
2. **Be solely intended for agricultural purposes; and**
3. **Be approved by and performed under the supervision of the USDA Natural Resource Conservation Service.**

(b) Applications for a general permit authorization under this section are subject to the application requirements and procedures at N.J.A.C. 7:13-8.1(c) through (e).

(c) Regulated activities satisfying (a) above shall qualify for authorization under one of the following general permits provided the conditions applicable to that general permit are satisfied:

1. **General permit 2A: A soil erosion control, bank stabilization or bank restoration project, provided:**
   i. **The project is accomplished by re-sloping the eroded bank and planting vegetation where possible. Where these techniques alone will not stabilize erosion, or where more than 2,000 square feet of trees would be removed using such methods, soil bioengineering, shall be used;**
   ii. **Disturbance to vegetation within the riparian zone is minimized;**
   iii. **The cross-sectional area of the channel is not significantly altered;**

iv. The activity will not obstruct flow in the channel or floodway; and

v. All cleared, cut or removed vegetation in the riparian zone is replanted with indigenous, non-invasive vegetation, except where the removed vegetation has been replaced by non-vegetative stabilizing material;

2. General permit 2B: The removal of accumulated silt, sediment, debris and/or garbage from a regulated water, provided:

i. Excavation does not extend below the natural bed or alter the natural banks. This general permit does not authorize the straightening or realignment of a channel. Straightening or realignment constitutes channel modification and requires an individual permit pursuant to N.J.A.C. 7:13-10.1(c);

ii. The project does not disturb the channel bank or the riparian zone, unless such disturbance is unavoidable, necessary to gain access to the channel and minimized;

iii. The project is conducted from only one bank where possible;

iv. All heavy machinery necessary for the conduct of the project is situated outside the channel. Heavy machinery may reach into the channel to dredge, but cannot be driven into or operated within the channel;

v. Vegetation and tree canopy on the more southerly or westerly bank is preserved in order to shade the channel;

vi. All proposed access points to the water are described in writing and with color photographs;

vii. All disturbed areas in the riparian zone are replanted with indigenous, non-invasive vegetation upon completion of the project;

viii. All removed sediment is disposed of in accordance with all applicable Federal, State and local laws. If the removed sediment is to remain in the flood hazard area, it is spread evenly at least 25 feet from any top of bank or edge of water and, if in a floodway, no more than three inches deep; and

ix. The placement of the removed sediment does not interfere with the positive overland drainage of the receiving area;

3. General permit 2C: The construction of a roadway across a regulated water, provided:

i. Construction in the channel is minimized and unset or raw cement is not allowed to come into contact with water in the channel during construction;

ii. If the crossing is accomplished with a culvert, the culvert is stabilized with headwalls that have footings which extend at least three feet below grade, and which will prevent the culvert from displacement during the flood hazard area design flood;

iii. If the crossing is accomplished with a bridge, the bridge is constructed with abutments that have footings which extend at least three feet below grade, and which will prevent the bridge from displacement during the flood hazard area design flood;

iv. The proposed roadway surface and all embankments are designed to remain stable during the flood hazard area design flood;

v. The perpendicular path of disturbance through the riparian zone is no more than 25 feet in width; and

vi. It is clear to the Department from a visual inspection of submitted drawings

that the proposed roadway crossing will not increase flooding offsite;

4. **General permit 2D: The filling of a manmade regulated water for the purpose of freshwater wetlands restoration, provided:**
   i. **The regulated water originates onsite; and**
   ii. **The filling of the regulated water will not adversely affect overland drainage on adjoining properties;**
5. **General permit 2E: The creation of a ford for livestock to cross a regulated water, provided:**
   i. **Livestock currently cross the regulated water on a regular basis;**
   ii. **The creation of a stable ford will reduce ongoing damage to the channel caused by the existing access to the channel by livestock;**
   iii. **No trees are cleared, cut or removed in a riparian zone;**
   iv. **The ford is situated at or below the existing channel bed so that the ford will not obstruct flow;**
   vii. **The perpendicular path of disturbance through the riparian zone is no more than 20 feet in width; and**
   v. **The ford is designed to remain stable during the flood hazard area design flood;**
6. **General permit 2F: The construction of a fence along and/or across a regulated water to limit or manage livestock access to a channel, or to prevent livestock or other animals from accessing certain agricultural areas, provided:**
   i. **No trees are cleared, cut or removed in a riparian zone;**
   ii. **The fence is placed parallel to the channel where possible;**

iii. If the fence crosses a channel and/or is located in a floodway, it has sufficiently large openings so as not to catch debris during a flood and thereby obstruct floodwaters, such as a barbed-wire, split-rail or strand fence. A fence with little or no open area, such as a chain link, lattice or picket fence, is not permitted across a channel or in a floodway; and

iv. The fence will not impede bank-full flow in the channel; and

7. General permit 2G: The construction of a pump and/or water intake structure in or along a regulated water, in order to provide water for livestock outside the channel (and thereby limit livestock access to the channel), provided:

i. No trees are cleared, cut or removed in a riparian zone;

ii. Fill within the flood hazard area is minimized; and

iii. The pump or structure will not impede bank-full flow in the channel.

7:13-8.5 General permit 3 for bridge or culvert scour protection by a public entity

(a) This section sets forth a general permit that authorizes a public entity to place rip-rap and other stabilization material within or along a regulated water to replace material that has eroded away, in order to prevent the scouring of an existing bridge or culvert along a public roadway. The application requirements and review procedures for this general permit authorization are set forth at N.J.A.C. 7:13-8.1(c) through (e).

(b) In addition to satisfying the requirements applicable to all general permits at N.J.A.C. 7:13-8.1(b), a scour protection activity is eligible for authorization under general permit 3 only if:

1. It is approved by and performed under the supervision of a public entity;

2. It is necessary for the maintenance and/or protection of an existing bridge or culvert along a public roadway;

3. The stabilizing material placed in the channel is in the same location as the material that has eroded away since the bridge or culvert was originally constructed;

4. The amount of stabilizing material placed in the channel is no greater than necessary to replace the material that has eroded away since the bridge or culvert was originally constructed;

5. The stabilizing material consists of, or is covered by, indigenous substrate where possible;

6. The stabilizing material does not obstruct flow in the channel or floodway;

7. The project does not disturb the channel bank or the riparian zone, unless such disturbance is unavoidable, necessary to gain access to the channel and minimized. If access to the channel results in topographic changes to the bank, such as ruts from trucks or other machinery, the grade of the bank shall be restored to its pre-construction topography where possible;

8. All cleared, cut or removed vegetation in the riparian zone is replanted with indigenous, non-invasive vegetation, except where the removed vegetation has been replaced by the stabilizing material;

9. Every effort is made to perform the activity from only one bank; and

10. Vegetation and canopy on the more southerly or westerly bank is preserved for shading of the water where possible.

7:13-8.6 General permit 4 for stormwater maintenance by a public entity

(a) This section sets forth a general permit that authorizes the maintenance, repair and replacement of lawfully existing stormwater management structures and conveyance features by a public entity. This general permit does not authorize any new stormwater discharges or the expansion of an existing stormwater management or collection system. The application requirements and review procedures for this general permit authorization are set forth at N.J.A.C. 7:13-8.1(c) through (e).

(b) In addition to satisfying the requirements applicable to all general permits at N.J.A.C. 7:13-8.1(b), a maintenance and repair activity is eligible for authorization under general permit 4 only if:

1. **It is approved by and performed under the supervision of a public entity;**
2. **It occurs within and is necessary for the maintenance of a lawfully existing, manmade conveyance structure or drainage feature, such as a pipe, culvert, ditch, channel or basin, not including natural channels that were previously modified;**
3. **It involves one or more of the following:**
    i. **The removal of accumulated sediment, debris or nuisance vegetation;**
    ii. **The stabilization of an eroded structure; and/or**
    iii. **The reconstruction, repair and/or in-kind replacement of any:**
        (1) **Culvert along a manmade channel;**
        (2) **Stormwater pipe, manhole, inlet, catch basin;**
        (3) **Headwall, discharge structure or associated conduit outlet protection; and/or**

(4) Tidegate, levee or pump station along a water that is separated from tidal influence by these structures;

4. Disturbance to vegetation in the riparian zone is minimized; and

5. All temporarily cleared, cut or removed vegetation in the riparian zone is replanted with indigenous, non-invasive vegetation.

7:13-8.7 General permit 5 for the relocation of a building to reduce flood damage

(a) This section sets forth a general permit that authorizes the relocation of a lawfully existing building to another location on the same site in order to reduce flood damage potential. The application requirements and review procedures for this general permit authorization are set forth at N.J.A.C. 7:13-8.1(c) through (e).

(b) In addition to satisfying the requirements applicable to all general permits at N.J.A.C. 7:13-8.1(b), the relocation of a lawfully existing building is eligible for authorization under general permit 5 only if:

1. Where possible, the building is moved further from the regulated water and to higher ground on the same site;

2. The building is not enlarged;

3. The building is not located in a floodway (either before or after relocation);

4. The lowest finished floor of the building is raised to at least one foot above the flood hazard area design flood elevation;

5. The area below the lowest finished floor of the building is not used for habitation and remains open to floodwaters, in accordance with N.J.A.C. 7:13-11.5(l);

6. The proposed location of the building is situated outside the riparian zone if a

suitable location exists on the same site. Otherwise, the removal of trees within the riparian zone shall be minimized to accommodate the new building location; and

7. No vegetation is cleared, cut or removed in a riparian zone, except for vegetation within 20 feet of the building if such disturbance is necessary to facilitate its relocation. In such a case, all temporarily disturbed areas shall be replanted with indigenous, non-invasive vegetation upon completion of the project, including the area where the relocated building originally existed.

(c) The flood hazard area design flood elevation and floodway limits must be known in order to determine compliance with this general permit authorization. If the flood hazard area design flood elevation and/or floodway limits can be determined using Methods 1, 2 or 3 (at N.J.A.C. 7:13-3.3, 3.4(d) and 3.4(e), respectively), then a verification pursuant to N.J.A.C. 7:13-6.1 does not need to be obtained prior to obtaining authorization under this general permit authorization. However, if the flood hazard area design flood elevation and/or floodway limits are determined using Methods 4, 5 or 6 (at N.J.A.C. 7:13-3.4(f), 3.5 and 3.6, respectively), then a verification pursuant to N.J.A.C. 7:13-6.1 must be obtained from the Department prior to, or concurrent with, obtaining authorization under this general permit.

7:13-8.8 General permit 6 for the reconstruction of a damaged or destroyed residence

(a) This section sets forth a general permit that authorizes the reconstruction of a lawfully existing private residence that has been damaged or destroyed by fire, flood or other natural disaster. The application requirements and review procedures for this general permit authorization are set forth at N.J.A.C. 7:13-8.1(c) through (e).

(b) In addition to satisfying the requirements applicable to all general permits at N.J.A.C. 7:13-7.1(b), the reconstruction of a lawfully existing private residence is eligible for authorization under general permit 6 only if:

1. **The residence has been damaged or destroyed by fire, flood or other natural disaster within the past 12 months;**
2. **The new residence is constructed within the footprint of the residence that was damaged or destroyed or is moved further from the regulated water to higher ground onsite;**
3. **The residence is not enlarged (except for an addition that meets the permit-by-rule at N.J.A.C. 7:13-7.2(a)4);**
4. **The residence is not located in a floodway (either before or after reconstruction);**
5. **The lowest finished floor of the new residence is constructed at least one foot above the flood hazard area design flood elevation;**
6. **The area below the lowest finished floor of the residence is not used for habitation and remains open to floodwaters, in accordance with N.J.A.C. 7:13-11.5(l);**
7. **If the residence is to be moved, it is situated outside the riparian zone if a suitable location exists on the same site. Otherwise the removal of trees within the riparian zone shall be minimized to accommodate the new building location; and**
8. **No vegetation is cleared, cut or removed in a riparian zone, except for vegetation within 20 feet of the residence if such disturbance is necessary to facilitate its reconstruction. In such a case all temporarily disturbed areas shall be replanted with indigenous, non-invasive vegetation upon completion of the project including, if the residence is relocated, the area where the residence originally existed.**

(c) The flood hazard area design flood elevation and floodway limits must be known in order to determine compliance with this general permit authorization. If the flood hazard area design flood elevation and/or floodway limits can be determined using Methods 1, 2 or 3 (at N.J.A.C. 7:13-3.3, 3.4(d) and 3.4(e), respectively), then a verification pursuant to N.J.A.C. 7:13-6.1 does not need to be obtained prior to obtaining authorization under this general permit. However, if the flood hazard area design flood elevation and/or floodway limits are determined using Methods 4, 5 or 6 (at N.J.A.C. 7:13-3.4(f), 3.5 and 3.6, respectively), then a verification pursuant to N.J.A.C. 7:13-6.1 must be obtained from the Department prior to, or concurrent with, obtaining authorization under this general permit.

7:13-8.9 General permit 7 for residential construction in a tidal flood hazard area

(a) This section sets forth a general permit to construct the following residential buildings in a tidal flood hazard area:

1. **One new private residence, which is not being constructed as part of a larger residential subdivision;**
2. **An addition to a private residence; and/or**
3. **A building appurtenant to a private residence, such as a garage, barn or shed.**

(b) The application requirements and review procedures for this general permit are set forth at N.J.A.C. 7:13-8.1(c) through (e). The construction of certain types of residential additions and appurtenant structures may occur pursuant to a permit-by-rule in accordance with N.J.A.C. 7:13-7.2(a) and (b). Activities covered by a permit-by-rule do not require a general permit authorization under this section.

(c) In addition to satisfying the requirements applicable to all general permits at N.J.A.C. 7:13-8.1(b), a private residence, addition or appurtenant structure is eligible for authorization under general permit 7 only if:

1. **It is located in a tidal flood hazard area;**
2. **It does not require a CAFRA or waterfront development permit under N.J.A.C. 7:7 and 7:7E;**
3. **It meets the requirements for disturbance in the riparian zone at N.J.A.C. 7:13-10.2, including any justification that may be required for the activity and any limitations on the area of vegetation that can be cleared, cut or removed in the riparian zone; and**
4. **It meets the applicable requirements for a building at N.J.A.C. 7:13-11.5.**

(d) The flood hazard area design flood elevation and floodway limits must be known in order to determine compliance with this general permit. If the flood hazard area design flood elevation and/or floodway limits can be determined using Methods 1, 2 or 3 (at N.J.A.C. 7:13-3.3, 3.4(d) and 3.4(e), respectively), then a verification pursuant to N.J.A.C. 7:13-6.1 does not need to be obtained prior to obtaining authorization under this general permit. However, if the flood hazard area design flood elevation and/or floodway limits are determined using Methods 4, 5 or 6 (at N.J.A.C. 7:13-3.4(f), 3.5 and 3.6, respectively), then a verification pursuant to N.J.A.C. 7:13-6.1 must be obtained from the Department prior to, or concurrent with, obtaining authorization under this general permit.

7:13-8.10 General permit 8 for a utility line across or along a water with a drainage area of less than 50 acres

(a) This section sets forth a general permit to construct a utility line across or along a regulated water that has a drainage area of less than 50 acres. The application requirements and review procedures for this general permit authorization are set forth at N.J.A.C. 7:13-8.1(c) through (e).

(b) In addition to satisfying the requirements applicable to all general permits at N.J.A.C. 7:13-8.1(b), a utility crossing is eligible for authorization under general permit 8 only if:

1. **It is located across or along a regulated water that has a drainage area of less than 50 acres;**
2. **It is not located in the flood hazard area or riparian zone of another regulated water that has a drainage area of 50 acres or greater;**
3. **It is authorized under a valid freshwater wetlands general permit 2, pursuant to N.J.A.C. 7:7A-5.2;**
4. **It meets the requirements for disturbance in the riparian zone at N.J.A.C. 7:13-10.2, including any justification that may be required for the activity and any limitations on the area of vegetation that can be cleared, cut or removed in the riparian zone; and**
5. **It meets the requirements at N.J.A.C. 7:13-11.9 for the construction of a utility line.**

7:13-8.11 General permit 9 for a roadway or footbridge across a water with a drainage area of less than 50 acres

(a) This section sets forth a general permit to construct a roadway or footbridge across a regulated water that has a drainage area of less than 50 acres. The application

requirements and review procedures for this general permit are set forth at N.J.A.C. 7:13-8.1(c) through (e).

(b) In addition to satisfying the requirements applicable to all general permits at N.J.A.C. 7:13-8.1(b), a roadway or footbridge is eligible for authorization under general permit 9 only if:

1. **It crosses a regulated water that has a drainage area of less than 50 acres;**
2. **It is not located in the flood hazard area or riparian zone of another regulated water that has a drainage area of 50 acres or greater;**
3. **It is authorized under a valid freshwater wetlands general permit 10A or 10B, pursuant to N.J.A.C. 7:7A-5.10A or 5.10B, respectively;**
4. **It meets the requirements for disturbance in the riparian zone at N.J.A.C. 7:13-10.2, including any justification that may be required for the activity and any limitations on the area of vegetation that can be cleared, cut or removed in the riparian zone; and**
5. **It meets the requirements at N.J.A.C. 7:13-11.7(e) through (l) for the protection of aquatic habitat and the maintenance of low-flow aquatic passage.**

7:13-8.12 General permit 10 for stormwater outfall along a water with a drainage area of less than 50 acres

(a) This section sets forth a general permit to construct a stormwater outfall structure along a regulated water that has a drainage area of less than 50 acres. The application requirements and review procedures for this general permit authorization are set forth at N.J.A.C. 7:13-8.1(c) through (e).

(b) In addition to satisfying the requirements applicable to all general permits at N.J.A.C. 7:13-8.1(b), a stormwater outfall structure is eligible for authorization under general permit 10 only if:

1. **It is located along a regulated water that has a drainage area of less than 50 acres;**
2. **It is not located in the flood hazard area or riparian zone of another regulated water that has a drainage area of 50 acres or greater;**
3. **It is authorized under a valid freshwater wetlands general permit 11, pursuant to N.J.A.C. 7:7A-5.11;**
4. **It meets the requirements for disturbance in the riparian zone at N.J.A.C. 7:13-10.2, including any justification that may be required for the activity and any limitations on the area of vegetation that can be cleared, cut or removed in the riparian zone; and**
5. **It meets the requirements at N.J.A.C. 7:13-11.10 for the construction of a stormwater outfall structure.**

SUBCHAPTER 9. INDIVIDUAL PERMITS

7:13-9.1 General provisions for individual permits

(a) This subchapter sets forth application and review procedures for an individual permit. Design and construction standards for activities that require an individual permit are set forth in this chapter as follows:

1. **Standards associated with the location of a project in a particular regulated area, such as a channel or floodway, or the location of the project in relation to certain**

natural resources, are set forth at N.J.A.C. 7:13-10; and

2. Standards associated with a particular regulated activity, such as the construction of a building or roadway, are set forth at N.J.A.C. 7:13-11.

(b) A regulated activity that requires an individual permit is typically subject to multiple requirements that are set forth throughout N.J.A.C. 7:13-10 and 11 as described in (a) above. The applicant shall evaluate each regulated activity according to its location, nature and potential impacts in order to determine which design and construction standards will apply to the applicant's particular project.

7:13-9.2 Application requirements for an individual permit

(a) An application for an individual permit shall include information on all planned activities that are reasonably related to the proposed project. In general, the level of detail and documentation required for an application shall correspond to the size and likely impact of the proposed project, its proximity to a channel and/or riparian zone, and its potential to adversely affect flooding and the environment. The Department shall, upon request, provide an applicant with guidance regarding the appropriate level of detail for a particular application.

(b) An application for an individual permit shall include the following:

1. One copy of the appropriate checklist for the proposed activities, completed as directed by its instructions. Checklists summarize the requirements of this chapter and ask various questions about the project in order to guide the applicant through the permitting process and ensure that the correct material is submitted with each application. For example, checklists ask how the applicant determined

the flood hazard area and floodway limits onsite, whether construction is proposed in a floodway or flood fringe, and how much impervious surface is proposed, all in order to alert the applicant as to whether hydrologic, hydraulic, flood storage and/or stormwater management calculations are required as part of the permit application. Checklists also ask the applicant to identify all regulated activities proposed onsite to ensure that public notice is provided where necessary and to help the applicant determine the correct application review fee. Checklists do not set forth application requirements in addition to those listed in this chapter. Checklists are provided at www.nj.gov/dep/landuse or can be obtained from the Department at the address listed in N.J.A.C. 7:13-1.1(f);

2. **Three copies of an application report, as described at N.J.A.C. 7:13-15.3. The photographs required in the application report shall show any sections of channel or riparian zone that will be disturbed by the project;**
3. **One copy of an engineering report, as described at N.J.A.C. 7:13-15.4, if the Department must review detailed engineering calculations in order to determine whether the proposed activity complies with this chapter;**
4. **Three copies of an environmental report, as described at N.J.A.C. 7:13-15.5, except that no environmental report is required if a project consists solely of the following activities:**
   i. **The construction of one private residence, which is not being constructed as part of a larger residential subdivision; and/or**
   ii. **The construction of a building appurtenant to a private residence, such as a garage, barn or shed;**

5. Documentation that the applicable public notice requirements of N.J.A.C. 7:13-16 have been met;

6. The application fee required under N.J.A.C. 7:13-17; and

7. Six sets of drawings, signed and sealed by a engineer, land surveyor or architect, as appropriate, which contain the following information:

i. All proposed regulated activities (including the size, location and all construction details for each regulated activity);

ii. The limit of any riparian zone onsite;

iii. Existing and proposed topography if fill or grading is proposed, unless the Department determines that topography is not necessary to determine compliance with this chapter. All topography shall reference NGVD, or include the appropriate conversion factor to NGVD, unless the applicant demonstrates that such reference is not necessary;

iv. The limit of the flood hazard area and floodway onsite if present. If proposed fill, construction and/or grading will affect these limits, then both existing and proposed flood hazard area and floodway limits shall be included on all drawings;

v. Details of proposed soil erosion and sediment control measures;

vi. If construction is proposed in a regulated water, the drawings shall also include the following:

(1) An explanation of the exact method of proposed construction;

(2) A timetable for the construction; and

(3) All proposed trenching, diversionary channels and temporary piping of

the regulated water; and

vii. If construction is proposed in a riparian zone, the drawings shall also include the following:

(1) All locations where vegetation will be cleared, cut or removed; and

(2) Details of any replanting pursuant to N.J.A.C. 7:13-10.2.

(c) An application that proposes activities in a regulated area known or suspected to contain acid producing soils shall include the following:

1. A comprehensive evaluation of the potential environmental risks caused by exposure of the acid producing soils; and

2. A plan to minimize any such risks.

(d) An application that proposes the use of fill credits to balance fill on a site in the Central Passaic Basin, as described at N.J.A.C. 7:13-10.4(s) and (t), shall include documentation that the fill credits have been purchased by the applicant prior to the submittal of the application.

(e) An application that proposes to construct a dry flood-proofed building shall include the following material, signed and sealed by an architect or engineer:

1. Drawings that clearly show the proposed dry flood-proofing measures;

2. Calculations that demonstrate that the structure meets the requirements for flood resistance at N.J.A.C. 7:13-11.4(b); and

3. A dry flood-proofing certification, listing each applicable dry flood-proofing requirement at N.J.A.C. 7:13-11.5(q), and stating how the building meets each requirement.

(f) An application proposing an activity that adversely impacts a property not owned by

the applicant, as described at N.J.A.C. 7:13-11.1(f), shall include documentation demonstrating that one or more of the following applies to each adversely impacted property:

1. **The applicant is a public entity that intends to appropriate the adversely impacted property through its power of eminent domain;**
2. **The applicant has entered into a contract to purchase the adversely impacted property;**
3. **The applicant has obtained an easement that encompasses the entire area that will be adversely impacted by the proposed activity, which specifically allows the applicant to undertake the proposed activity; and/or**
4. **The applicant has obtained written permission from the owners of the adversely impacted property. Written permission shall include the following:**
   i. **An explanation of the nature and purpose of the project;**
   ii. **An estimate of the length of time regulated activities will occur;**
   iii. **An estimate of the extent to which the adversely impacted property will be affected by flooding or stormwater discharges and the frequency at which these impacts are expected to occur; and**
   iv. **The notarized signature of all owners of the adversely impacted property.**

(g) The Department shall accept for review an application for an individual permit for an activity subject to the Department's Water Quality Management Planning rules at N.J.A.C. 7:15 only if the activity is consistent with N.J.A.C. 7:15 and the applicable Water Quality Management Plan adopted under the Water Quality Management Planning Act, N.J.S.A. 58:11A-1 et seq.

(h) The Department shall accept for review an application for an individual permit for an activity located in an area under the jurisdiction of the Pinelands Commission, as defined at N.J.S.A. 13:18A-11, only if the applicant has first received a Certificate of Filing, a Certificate of Compliance or an Resolution of Approval from the Pinelands Commission for the proposed activity, as appropriate. For more information, contact the Pinelands Commission at (609) 894-7300 or through its website at www.state.nj.us/pinelands.

7:13-9.3 Application review procedures for a verification or individual permit

(a) This section sets forth the Department's application review process for verifications and individual permits with the following exceptions:

1. **The default approval provisions at (e) through (h) below do not apply to an application for an individual permit for an electric generating facility or for a petroleum processing or storage facility, including a liquefied natural gas facility, with a storage capacity of over 50,000 barrels; and**
2. **This section does not apply to a regulated activity associated with a Major Highlands Development, the application requirements and review procedures for which are found in the Highlands Water Protection and Planning Act rules at N.J.A.C. 7:38.**

(b) Within 20 working days following the receipt of an application, the Department shall:

1. **Determine that all necessary information required by this chapter for a complete application has been provided, and declare the application complete for review;**
2. **Determine that all necessary information required by this chapter for a complete application has not been provided, or that one or more submitted items are**

deficient, and request in writing that the applicant submit the missing or incomplete information within a reasonable time period. The Department may cancel the application if the missing information is not provided within 60 calendar days. The Department shall declare the application complete for review within 20 working days of receiving the requested information; or

3. If the Department does not take action under (b)1 or 2 above within 20 working days, the application shall be deemed complete for review. In such a case, the Department may request additional information, which is necessary to bring the application into compliance with the requirements of this chapter during the review of the application.

(c) Upon written request of the applicant, the Department shall cancel an application and fully refund the submitted application fee provided:

1. The request to cancel the application is received within 20 working days of the submittal of the application and the Department has not already approved or denied the application; or

2. The request to cancel the application is received within 60 calendar days of the submittal of an application that remains incomplete under (b)2 above.

(d) If the Department determines during the review of a complete application under (b) above that the application does not meet the requirements of this chapter, the Department can request additional information and/or changes to the project in order to bring the project into compliance, provided such changes are possible within the remaining application review period described in (e) below.

(e) Within 90 calendar days following the receipt of a complete application under (b)

above, the Department shall:

1. **Determine that the application meets the requirements of this chapter and approve the application in writing;**
2. **Determine that the application does not meet the requirements of this chapter and extend the review period by 30 calendar days in writing, if agreed to by the applicant as described in (f) below; or**
3. **Determine that the application does not meet the requirements of this chapter and deny the application in writing.**

(f) The 90-day review period in (e) above can be extended one time by 30 calendar days by mutual consent of the applicant and the Department. An applicant requesting an extension shall make this request in writing during the 90-day review period (prior to the approval or denial of the project) and shall direct the request to the project manager (or his or her supervisor) assigned to review the application. The Department shall not extend the 90-day review period by less than or greater than 30 calendar days. An applicant cannot waive the right for a timely review (as provided under this section and the Ninety-Day Construction Permits Law, N.J.S.A. 13:1D-29 et seq.) and thereby avoid or indefinitely extend the Department's 90-day review period for the application.

(g) If a 30-day extension has been granted under (f) above, the Department shall, within this 30-day period:

1. **Determine that the application meets the requirements of this chapter and approve the application in writing; or**
2. **Determine that the application does not meet the requirements of this chapter and deny the application in writing.**

(h) If the Department fails to take action on an application in accordance with (e) or (g) above, the application shall be deemed to be approved. This default approval is subject to any applicable conditions set forth in this chapter for the activities covered by the application. Furthermore, default approval under this section shall not prevent the Department from taking enforcement action pursuant to N.J.A.C. 7:13-19 for any activity undertaken in violation of this chapter.

(i) An applicant can request withdrawal of an application in writing at any time during the Department's review of the application. In response to a request to withdraw an application, the Department shall:

1. **Agree to the withdrawal in writing; or**
2. **Not agree to the withdrawal and either approve or deny the application in accordance with (e) or (g) above.**

(j) If an application is denied or withdrawn under (e), (g) or (i) above, any application fee that was paid to the Department shall be credited toward the application fee for one new application, provided the following requirements are satisfied:

1. **The denied or withdrawn application did not include a request for a hardship exception pursuant to N.J.A.C. 7:13-9.8;**
2. **The new application is submitted within one year of denial or withdrawal;**
3. **The new application is submitted by the same applicant;**
4. **The new application is submitted for the same site; and**
5. **The new application is submitted for the same project, except for changes necessary to meet the requirements for approval or other minor adjustments that do not require a complete re-review of the project.**

(k) The Department shall list in the DEP Bulletin, published in accordance with N.J.S.A. 13:1D-34, all complete applications received, the review status of these applications, and all decisions made on these applications. The DEP Bulletin can be viewed or downloaded from the Department's web site at www.state.nj.us/dep.

(l) The Department may issue or deny an application for a verification or an individual permit without a public hearing. However, the Department shall hold a public hearing in either of the following cases:

1. **There is a significant degree of public interest in the application, as manifested by written requests for a hearing from at least 10 persons at different addresses. In considering the degree of public interest, the Department shall take into account whether the issues raised in the hearing requests are relevant to the application's review; or**
2. **The Department determines that the public interest would be best served by holding a hearing due to an unusual situation or condition on site, or due to a high potential for adverse impacts to flooding and/or the environment.**

7:13-9.4 Duration of an individual permit

(a) Except as provided in (b) below, an individual permit is valid for five years from its issuance date and shall not be extended. However, the Department can transfer an individual permit with the sale of a property to a new owner pursuant to N.J.A.C. 7:13-14.1.

(b) An individual permit for a public roadway, railroad or flood control project is valid for 10 years from its issuance date, provided the applicant is a public entity and the applicant

demonstrates that the size and scope of the project is likely to prevent the completion of all regulated activities within a five-year period.

(c) All regulated activities shall cease upon expiration of an individual permit. Regulated activities cannot resume unless the applicant applies for and obtains a new individual permit from the Department. In such cases, the Department shall issue a new individual permit only as follows:

1. **If no regulated activities have occurred onsite prior to the expiration of the original individual permit, a new individual permit shall be issued only if the project is revised where necessary to comply with the requirements of this chapter in effect when the new application is submitted; and**
2. **If some regulated activities have occurred onsite prior to the expiration of the original individual permit, a new individual permit shall be issued only if the project is revised where feasible to comply with the requirements of this chapter in effect when the new application is submitted. In determining the feasibility of compliance with the current requirements of this chapter, the Department shall consider the amount of construction that was completed onsite prior to the permit expiration, as well as whether continuing construction as originally approved would constitute an adverse impact on flooding or the environment.**

7:13-9.5 Individual permit conditions

(a) The Department places certain conditions on an individual permit to ensure that the approved project complies with this chapter. Standard conditions that apply to all individual permits are described in (b) below and the application of additional site-specific

conditions are described in (c) through (e) below. If a permittee does not agree with a condition on an individual permit, the permittee is entitled to appeal the individual permit as described at N.J.A.C. 7:13-18.1. However, if a permittee undertakes any regulated activity approved under an individual permit, such action shall constitute the permittee's acceptance of the individual permit in its entirety and the permittee's agreement to abide by the individual permit and all conditions listed therein.

(b) The following conditions apply to all individual permits issued under this chapter:

1. **Duty to comply: The permittee, its contractors and subcontractors shall comply with all conditions of the permit, supporting documents and approved drawings. Any noncompliance with a permit constitutes a violation of this chapter, and is grounds for enforcement action under N.J.A.C. 7:13-19, as well as suspension and/or termination of the permit.**
2. **Duty to reapply: If the permittee wishes to continue an activity covered by the permit after the expiration date of the permit, the permittee must apply for and obtain a new permit.**
3. **Duty to halt or reduce activity: It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.**
4. **Duty to minimize environmental impacts: The permittee shall take all reasonable steps to prevent, minimize or correct any adverse impact on the environment resulting from activities conducted pursuant to the permit, or from noncompliance with the permit.**

5. **Proper operation and maintenance: The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used to achieve compliance with the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. The operation of back-up or auxiliary facilities or similar systems is only required when necessary to achieve compliance with the permit. The permittee must also properly execute any approved mitigation compensation and/or restoration proposal designed to mitigate losses caused by the permitted activity. The permittee shall maintain the authorized work areas in good condition and in accordance with the permit.**
6. **Proper oversight: The permittee shall ensure that all approved activities are undertaken using the best management practices available under the supervision and direction of an engineer.**
7. **Proper site maintenance: While the regulated activities are being undertaken, neither the permittee nor its agents shall cause or permit any unreasonable interference with the free flow of a regulated water by placing or dumping any materials, equipment, debris or structures within or adjacent to the channel. Upon completion or abandonment of the work, the permittee and/or its agents shall remove and dispose of in a lawful manner all excess materials, debris, equipment, silt fences and other temporary soil erosion and sediment control devices from all regulated areas.**

8. Permit actions: A permit can be revised, suspended or terminated for cause. The filing of a request by the permittee for a revision, or a notification of planned changes or anticipated noncompliance does not stay any condition of a permit.

9. Property rights: A permit does not convey any property rights of any sort, or any exclusive privilege.

10. Duty to provide information: A copy of the general permit and other authorizing documents including all approved plans and drawings shall be maintained at the authorized site at all times and made available to Department representatives or their designated agents immediately upon request. The permittee shall also furnish to the Department within a reasonable time any information that the Department requests to determine compliance with a permit or to determine whether cause exists for suspension or termination of a permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by the permit.

11. Inspection and entry: The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to:

i. Enter upon the permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of the permit;

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit; and

iii. Inspect at reasonable times any facilities, equipment, practices or operations regulated or required under the permit. Failure to allow reasonable access under this section shall be considered a violation of this chapter and subject the permittee to enforcement action under N.J.A.C. 7:13-19.

12. Reporting requirements: The permittee shall provide reports to the Department as follows:

i. Planned changes: The permittee shall give notice to the Department prior to any planned physical alterations or additions to the permitted project or activity;

ii. Transfers: The permit is not transferable to any person unless the transfer is approved by the Department, pursuant to N.J.A.C. 7:13-14.1;

iii. Noncompliance: The permittee shall immediately report to the Department by telephone at (877) 927-6337 any noncompliance that may endanger health or the environment. The permittee shall report all other noncompliance to the Division of Land Use Regulation by telephone at (609) 292-0060 within two business days of the time the permittee becomes aware of the noncompliance, and in writing within five business days of the time the permittee becomes aware of the noncompliance. The written notice shall include: a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated length of time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. Such notice shall not, however, serve as a defense to enforcement action if the project is found to be in violation of this chapter; and

iv. Other information: Where the permittee becomes aware that it failed to submit any relevant facts in an application, or submitted incorrect information in an application or in any report to the Department, it shall

promptly submit such facts or information.

(c) In addition to the conditions that apply to all individual permits under (b) above, the Department shall establish conditions in an individual permit, as required on a case-by-case basis, to assure compliance with all applicable requirements of this chapter and its enabling statutes.

(d) The Department may in some cases include in an individual permit a condition requiring a pre-construction meeting on the site of permitted activities. Such a condition shall specify how many days prior to construction the permittee must notify the Department so that the pre-construction meeting can be scheduled.

(e) All conditions of an individual permit shall be incorporated either expressly or by reference. If incorporated by reference, a specific citation to the applicable rules or regulations or requirements shall be included in the individual permit.

7:13-9.6 Cases where a verification is required prior to obtaining an individual permit

(a) Except as provided at (b) and (c) below, the Department shall issue an individual permit for a regulated activity only if the flood hazard area design flood elevation and floodway limit are known and verified pursuant to N.J.A.C. 7:13-6.1. The applicant for an individual permit shall demonstrate that:

1. **The applicant possesses a valid verification of the flood hazard area design flood elevation, and also the floodway limit if present, for the project area;**
2. **The applicant has applied for a verification of the flood hazard area design flood elevation, and also the floodway limit if present, for the project area, and the Department approves the verification either prior to or concurrent with the**

issuance of the individual permit;

3. **The project meets the conditions of either (b)1 or 2 below, in which case no verification is required in order to obtain an individual permit; or**
4. **The project meets the conditions of (c) below, in which case a verification of only the flood hazard area design flood elevation is required either prior to or concurrent with the issuance of an individual permit.**

(b) A verification is not required prior to the issuance of an individual permit if:

1. **No fill and no aboveground structure is proposed onsite; or**
2. **Fill and/or an aboveground structure is proposed and the following apply:**
   i. **No habitable building is proposed, which requires knowledge of the flood hazard area design flood elevation to determine compliance with this chapter;**
   ii. **No railroad, roadway or parking area is proposed, which requires knowledge of the flood hazard area design flood elevation to determine compliance with this chapter;**
   iii. **It is clear to the Department from a visual inspection of submitted drawings that the proposed fill and/or structure is either located outside a floodway or will not obstruct flow in a floodway; and**
   iv. **It is clear to the Department from a visual inspection of submitted drawings that the flood storage displacement requirements of N.J.A.C. 7:13-10.4 are satisfied.**

(c) Verification of the floodway limit is not required prior to the issuance of an individual permit for the construction a habitable building, railroad, roadway or parking area if:

1. **It is clear to the Department from a visual inspection of submitted drawings that**

the proposed fill and/or structure is either located outside a floodway or will not obstruct flow in a floodway; and

2. It is clear to the Department from a visual inspection of submitted drawings that the flood storage displacement requirements of N.J.A.C. 7:13-10.4 are satisfied.

7:13-9.7 Cases where an individual permit can be issued in an approximated flood hazard area

(a) The Department shall issue an individual permit for a regulated activity in a flood hazard area approximated under Method 5 at N.J.A.C. 7:13-3.5, only if the flood hazard area is verified under N.J.A.C. 7:13-6, and only in either of the following cases:

1. No fill or aboveground structure is proposed in the flood hazard area; or

2. Fill and/or an aboveground structure is proposed in the flood hazard area, and it is clear to the Department from a visual inspection of submitted drawings that the following requirements are satisfied:

i. If a habitable building is proposed, it is located outside a floodway;

ii. If fill or any structure other than a habitable building is proposed, it is either located outside a floodway or will not obstruct flow in a floodway; and

iii. The flood storage displacement requirements of N.J.A.C. 7:13-10.4 are satisfied.

7:13-9.8 Hardship exception for an individual permit

(a) The Department shall issue an individual permit for an activity that does not comply with one or more of the requirements at N.J.A.C. 7:13-10 and 11 only if all of the

requirements of (b) below are satisfied and, additionally, one or more of the following requirements are satisfied:

1. **The Department determines that there is no feasible and prudent alternative to the proposed project, including not pursuing the project, which would avoid or substantially reduce the anticipated adverse effects of the project, and that granting the hardship exception would not compromise the reasonable requirements of public health, safety and welfare, or the environment;**
2. **The Department determines that the cost of compliance with the requirements of this chapter is unreasonably high in relation to the environmental benefits that would be achieved by compliance; and/or**
3. **The Department and applicant agree to one or more alternative requirements that, in the judgment of the Department, provide equal or better protection to public health, safety and welfare and the environment.**

(b) To obtain an individual permit based on a hardship exception, the applicant shall demonstrate to the Department that the following requirements are satisfied:

1. **Due to an extraordinary situation of the applicant or site condition, compliance with this chapter would result in an exceptional and/or undue hardship for the applicant;**
2. **The proposed activities will not adversely affect the use of contiguous or nearby property;**
3. **The proposed activities will not pose a threat to the environment, or to public health, safety and welfare; and**
4. **The hardship was not created by any action or inaction of the applicant or its**

agents.

(c) To obtain an individual permit based on a hardship exception, the applicant shall submit an application pursuant to N.J.A.C. 7:13-9.2 and shall include the following additional information as applicable:

1. **A description of the potential effects of the proposed project upon the environment;**
2. **If the hardship exception relates to the access requirements of N.J.A.C. 7:13-11.6, proposed access routes to and from the property during a flood;**
3. **The projected height, velocity and duration of the floodwaters expected at the site during the flood hazard area design flood;**
4. **If the hardship exception request is based on economic grounds, detailed financial documentation to support the request;**
5. **A description of the existing development in the area and the impact of the proposed regulated activities on that development;**
6. **Evidence that the project will not adversely affect the hydraulic capacity of any water so as to cause or increase flooding upstream and/or downstream of the proposed project; and**
7. **Any additional information that the Department determines is reasonable and necessary to evaluate whether the request for a hardship exception meets the requirements of this section.**

(d) The Department shall review an application for an individual permit based on a hardship exception in accordance with the procedures for an individual permit at N.J.A.C. 7:13-9.3. The denial of an individual permit based on a hardship

exception shall be without prejudice. However, any future reapplication for an individual permit based on a hardship exception that has been denied or withdrawn shall be accompanied by a new application fee.

(e) A delegated agency shall not issue an individual permit based on a hardship exception.

SUBCHAPTER 10. INDIVIDUAL PERMIT REQUIREMENTS WITHIN VARIOUS REGULATED AREAS

7:13-10.1 Requirements for a regulated activity in a channel

(a) This section sets forth specific design and construction standards that apply to any regulated activity proposed in a channel.

(b) The Department shall issue an individual permit for a regulated activity in a channel only if the following requirements are satisfied:

1. **The basic purpose of the project cannot be accomplished without the disturbance to the channel;**
2. **Disturbance to the channel is eliminated where possible; where not possible to eliminate, disturbance is minimized through methods including relocating the project and/or reducing the size or scope of the project;**
3. **All roadway, railroad, pedestrian, utility and other crossings are constructed as nearly perpendicular to the channel as possible;**
4. **All disturbed sections of the channel are properly stabilized, with special attention given to changes in slope, channel width and hydraulic capacity;**
5. **If stabilization measures such as rip-rap or scour holes are proposed in the**

channel, the applicant demonstrates that such measures are necessary to stabilize the channel and/or to withstand scour along a bridge or culvert, and cannot be avoided through alternative designs, such as construction of deeper abutment footings or a larger bridge opening. Any rip-rap shall be embedded in the channel bed in such a way as to provide low-flow aquatic passage and withstand velocities associated with bank-full flows;

6. **No mining of the channel is proposed. This does not preclude the incidental use or sale of material removed as a result of lake dredging, channel cleaning or other regulated activities authorized by the Department and performed for purposes other than mining;**
7. **All temporarily disturbed sections of the channel are restored to pre-construction conditions. Characteristics that shall be replicated include channel shape, width and meandering, ratio of shallow areas to deep areas, anticipated flow rate and velocity and substrate type;**
8. **Aquatic habitat is preserved where possible; and**
9. **Aquatic habitat is enhanced where preservation is not possible, such as through the placement of habitat enhancement devices, replacement of vegetation removed during construction, creation of tree canopy along the channel where no canopy exists and/or enhancement of existing tree canopy along the channel.**

(c) The Department shall issue an individual permit for a channel modification only if the applicant demonstrates that, in addition to meeting the requirements of (b) above, the channel modification meets at least one of the following requirements:

1. **The channel modification is necessary to control existing flooding or erosion which**

poses an immediate threat to life, property or a lawfully existing structure; or

2. The channel modification is necessary for the construction of a bridge or culvert, and the following requirements are satisfied:

i. The disturbance to the channel is minimized;

ii. A bridge is constructed rather than a culvert, where feasible;

iii. The length of channel covered by a bridge or enclosed in a culvert is the minimum feasible; and

iv. No more than 200 linear feet of channel (including the bridge or culvert) is disturbed.

(d) The Department shall allow the use of construction equipment to perform regulated activities in a channel (whether situated in a channel, reaching into a channel or driven across a channel) only if, in addition to meeting the requirements of (b) above, the following requirements are satisfied:

1. There is no feasible alternative that will result in less environmental damage;

2. The bed is firm, the approaches are stable and the proposed construction activities will not cause or exacerbate bank erosion;

3. Contact with flowing water is minimized where possible through the use of temporary bridges or culverts, coffer dams and/or sediment control devices, which are removed after completion of the project;

4. Fording the channel is avoided;

5. Where unavoidable, fording is made as nearly perpendicular to the channel as possible; and

6. Adequate precautions are taken to prevent sediment, petroleum products and

other pollutants from entering the channel.

(e) A person shall not drive or operate a vehicle across a channel except where:

1. **It is necessary to operate construction equipment in or across a channel as described in (d) above as part of a temporary construction activity;**
2. **An emergency vehicle must access a site that has no other feasible means of entry. This does not include repeated visits to the same site by delivery trucks; or**
3. **The vehicle is driven across a lawfully existing and stable ford that was either constructed prior to October 2, 2006, or which is constructed on agricultural lands under general permit 2E at N.J.A.C. 7:13-8.4(c)5.**

7:13-10.2 Requirements for a regulated activity in a riparian zone

(a) This section sets forth specific design and construction standards that apply to any regulated activity that will result in the clearing, cutting or removing of vegetation in a riparian zone. The width of the riparian zone is set forth at N.J.A.C. 7:13-4.1.

(b) The riparian zones established by this chapter are separate from and in addition to any other similar zones or buffers established to protect surface waters. For example, the Stormwater Management rules at N.J.A.C. 7:8 and the Highlands Water Protection and Planning Act rules at N.J.A.C. 7:38 establish 300-foot Special Water Resource Protection Areas and buffers, respectively, along certain waters. Furthermore, the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A establish 50-foot and 150-foot transition areas along freshwater wetlands and other features that are also regulated under this chapter. Compliance with the riparian zone requirements of this chapter does not constitute compliance with the requirements imposed under any other Federal, State or

local statute, regulation or ordinance.

(c) As used in this section, the total area of vegetation disturbed in a riparian zone shall include the following:

1. **The area within the limit of disturbance shown on submitted drawings;**
2. **The area under the canopy of trees to be cleared, cut or removed; and**
3. **All other areas from which vegetation is to be cleared, cut or removed.**

(d) The following table sets forth limits on the area of vegetation that can be disturbed for various regulated activities, provided the requirements for each activity as described in (e) through (r) below are satisfied, and provided the applicant demonstrates the following:

1. **The basic purpose of the project cannot be accomplished onsite without disturbing vegetation in the riparian zone;**
2. **Disturbance to the riparian zone is eliminated where possible; where not possible to eliminate, disturbance is minimized through methods including relocating the project, reducing the size or scope of the project and/or situating the project in portions of the riparian zone where previous development or disturbance has occurred;**
3. **All temporarily cleared, cut or removed vegetation within a riparian zone is replanted with indigenous, non-invasive vegetation upon completion of the project in accordance with (u) below; and**
4. **All additional restrictions for the specific proposed activity described elsewhere in this chapter are satisfied. For example, while (o) below sets limits on disturbance to the riparian zone resulting from a flood control project, N.J.A.C. 7:13-11.12 includes further specific requirements to ensure that disturbance to the channel**

and riparian zone is avoided or minimized for such projects.

Table B
MAXIMUM ALLOWABLE DISTURBANCE TO RIPARIAN ZONE VEGETATION

Proposed Regulated Activity		See Paragraph Below for Further Detail	Maximum Area of Vegetation Disturbance Based on the Width of the Riparian Zone		
			50-foot Riparian Zone	150-foot Riparian Zone	300-foot Riparian Zone
• **Railroad or public roadway**					
New	Crossing a water	(e)	5,000 ft^2	15,000 ft^2	30,000 ft^2
	Not crossing a water		2,000 ft^2	6,000 ft^2	12,000 ft^2
Reconstructed	Crossing a water	(f)	2,500 ft^2	7,500 ft^2	15,000 ft^2
	Not crossing a water		1,000 ft^2	3,000 ft^2	6,000 ft^2
• **Private roadway that serves as a driveway to one private residence**					
New	Crossing a water	(g)	1,500 ft^2	4,500 ft^2	9,000 ft^2
	Not crossing a water		600 ft^2	1,800 ft^2	3,600 ft^2
Reconstructed	Crossing a water	(h)	750 ft^2	2,250 ft^2	4,500 ft^2
	Not crossing a water		300 ft^2	900 ft^2	1,800 ft^2
• **All other private roadways**					
New	Crossing a water	(g)	3,000 ft^2	9,000 ft^2	18,000 ft^2
	Not crossing a water		1,200 ft^2	3,600 ft^2	7,200 ft^2
Reconstructed	Crossing a water	(h)	1,500 ft^2	4,500 ft^2	9,000 ft^2
	Not crossing a water		600 ft^2	1,800 ft^2	3,600 ft^2
• **Bank stabilization**					
Bank stabilized with vegetation only		(i)	No limit if disturbance is justified		
Other permanent disturbance			2,000 ft^2	2,000 ft^2	2,000 ft^2
Other temporary disturbance			1,000 ft^2	3,000 ft^2	6,000 ft^2
• **Stormwater discharge (including pipe and conduit outlet protection)**					
Permanent disturbance		(j)	1,000 ft^2	1,000 ft^2	1,000 ft^2
Temporary disturbance			1,000 ft^2	3,000 ft^2	6,000 ft^2
• **Utility line (temporary disturbance only)**					
Crossing a water		(k)	2,000 ft^2	6,000 ft^2	12,000 ft^2
Not crossing a water		(l)	800 ft^2	2,400 ft^2	4,800 ft^2
• **Other projects**					
Private residence		(m)	2,500 ft^2	5,000 ft^2	5,000 ft^2
Addition, garage, barn or shed		(n)	1,000 ft^2	2,000 ft^2	2,000 ft^2
Flood control project		(o)	3,000 ft^2	9,000 ft^2	18,000 ft^2
Public accessway or public access area		(p)	No limit if disturbance is justified		
Water dependent development		(q)	No limit if disturbance is justified		
All other regulated activities		(r)	1,000 ft^2	3,000 ft^2	6,000 ft^2

(e) The Department shall issue an individual permit for the construction of a new railroad or public roadway, which results in clearing, cutting and/or removing vegetation in a riparian zone, only if the following requirements are satisfied:

1. **The total area of vegetation cleared, cut and/or removed within the riparian zone does not exceed the limits set forth in Table B above;**
2. **The width of the railroad or public roadway is minimized;**
3. **Any crossing of a regulated water is designed and constructed as nearly perpendicular to the channel as possible; and**
4. **If the project impacts a 150-foot or 300-foot riparian zone, the applicant demonstrates that there is a compelling public need to construct the new railroad or public roadway, which cannot be satisfied without impacting the riparian zone. This demonstration shall include an analysis of alternate routes and other alternative projects that would avoid impacting the riparian zone.**

(f) The Department shall issue an individual permit for the expansion or improvement of a lawfully existing railroad or public roadway, which results in clearing, cutting and/or removing vegetation in a riparian zone, only if the following requirements are satisfied:

1. **The total area of vegetation cleared, cut and/or removed within the riparian zone does not exceed the limits set forth in Table B above, unless the applicant demonstrates that public safety cannot be adequately ensured without exceeding these limits. In such a case, the applicant shall provide 2:1 compensation for all cleared, cut and removed vegetation in excess of the limit set forth in Table B in a manner described at (t) below;**
2. **The width of the railroad or public roadway is minimized; and**

3. If the project impacts a 150-foot or 300-foot riparian zone, the applicant demonstrates that there is a compelling public need to expand or improve the railroad or public roadway, which cannot be satisfied without impacting the riparian zone. This demonstration shall include an analysis of alternate routes and other alternative projects that would avoid impacting the riparian zone.

(g) The Department shall issue an individual permit for the construction of a new private roadway, which results in clearing, cutting and/or removing vegetation in a riparian zone, only if the following requirements are satisfied:

1. The total area of vegetation cleared, cut and/or removed within the riparian zone does not exceed the limits set forth in Table B above;

2. The width of the roadway is minimized;

3. Any crossing of a regulated water is designed and constructed as nearly perpendicular to the channel as possible;

4. The roadway accesses a lot that did not receive preliminary or final subdivision approval after October 2, 2006;

5. If the roadway does not cross a regulated water, but impacts a 150-foot or 300-foot riparian zone, the applicant demonstrates that there is no other means of constructing a roadway to access the developable area onsite, which would reduce or eliminate the impact to the riparian zone; and

6. If the roadway crosses a regulated water that has a 150-foot or 300-foot riparian zone, the applicant demonstrates that there is developable land onsite that cannot feasibly be accessed without crossing the water, including accessing the site through neighboring properties.

(h) The Department shall issue an individual permit for the expansion or improvement of an existing private roadway, which results in clearing, cutting and/or removing vegetation in a riparian zone, only if the following requirements are satisfied:

1. **The total area of vegetation cleared, cut and/or removed within the riparian zone does not exceed the limits set forth in Table B above;**
2. **The width of the roadway is minimized; and**
3. **If the expansion or improvement impacts a 150-foot or 300-foot riparian zone, the applicant demonstrates the proposed reconstruction is necessary for the continued safe access to the site.**

(i) The Department shall issue an individual permit to stabilize an eroded bank of a channel or impounded water, which results in clearing, cutting and/or removing vegetation in a riparian zone, only if the following requirements are satisfied:

1. **If the eroded bank is cut back to a stable slope and revegetated as described at N.J.A.C. 7:13-11.14(c)2, and the applicant demonstrates the project is necessary pursuant to N.J.A.C. 7:13-11.14(b), the area of vegetation cleared, cut and/or removed within the riparian zone is minimized;**
2. **If the eroded bank is stabilized by any means other than that which is described in (i)1 above, the total area of vegetation permanently cleared, cut and/or removed within the riparian zone does not exceed the limits set forth in Table B above, unless the applicant demonstrates that the bank cannot be adequately stabilized without exceeding these limits. In such a case, the applicant shall provide 2:1 compensation for all areas permanently cleared of vegetation in excess of the limit set forth in Table B in a manner described at (t) below; and**

3. The total area of vegetation temporarily cleared, cut and/or removed within the riparian zone in order to provide access to perform the stabilization work does not exceed the limits for temporary disturbance set forth in Table B above. All such disturbed areas shall be replanted with indigenous, non-invasive vegetation; and

(j) The Department shall issue an individual permit to construct a stormwater discharge (including the stormwater pipe leading to the discharge), which results in clearing, cutting and/or removing vegetation in a riparian zone, only if the following requirements are satisfied:

1. The total area of vegetation cleared, cut and/or removed within the riparian zone does not exceed the limits set forth in Table B above; and

2. No portion of the stormwater discharge, including any associated conduit outlet protection and/or conveyance swale, is placed within a 150-foot or 300-foot riparian zone, except in the following cases (note that new discharges along Category One waters and certain upstream tributaries are restricted in certain cases under the Stormwater Management rules at N.J.A.C. 7:8-5.5(h)):

i. The reconstruction of an existing stormwater discharge provided:

(1) The reconstruction is necessary to ameliorate erosion and/or flooding; and

(2) The volume, rate and quality of stormwater being discharged is not altered;

ii. The construction of a new stormwater discharge along an existing roadway provided:

(1) The discharge is necessary to ameliorate erosion and/or flooding; and

(2) There is no feasible alternative means of constructing the discharge

outside the riparian zone due to topography, soil type, vegetative cover and/or location of the roadway or other existing structures;

iii. The construction of a new stormwater discharge associated with the construction of a new roadway provided:

(1) There is no feasible alternative location or alignment for either the new roadway or the new discharge, which would eliminate the need to construct a discharge in the riparian zone;

(2) In the case of a public roadway, the applicant demonstrates that there is a compelling public need to construct the new roadway and the new discharge, which cannot be satisfied without impacting the riparian zone. This demonstration shall include an analysis of alternate routes for the new roadway and other alternative projects that would avoid impacting the riparian zone; and

(3) In the case of a private roadway, the applicant demonstrates that there is developable land onsite that cannot feasibly be accessed without constructing a new roadway and/or discharge that impacts the riparian zone, including accessing the site through neighboring properties; and

iv. The construction or reconstruction of any stormwater discharge not described in (j)2i, ii or iii above, which is located in a Special Water Resource Protection Area pursuant to N.J.A.C. 7:8-5.5(h), provided the requirements at N.J.A.C. 7:8-5.5(h)3 are met.

(k) The Department shall issue an individual permit to construct a utility line, which crosses a regulated water and results in clearing, cutting and/or removing vegetation in a

riparian zone, only if the following requirements are satisfied:

1. **The total area of vegetation cleared, cut and/or removed within the riparian zone does not exceed the limits set forth in Table B above, unless the applicant demonstrates that:**
   i. **The construction of an open trench through the riparian zone is necessary to install the utility line; and**
   ii. **The width of the trench required to safely install the utility line necessitates that disturbance to vegetation in the riparian zone exceeds the limits set forth in Table B, as described at N.J.A.C. 7:13-11.9(b)4; and**
2. **The applicant demonstrates, pursuant to N.J.A.C. 7:13-11.9(b)1 through 4, that disturbance in the riparian zone is unavoidable.**

(l) The Department shall issue an individual permit to construct a utility line, which does not cross a regulated water but which results in clearing, cutting and/or removing vegetation in a riparian zone, only if the following requirements are satisfied:

1. **The total area of vegetation cleared, cut and/or removed within the riparian zone does not exceed the limits set forth in Table B above;**
2. **The applicant demonstrates that it is not feasible to construct the line either outside the riparian zone completely, or otherwise in such a way that no vegetation in the riparian zone is disturbed; and**
3. **The line is placed at least 25 feet from any top of bank or edge of water.**

(m) The Department shall issue an individual permit for the construction of a new private residence, which results in clearing, cutting and/or removing vegetation in a riparian zone, only if the following requirements are satisfied:

1. **The total area of vegetation cleared, cut and/or removed within the riparian zone does not exceed the limits set forth in Table B above;**
2. **The private residence is being constructed on a lot that did not receive preliminary or final subdivision approval after October 2, 2006;**
3. **The private residence is not being constructed as part of a larger residential subdivision; and**
4. **The applicant demonstrates the following:**
   i. **There is no other reasonable use for the site, which would reduce or eliminate the impact to the riparian zone;**
   ii. **There is no other feasible location onsite to construct a private residence, which would reduce or eliminate the impact to the riparian zone; and**
   iii. **All disturbance within the riparian zone is located at least 25 feet from any top of bank or edge of water and as far from the regulated water as possible, unless the private residence is constructed adjacent to a man-made tidal waterway.**

(n) The Department shall issue an individual permit for the construction of an addition to an existing building, or the construction of a building appurtenant to an existing building, such as a garage, barn or shed, which results in clearing, cutting and/or removing vegetation in a riparian zone, only if the following requirements are satisfied:

1. **The total area of vegetation cleared, cut and/or removed within the riparian zone does not exceed the limits set forth in Table B above; and**
2. **The applicant demonstrates the following:**
   i. **There is no other feasible location onsite to construct the addition or building,**

which would reduce or eliminate the impact to the riparian zone; and

ii. All disturbance within the riparian zone is located at least 25 feet from any top of bank or edge of water and as far from the regulated water as possible.

(o) The Department shall issue an individual permit for the construction of a flood control project, which results in clearing, cutting and/or removing vegetation in a riparian zone, only if the total area of vegetation cleared, cut and/or removed within the riparian zone does not exceed the limits set forth in Table B above, unless the applicant demonstrates that public safety cannot be adequately ensured without exceeding these limits. In such a case, the applicant shall provide 2:1 compensation for all cleared, cut and removed vegetation in excess of the limit set forth in Table B in a manner described at (t) below.

(p) The Department shall issue an individual permit for the construction of a public accessway or public access area along a tidal water, which results in clearing, cutting, and/or removing vegetation in a riparian zone, only if the following requirements are met:

1. **The public accessway or public access area is designed in accordance with the public access to the waterfront rule, N.J.A.C. 7:7E-8.11. Such construction need not comply with (d)1 and 2 above;**
2. **No building is constructed within 25 feet of any top of bank or edge of water; and**
3. **For any proposed parking area, the applicant demonstrates that there is no other reasonable location onsite to construct the parking area that would reduce or eliminate the impact to the riparian zone;**

(q) The Department shall issue an individual permit for the construction of a water dependent development along a tidal water, which results in clearing, cutting, and/or removing vegetation in a riparian zone, only if the following requirements are met:

1. **The development is designed in accordance with the Coastal Zone Management rules, N.J.A.C. 7:7E, and meets the definition of water dependent at N.J.A.C. 7:7E-1.8;**
2. **No building is constructed within 25 feet of any top of bank or edge of water; and**
3. **For any proposed development, the applicant demonstrates that there is no other location onsite to construct the development that would reduce or eliminate the impact to the riparian zone.**

(r) The Department shall issue an individual permit for a regulated activity not listed in (e) through (q) above, which results in clearing, cutting and/or removing vegetation in a riparian zone, only if the following requirements are satisfied:

1. **The total area of vegetation cleared, cut and/or removed within the riparian zone does not exceed the limits set forth in Table B above;**
2. **No building is constructed within 25 feet of any top of bank or edge of water;**
3. **The applicant demonstrates the following:**
   i. **There is no other reasonable means of accomplishing the project, which would reduce or eliminate the impact to the riparian zone;**
   ii. **There is no other feasible location onsite to undertake the project, which would reduce or eliminate the impact to the riparian zone; and**
   iii. **All disturbance within the riparian zone is located as far from the regulated water as possible; and**
4. **The applicant provides 2:1 compensation for all cleared, cut and removed vegetation in the riparian zone in a manner described at (t) below.**

(s) If the Department determines that requiring an applicant to meet a limit of

disturbance set forth in Table B above constitutes a hardship under N.J.A.C. 7:13-9.8, and the Department subsequently grants an individual permit for an activity that exceeds that limit, the applicant shall provide 2:1 compensation for all cleared, cut and removed vegetation in excess of that limit set forth in Table B in a manner described at (t) below.

(t) The 2:1 compensation required under (f)1, (i), (o), (r)4 and (s) above shall be accomplished as follows:

1. **In the case of (f)1, (i), (o) and (s) above, at least twice the area of all cleared, cut and removed vegetation in excess of the limit in Table B above shall be replanted;**
2. **In the case of (r)4 above, at least twice the area of all cleared, cut and removed vegetation shall be replanted;**
3. **The area selected for 2:1 compensation is deed restricted against future development that would remove the vegetation being planted; and**
4. **All replanting of vegetation shall be accomplished as described in (u) below and in one or both of the following ways:**
    i. **The applicant shall remove lawfully existing structures and/or impervious surfaces in the riparian zone, and replant the area with vegetation; and/or**
    ii. **The applicant shall plant new trees in the riparian zone in an area that is devoid of trees at the time of application because the trees were removed due to previous, lawful development. Replanting vegetation that was removed in violation of this chapter does not constitute compensation under this section.**

(u) All replanting of riparian zone vegetation required under this section shall meet the following:

1. **All replanting shall be in the riparian zone of the same regulated water as the**

cleared, cut or removed vegetation;

2. **All replanting shall be as close to the cleared, cut or removed vegetation as possible;**
3. **All replanting shall be of indigenous, non-invasive vegetation;**
4. **The replanted vegetation shall be of equal or greater density as the cleared, cut or removed vegetation;**
5. **The applicant shall monitor and maintain replanted vegetation for at least three growing seasons to ensure proper establishment and survival; and**
6. **The location, nature, area and schedule for replanted vegetation shall be shown on drawings submitted with the application for the individual permit which necessitates the replanting. No replanting required under this section shall commence without the prior approval of the Department.**

(v) In cases where an applicant proposes to redevelop a site within 25 feet of any top of bank or edge of water, all existing impervious surface within 25 feet of the top of bank or edge of water shall be removed and the riparian zone in this area shall be adequately stabilized and replanted with indigenous, non-invasive vegetation, except in the following cases:

1. **The applicant demonstrates that removing the existing impervious surface and/or preventing the replacement of the existing impervious surface within 25 feet of the top of bank or edge of water would likely threaten public safety, exacerbate flooding or erosion and/or cause an undue economic hardship upon the applicant. In such a case, the riparian zone within 25 feet of the top of bank or edge of water shall be restored, stabilized and/or replanted to the extent feasible; and/or**

2. The applicant proposes to construct a public walkway within 25 feet of the top of bank or edge of water, provided the walkway is constructed of permeable material where feasible, and provided the remainder of the area within 25 feet of the top of bank or edge of water is restored, stabilized and replanted with indigenous, non-invasive vegetation.

7:13-10.3 Requirements for a regulated activity in a floodway

(a) This section sets forth specific design and construction standards that apply to any regulated activity proposed in a floodway.

(b) Except as provided in (c) below, the Department shall not issue an individual permit for the following activities:

1. The placement of any aboveground structure in or above a floodway;

2. Any regulated activity that would result in the placement of fill in a floodway;

3. Any regulated activity that would raise the ground elevation in a floodway; or

4. Any regulated activity that would obstruct the passage of floodwaters in a floodway.

(c) Notwithstanding (b) above, the Department shall issue an individual permit for the following regulated activities in a floodway, provided all other requirements of this chapter are satisfied for each activity:

1. The construction of a building on a pier in the Hudson River, provided the requirements of the Coastal Zone Management rules at N.J.A.C. 7:7E-3.48 are satisfied;

2. The reconstruction of a lawfully existing building, in accordance with N.J.A.C.

7:13-11.5(e);

3. **The construction of an addition to a lawfully existing building, in accordance with N.J.A.C. 7:13-11.5(f);**
4. **The construction of a water control structure, such as a bridge, culvert, footbridge, dam or flood control project, in accordance with N.J.A.C. 7:13-11.7, 11.8, 11.11 and 11.12;**
5. **The construction of a stormwater outfall structure, in accordance with N.J.A.C. 7:13-11.10;**
6. **The restoration and/or stabilization of an eroded bank, in accordance with N.J.A.C. 7:13-11.14, which requires the placement of fill, provided:**
   i. **The placement of the fill is necessary to protect nearby structures or trees from undermining or failure and not simply to reclaim land that has been lost due to erosion; and**
   ii. **The cross-sectional area of the channel open to flow will not be reduced to less than the pre-eroded condition of the channel;**
7. **The placement of dredged material adjacent to the water from which the material was removed, in accordance with N.J.A.C. 7:13-11.15(f);**
8. **The placement of fill in an isolated shallow depression or other area that does not contribute to the hydraulic capacity of the floodway; and**
9. **The placement of fill in a portion of a manmade impoundment of water, such as a pond or lake, provided:**
   i. **An equal or greater amount of excavation is performed elsewhere in the same pond or lake at similar elevations as the proposed fill;**

ii. The applicant demonstrates that the fill will not obstruct flood flows;

iii. The fill will extend no further than 20 percent of the width of the water, measured perpendicularly across the water from the shoreline along which the fill is being placed; and

iv. The applicant demonstrates that placing the fill will not cause adverse environmental impacts.

7:13-10.4 Requirements for a regulated activity in a flood fringe

(a) This section sets forth specific design and construction standards that apply to any regulated activity proposed in a flood fringe.

(b) This section provides standards for the volume of material that may be placed aboveground in a flood fringe as well as other activities that would reduce the flood storage volume on a site. When material is placed aboveground in a flood fringe, it will occupy a space that would otherwise be filled with floodwaters during a flood, and, thus, will reduce the flood storage volume on the site. Construction also reduces the flood storage volume by preventing floodwaters from entering a space that it would otherwise occupy, such as the space inside a building or stormwater management basin, or behind an embankment. For example, although the space within a building may be empty, the building's walls might prevent floodwaters from entering that space. Since the entire space within the walls has been rendered inaccessible to floodwaters, the entire space, though empty, displaces flood storage volume. The Department also recognizes that some structures, such as garages, sheds and other buildings that are not dry flood-proofed are not likely to prevent the entry of floodwaters, and, therefore, the space within the walls of such a structure may not

actually displace flood storage volume.

(c) The Department shall issue an individual permit for a regulated activity (or combination of regulated activities) in a flood fringe only if one of the following is satisfied:

1. **The regulated activity is not subject to the flood storage volume displacement limits of this section, in accordance with (d) below;**
2. **The regulated activity will displace no flood storage volume onsite, as calculated for both the flood hazard area design flood and the 10-year flood, in accordance with (e) below; or**
3. **The regulated activity will displace no more than 20 percent of the flood storage volume onsite, as calculated for both the flood hazard area design flood and the 10-year flood, and all flood storage displacement onsite will be compensated offsite as follows:**
   i. **If the regulated activity is located within the Central Passaic Basin, the requirements at (g) below shall be met;**
   ii. **If the regulated activity is a Major Highlands Development, as defined at N.J.A.C. 7:38-1.4, the requirements at (h) below shall be met; or**
   iii. **If the regulated activity is not located within the Central Passaic Basin and is not a Major Highlands Development, the requirements at (i) below shall be met.**

(d) The following regulated activities (or combination of regulated activities) are not subject to the flood storage volume displacement limits of this section, provided the activity is not associated with a Major Highlands Development:

1. **Any activity located in a tidal flood hazard area;**

2. Any activity that displaces no more than five cubic yards of flood storage volume;

3. The reconstruction of a lawfully existing railroad or public roadway, including any improvement or enlargement, provided flood storage volume displacement is minimized;

4. The construction or improvement of a driveway across a regulated water provided:

i. The driveway serves only one private residence, which is not being constructed as part of a larger residential subdivision;

ii. In the case of the construction of a new driveway, the applicant demonstrates that there is developable land onsite that cannot feasibly be accessed without crossing the water, including accessing the site through neighboring properties; and

iii. Any flood storage volume displacement resulting from the driveway is minimized;

5. The construction of one private residence provided:

i. The residence is not being constructed as part of a larger residential subdivision;

ii. Any enclosed area beneath the flood hazard area design flood elevation meets the requirements of N.J.A.C. 7:13-11.5(l); and

iii. Except for the construction of a driveway across a regulated water, which meets the requirements of (d)4 above, the site is not graded to accommodate the construction of the residence in such a way that flood storage volume would be displaced;

6. The construction of a flood control project, provided flood storage volume displacement is minimized; and

7. The depositing of sediment removed from a channel, which meets the requirements of N.J.A.C. 7:13-11.15(f).

(e) The following shall apply to any regulated activity that is designed to displace no flood storage volume in accordance with (c)2 above:

1. The existing flood storage volume onsite (VE) is the volume of floodwater that is able to occupy the flood fringe onsite before the proposed regulated activity is undertaken. To determine the existing flood storage volume, calculate the volume of space within the flood fringe between the flood elevation and the ground surface as it exists on the date of application to the Department, and subtract the volume occupied by any structures that lawfully exist as of that date.

2. The proposed flood storage volume onsite (VP) is the volume of floodwater that will be able to occupy the flood fringe onsite once all proposed construction, excavation, filling and grading is completed. To determine the proposed flood storage volume, calculate the volume of space within the flood fringe between the flood elevation and the proposed ground surface, and subtract the volume occupied by any structures that will lawfully exist once all proposed construction is completed.

3. The proposed flood storage volume onsite (VP) shall be greater than or equal to the existing flood storage volume onsite (VE), for both the flood hazard area design flood and the 10-year flood, and shall be calculated according to (j) below. Additional flood storage volume can be created onsite to compensate for proposed

flood storage displacement in accordance with (m) below.

(f) Table C below sets forth the percentage of flood storage volume that a regulated activity (or combination of activities) can lawfully displace in various geographic areas of New Jersey. As described in further detail in this section below, a project cannot displace more than 20 percent of the flood storage volume that originally existed onsite, and all proposed displacement onsite must ultimately be compensated offsite. Table C indicates the dates from which the original and proposed flood storage volumes should be calculated for different geographic areas. Flood storage calculations shall be performed for both the flood hazard area design flood and the 10-year flood, as described at (j) below, to show that the 20-percent and zero-percent limitations are met for both of these flood events.

Table C
ALLOWABLE PERCENTAGES OF FLOOD STORAGE VOLUME DISPLACEMENT
(That shall be met for both the flood hazard area design flood and the 10-year flood)

Geographic Area	Maximum onsite percentage of flood storage volume that a project can lawfully displace (P_{ONSITE})	Maximum total percentage of flood storage volume that a project can lawfully displace including all offsite credits (P_{TOTAL})
Central Passaic Basin	20% of flood storage that existed onsite on March 25, 1977	0% of flood storage that existed onsite on March 25, 1977
Highlands Preservation Area*	20% of flood storage that existed onsite on January 31, 1980	0% of flood storage that existed onsite on August 10, 2004
Remainder of State	20% of flood storage that existed onsite on January 31, 1980	0% of flood storage that existed onsite on [effective date of these rules]

***If associated with Major Highlands Development, as defined at N.J.A.C. 7:38-1.4.**

(g) The following shall apply to any project located within the Central Passaic Basin that does not meet the requirements of (d) or (e) above:

1. **The onsite percentage of flood storage volume that a project displaces shall be determined as follows:**

   i. **Calculate the base flood storage volume onsite on March 25, 1977 (V_{1977})**

according to (j) and (k) below;

ii. Calculate the proposed flood storage volume onsite (V_P) according to (j) and (l) below; and

iii. Calculate the percentage of flood storage volume displaced onsite (P_{ONSITE}) as follows:

$$P_{ONSITE} = (V_{1977} - V_P)/ V_{1977}$$

2. The total percentage of flood storage volume that a project displaces, including any offsite compensation, shall be determined as follows:

i. Calculate any offsite compensation (V_C) according to (o) below; and

ii. Calculate the total percentage of flood storage volume displaced (P_{TOTAL}) as follows:

$$P_{TOTAL} = (V_{1977} - V_P - V_C)/ V_{1977}$$

(h) The following shall apply to any Major Highlands Development within the Highlands Preservation Area that does not meet the requirements of (d) or (e) above:

1. The onsite percentage of flood storage volume that a project displaces shall be determined as follows:

i. Calculate the base flood storage volume onsite on January 31, 1980 (V_{1980}) according to (j) and (k) below;

ii. Calculate the proposed flood storage volume onsite (V_P) according to (j) an (l) below; and

iii. Calculate the percentage of flood storage volume displaced onsite (P_{ONSITE}) as follows:

$$P_{ONSITE} = (V_{1980} - V_P)/ V_{1980}$$

2. The total percentage of flood storage volume that a project displaces, including any offsite compensation, shall be determined as follows:

i. Calculate the base flood storage volume onsite on August 10, 2004 (V_{2004}) according to (j) and (k) below;

ii. Calculate any offsite compensation (V_C) according to (o) below; and

iii. Calculate the total percentage of flood storage volume displaced (P_{TOTAL}) as follows:

$$P_{TOTAL} = (V_{2004} - V_P - V_C)/ V_{2004}$$

(i) The following shall apply to any project located outside the Central Passaic Basin (except for Major Highlands Development as described at (h) above) that does not meet the requirements of (d) or (e) above:

1. The onsite percentage of flood storage volume that a project displaces shall be determined as follows:

i. Calculate the base flood storage volume onsite on January 31, 1980 (V_{1980}) according to (j) and (k) below;

ii. Calculate the proposed flood storage volume onsite (V_P) according to (j) and (l) below; and

iii. Calculate the percentage of flood storage volume displaced onsite (P_{ONSITE}) as follows:

$$P_{ONSITE} = (V_{1980} - V_P)/ V_{1980}$$

2. The total percentage of flood storage volume that a project displaces, including any offsite compensation, shall be determined as follows:

i. Calculate the base flood storage volume onsite on (effective date of these rules)

(V_{2007}) according to (j) and (k) below;

ii. Calculate any offsite compensation (V_C) according to (o) below; and

iii. Calculate the total percentage of flood storage volume displaced (P_{TOTAL}) as follows:

$$P_{TOTAL} = (V_{2007} - V_P - V_C)/ V_{2007}$$

(j) The following factors shall be considered when calculating flood storage volumes under this section:

1. **The flood storage displacement limits in this section apply to both the flood hazard area design flood and the 10-year flood. As such, applicants must demonstrate that a proposed project meets these limits for both floods unless the entire project lies above the 10-year flood elevation.**
2. **Flood storage displacement proposed above the 10-year flood elevation onsite must be compensated for by the creation of flood storage above the 10-year flood elevation. Similarly, flood storage displacement proposed below the 10-year flood elevation must be compensated for by the creation of flood storage below the 10-year flood elevation. This applies whether the compensation occurs onsite, as described at (m) below, or offsite, as described at (o) below.**
3. **In cases where the 10-year flood elevation is not provided on State or Federal flood maps, calculations can instead be performed using a flood depth halfway between the flood hazard area design flood elevation and the lowest ground elevation onsite. For example, if the flood hazard area design flood elevation onsite is 90.0 feet NGVD and the lowest ground elevation onsite is 80.0 feet NGVD, flood storage calculations can be performed using a flood elevation of 85.0 feet NGVD if the 10-**

year flood elevation is unknown.

4. **The volume inside a stormwater management basin or other impoundment is considered displaced flood storage volume. For instance, when calculating the flood storage volume onsite during the 10-year flood, the volume below the 10-year water surface elevation in the basin is considered displaced flood storage volume.**
5. **The volume behind a dike, levy or similar barrier that prevents the free flow of water is considered displaced flood storage volume.**
6. **The volume inside a building that prevents floodwaters from entering is considered displaced flood storage volume.**
7. **The construction of a channel modification, or the reconstruction of a water control structure such as a bridge or culvert, can result in lower flood elevations at some point along the water. In such a case, the volume in the flood fringe between the existing and proposed flood elevations is considered displaced flood storage volume.**

(k) The base flood storage volume onsite (V_{1977}, V_{1980}, V_{2004} and/or V_{2007}) is the volume of floodwater that was able to occupy the flood fringe onsite on the appropriate date shown in Table C depending on the geographic location of the project. To determine the base flood storage volume, calculate the volume of space within the flood fringe between the flood elevation and the ground surface as it existed on the appropriate date in Table C, and subtract the volume occupied by any structures that lawfully existed on that date.

(l) The proposed flood storage volume onsite (V_P) is the volume of floodwater that will be able to occupy the flood fringe onsite once all proposed construction, excavation, filling and grading is completed. To determine the proposed flood storage volume, calculate the

volume of space within the flood fringe between the flood elevation and the proposed ground surface, and subtract the volume occupied by any structures that will lawfully exist once all proposed construction is completed.

(m) Additional flood storage volume may be created onsite to compensate for proposed flood storage displacement only on land that meets the requirements of (n) below and in the following ways:

1. **Removing material that has been previously lawfully placed within the flood fringe, such as fill or structures, and properly disposing the material outside a flood hazard area, as described in (q) below; and/or**
2. **Excavating material from below the surface of the ground and properly disposing the material outside a flood hazard area, as described in (r) below.**

(n) Flood storage volume may be created onsite to compensate for regulated activities that displace flood storage as described in (m) above provided the onsite compensation:

1. **Is created within or adjacent to the flood hazard area of the same water as the proposed flood storage displacement, or a tributary to the same water as the proposed flood storage displacement, if the flood hazard area of both waters connect onsite;**
2. **Is not created in a floodway;**
3. **Is not created within the following areas, unless the area where the compensation will be created has been subject to previous, lawful disturbance:**
    i. **Within a riparian zone, pursuant to N.J.A.C. 7:13-4.1 and 10.2;**
    ii. **Within 300 feet of a Highlands open water, if the project is a major Highlands development as defined in the Highlands Water Protection and Planning Act**

rules at N.J.A.C. 7:38-1.4; and/or

iii. Within a Special Water Resource Protection Area, if the project is a major development as defined in the Stormwater Management rules at N.J.A.C. 7:8-1.2; and

4. Would not have other significant adverse environmental consequences; the proposed compensation shall not merely substitute the adverse effects of the proposed activities with adverse impacts upon threatened or endangered species, aquatic biota, fishery resources or Highlands resource areas.

(o) Offsite compensation (V_C) is additional flood storage volume created offsite to compensate for proposed flood storage displacement onsite. Offsite compensation can only be created on land that meets the requirements of (p) below, and only in the following ways:

1. Removing material that has been previously lawfully placed within the flood fringe, such as fill or structures, and properly disposing the material outside a flood hazard area, as described in (q) below;

2. Excavating material from below the surface of the ground and properly disposing the material outside a flood hazard area, as described in (r) below; and/or

3. Purchasing fill credits, where available, if the project is located in the Central Passaic Basin, as described in (s) and (t) below.

(p) Flood storage volume can be created offsite to compensate for regulated activities that displace flood storage as described in (o) above provided the offsite compensation:

1. Is created within or adjacent to the flood hazard area of the same water as the proposed flood storage displacement, or a tributary to the same water as the

proposed flood storage displacement, if the flood hazard area of both waters connect onsite;

2. **Is not separated from the proposed flood storage displacement by a water control structure, such as a bridge, culvert or dam, unless the applicant demonstrates that the water control structure causes no significant change in the flood hazard area design flood elevation;**
3. **Is situated within the same HUC-14 watershed as the proposed flood storage displacement;**
4. **Is not created in a floodway;**
5. **Is not created within the following areas, unless the area where the compensation will be created has been subject to previous, lawful disturbance:**
   i. **Within a riparian zone, pursuant to N.J.A.C. 7:13-4.1 and 10.2;**
   ii. **Within 300 feet of a Highlands open water, if the project is a major Highlands development as defined in the Highlands Water Protection and Planning Act rules at N.J.A.C. 7:38-1.4; and/or**
   iii. **Within a Special Water Resource Protection Area, if the project is a major development as defined in the Stormwater Management rules at N.J.A.C. 7:8-1.2;**
6. **Would not have other significant adverse environmental consequences; the proposed compensation shall not merely substitute the adverse effects of the proposed activities with adverse impacts upon threatened or endangered species, aquatic biota, fishery resources or Highlands resource areas;**
7. **Is agreed to in writing by the owners of the land on which the offsite compensation**

is proposed; and

8. Is proposed on land which, subsequent to the creation of the offsite compensation, is deed restricted against future flood storage volume displacement. The modified deed shall be filed with the local county clerk, a copy of which shall be provided to the Department within 90 calendar days of the issuance of the individual permit.

(q) For the purposes of (m)1 and (o)1 above, flood storage volume can be created by removing material previously placed within the flood fringe, such as fill or structures, provided:

1. The material to be removed was not placed in violation of this chapter;

2. The material to be removed is not associated with an activity permitted-by-rule under N.J.A.C. 7:13-7;

3. The area disturbed by the removal of the material is properly graded so that floodwaters can freely enter and exit;

4. The material to be removed is properly disposed of outside of any regulated area; and

5. The removal of the material is approved under an individual permit and is completed concurrent with or prior to the commencement of the activities for which the compensation is intended.

(r) For the purposes of (m)2 and (o)2 above, flood storage volume can be created by excavating material from below the surface of the ground, provided:

1. The excavation is located in a flood fringe, or is located adjacent and connected to a flood hazard area so that floodwaters can enter the excavated area;

2. The excavation is located below the flood hazard area design flood elevation;

3. The excavation is located above the seasonal high water table;

4. The excavation is located above the normal water surface elevation of the nearest regulated water;

5. The area disturbed by the excavation is properly graded so that floodwaters can freely enter and exit;

6. The excavated material is properly disposed of outside of any regulated area; and

7. The excavation is approved under an individual permit and is completed concurrent with or prior to the commencement of the activities for which the compensation is intended.

(s) For the purposes of (o)3 above, offsite compensation in the Central Passaic Basin can be accomplished in certain cases described in (t) below through the purchase of fill credits. A fill credit is a unit of flood storage volume that has been created in the Central Passaic Basin by excavation and/or removal of fill, and which can be sold to a permittee to compensate for proposed fill elsewhere in the Central Passaic Basin. The Department has previously permitted several facilities to create fill credits. However, the Department shall no longer accept new applications to allow a person or facility to create additional fill credits in this manner. In order for fill credits to be valid under this section, an application to create the fill credits must have been received by the Department prior to October 2, 2006 and the fill credits, once approved, must be lawfully created by the applicant prior to October 2, 2011. Once all approved fill credits have been purchased, offsite compensation in the Central Passaic Basin will no longer be possible through fill credits.

(t) For the purposes of (o)3 above, offsite compensation in the Central Passaic Basin can be made through the purchase of fill credits, as described in (s) above, provided the

following requirements are satisfied:

1. **The fill credits are purchased from a person or facility that has been authorized by the Department to create and sell fill credits in accordance with (s) above;**
2. **The flood storage volume on which the fill credits are based was created prior to the submittal of the application for the activities for which compensation is required;**
3. **The Department approves the use of the particular fill credits for the particular activity; and**
4. **The applicant provides the Department with adequate documentation of the purchase of the fill credits.**

(u) If the percentage of flood storage volume displacement on a site already exceeds a limit at Table C above due to activities that were previously undertaken in accordance with this chapter, the Department shall issue an individual permit for a new regulated activity on the site only if an equal amount of flood storage volume is created to compensate onsite for any displaced flood storage volume that would result from the new regulated activity, in accordance with (e) above. Compensatory flood storage volume shall not be created offsite in such a case, and shall only be created onsite, as described in (m) above. The volume of fill in excess of the limits in Table C does not need to be removed from the site.

(v) If the percentage of flood storage volume displacement on a site already exceeds a limit at Table C above due to activities that were previously undertaken in violation of this chapter, the Department shall issue an individual permit for a new regulated activity on the site only if the following requirements are satisfied:

1. **The applicant either obtains an individual permit for the activities undertaken in**

violation of this chapter, or else removes from the flood hazard area any fill or structure that was placed in violation of this chapter;

2. **All displaced flood storage volume in excess of the limit in Table C is restored onsite; and**
3. **An equal amount of flood storage volume is created to compensate onsite for any displaced flood storage volume that would result from the new regulated activity, in accordance with (e) above. Compensatory flood storage volume shall not be created offsite in such a case, and shall only be created onsite, as described in (m) above.**

(w) If the Department issues or has issued an individual permit for a regulated activity that displaces flood storage volume on a site, and that activity was subject to a flood storage displacement limit at the time the permit was issued, subsequent subdivision of that site shall not increase the total amount of flood storage volume that can be displaced on the site under future applications. Instead, the following shall apply:

1. **Flood storage volume can be displaced within a portion of the subdivided site only to the extent that the total flood storage volume displaced within the entire subdivided site does not exceed the flood storage displacement limits of this section;**
2. **If the subdivided site involves multiple lots owned (or to be owned) by different persons, any remaining allowable flood storage volume shall be divided equally among all lots in the flood fringe, unless the owners of all lots in the flood fringe otherwise agree in writing; and**
3. **The volume of flood storage displacement permissible on each lot shall be**

described in any individual permit issued for the site as well as in the deed of record for each affected property. The modified deed shall be filed with the applicable county clerk, a copy of which shall be provided to the Department within 90 calendar days of the issuance of the individual permit.

7:13-10.5 Requirements for a regulated activity in or along a water with fishery resources

(a) This section sets forth specific design and construction standards that apply to any regulated activity proposed in the channel and/or riparian zone of a regulated water containing fishery resources. Further standards for the construction of a bridge or culvert in or along waters with fishery resources are described at N.J.A.C. 7:13-11.7.

(b) The waters identified by the Department as containing fishery resources are listed in the Department's Surface Water Quality Standards at N.J.A.C. 7:9B, and are further supplemented by the following reports as updated, which are included here by reference. Copies of these reports are included in the Flood Hazard Area Technical Manual, available from the Department at the address listed at N.J.A.C. 7:13-1.1(g):

1. **"Classification of New Jersey Waters as Related to Their Suitability for Trout";**
2. **"List of Waters Stocked with Trout by the New Jersey Division of Fish and Wildlife"; and**
3. **"Locations of Anadromous American Shad and River Herring During Their Spawning Period in New Jersey's Freshwaters Including Known Migratory Impediments and Fish Ladders."**

(c) The Department shall issue an individual permit for a regulated activity in the channel and/or riparian zone of a regulated water containing fishery resources only if the following

requirements are satisfied:

1. **Except as provided in (e) below, the activity meets the timing restrictions of (d) below;**
2. **Unset or raw cement is not allowed to come into contact with water in the channel during construction;**
3. **No logs or boulders that provide fish habitat are removed from the channel, unless the Department determines that such removal is necessary to accomplish the project; and**
4. **Low-flow aquatic passage is maintained in the channel throughout the entire area of disturbance during and after the performance of the regulated activity. In order to provide low-flow aquatic passage, the depth of flow in the modified channel during low-flow conditions must be equal to or greater than pre-project conditions. Where feasible, the applicant shall also provide low-flow aquatic passage in areas that do not currently contain low-flow aquatic passage.**

(d) Except as provided at (e) below, certain activities are prohibited during times when fish are breeding or are especially sensitive to disturbance. The following activities are prohibited during the restricted periods listed in Table D below:

1. **Any construction, excavation, filling or grading in the channel; and**
2. **Any construction, excavation, filling or grading in the riparian zone, unless the applicant demonstrates that appropriate soil erosion and sediment control measures are in place which will prevent sediment from reaching the channel. All proposed measures shall meet the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90.**

Table D
RESTRICTED TIME PERIODS FOR WATERS WITH FISHERY RESOURCES

Water and classification	Time period (inclusive) during which activities are prohibited
1. Trout Waters	
• All trout production waters except rainbow trout	September 15 through March 15
• Rainbow trout production waters	February 1 through April 30
• Trout stocked waters • Trout maintenance waters • Any water located within 1 mile upstream of a trout stocked or a trout maintenance water	March 15 through June 15
2. Non-Trout Waters	
• Waters that support general game fish	May 1 through June 30
• Waters that support pickerel	Ice out through April 30
• Waters that support walleye	March 1 through May 30
3. Anadromous Waters	
• All unimpeded tidal waters open to the Atlantic Ocean or any coastal bay • All waters identified as anadromous migratory pathways	April 1 through June 30
• Delaware River upstream of U.S. Route 202	April 1 through June 30 and September 1 through November 30
• Delaware River between U.S. Route 202 and the Pennsylvania Turnpike	March 1 through June 30
• Delaware River between the Pennsylvania Turnpike and Interstate 295 • Tidal portions of Raccoon, Rancocas Creek, Crosswicks Creeks and Cooper River	March 1 through June 30 and September 1 through November 30
• All unimpeded tidal waters open to the Delaware River downstream of Interstate 295 • Tidal portions of the Maurice River, Cohansey River and Salem River	March 1 through June 30 and October 1 through November 30

(e) An applicant may request that the Department reduce, extend or otherwise modify a timing restriction listed in Table D. The Department shall grant such a request if one or more of the following requirements is satisfied:

1. The applicant demonstrates that the adverse impacts to fishery resources will be less if a regulated activity occurs during the restricted time period rather than

during an unrestricted time period;

2. **A regulated activity is subject to more than one restricted time period, the combined effect of which would limit the regulated activity to fewer than 183 calendar days per year. In such a case, the Department shall allow the regulated activity to occur for up to 183 calendar days, provided the applicant demonstrates that additional measures shall be taken to reduce adverse impacts to fishery resources to a level acceptable to the Department. Note that the 183-day period during which the Department determines that activities may occur need not be consecutive. For example, the Department may determine that restricting activities for three months in the spring and three months in the fall best protects fishery resources in a particular case;**
3. **The Department determines that observance of a timing restriction for the reconstruction of a public road crossing would cause increased risks or excessive delays to school buses or vans, and the applicant demonstrates that additional measures shall be taken to reduce adverse impacts to fishery resources to an acceptable level; or**
4. **The Department determines that, due to the nature of the project or an unusual circumstance onsite, the timing restriction must be modified in order to prevent a substantial adverse impact to the fishery resource or to the environment.**

(f) The Delaware River Basin Commission (DRBC) may impose timing restrictions in addition to those listed in Table D above on certain activities in waters under DRBC jurisdiction. Contact the U.S. Fish and Wildlife Service's River Basin Coordinator through the DRBC at (609) 883-9500 for information on these additional timing restrictions.

7:13-10.6 Requirements for a regulated activity in a documented habitat for threatened or endangered species

(a) This section sets forth specific design and construction standards that apply to any regulated activity proposed in a documented habitat for a threatened or endangered species.

(b) For the purposes of this chapter, the Department identifies present and/or documented habitat for most threatened or endangered wildlife species using the Landscape Project method, which focuses on habitat areas required to support local populations of threatened and endangered wildlife species. This method is further described in the Flood Hazard Area Technical Manual, available from the Department at the address listed at N.J.A.C. 7:13-1.1(g). The report entitled New Jersey's Landscape Project provides additional information on mapping methodology and is available at the website www.nj.gov/dep/fgw/ensphome.htm or by contacting the address given below. The Department's Landscape Maps may be updated periodically and may be obtained via file download from www.nj.gov/dep/fgw/ensphome.htm or through the Interactive I-map NJ website: www.state.nj.us/dep/gis/imapnj/imapnj.htm or by writing to the Division of Fish and Wildlife, Endangered and Nongame Species Program at: The Landscape Project NJ Division of Fish and Wildlife Endangered and Nongame Species Program, PO Box 400 Trenton, NJ 08625-0400

(c) For endangered or threatened plant species and for those wildlife species for which a landscape model in the Landscape Project has not been developed (models do not exist for certain aquatic species), the Department shall rely on the New Jersey Natural Heritage

Database for site-specific information. To determine which animal species are not included in the Landscape Project, see Appendix IV of the New Jersey Landscape Mapping Project, Version 2.0 report, available at www.nj.gov/dep/fgw/ensphome.htm. Information regarding the Natural Heritage Program Database is available at: www.nj.gov/dep/parksandforests/natural/heritage/.

(d) The Department shall issue an individual permit for a regulated activity only if the activity will not adversely affect either of the following:

1. **A threatened or endangered species; or**
2. **A documented habitat for a threatened or endangered species.**

(e) The Department shall require a survey and/or a habitat assessment for threatened or endangered species as part of an environmental report, as described at N.J.A.C. 7:13-15.5(c), for an individual permit for any regulated activity which is likely to do either of the following:

1. **Disturb an area known to contain a threatened or endangered species; or**
2. **Disturb any habitat that could support a threatened or endangered species.**

(f) Persons seeking information pertaining to threatened or endangered species sightings on or near a particular site can contact: State of New Jersey Department of Environmental Protection Natural Heritage Program, P.O. Box 404 Trenton, New Jersey 08625 Telephone: (609) 984-1339 Website: www.nj.gov/dep/parksandforests/natural/heritage/

(g) The Department shall restrict a regulated activity during times of year when a threatened or endangered species is especially sensitive to disturbance, such as during mating or migratory periods. The Department shall not limit the regulated activity to fewer than 183 calendar days per year under this section. Note that the 183-day period during

which the Department determines that activities may occur need not be consecutive. For example, the Department may determine that restricting activities for three months in the spring and three months in the fall best protects a threatened or endangered species in a particular case.

7:13-10.7 Requirements for a regulated activity in an area with acid producing soils

(a) This section sets forth specific design and construction standards that apply to any regulated activity proposed in an area containing acid producing soils.

(b) The Department shall issue an individual permit for an activity in a regulated area known or suspected to contain acid producing soils only if the applicant submits for Department approval a plan to minimize the adverse effects of exposing acid producing soils. The plan shall, at a minimum, address how the applicant will meet the following requirements:

1. **Exposure of acid producing soils to air and/or water shall be minimized;**
2. **All exposed areas with acid producing soils shall be promptly stabilized to prevent such soils from washing into the water;**
3. **Any acid that is generated or exposed shall be properly neutralized;**
4. **The area shall be treated to ensure that post-exposure oxidation rates do not exceed pre-exposure oxidation rates;**
5. **Acid producing soils shall be disposed of properly and shall not be mixed into or spread over non-acid producing soils; and**
6. **Any acid producing soils remaining after construction shall be covered with lime and a layer of non-acid producing soil sufficient to facilitate the growth of**

vegetation.

(c) The following steps shall be taken if acid producing soils are unexpectedly exposed in a regulated area:

1. **Soil disturbance shall cease immediately;**
2. **The soils that have been disturbed shall be quickly stabilized so as to prevent acid producing soils from washing into any nearby water;**
3. **Any uncovered acid producing soil shall be immediately isolated from any flowing water;**
4. **The Department shall be contacted immediately for further guidance;**
5. **The plan required in (b) above shall be prepared and submitted to the Department; and**
6. **Soil disturbance shall not resume until the Department has approved the plan.**

(d) The Flood Hazard Area Technical Manual, available at the Department at the address listed at N.J.A.C. 7:13-1.1(g), provides further information to assist in preparation of the plan required in (b) and (c) above.

SUBCHAPTER 11. INDIVIDUAL PERMIT REQUIREMENTS FOR VARIOUS REGULATED ACTIVITIES

7:13-11.1 Requirements that apply to all regulated activities

(a) This section sets forth design and construction standards that apply to any regulated activity proposed in any regulated area.

(b) The Department shall issue an individual permit for a regulated activity only if it

determines that the regulated activity is not likely to cause significant and adverse effects on the following:

1. **Water quality;**
2. **Aquatic biota;**
3. **Water supply;**
4. **Flooding;**
5. **Drainage;**
6. **Channel stability;**
7. **Threatened and endangered species or their current or documented historic habitats;**
8. **Navigation;**
9. **Energy production; and**
10. **Fishery resources.**

(c) A permittee shall obtain all necessary approvals from the local Soil Conservation District or its designee prior to commencing any activity approved in an individual permit issued under this chapter.

(d) A permittee shall obtain all necessary approvals from the USDA Natural Resource Conservation Service or its designee prior to commencing any activity approved in an individual permit issued under this chapter.

(e) If neither the Soil Conservation District nor the USDA Natural Resource Conservation Service has jurisdiction over an activity approved in an individual permit issued under this chapter, the permittee shall commence the activity only if the following soil erosion and sediment control standards are implemented:

1. **Sediment control measures shall be installed around the proposed construction sufficient to prevent sediment from entering any riparian zone or channel outside the construction area;**
2. **If construction is proposed in a channel, sediment control measures, such as coffer dams, shall be installed around the activity sufficient to prevent flowing water from coming in contact with construction for the duration of the project where feasible;**
3. **All slopes shall be graded and stabilized to prevent post-construction erosion; and**
4. **Permanent, indigenous, non-invasive vegetation shall be established on all exposed soils immediately following construction. The applicant shall monitor and maintain all such vegetation for at least three growing seasons to ensure proper establishment and survival.**

(f) The Department shall issue an individual permit for a regulated activity that adversely impacts a property not owned by an applicant only if the applicant demonstrates that one or more of the requirements at N.J.A.C. 7:13-9.2(f) are satisfied for each adversely impacted property. A regulated activity shall be considered to adversely impact a property not owned by an applicant if the activity meets any of the following requirements (for the purpose of determining compliance with (f)3, 4 and 5 below, calculations shall be rounded to the nearest 0.1 feet):

1. **The regulated activity is situated, in whole or in part, on property that is not owned by the applicant;**
2. **A stormwater discharge is directed overland onto property that is not owned by the applicant and the Department determines that the discharge will significantly**

increase overland flow on the property not owned by the applicant;

3. **The regulated activity will cause a building situated on property not owned by the applicant to be subject to increased frequency or depth of flooding during any flood event up to and including the flood hazard area design flood;**
4. **The regulated activity is located in a floodway, spans a regulated water and will cause the flood hazard area design flood elevation to increase by more than 0.2 feet on any property not owned by the applicant; and/or**
5. **The regulated activity is located in a floodway, does not span a regulated water and will cause the flood hazard area design flood elevation to increase by more than 0.1 feet on any property not owned by the applicant.**

(g) If a project results in a significant change in the cross-sectional area and/or hydraulic capacity of a channel or floodway, the Department shall presume that the project has the potential to adversely impact a property not owned by the applicant, as described at (f) above. In such a case, the Department shall require the applicant to provide hydrologic and/or hydraulic calculations that identify the properties that would be adversely impacted, or which demonstrate that such impacts will not in fact occur. Examples of projects that may require such an analysis include a channel modification, flood control project, the construction or removal of a water control structure and the placement of a significant volume of fill in a floodway.

7:13-11.2 Requirements for stormwater management

(a) This section sets forth stormwater management requirements and specific design and construction standards that apply to any major development, as defined at N.J.A.C. 7:8-

1.2, which requires an individual permit under this chapter.

(b) The Department shall issue an individual permit for a regulated activity associated with a major development only if the requirements of the Stormwater Management rules at N.J.A.C. 7:8 are satisfied.

(c) The Department shall issue an individual permit for a stormwater management basin located within or discharging within a flood hazard area only if the following requirements are satisfied:

1. **The basin is designed and constructed to function properly during both flood and non-flood conditions;**
2. **The effects of flooding and tailwater conditions on any proposed discharge are accounted for in the stormwater management calculations for the proposed basin. Tailwater conditions refer to situations where the discharge pipe will be submerged during a flood in such a way that floodwaters prevent the basin from draining properly. The effects of flooding and tailwater conditions are of particular concern in the following cases:**
   i. **The basin will be overtopped and flooded during the flood hazard area design flood, because it is not feasible to construct the emergency spillway in accordance with (c)3 below;**
   ii. **The drainage area of the basin is similar in size to the drainage area of the water receiving the proposed discharge;**
   iii. **The basin reaches its maximum storage volume during or near the time flooding peaks within the water receiving the proposed discharge; and/or**
   iv. **The elevation of the lowest discharge orifice or weir in the basin lies below the**

flood hazard area design flood elevation;

3. **If a basin is proposed within the flood hazard area, the emergency spillway shall be constructed above the flood hazard area design flood elevation where feasible, in order to prevent floodwaters from overtopping the berm and flooding the basin; and**
4. **If the elevation of the lowest discharge orifice or weir in the basin lies below the flood hazard area design flood elevation, the discharge pipe shall be equipped with mechanical devices to prevent floodwater from backing up the pipe into the basin.**

7:13-11.3 Requirements for excavation, fill and grading activities

(a) This section sets forth specific design and construction standards that apply to any excavation, fill and/or grading proposed in any regulated area.

(b) The Department shall issue an individual permit for excavation, fill and/or grading only if the following requirements are satisfied:

1. **The overland flow of stormwater is not impeded and floodwaters can freely enter and exit the disturbed area, unless the area is graded to impound water for a stormwater management structure that meets the requirements of the Stormwater Management rules at N.J.A.C. 7:8;**
2. **Any slope of 50 percent or greater (a ratio of two horizontal to one vertical) is stabilized using soil bioengineering, retaining walls, rip-rap or other appropriate slope protection;**
3. **The excavation, fill and/or grading does not endanger the integrity of any existing structure;**

4. **No permanently excavated area extends below the seasonal high water table, unless the excavation is for a stormwater management basin that meets the requirements of the Stormwater Management rules at N.J.A.C. 7:8.This does not include temporary excavation to construct foundations, footings or utility lines; and**
5. **All excavated material is disposed of lawfully.**

7:13-11.4 Requirements for a structure

(a) This section sets forth specific design and construction standards that apply to any structure proposed in any regulated area.

(b) The Department shall issue an individual permit to construct or reconstruct a structure only if the entire structure is designed and constructed to be suitably anchored in order to:

1. **Resist impact from water and debris during the flood hazard area design flood;**
2. **Resist uplift, flotation, collapse and displacement due to hydrostatic and hydrodynamic forces resulting from the flood hazard area design flood;**
3. **Resist overturning and sliding pressure, as well as pressure from the freeze/thaw cycle of the soil; and**
4. **If the structure is located in or adjacent to a channel, resist undermining caused by channel erosion.**

7:13-11.5 Requirements for a building

(a) This section sets forth specific design and construction standards that apply to any

building proposed in the areas listed in (b) below. Subsection (c) below establishes standards that apply to all buildings, and subsections (d) through (q) below provide additional standards for various types of buildings.

(b) The requirements in this section apply to a building that is constructed or reconstructed in the following areas:

1. **A flood hazard area; and**
2. **An area that was previously situated in a flood hazard area, but which was filled, raised or otherwise removed from the flood hazard area after January 31, 1980, whether in accordance with or in violation of this chapter, except in the following cases:**
   i. **A Department delineation is available for the site, and the Department approves a revision of its delineation that removes the area in question from the flood hazard area; or**
   ii. **No Department delineation is available for the site, but FEMA issues a Letter of Map Amendment that removes the area in question from the 100-year flood plain.**

(c) The Department shall issue an individual permit to construct or reconstruct a building of any kind only if the following requirements are satisfied:

1. **Any new building is located at least 25 feet from any top of bank or edge of water;**
2. **If an existing building located near any top of bank or edge of water is to be expanded, the expanded portion is located at least 25 feet from the top of bank or edge of water, where possible;**
3. **If an existing building located near any top of bank or edge of water is to be**

reconstructed, the new building shall be relocated at least 25 feet from the top of bank or edge of water, where possible;

4. Any exterior wall being constructed or reconstructed is designed to resist hydrostatic and hydrodynamic pressure caused by flooding up to the flood hazard area design flood elevation; and

5. All applicable requirements contained in (d) through (q) below are satisfied.

(d) The Department shall not issue an individual permit for the construction of a new building in a floodway, except for the construction of a building on a pier in the Hudson River satisfying the requirements of N.J.A.C. 7:7E-3.48.

(e) The Department shall issue an individual permit for the reconstruction of a lawfully existing building in a floodway only if the following requirements are satisfied:

1. The building has not been unoccupied for more than five years prior to the date of application to the Department to reconstruct;

2. The reconstruction shall not convert a non-residential use to a residential use; and

3. All construction takes place within the same footprint as the original building.

(f) The Department shall issue an individual permit for the construction of an addition to a lawfully existing building in a floodway only if the following requirements are satisfied:

1. The building has not been unoccupied for more than five years prior to the date of application to the Department to construct the addition;

2. The addition does not result in any further obstruction to the flow of floodwaters; and

3. The existing building, in combination with the addition, is modified to withstand the hydrodynamic and hydrostatic forces due to flooding up to the flood hazard

area design flood elevation.

(g) The Department shall issue an individual permit to construct or reconstruct a private residence only if the lowest floor of the building meets the elevation requirements at (k) below.

(h) The Department shall issue an individual permit to construct or reconstruct a public building only if the following requirements are satisfied:

1. **The lowest floor of the building meets the elevation requirements at (k) below;**
2. **For a new building in a fluvial flood hazard area, the applicant demonstrates that the building is served by at least one roadway, the travel surface of which is constructed at least one foot above the flood hazard area design flood elevation; and**
3. **For a new building in a tidal flood hazard area, or for any reconstructed building, the applicant demonstrates that the building is served by at least one roadway, the travel surface of which is constructed at least one foot above the flood hazard area design flood elevation, where feasible.**

(i) The Department shall issue an individual permit to construct or reconstruct a habitable building that is neither a private residence nor a public building, only if one of the following requirements is satisfied:

1. **The lowest floor of the building meets the elevation requirements at (k) below; or**
2. **The applicant does the following:**
    i. **Demonstrates that it is not feasible to meet the elevation requirements at (k) below;**
    ii. **Constructs the lowest floor of the building as close to one foot above the flood**

hazard area design flood elevation as feasible; and

iii. Certifies that the building will be constructed in accordance with the dry flood-proofing requirements at (q) below.

(j) The Department shall issue an individual permit for the conversion of a building into a private residence or public building only if the following requirements are satisfied:

1. The lowest floor of the building meets the elevation requirements at (k) below; and

2. For a public building, the applicant demonstrates that the building is served by at least one roadway, the travel surface of which is constructed at least one foot above the flood hazard area design flood elevation, where feasible.

(k) The elevation requirements for a building listed at (g) through (j) above are as follows:

1. For a new building, the lowest floor shall be constructed at least one foot above the flood hazard area design flood elevation;

2. For the reconstruction of a building that has been damaged by fire, flooding or other natural disaster, the lowest floor shall be constructed at least one foot above the flood hazard area design flood elevation, unless the applicant demonstrates that it is not feasible to do so. In such a case, the lowest floor shall be constructed as close to this elevation as feasible;

3. For the reconstruction of a building not covered in (k)2 above, such as the voluntary razing a building and constructing a new one in its place, the lowest floor shall be constructed at least one foot above the flood hazard area design flood elevation; and

4. For the enlargement of a building, such as the construction of an addition, the lowest floor of the new portion of the building shall be constructed at least one foot

above the flood hazard area design flood elevation. The original building does not need to be elevated unless the original building was constructed in violation of this chapter. The Department shall not issue a permit to enlarge a building that was constructed in violation of this chapter unless the applicant first does the following:

i. Receives a permit under this chapter to legalize the existing building; and

ii. Performs any modifications to the existing building that the Department determines are necessary to bring the building into compliance with the requirements of this chapter.

(l) The Department shall issue an individual permit for a habitable building with an enclosed area beneath the flood hazard area design flood elevation only if the enclosed area meets one of the following requirements:

1. The enclosed area is a crawl space that meets the requirements of (m) below;

2. The enclosed area is a garage that meets the requirements of (n) below; or

3. The enclosed area is open to floodwaters as described at (o) below.

(m) The Department shall issue an individual permit for a habitable building with a crawl space below the flood hazard area design flood elevation as described at (l)1 above only if the Department determines that the crawl space meets the following requirements:

1. The floor elevation of the crawl space is at or above the adjoining exterior grade along at least one entire exterior wall;

2. In order to prevent habitation of the crawl space, the vertical distance from the crawl space floor to the finished elevation of the first floor of the building is six feet or less. If this distance is greater than six feet, the area beneath the finished first

floor is not considered a crawl space;

3. **Two or more permanent flood vents that meet the requirements of (p) below are constructed in the outer walls of the crawl space; and**
4. **The deed of the property is modified to state that habitation of the crawl space is prohibited. The modified deed shall be filed with the local county clerk, a copy of which shall be provided to the Department within 90 calendar days of the issuance of the individual permit.**

(n) The Department shall issue an individual permit for a garage with a floor below the flood hazard area design flood elevation as described at (l)2 above, whether attached to or below a private residence or freestanding, only if the garage meets the following requirements:

1. **The floor elevation of the garage is at or above the adjoining exterior grade along at least one entire exterior wall;**
2. **The garage serves only one private residence, which is not being constructed as part of a larger residential subdivision;**
3. **The garage has a footprint of no more than 625 square feet;**
4. **Two or more permanent flood vents that meet the requirements of (p) below are constructed in the outer walls of the garage; and**
5. **The deed of the property is modified to state the following (the modified deed shall be filed with the local county clerk, a copy of which shall be provided to the Department within 90 calendar days of the issuance of the individual permit):**
   i. **That habitation of the garage is prohibited;**
   ii. **That the garage and driveway are likely to be inundated by floodwaters;**

iii. The minimum frequency storm at which the garage and driveway will be inundated; and

iv. The depth of flooding during the flood hazard area design flood.

(o) The Department shall issue an individual permit for a habitable building with an enclosed area below the flood hazard area design flood elevation, which is not a crawl space or garage as described at (m) and (n) above, only if the enclosed area meets the following requirements:

1. **The floor elevation of the enclosed area is at or above the adjoining exterior grade along at least one entire exterior wall;**
2. **At least 25 percent of the surface area of the outer wall of the enclosed area is left permanently open so that floodwaters can freely enter the building to balance hydrostatic pressure during a flood;**
3. **At least one permanent opening in the outer wall extends down to the floor elevation of the enclosed area; and**
4. **The deed of the property is modified to state that habitation of the enclosed area is prohibited. The modified deed shall be filed with the local county clerk, a copy of which shall be provided to the Department within 90 calendar days of the issuance of the individual permit.**

(p) A flood vent constructed in the outer wall of a building shall meet the following requirements:

1. **The invert of each flood vent shall be no more than 12 inches above the adjoining exterior grade;**
2. **The invert of at least half of the flood vents shall be no more than 12 inches above**

the floor of the building;

3. **The combined effective open area of the flood vents shall be at least one square inch per square foot of the area of the footprint of the building, unless a smaller FEMA-approved device with an equivalent effective area is utilized; and**
4. **The flood vents shall not be blocked at any time, but shall permanently remain open so that floodwaters can freely enter the building to balance hydrostatic pressure during a flood.**

(q) A building that is to be dry flood-proofed to meet a requirement of this chapter shall be designed and constructed to be waterproof up to the flood hazard area design flood elevation so that floodwaters cannot enter the structure during a flood. Specifically, the building's foundation, floor slab and walls shall be designed to resist hydrostatic pressure up to the flood hazard area design flood elevation. In addition, any exterior wall opening below the flood hazard area design flood elevation, such as a door or window, shall be equipped with waterproof seals and/or panels and shall also be designed to resist hydrostatic pressure up to the flood hazard area design flood elevation. An application for an individual permit for a dry flood-proofed building shall include the information listed at N.J.A.C. 7:13-9.2(e).

7:13-11.6 Requirements for a railroad, roadway or parking area

(a) This section sets forth specific design and construction standards that apply to any railroad, roadway or parking area proposed in a flood hazard area.

(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. The travel surface of the railroad or public roadway 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 proposed railroad or public roadway 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.

(c) The Department shall issue an individual permit to construct or reconstruct a driveway that only serves one private residence, which is not being constructed as part of a larger residential subdivision, only if one of the following requirements is satisfied:

1. The travel surface of the driveway is constructed at least one foot above the flood hazard area design flood elevation; or

2. The applicant does the following:

i. Demonstrates that it is not feasible to construct the travel surface of the proposed driveway 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; and

ii. Modifies the deed of the property to disclose (c)2ii(1) through (3) below. The modified deed shall be filed with the local county clerk, a copy of which shall be provided to the Department within 90 calendar days of the issuance of the individual permit.

(1) That the driveway is likely to be inundated by floodwaters, which may result in damage and/or inconvenience;

(2) The minimum frequency storm at which the driveway will be inundated;

and

(3) The depth of flooding during the flood hazard area design flood.

(d) The Department shall issue an individual permit to construct or reconstruct a private roadway that serves a public building only if one of the following requirements is satisfied:

1. **The travel surface of the private roadway is constructed at least one foot above the flood hazard area design flood elevation;**
2. **For a new private roadway in a fluvial flood hazard area, the applicant demonstrates that the public building is already served by one or more roadways 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 public building, and instead constructs the travel surface of the roadway 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) The Department shall issue an individual permit to construct or reconstruct a parking area that serves a public building 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.

(f) The Department shall issue an individual permit to construct or reconstruct a private roadway and/or parking area that serves a building, or group of buildings, not covered by (c), (d) or (e) above, such as a commercial business, house of worship, office complex, shopping center or residential subdivision of two or more private residences, only if one of the following requirements is satisfied:

1. **The travel surface of each proposed private roadway and parking area that serve the building or group of buildings is constructed at least one foot above the flood hazard area design flood elevation;**
2. **The applicant demonstrates the following:**
   i. **Each building or group of buildings is already served by one or more roadways 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;**
   ii. **The travel surface of each proposed roadway is constructed as close to one foot above the flood hazard area design flood elevation as feasible; and**
   iii. **The travel surface of each proposed parking area is constructed at least one foot above the flood hazard area design flood elevation; or**
3. **The applicant demonstrates the following:**
   i. **It is not feasible to construct the travel surface of each private roadway and parking area at least one foot above the flood hazard area design flood**

elevation pursuant to (g) below;

ii. The travel surface of each private roadway and parking area is constructed as close to one foot above the flood hazard area design flood elevation as feasible;

iii. Every effort has been taken to provide some parking areas or sections of roadway in the overall development that are situated at least one foot above the flood hazard area design flood elevation so that vehicles can be moved to higher ground during a flood;

iv. No extraordinary risk is posed to any person using each private roadway or parking area that is constructed at an elevation less than one foot above the flood hazard area design flood elevation; and

v. An adequate number of permanent signs are posted in prominent locations indicating which private roadways and parking areas are subject to flooding in the following cases:

(1) The roadway and/or parking serves a residential subdivision of two or more private residences; or

(2) The parking area has 10 spaces or more.

(g) 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 prove that strict compliance with this requirement would result in one or more of the following:

1. Prohibitively high construction costs;

2. Construction costs that are disproportionately high compared with any benefit that would be obtained by strict compliance;

3. **A design that necessitates excessive volumes of fill that exceed the flood storage displacement limits at N.J.A.C. 7:13-10.4, for which flood storage cannot feasibly be created in compensation either onsite or offsite; and/or**
4. **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.**

7:13-11.7 Requirements for a bridge or culvert

(a) This section sets forth specific design and construction standards that apply to any bridge or culvert proposed in any regulated area.

(b) The Department shall issue an individual permit to construct or reconstruct a bridge or culvert only if the following requirements are satisfied:

1. **The bridge or culvert, and all embankments, are designed to remain stable, scour resistant and resistant to displacement and/or damage during any flood event up to and including the flood hazard area design flood. At a minimum, each bridge shall have stable abutments, each culvert shall have stable headwalls, and each abutment and headwall shall have footings that extend no less than three feet below the invert of the channel; and**
2. **The bridge or culvert, and its associated roadway, are designed to minimize flooding and adverse impacts to channel stability and fishery resources. To help achieve this goal, the bridge or culvert opening shall match or exceed the dimensions of the existing channel where feasible, so that the size and shape of the**

natural channel is preserved through the structure. If additional flood conveyance is required, parallel culverts can be placed alongside the primary structure to carry flows that exceed the banks. Examples of acceptable designs are provided in the Flood Hazard Area Technical Manual, available from the Department at the address listed at N.J.A.C. 7:13-1.1(g).

(c) The Department shall issue an individual permit to construct a new bridge or culvert only if the following requirements are satisfied (for the purpose of determining compliance with this subsection, calculations shall be rounded to the nearest 0.1 feet):

1. **The new structure does not cause any offsite building, railroad, roadway or parking area to be subject to increased frequency or depth of flooding during any flood event up to and including the flood hazard area design flood; and**
2. **The new structure does not cause an increase of more than 0.2 feet in the flood hazard area design flood elevation offsite.**

(d) The Department shall issue an individual permit to reconstruct an existing bridge or culvert only if the following requirements are satisfied (for the purpose of determining compliance with this subsection, calculations shall be rounded to the nearest 0.1 feet):

1. **The reconstructed structure does not cause any offsite building, railroad, roadway or parking area to be subject to increased frequency or depth of flooding during any flood event up to and including the flood hazard area design flood;**
2. **The reconstructed structure does not cause an increase of more than 0.2 feet in the flood hazard area design flood elevation offsite within 500 feet of the structure; and**
3. **The reconstructed structure does not cause any increase in the flood hazard area**

design flood elevation offsite more than 500 feet from the structure.

(e) Subsections (f) through (m) below set forth standards for the protection of aquatic habitat and the maintenance of low-flow aquatic passage associated with the construction of a bridge or culvert. Examples of various designs described in this section are depicted in the Flood Hazard Area Technical Manual, available from the Department at the address listed at N.J.A.C. 7:13-1.1(g). For the purposes of this section, regulated waters are divided into three classes as follows:

1. **Class A waters, which include the following:**
   - i. **Category One waters;**
   - ii. **Trout production waters;**
   - iii. **Trout maintenance waters;**
   - iv. **Trout stocked waters;**
   - v. **Anadromous waters;**
   - vi. **Waters supporting cool and warmwater gamefish; and**
   - vii. **Waters supporting aquatic threatened and/or endangered species;**
2. **Class B waters, which include the following:**
   - i. **Waters supporting non-game cool and warmwater fish;**
   - ii. **Waters identified by the Department's Division of Fish and Wildlife as supporting aquatic biota, which are not otherwise listed as Class A in (e)1 above; and**
   - iii. **Waters that have been altered and/or degraded by lining, ditching, channel modification or other human activity, but which the Department determines can be restored and/or enhanced to support viable aquatic resources such as**

described in this paragraph; and

3. Class C waters, which include the following:

i. Waters that do not contain fishery resources;

ii. Waters that are wholly manmade (not naturally occurring waters that have been altered by human activity); and

iii. All other waters not otherwise included in Class A and Class B in (e)1 and 2 above.

(f) The Department shall issue an individual permit to construct or reconstruct a bridge or culvert in or across a Class A water that has a channel width of five feet or more as follows:

1. The channel shall be completely spanned with one bridge, arch culvert or three-sided culvert as described in (i) below.

2. If spanning under (i) below is not feasible due to excessive cost, unstable substrate, adverse impacts to flooding and/or an irregular channel configuration, and the applicant meets the waiver requirements at (m) below, the channel shall be spanned with a smaller structure and adjoining side-relief culverts shall be constructed as described in (j) below.

3. If spanning the channel with side-relief culverts under (j) below is not feasible due to excessive cost, unstable substrate, adverse impacts to flooding and/or an irregular channel configuration, one circular or elliptical culvert, or a system of culverts, shall be constructed as described in (k) below.

4. If constructing culverts under (k) below is not feasible due to hydraulic or structural design constraints, the applicant can construct a circular, elliptical or box culvert as described in (l) below.

(g) The Department shall issue an individual permit to construct or reconstruct a bridge or culvert in or across a Class B water, or a Class A water that has a channel width of less than five feet, as follows:

1. **The channel shall be completely spanned with one bridge, arch culvert or three-sided culvert as described in (i) below.**
2. **If spanning under (i) below is not feasible due to excessive cost, unstable substrate, adverse impacts to flooding and/or an irregular channel configuration, the channel shall be spanned with a smaller structure and adjoining side-relief culverts shall be constructed as described in (j) below.**
3. **If spanning the channel with side-relief culverts under (j) below is not feasible due to excessive cost, unstable substrate, adverse impacts to flooding and/or an irregular channel configuration, and the applicant meets the waiver requirements at (m) below, one circular or elliptical culvert, or a system of culverts, shall be constructed as described in (k) below.**
4. **If constructing culverts under (k) below is not feasible due to hydraulic or structural design constraints, the applicant can construct a circular, elliptical or box culvert as described in (l) below.**

(h) The Department shall issue an individual permit to construct or reconstruct a bridge or culvert in or across a Class C water as follows:

1. **The channel shall be completely spanned with one bridge, arch culvert or three-sided culvert as described in (i) below.**
2. **If spanning under (i) below is not feasible due to excessive cost, unstable substrate, adverse impacts to flooding and/or an irregular channel configuration, the channel**

shall be spanned with a smaller structure and adjoining side-relief culverts shall be constructed as described in (j) below.

3. **If spanning the channel with side-relief culverts under (j) below is not feasible due to excessive cost, unstable substrate, adverse impacts to flooding and/or an irregular channel configuration, one circular or elliptical culvert, or a system of culverts, shall be constructed as described in (k) below.**
4. **If constructing culverts under (k) below is not feasible due to hydraulic or structural design constraints, the applicant can construct a circular, elliptical or box culvert as described in (l) below.**

(i) Spanning a channel under (f)1, (g)1 and (h)1 above shall be accomplished as follows:

1. **The span shall be adequately sized to pass the flood hazard area design flood without a significant increase in the velocity of water in the channel;**
2. **A stable, natural, earthen channel with low-flow aquatic passage shall be provided throughout the structure; and**
3. **No armoring shall be placed under or across the channel bed, unless such armoring is necessary to prevent scour along the proposed abutments or footings. In such a case, the armoring shall be buried beneath at least two feet of native substrate.**

(j) Spanning a channel with adjoining side-relief culverts under (f)2, (g)2 and (h)2 above shall be accomplished as follows:

1. **The span shall consist of a bridge, arch culvert or three-sided culvert that is sized to match the width and cross-sectional area of the channel so as to convey bank-full flow without a significant increase in the velocity of water in the channel;**

2. A stable, natural, earthen channel with low-flow aquatic passage shall be provided throughout the structure;

3. Additional culverts shall be constructed outside the channel, and parallel to the span, as needed to convey flood events that exceed the channel's capacity, up to and including the flood hazard area design flood; and

4. No armoring shall be placed under or across the channel bed, unless such armoring is necessary to prevent scour along the proposed abutments or footings. In such a case, the armoring shall be buried beneath at least two feet of native substrate.

(k) One circular or elliptical culvert, or a system of parallel circular and/or elliptical culverts, under (f)3, (g)3 and (h)3 shall be constructed as follows:

1. Where possible, one culvert shall be constructed, which is adequately sized so to pass the flood hazard area design flood without a significant increase in the velocity of water in the channel;

2. If construction under (k)1 above is not feasible, one culvert shall be sized to match the width and cross-sectional area of the channel, so as to convey bank-full flow without a significant increase in velocity, and additional culverts shall be constructed outside the channel, and parallel to the span, as needed to convey flood events that exceed the channel's capacity, up to and including the flood hazard area design flood;

3. The invert of the in-channel culvert shall be installed at least two feet below the invert of the natural channel;

4. The in-channel culvert shall be filled with native substrate up to the invert of the

natural channel, in order to create a contiguous flow-path through the culvert that meets and matches the bottom inverts, cross-sections and profile of the channel beyond the culvert; and

5. The applicant shall demonstrate that the native substrate placed within the in-channel culvert will remain stable under expected storm flow conditions.

(l) A circular, elliptical or box culvert under (f)4, (g)4 and (h)4 shall be constructed as follows:

1. Where feasible:

i. The invert of the culvert shall be installed at least two feet below the invert of the natural channel;

ii. The culvert shall be filled with native substrate up to the invert of the natural channel, in order to create a contiguous flow-path through the culvert that meets and matches the bottom inverts, cross-sections and profile of the channel beyond the culvert; and

iii. The applicant shall demonstrate that the native substrate placed within the culvert will remain stable under expected storm flow conditions; and

2. If a culvert cannot be constructed as described at (k)1 above due to unstable substrate or other physical constraints, the culvert shall be constructed to incorporate an artificial low-flow treatment such as a V-notch, key-notch or concave floor (see the Flood Hazard Area Technical Manual, available from the Department at the address listed at N.J.A.C. 7:13-1.1(g), for various examples).

(m) A waiver from the requirements of (f)1 and (g)2 above shall be granted provided:

1. The applicant clearly demonstrates that compliance with (f)1 or (g)2 is not possible

or feasible, and/or that the cost of compliance greatly outweighs the environmental benefit that would be achieved. For the purposes of this subsection, the cost of compliance refers not only to economic cost to the applicant but also real or potential adverse impacts to the environment, flooding or public safety;

2. The applicant, if a public entity, demonstrates that:

i. There is a public need to cross the regulated water; and

ii. There is no other feasible means of constructing a bridge or culvert, which would reduce or eliminate adverse impacts to aquatic resources, flooding and public safety; and

3. The applicant, if a private entity, demonstrates that:

i. There is developable land onsite that cannot feasibly be accessed without crossing the regulated water, including accessing the site through neighboring properties; and

ii. There is no other feasible means of constructing a bridge or culvert to access the developable area onsite, which would reduce or eliminate adverse impacts to aquatic resources, flooding and public safety.

7:13-11.8 Requirements for a footbridge

(a) This section sets forth specific design and construction standards that apply to any footbridge proposed in any regulated area.

(b) The Department shall issue an individual permit to construct or reconstruct a footbridge only if the following requirements are satisfied (examples of various designs described in this section are depicted in the Flood Hazard Area Technical Manual,

available from the Department at the address listed at N.J.A.C. 7:13-1.1(g)):

1. **The structure is used exclusively to carry pedestrians, livestock and/or light vehicles such as bicycles, golf carts or lawn tractors over a regulated water;**
2. **The travel width is no more than 10 feet. If the travel width is more than six feet, bollards or similar devices shall be installed to prevent automobiles and other larger vehicles from utilizing the footbridge;**
3. **The structure completely spans the water so that no footings, piers or abutments are placed in the water or its channel;**
4. **All footings, piers and abutments proposed within 10 feet of the top of bank or edge of water extend at least three feet below the channel invert;**
5. **All footings, piers and abutments proposed more than 10 feet beyond the top of bank or edge of water extend at least three feet below grade;**
6. **No approach ramp or other part of the footbridge obstructs flow in a floodway;**
7. **If the footbridge provides access to a public building, its travel surface is constructed at least one foot above the flood hazard area design flood elevation where feasible, or as close to this elevation as feasible; and**
8. **The footbridge is designed to pass floodwaters in one of the following ways:**
   i. **The low chord of the footbridge is set above the flood hazard area design flood elevation; or**
   ii. **Open handrails are used instead of a solid parapet, and the vertical distance between the low chord and the top of the footbridge deck, including any curbing, is no more than eight inches.**

(c) A structure that meets the requirements of (b) above is not subject to the

requirements for a bridge or culvert at N.J.A.C. 7:13-11.7. Any footbridge or other similar crossing that does not comply with the requirements of (b) above is subject to the requirements at N.J.A.C. 7:13-11.7 for bridges and culverts instead of the requirements of this section.

7:13-11.9 Requirements for a utility line

(a) This section sets forth specific design and construction standards that apply to any utility line proposed in any regulated area.

(b) The Department shall issue an individual permit to construct or reconstruct a utility line across or under a channel or water only if the following requirements are satisfied, as applicable:

1. **The applicant demonstrates that it is not feasible to directionally drill or "jack" the proposed utility line under the channel or water, as permitted-by-rule at N.J.A.C. 7:13-7.2(c)3;**
2. **The applicant demonstrates that it is not feasible to construct the utility line within a roadway that already crosses the channel or water, as permitted-by-rule at N.J.A.C. 7:13-7.2(c)4;**
3. **The applicant demonstrates that it is not feasible to attach the utility line to a bridge that already crosses the channel or water, as permitted-by-rule at N.J.A.C. 7:13-7.2(c)5;**
4. **The excavation of an open trench across a channel or water resulting in contact with flowing water is avoided. If the excavation of an open trench is unavoidable, the following requirements shall be met;**

i. Any trench in a channel, water or riparian zone, is no more than 20 feet wide, unless the applicant demonstrates that such a width is not feasible and a wider trench is necessary for safe construction;

ii. The normal flow of the channel or water is piped or diverted around the open trench during construction where possible so that sediment cannot enter the regulated water; and

iii. The trench is backfilled to the pre-excavation ground elevation using native substrate upon completion of the crossing;

5. All disturbed areas in the flood hazard area are restored to pre-construction topography;

6. A utility line that conveys a gas or liquid is protected in one of the following ways:

i. It is covered by at least four feet of stable material consisting of native substrate in the channel or water;

ii. It is encased in six inches of concrete and covered by at least three feet of stable material consisting of native substrate in the channel or water;

iii. It is encased within a steel sleeve, or covered by a 0.25 inch stainless steel plate, and covered by at least three feet of stable material consisting of native substrate in the channel or water; or

iv. If the applicant demonstrates that it is not feasible to provide at least three feet of coverage beneath the channel or water, and that there is no feasible alternative location for crossing the channel or water where at least three feet of coverage is provided, the utility line is either:

(1) Covered by as much stable material consisting of native substrate in the

channel or water as feasible, and encased within a steel sleeve; or

(2) Covered by as much stable material consisting of native substrate in the channel or water as feasible, protected above by a stainless steel plate at least 0.25 inches thick, and encased with six inches of concrete around the sides and bottom;

7. A utility line that does not convey a gas or liquid is covered by at least three feet of stable material consisting of native substrate in the channel or water where feasible;

8. The utility line is sealed to ensure that there will be no leakage or discharge in a regulated area; and

9. The following requirements are satisfied for each utility line that crosses a channel or water, unless the applicant demonstrates that one or more of these requirements is not feasible or that another configuration would pose less risk to life, property and the environment:

i. Each utility line is placed horizontally under the entire channel or water, and remains horizontal beyond each bank for a distance equal to twice the height of the bank, or 10 feet, whichever is greater. If there is no discernable bank, the utility line shall remain horizontal for at least 10 feet beyond the normal edge of water;

ii. The inclined portion of each utility line approaching the channel or water has a slope no steeper than 50 percent (a ratio of two horizontal to one vertical); and

iii. Encasement extends under the entire channel or water and 10 feet beyond

each top of bank. If there is no discernable bank, the utility line shall be encased for at least 10 feet beyond the normal edge of water.

(c) The Department shall issue an individual permit to construct or reconstruct a utility line above a channel or floodway, which is not attached to a roadway or railroad crossing, or which is attached to such a crossing but does not meet the permit-by-rule at N.J.A.C. 7:13-7.2(c)5, only if the following requirements are satisfied:

1. **The applicant demonstrates that it is not feasible to attach the utility line to a bridge that already crosses the channel or water, as permitted-by-rule at N.J.A.C. 7:13-7.2(c)5;**
2. **The utility line does not create any obstruction to the flow of floodwaters;**
3. **The utility line is suitably anchored and protected from damage by impact from floating debris;**
4. **The utility line is sealed to ensure that there will be no leakage or discharge in a regulated area; and**
5. **The utility line is placed at least one foot above the flood hazard area design flood elevation.**

(d) The Department shall issue an individual permit to construct or reconstruct a manhole associated with a utility line in a regulated area only if the following requirements are satisfied:

1. **The manhole is constructed at least 10 feet from any top of bank or edge of water (unless situated within a paved roadway);**
2. **The manhole has a watertight cover if constructed along a sanitary sewer line;**
3. **The top of a manhole in a floodway is flush with the ground; and**

4. The top of a manhole in a flood fringe is flush with the ground, where possible.

(e) The Department shall issue an individual permit for the placement of a cable directly on the bed of a channel or water only if the following requirements are satisfied:

1. The channel or water is large enough in both width and depth that the cable will not interfere with the normal flow of the channel or water; and

2. The cable is laid with enough slack so that it can be easily moved.

(f) The Department shall issue an individual permit that allows, over the five-year term of the permit, the necessary and periodic repair or replacement of any damaged or unsafe section of a lawfully existing utility line in a regulated area only if the following requirements are satisfied:

1. The applicant submits an application for an individual permit which, in addition to the normal application requirements, includes the following:

i. The exact location of the utility line network that is the subject of the application, identified on USGS quad maps; and

ii. Details of the types of repairs and replacements that can be expected to occur during the five-year period, including typical drawings of the anticipated repairs and a construction sequence;

2. The applicant agrees to provide public notice pursuant to N.J.A.C. 7:13-16.3(d) at least five working days before performing any repair or replacement;

3. The applicant agrees to replant all disturbed areas in the riparian zone with indigenous, non-invasive vegetation after each repair or replacement;

4. The applicant agrees to restore all disturbed areas in the flood hazard area to pre-construction topography after each repair or replacement; and

5. The applicant agrees to submit a report to the Department each January which includes the following:

i. A description of each repair or replacement that occurred during the previous calendar year;

ii. Color photographs of each regulated area before and after each repair or replacement; and

iii. The fee for each repair or replacement, as provided at N.J.A.C. 7:13-17.

7:13-11.10 Requirements for a stormwater outfall structure

(a) This section sets forth specific design and construction standards that apply to any stormwater outfall structure proposed in any regulated area.

(b) The Department shall issue an individual permit to construct or reconstruct a stormwater outfall structure only if the following requirements are satisfied (examples of acceptable designs are provided in the Flood Hazard Area Technical Manual, available from the Department at the address listed at N.J.A.C. 7:13-1.1(g)):

1. The structure is built with a concrete headwall or flared-end section with footings that extend no less than three feet below grade;

2. The structure does not obstruct flow in a channel or floodway;

3. The structure includes adequate conduit outlet protection where required by the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90;

4. If the structure includes a rip-rap apron, a three feet deep by three feet wide rip-rap toe wall is constructed at the end of the apron; and

5. The structure does not interfere with the normal flow of the channel or threaten to

change the dimensions or location of the channel. For example, a large discharge of stormwater into a small channel, or a discharge situated at a significant angle to the normal flow in a channel, may cause the channel to move over time, interfere with the direction of flow and/or cause increased erosion or deposition of sediment within the channel.

7:13-11.11 Requirements for a dam or a low dam

(a) This section sets forth specific design and construction standards that apply to any dam or low dam proposed in any regulated area.

(b) Activities performed in association with the construction of a dam or low dam, such as a channel modification, the excavation of a stormwater management basin or the creation of a stormwater collection and discharge system, shall be reviewed in accordance with the appropriate requirements for those activities under this chapter. This section applies only to the construction of the dam or low dam itself.

(c) The construction of a dam in a regulated area is subject to the requirements of this chapter only if the dam is part of a stormwater management basin that is located in a regulated area, or which discharges in a regulated area. Any dam that is constructed for another purpose is not subject to the requirements of this chapter, but is subject to the Dam Safety Standards at N.J.A.C. 7:20. Certain classes of dams require a permit from the Department's Dam Safety Section, which can be reached at (609) 984-0859 for further information. The requirements for removing a dam that is subject to this chapter are found at N.J.A.C. 7:13-11.19.

(d) The Department shall issue an individual permit to construct a dam or a low dam in a

regulated area only if the following requirements are satisfied:

1. **The dam or low dam does not increase offsite flooding in accordance with N.J.A.C. 7:13-11.1(f);**
2. **The dam or low dam is not located in a channel unless the applicant demonstrates that there is no feasible alternative that would cause less adverse impact to the environment; and**
3. **The dam or low dam is not located in a water with fishery resources, as described at N.J.A.C. 7:13-10.5, unless the dam or low dam includes a fish ladder or other mechanism that permits fish to pass the structure in either direction.**

7:13-11.12 Requirements for a flood control project

(a) This section sets forth specific design and construction standards that apply to any flood control project proposed in any regulated area.

(b) The Department shall issue an individual permit for a flood control project only if the applicant is a public entity, and the applicant provides a detailed analysis of the existing flooding problem that is to be mitigated. At minimum, this analysis shall include the following:

1. **The frequency and intensity of flooding;**
2. **The number of homes, businesses and other facilities historically affected by flooding;**
3. **A cost-benefit analysis for the proposed flood control project;**
4. **A discussion regarding which storms the flood control project is designed to mitigate and why these storms were selected;**

5. If the flood control project is not designed to alleviate flooding for the 100-year flood and/or the flood hazard area design flood, a demonstration as to why this is not feasible and/or possible; and

6. All hydrologic and hydraulic calculations necessary to demonstrate the need for and viability of the project.

(c) The Department shall issue an individual permit for a flood control project that results in disturbance to a channel and/or riparian zone only if the requirements of (b) above are satisfied and provided the applicant demonstrates that there is no feasible alternative project located outside the channel and riparian zone that would satisfactorily reduce flooding. At minimum, this analysis shall include the following:

1. A demonstration that the flooding problem cannot feasibly be solved through any of the following:

i. Raising, relocating and/or removing the flood prone structures;

ii. Replacing, removing or altering existing water control structures that are contributing to the flooding, such as dams or inadequately-sized bridges or culverts; and

iii. Improving the hydraulic capacity of existing water control structures, such as removing accumulated sediment and debris from bridges and culverts, or eliminating bends, inlets and blockages in culverts;

2. A demonstration that the flooding problem cannot feasibly be solved by reducing the volume and/or flow rate of floodwaters in the channel through either of the following:

i. Constructing regional stormwater management basins upstream of the

flooding; and

ii. Redirecting excess flows into pipes or artificial channels to bypass the affected areas; and

3. A demonstration that the following steps have been taken to ensure that the flooding problem will not reoccur after the flood control project has been constructed:

i. Analysis of local stormwater management ordinances within the drainage area and modification, where necessary, or the ordinances to ensure that flows within the channel will not increase over time; and

ii. Development of a regional plan to preserve the existing flood storage within the drainage area.

(d) The Department shall issue an individual permit for the lining or piping of a channel as part of a flood control project only if the project meets the requirements at (b) and (c) above, and provided the applicant demonstrates the following:

1. There is no feasible alternative project that would satisfactorily reduce the flooding, which would avoid lining or piping the channel;

2. Lining or piping the channel is necessary to protect public health, safety and welfare; and

3. Adequate mitigation for all lost vegetation and aquatic biota will occur.

7:13-11.13 Requirements for a retaining wall or bulkhead

(a) This section sets forth specific design and construction standards that apply to any retaining wall or bulkhead proposed in any regulated area.

(b) The Department shall issue an individual permit to construct or reconstruct a retaining wall or bulkhead that is at least four feet in height in a fluvial flood hazard area only if the following requirements are satisfied:

1. **The retaining wall or bulkhead is designed with stable footings that extend at least 3 feet below grade, unless the applicant demonstrates that such a footing is not possible to construct or necessary for stability;**
2. **The applicant provides a stability analysis, signed and sealed by an engineer, which demonstrates that the retaining wall or bulkhead is designed to withstand displacement, overturning and failure due to undermining and/or pressure from soil, water and frost; and**
3. **If located in a channel, the wall is designed to be resistant to erosion as well as the possibility of a shifting bed and/or bank over time.**

(c) The Department shall issue an individual permit to construct or reconstruct a retaining wall or bulkhead that is at least four feet in height in a tidal flood hazard area only if an engineer certifies that the retaining wall or bulkhead is designed to withstand displacement, overturning and failure due to undermining and/or pressure from soil, water and frost.

(d) The Department shall issue an individual permit to construct or reconstruct a retaining wall or bulkhead that is less than four feet in height only if the wall is designed with stable footings and, if located in a channel, the wall is designed to be resistant to erosion as well as the possibility of a shifting bed and/or bank over time.

7:13-11.14 Requirements for bank stabilization

(a) This section sets forth specific design and construction standards that apply to any stabilization of a bank proposed in any regulated area.

(b) The Department shall issue an individual permit to stabilize an eroded bank only if the applicant provides a detailed analysis of the existing erosion problem that is to be corrected. At minimum, this analysis shall include the following:

1. **A complete description of the existing erosion problem including:**
    i. **The likely causes of the erosion; and**
    ii. **A history of the site and the drainage area, including any previous attempts to stabilize the bank; and**
2. **A demonstration of why the selected stabilization methods are the most suitable for the site. At minimum, this demonstration should include and discuss the following (see Flood Hazard Area Technical Manual, available from the Department at the address listed at N.J.A.C. 7:13-1.1(g), for examples):**
    i. **The location of any headcut if a channel is present. A headcut is a sudden change in elevation in the stream bed, which usually occurs at the leading edge of a forming gully, and is indicative of erosive forces that are likely to continue to wash away the natural channel;**
    ii. **Any upstream or downstream stressors that may have contributed to and/or exacerbated the erosion that needs to be addressed as part of the project;**
    iii. **How future development in the drainage area could impact the bank and the proposed stabilization;**
    iv. **The anticipated lifetime of the proposed stabilization;**
    v. **A maintenance and monitoring plan to ensure the success of the proposed**

stabilization;

vi. An action plan in case of future failure of the project; and

vii. A plan to reduce the likelihood of future erosion.

(c) The Department shall issue an individual permit to stabilize an eroded bank only if the stabilization is accomplished as follows:

1. **The project is designed by an individual with experience in stream geomorphology (and soil bioengineering if used on site), as evidenced by documentation supplied with the individual permit application;**
2. **Where possible, the eroded bank is stabilized simply by cutting back the bank to a stable slope and planting with vegetation suitable for stabilization. Generally a slope of no more than 50 percent (a ratio of two horizontal to one vertical) is recommended to stabilize an eroded bank;**
3. **Where nuisance flooding is a related issue, flood capacity outside the regulated water is increased by terracing the overbank areas where appropriate, so that the channel is not forced to convey excessive flows (see the Flood Hazard Area Technical Manual, available from the Department at the address listed at N.J.A.C. 7:13-1.1(g), for examples);**
4. **If cutting the bank and planting vegetation as described in (b)2 above cannot fully prevent erosion due to excessive channel velocity, or if cutting the bank would destroy vegetation in excess of that which is allowed at N.J.A.C. 7:13-10.2(i), soil bioengineering is used to stabilize the eroded bank. In designing soil bioengineering installations, the existing soil characteristics, the bank's physical structure and the hydrologic conditions on site shall be considered;**

5. The Department shall issue an individual permit for bank stabilization that is not accomplished solely using vegetation or soil bioengineering, as described in (c)1 through 4 above, only if the applicant demonstrates that, given the velocity and configuration of the adjacent channel and/or other conditions of the site, vegetation and/or soil bioengineering alone are not adequate to stabilize the bank; and

6. The Department shall issue an individual permit for the lining or piping of a channel in order to stabilize erosion only if the applicant demonstrates the following:

i. There is no feasible alternative project that would satisfactorily reduce the erosion, which would avoid lining or piping the channel;

ii. Lining or piping the channel is necessary to protect public health, safety and welfare; and

iii. Adequate mitigation for all lost vegetation and aquatic biota will occur.

7:13-11.15 Requirements for sediment and debris removal from a water

(a) This section sets forth specific standards that apply to any proposed sediment and debris removal from a regulated water.

(b) This section does not apply to the removal of sediment and/or debris by a county or municipality in accordance with general permit 1 at N.J.A.C. 7:13-8.3, or the removal of sediment and/or debris conducted for agricultural purposes in accordance with general permit 2B at N.J.A.C. 7:13-8.4(c)2. In addition, the removal of trash and obstructions from a channel are permitted-by-rule under

certain circumstance pursuant to N.J.A.C. 7:13-7.2(a)5 and (d)3.

(c) Except as provided in (d) below, the Department shall issue an individual permit for the removal of sediment and debris from a channel only if the following requirements are satisfied:

1. **The applicant demonstrates the following:**
   i. **That there is a flooding problem, mosquito control problem or other threat to public health, safety or welfare that cannot otherwise be remedied without removing the sediment and/or debris from the water; and**
   ii. **That removing the sediment and/or debris will remedy the problem identified in (c)1i above;**
2. **The material to be removed from the water consists solely of accumulated silt, sediment and debris. Removal of material beyond or below the natural channel constitutes a channel modification and is subject to the requirements at N.J.A.C. 7:13-10.1(c);**
3. **In order to minimize the downstream transport of sediment during dredging, all areas being dredged are isolated from flowing water where possible. Means of isolation include erecting temporary berms or sheet-piles around the areas being dredged and pumping the normal channel flow around the work area, or, if channel flow is low, by blocking off sections of the channel being dredged and allowing the sediment to settle;**
4. **The applicant properly disposes of all material removed from the channel. Removed sediment can be disposed of in a regulated area provided the requirements at (f) below are satisfied. All removed trash and debris shall be**

disposed of in accordance with all applicable Federal, State and local laws outside any flood hazard area or riparian zone;

5. **The project does not disturb the channel bank or the riparian zone, unless such disturbance is unavoidable, necessary to gain access to the channel and minimized;**
6. **The project is conducted from only one bank where possible;**
7. **The use of heavy equipment in the channel is avoided;**
8. **Vegetation and tree canopy on the more southerly or westerly bank is preserved in order to shade the channel;**
9. **All access points to the water are described in writing and with color photographs; and**
10. **All disturbed areas in the riparian zone are replanted with indigenous, non-invasive vegetation upon completion of the project.**

(d) The Department shall issue an individual permit for the removal of sediment and debris from a channel, which does not meet one or more of the requirements at (c) above, only if the following requirements are satisfied:

1. **The applicant is a public entity;**
2. **The project is intended solely for mosquito control;**
3. **The applicant demonstrates that the mosquito control problem cannot be solved by any other feasible methods;**
4. **The applicant submits an individual, site-specific proposal to the Administrator of the State Office of Mosquito Control Coordination, and said office determines that the project is necessary to control a documented mosquito problem;**
5. **The applicant explains in its public notice that the project does not meet the**

normal requirements under this chapter for sediment removal and that the applicant is seeking an exception for mosquito control purposes;

6. The applicant convenes a public hearing to discuss the project in cases of significant public interest; and

7. The applicant demonstrates that all adverse environmental impacts are minimized.

(e) The Department shall issue an individual permit for the removal of sediment and debris from an impounded water, such as a lake, pond or reservoir, only if the following requirements are satisfied:

1. In order to minimize the transport of sediment during dredging, all areas being dredged are isolated from flowing water where possible. Means of isolation include erecting temporary berms or sheet-piles around the areas being dredged, lowering the water level if controlled by a dam, plugging the downstream discharge of the water and pumping the incoming water around the impoundment;

2. The applicant obtains a lake lowering permit from the Department's Division of Fish and Wildlife, where necessary;

3. The applicant obtains any necessary approvals the Department's Dam Safety Section;

4. Machinery access to the water is restricted in order to minimize disturbance to the riparian zone;

5. The applicant properly disposes of all material removed from the impounded water. Removed sediment can be disposed of in a regulated area provided the requirements at (f) below are satisfied. All removed trash and debris shall be disposed of in accordance with all applicable Federal, State and local laws outside

any flood hazard area or riparian zone; and

6. If dredging expands the area or depth of the impounded water beyond its original dimensions, the applicant demonstrates that such expansion will not adversely affect flooding, any structure or freshwater wetlands adjacent to the water, the seasonal high water table or any dam or low dam that may exist.

(f) The Department shall issue an individual permit to deposit sediment that has been removed from a regulated water, only if the following requirements are satisfied:

1. The applicant demonstrates that the transport of the sediment out of the regulated area is not economically or physically feasible, and/or would cause greater environmental damage than depositing the sediment within the regulated area;

2. The sediment is disposed of in accordance with all applicable Federal, State and local laws;

3. The sediment is deposited at least 25 feet from any top of bank or edge of water;

4. The placement of the sediment does not interfere with the positive overland drainage of the receiving area;

5. Sediment deposited in a floodway is placed no more than three inches deep; and

6. Sediment deposited is placed on land that lies below both the seasonal high water table and the normal water surface elevation of the nearest regulated water, unless the applicant demonstrates that the sediment cannot feasibly be deposited on such land.

(g) The Department shall issue an individual permit that allows an applicant to repeatedly remove sediment and debris from a regulated water during the term of the permit, only if the applicant does the following:

1. **Demonstrates that there is no feasible means of preventing the accumulation of sediment and debris over time, which would therefore avoid the need for repeated cleanings;**
2. **Demonstrates that repeated cleanings are necessary to properly maintain existing bridges or culverts along the water, and/or to alleviate local flooding;**
3. **Demonstrates that repeated cleanings will not adversely impact fishery resources in the water;**
4. **Agrees to notify the Department in writing no less than 10 calendar days prior to each proposed sediment removal activity; and**
5. **Agrees to submit a report to the Department within 30 calendar days of the completion of each sediment removal activity. This report shall include color photographs of the work area and shall describe how the sediment removal was accomplished, where the dredged material was deposited and to what extent disturbed vegetation in the riparian zone was restored.**

7:13-11.16 Requirements for the storage of unsecured material

(a) This section sets forth specific standards that apply to any proposed storage of unsecured material in any regulated area.

(b) This section governs the storage of unsecured material not addressed by the following:

1. **The permits-by-rule at N.J.A.C. 7:13-7.2(e)1 through 4, which cover the storage of unsecured materials for construction activities, and for certain ongoing residential and commercial uses; and**
2. **The requirements at N.J.A.C. 7:13-11.17 and 11.18, which cover the placement of**

hazardous substances and solid waste in a regulated area, respectively, whether secured or unsecured.

(c) The Department shall not issue an individual permit for the storage of unsecured material in a floodway.

(d) The Department shall issue an individual permit for the storage of unsecured material in a regulated area outside a floodway only if the following requirements are satisfied:

1. **No vegetation is cleared, cut or removed in a riparian zone;**
2. **The unsecured material is stored as part of a business or facility, the primary function of which is to store and distribute material, such as a bus or truck depot, car dealership or rental facility, gravel pit, junk yard, landscaping business, lumber yard or vehicle impoundment area;**
3. **The applicant demonstrates that the unsecured material cannot feasibly be stored outside the flood hazard area and riparian zone onsite;**
4. **The unsecured material to be stored is isolated from floodwaters by berms, or will be situated in a specially designed containment area onsite, so that, in the event of a flood, the stored material will not be transported off the site by floodwaters;**
5. **The applicant discloses the maximum volume of unsecured material that will be stored in the flood fringe and includes this volume in calculating the maximum flood storage volume displacement on the site pursuant to N.J.A.C. 7:13-10.4; and**
6. **The Department determines that the storage of unsecured material in a flood hazard area and riparian zone will not pose a threat to the environment or to public health, safety or welfare.**

7:13-11.17 Requirements for the placement, storage or processing of hazardous substances

(a) This section sets forth specific design and construction standards that apply to any proposed placement, storage or processing of hazardous substances in any regulated area.

(b) A hazardous waste facility established on or before October 2, 2006 may be eligible to place, store or process hazardous substances under the permit-by-rule at N.J.A.C. 7:13-7.2(e)5, provided the size or capacity of the facility is not increased. In addition, the placement of a fuel tank is permitted-by-rule under certain conditions pursuant to N.J.A.C. 7:13-7.2(b)15 and 16. All other placement, storage or processing of hazardous substances is subject to this section.

(c) The Department shall not issue an individual permit for the placement, storage or processing of hazardous substances in a floodway.

(d) The Department shall issue an individual permit for the placement, storage or processing of hazardous substances in a regulated area outside a floodway only if the following requirements are satisfied:

1. No vegetation is cleared, cut or removed in a riparian zone;

2. The placement, storage or processing of hazardous substances is part of an increase in the size or capacity of a lawfully existing hazardous waste facility established on or before October 2, 2006. The individual permit application shall include copies of all relevant State permits, licenses and authorizations in order to demonstrate that the facility is operating lawfully;

3. The applicant demonstrates that the hazardous substances cannot feasibly be placed, stored or processed outside the flood hazard area and riparian zone onsite;

4. The hazardous substances to be placed, stored or processed is isolated from

floodwaters by berms, or will be situated in a specially designed containment area onsite, so that in the event of a flood, the hazardous substances will not be transported off the site by floodwaters;

5. The applicant discloses the maximum volume of hazardous substances to be placed, stored or processed in the flood fringe and includes this volume in calculating the maximum flood storage displacement volume on the site pursuant to N.J.A.C. 7:13-10.4; and

6. The Department determines that the placement, storage or processing of hazardous substances in the flood hazard area and riparian zone will not pose a threat to the environment or to public health, safety or welfare.

7:13-11.18 Requirements for the placement, storage or processing of solid waste

(a) This section sets forth specific standards that apply to any proposed placement, storage or processing of solid waste in any regulated area.

(b) A solid waste facility established on or before October 2, 2006 may be eligible to continue to place, store or process solid waste under the permit-by-rule at N.J.A.C. 7:13-7.2(e)6, provided the size or capacity of the facility is not increased. All other placement storage or processing of solid waste is subject to this section.

(c) The Department shall not issue an individual permit for the placement, storage or processing of solid waste in a floodway.

(d) The Department shall issue an individual permit for the placement, storage or processing of solid waste in a regulated area outside a floodway only if the following requirements are satisfied:

1. **No vegetation is cleared, cut or removed in a riparian zone;**
2. **The placement, storage or processing of solid waste is part of an increase in the size or capacity of a lawfully existing solid waste facility established on or before October 2, 2006. The individual permit application shall include copies of all relevant State permits, licenses and authorizations in order to demonstrate that the facility is operating lawfully;**
3. **The applicant demonstrates that the solid waste cannot feasibly be placed, stored or processed outside the flood hazard area and riparian zone onsite;**
4. **The solid waste to be placed, stored or processed is isolated from floodwaters by berms, or will be situated in a specially designed containment area onsite, so that in the event of a flood, the solid waste will not be transported off the site by floodwaters;**
5. **The applicant discloses the maximum volume of solid waste to be placed, stored or processed in the flood fringe for the purpose of calculating the maximum flood storage displacement on the site pursuant to N.J.A.C. 7:13-10.4; and**
6. **The Department determines that the placement, storage or processing of solid waste in the flood hazard area and riparian zone will not pose a threat to the environment or to public health, safety or welfare.**

7:13-11.19 Requirements for the removal of existing fill or an existing structure

(a) This section sets forth specific standards that apply to any proposed removal of existing fill or an existing structure in any regulated area.

(b) The removal of existing fill or an existing structure is subject to the requirements of

this section only as follows:

1. **The fill or structure to be removed lies in a floodway; or**
2. **The fill or structure to be removed lies in a regulated area outside a floodway, but does not qualify for the permit-by-rule at N.J.A.C. 7:13-7.2(b)2.**

(c) The Department shall issue an individual permit for the removal of existing fill or an existing structure as described in (b) above only if the following requirements are satisfied:

1. **All disturbed regulated areas are properly stabilized;**
2. **If the removed fill or structure lies in a floodway, the applicant demonstrates through a hydraulic analysis that the removal will not adversely impact a property not owned by the applicant, pursuant to N.J.A.C. 7:13-11.1(f) and (g), unless it is clear to the Department that the proposed removal poses no threat to offsite properties;**
3. **Any removed fill is disposed of in accordance with all applicable Federal, State and local laws;**
4. **Any removed structure is disposed of outside of any regulated area and in accordance with all applicable Federal, State and local laws; and**
5. **No vegetation is cleared, cut or removed in a riparian zone, unless the following apply:**
   i. **Vegetation in the riparian zone must be cleared, cut or removed in order to access the fill or structure;**
   ii. **The area of disturbance within the riparian zone is minimized; and**
   iii. **All vegetation cleared, cut or removed in the riparian zone is replanted with indigenous, non-invasive species, except where the removed material is to be**

replaced by a new structure. (Any replacement fill or structure is subject to the requirements of this chapter.)

SUBCHAPTER 12. EMERGENCY PERMITS

7:13-12.1 Requirements for issuing an emergency permit

(a) An emergency permit is an authorization to undertake a regulated activity that the Department will issue when conditions warrant immediate action to protect the environment and/or public health, safety and welfare.

(b) The Department shall approve an emergency permit only if the following requirements are satisfied:

1. **Severe environmental degradation will occur if an emergency permit is not issued and/or there is an immediate and extraordinary risk to property or the public health, safety and welfare; and**
2. **There is a high probability that the environmental degradation or impact to property or the public health, safety and welfare will occur before a flood hazard area individual permit or general permit authorization could be obtained under the otherwise applicable requirements of this chapter.**

(c) An applicant for an emergency permit shall provide the Department with the following by telephone, and in addition by fax, electronic mail or letter, if possible:

1. **The nature of the emergency;**
2. **The cause of the emergency;**
3. **The date and time at which the applicant learned of the emergency;**

4. The nature and extent of the proposed regulated activities;

5. The date by which the applicant expects to begin the proposed regulated activities;

6. The date by which the applicant expects to complete the proposed regulated activities;

7. The precise location of the proposed regulated activities, including lot, block, municipality and county;

8. The identity of the owner of the site where the regulated activities are proposed;

9. A demonstration that the property owner has given permission for the regulated activities to be performed or, in the case of a public entity intending to undertake regulated activities on private property through power of eminent domain, a written statement of the public entity's intent; and

10. If notice to the Department is also made by fax, electronic mail or letter, photographs of the area in question and a sketch of the proposed emergency activities, where feasible.

(d) If the Department determines that the requirements of (b) and (c) above are satisfied, the Director of the Division of Land Use Regulation, or the Director's designee, shall provide verbal approval of the necessary activities. This verbal approval shall be followed within five working days by a written confirmation of the emergency permit from the Department.

(e) No public notice or fee is required for an emergency permit. However, either an individual permit (which requires public notice and an application fee) or a general permit authorization (which requires an application fee, except for general permit 6) must be obtained after an emergency permit is issued under N.J.A.C. 7:13-12.2.

7:13-12.2 Procedures after an emergency permit is issued

(a) The permittee shall commence the approved emergency activities within 30 calendar days after the Department's verbal approval of the emergency permit, unless extended in accordance with (d) below. If the emergency activities are not commenced within 30 calendar days of the verbal approval, the emergency permit is void.

(b) Once commenced, all regulated activities authorized under the emergency permit shall be completed, and the emergency permit shall expire, by 60 calendar days after the Department's verbal approval, unless extended in accordance with (d) below. If the regulated activities authorized under the emergency permit are not completed by this expiration date, these regulated activities shall cease until an individual permit, general permit authorization or another emergency permit is obtained from the Department for the regulated activities.

(c) The permittee shall submit to the Department a complete application for an individual permit or a general permit authorization for the completed activities within 90 calendar days after the Department's verbal approval of the emergency permit, unless extended in accordance with (d) below. The application shall include the following:

1. **A demonstration that the regulated activities comply with this chapter; and**
2. **"As-built" drawings, signed and sealed by a engineer, land surveyor or architect, as appropriate, showing the regulated activities that were conducted under the emergency permit.**

(d) The Department shall extend the 30-day, 60-day and/or 90-day periods established in (a), (b) and (c) above if the applicant demonstrates that the specified requirements cannot

feasibly be satisfied within these allotted time frames.

(e) Any activity performed under an emergency permit shall meet all requirements that apply to that activity under this chapter to the fullest extent possible. Upon review of the permit application and associated as-built drawings required in (c) above, the Department shall require modification, restoration and/or stabilization measures as necessary to ensure compliance with this chapter.

SUBCHAPTER 13. REVISION OF AN APPROVAL

7:13-13.1 Revision of a verification

(a) This section applies to the revision of a flood hazard area design flood elevation, flood hazard area limit, floodway limit and/or other related feature on an approved drawing after a verification has been issued. A verification must be valid in order to be revised. A revision shall not extend the term of a verification.

(b) The Department shall, in response to an applicant's request, revise an entire verification or any portion of a verification, provided the requirements of this section are satisfied.

(c) There are two types of verification revisions, as follows:

1. **A minor revision of a verification is a change in the flood hazard area design flood elevation, flood hazard area limit, floodway limit and/or other related feature, which does not require the Department to review detailed engineering calculations in order to determine that the revision is accurate. Any type of verification under N.J.A.C. 7:13-6 can be the subject of a minor revision. Examples of a minor**

revision include:

i. Correcting a drafting error;

ii. Improving topographical data;

iii. Revising a previously approved metes and bounds description of the flood hazard area limit and/or floodway limit to more closely match their actual location;

iv. Deletion or addition of structures that were previously unmapped or mapped in error (unless said structure would alter the original hydraulic modeling); and

v. Adding notes, labels or other clarifying information required by the Department or another governing body; and

2. A major revision of a verification is a change in the flood hazard area design flood elevation, flood hazard area limit, floodway limit and/or other related feature, which requires the Department to review detailed engineering calculations in order to determine that the revision is accurate. Only a verification based on Method 4 (pursuant to N.J.A.C. 7:13-3.4) or Method 6 (pursuant to N.J.A.C. 7:13-3.6) can be the subject of a major revision. Examples of a major revision include:

i. Correcting the floodway limit;

ii. Improving the hydrologic modeling upon which the verification is based, resulting in a new peak flow rate; and

iii. Improving the hydraulic modeling upon which the verification is based, such as adding cross-sections, revising, improving or correcting topography, or altering data for a water control structure, resulting in a new water surface

profile.

(d) The Department shall not revise a verification if the Department determines that the proposed revision constitutes a substantial change in the approved flood hazard area design flood elevation, flood hazard area limit and/or floodway limit. In such a case, the applicant shall submit an application for a new verification and the Department shall review the proposed redelineation as if it were a new project. Examples of a substantial change include:

1. **The redelineation of all or most of the verified flood hazard area and/or floodway limit based on new hydrologic and hydraulic calculations; and**
2. **The addition of any previously unverified sections of a regulated water as described in (e) below.**

(e) The Department shall revise a verification only for the section of water approved under the verification that the applicant seeks to revise. The Department shall not issue a revision that adds a new section of water to the verification.

(f) An application for a minor revision of a verification shall include the following:

1. **The application fee required under N.J.A.C. 7:13-17;**
2. **One LURP-1 application form completed as described at N.J.A.C. 7:13-15.1(f);**
3. **One copy of the verification that is the subject of the revision application;**
4. **One set of the originally approved drawings (if available);**
5. **A detailed written description of the proposed revisions to the flood hazard area design flood elevation, flood hazard area limit, floodway limit and/or other related feature; and**
6. **Six sets of revised drawings, signed and sealed by a engineer, land surveyor or**

architect, as appropriate, prepared in accordance with the application requirements for a verification at N.J.A.C. 7:13-6.1(c). For each revised flood hazard area design flood elevation, flood hazard area limit, floodway limit and/or other related feature, the applicant shall submit both the originally approved drawings showing the approved elevation, limits and/or features and new drawings showing the revised elevation limits and/or features.

(g) An application for a major revision of a verification shall include the following:

1. All material listed in (f) above;

2. All supporting hydrologic and hydraulic calculations, which are necessary to demonstrate that the proposed revision meets the requirements of this chapter;

3. A narrative that explains the submitted calculations and describes why each particular calculation or methodology was used; and

4. All maps, references and other supporting materials that were used to prepare the submitted calculations.

(h) After reviewing an application for a revision of a verification, the Department shall:

1. Notify the applicant that the application did not include all the material required at (f) or (g) above, or that supplemental information is needed to determine if the application complies with this chapter, and request the missing information. The Department may cancel the application if the missing information is not provided within 60 calendar days. When the requested material is received, the Department shall take one of the actions in (h)2 or 3 below;

2. Notify the applicant in writing that the application does not meet the requirements of this section, deny the application, and provide the technical reasons for this

decision; or

3. Determine that the application meets the requirements of this section and approve the revision in writing.

(i) Workload permitting, the Department shall make a final decision on an application for a revision of a verification within 60 calendar days of receiving a complete application.

(j) Within 90 calendar days after the Department revises a verification on a privately owned lot, or on a publicly owned lot other than a right-of-way, the applicant shall submit the following information to the clerk of each county in which the site is located, and shall send proof to the Department that this information is recorded on the deed of each lot referenced in the verification. Failure to have this information recorded in the deed of each lot and/or to submit proof of recording to the Department constitutes a violation of this chapter and may result in suspension or termination of the verification or subject the applicant to enforcement action pursuant to N.J.A.C. 7:13-19:

1. The Department file number for the verification;

2. The approval and expiration dates of the verification;

3. A metes and bounds description of each flood hazard area limit and/or floodway limit approved under the verification;

4. The flood hazard area design flood elevation, or range of elevations if variable, approved under the verification; and

5. The following statement: "The State of New Jersey has determined that all or a portion of this lot lies in a flood hazard area. Development in flood hazard areas is regulated by the State and some activities may be prohibited on this site or may first require a permit from the Department of Environmental Protection."

7:13-13.2 Revision of a general permit

(a) This section applies to proposed changes to a regulated activity after the Department issues a general permit. A general permit must be valid in order to be revised. A revision shall not extend the term of a general permit.

(b) The Department shall only issue a minor revision to a general permit. A minor revision is a change in a project element that does not require the Department to review detailed engineering calculations in order to determine whether the revised project element complies with this chapter, whereas a major revision involves the review of calculations, which does not apply to general permits under this chapter. Examples of a minor revision include the following:

1. **Correcting a drafting error;**
2. **Improving topographical data;**
3. **Adding notes, labels or other clarifying information required by the Department or another governing body;**
4. **Adjusting the size, shape or location of a proposed structure; and/or**
5. **Reducing the level of proposed development on site, such as deleting a proposed structure or reducing its footprint.**

(c) The Department shall not issue a revision of a general permit if the Department determines that the proposed revision constitutes a substantial redesign of the project or will increase the environmental impact of the project. In such a case, the applicant shall submit an application for a new general permit and the Department shall review the proposed redesign as if it were a new project. Examples of a substantial redesign include:

1. Any change to the basic purpose or scope of a project;

2. Any increase in the amount of disturbance within the riparian zone; and

3. The addition of any previously unapproved project element.

(d) An application for a revision of a general permit shall include the following:

1. The application fee required under N.J.A.C. 7:13-17;

2. One LURP-1 application form completed as described at N.J.A.C. 7:13-15.1(f);

3. One copy of the general permit that is the subject of the revision application;

4. One set of the originally approved drawings (if available);

5. One completed certification (available from the Department's website at www.nj.gov/dep/landuse), signed and sealed by an engineer, which lists each requirement of N.J.A.C. 7:13-8.1(b), as well as each requirement for the particular general permit being modified. The certification shall explain, as necessary, how each requirement for the particular general permit is met, as well as any changes that are being proposed to the project which necessitates the request to revise the general permit; and

6. Six sets of drawings, signed and sealed by an engineer, land surveyor or architect, as appropriate, which detail the proposed activities and show the project elements to be revised, including existing and proposed topography if fill or grading is proposed. All topography shall reference NGVD, or include the appropriate conversion factor to NGVD, unless the applicant demonstrates that such reference is not necessary.

(e) After reviewing an application for a revision of a general permit, the Department shall:

1. Notify the applicant that the application did not include all the material required

at (d) above, or that supplemental information is needed to determine if the application complies with this chapter, and request the missing information. The Department may cancel the application if the missing information is not provided within 60 calendar days. When the requested material is received, the Department shall take one of the actions in (e)2 or 3 below;

2. Notify the applicant in writing that the application does not meet the requirements of this section, deny the application, and provide the technical reasons for this decision; or

3. Determine that the application meets the requirements of this section and approve the revision in writing.

(f) Workload permitting, the Department shall make a final decision on an application for a revision of a general permit authorization within 30 calendar days of receiving a complete application.

7:13-13.3 Revision of an individual permit

(a) This section applies to proposed changes to a regulated activity after the Department issues an individual permit. An individual permit must be valid in order to be revised. A revision shall not extend the term of an individual permit.

(b) The Department shall, in response to an applicant's request, revise an entire individual permit or any project element approved under an individual permit, provided the requirements of this section are satisfied.

(c) There are two types of individual permit revisions, as follows:

1. A minor revision of an individual permit is a change in a project element that does

not require the Department to review detailed engineering calculations in order to determine whether the revised project element complies with this chapter. Examples of a minor revision include the following, provided no review of calculations is required:

i. Correcting a drafting error;

ii. Improving topographical data;

iii. Adding notes, labels or other clarifying information required by the Department or another governing body;

iv. Adjusting the size, shape or location of a proposed structure; and

v. Reducing the level of proposed development on site, such as deleting a proposed structure or reducing its footprint.

2. A major revision of an individual permit is a change in a project element that requires the Department to review detailed engineering calculations in order to determine whether the revised project element complies with this chapter. A project element that does not require calculations in order to receive an individual permit, such as a footbridge or utility line, instead qualifies for a minor revision under (c)1 above. Examples of a major revision include the following:

i. Adjusting the proposed flood storage displacement volume on site, thereby requiring re-review of cut and fill calculations;

ii. Adjusting the size, shape or location of a proposed water control structure, thereby requiring a re-review of hydraulic calculations; and

iii. Adjusting a characteristic of a proposed stormwater management system, thereby requiring a re-review of hydrologic and/or hydraulic calculations.

(d) The Department shall not issue a revision of an individual permit if the Department determines that the proposed revision constitutes a substantial redesign of the project or will increase the environmental impact of the project. In such a case, the applicant shall submit an application for a new individual permit and the Department shall review the proposed redesign as if it were a new project. Examples of a substantial redesign include:

1. **Any change to the basic purpose or scope of a project, such as a change from the construction of a hospital to the construction of an apartment complex;**
2. **Any expansion of activity beyond that which was described in the public notice made for the individual permit application;**
3. **Any substantial redesign of the project or its stormwater management system, which would require a new hydrologic analysis of the site;**
4. **Any increase in the amount of disturbance within the riparian zone; and**
5. **The addition of any previously unapproved project element.**

(e) An application for a minor revision of an individual permit shall include the following:

1. **The application fee required under N.J.A.C. 7:13-17;**
2. **One LURP-1 application form completed as described at N.J.A.C. 7:13-15.1(f);**
3. **One copy of the individual permit that is the subject of the revision application;**
4. **One set of the originally approved drawings (if available);**
5. **A detailed written description of the proposed revisions; and**
6. **Six sets of drawings, signed and sealed by an engineer, land surveyor or architect, as appropriate, which detail the proposed activities and show the project elements to be revised, including existing and proposed topography if fill or grading is proposed. All topography shall reference NGVD, or include the appropriate**

conversion factor to NGVD, unless the applicant demonstrates that such reference is not necessary.

(f) An application for a major revision of an individual permit shall include the following:

1. **All material listed in (e) above;**
2. **All supporting hydrologic, hydraulic, flood storage volume, stormwater and structural calculations, which are necessary to demonstrate that the proposed project meets the requirements of this chapter;**
3. **A narrative that explains the submitted calculations and describes why each particular calculation or methodology was used; and**
4. **All maps, references and other supporting materials that were used to prepare the submitted calculations.**

(g) After reviewing an application for a revision of an individual permit, the Department shall:

1. **Notify the applicant that the application did not include all the material required at (e) or (f) above, or that supplemental information is needed to determine if the application complies with this chapter, and request the missing information. The Department may cancel the application if the missing information is not provided within 60 calendar days. When the requested material is received, the Department shall take one of the actions in (g)2 or 3 below;**
2. **Notify the applicant in writing that the application does not meet the requirements of this section, deny the application, and provide the technical reasons for this decision; or**
3. **Determine that the application meets the requirements of this section and approve**

the revision in writing.

(h) Workload permitting, the Department shall make a final decision on an application for a revision of an individual permit within 60 calendar days of receiving a complete application.

7:13-13.4 Revision of a Department delineation by application

(a) This section applies to the revision of a flood hazard area design flood elevation, flood hazard area limit, floodway limit and/or other related feature on a flood hazard area delineation that has been promulgated by the Department. Appendix 2 of this chapter lists the Department-delineated waters of New Jersey.

(b) There are two types of delineation revisions, as follows:

1. A minor revision of a delineation is a change in the flood hazard area design flood elevation, flood hazard area limit, floodway limit and/or other related feature, which does not require the Department to review detailed engineering calculations in order to determine that the revision is accurate. Examples of a minor revision include:

i. Correcting a drafting error;

ii. Improving topographical data;

iii. Deletion or addition of structures that were previously unmapped or mapped in error (unless said structure would alter the original hydraulic modeling); and

iv. Adding notes, labels or other clarifying information required by the Department or another governing body; and

2. A major revision of a delineation is a change in the flood hazard area design flood elevation, flood hazard area limit, floodway limit and/or other related feature, which requires the Department to review detailed engineering calculations in order to determine that the revision is accurate. Examples of a major revision include:

i. Correcting the floodway limit;

ii. Improving the hydrologic modeling upon which the delineation is based, resulting in a new peak flow rate; and

iii. Improving the hydraulic modeling upon which the delineation is based, such as adding cross-sections, revising, improving or correcting topography, or altering data for a water control structure, resulting in a new water surface profile.

(c) The Department shall issue a revision of a delineation only for a section of water already promulgated by the Department. The Department shall not add or remove a section of delineated water from Appendix 2 under this section.

(d) An application for a minor revision of a Department delineation shall include the following:

1. The application fee required under N.J.A.C. 7:13-17;

2. One LURP-1 application form completed as described at N.J.A.C. 7:13-15.1(f);

3. One copy of the Department delineation that is the subject of the revision application;

4. A detailed written description of the proposed revisions to the flood hazard area design flood elevation, flood hazard area limit, floodway limit and/or other related

feature; and

5. Three copies of revised drawings, signed and sealed by a engineer or land surveyor, as appropriate, depicting the existing and the revised flood hazard area design flood elevations, flood hazard area limits, floodway limits and/or other related features. These drawings shall be of the same scale as the Department delineation that is the subject of the revision, unless otherwise requested by the Department.

(e) After reviewing an application for a minor delineation revision, the Department shall:

1. Notify the applicant that the application did not include all the material required at (d) above, or that supplemental information is needed to determine if the application complies with this chapter, and request the missing information. The Department may cancel the application if the missing information is not provided within 60 calendar days. When the requested material is received, the Department shall take one of the actions in (e)2 or 3 below;

2. Notify the applicant in writing that the application does not meet the requirements of this chapter, deny the application, and provide the technical reasons for this decision; or

3. Determine that the revision is accurate and necessary, in which case the Department shall revise the delineation as necessary and provide the applicant and the affected municipalities with a copy of the revised flood hazard area and/or floodway maps.

(f) Workload permitting, the Department shall make a final decision on an application for a minor delineation revision within 60 calendar days of receiving a complete application.

(g) An application for a major revision of a Department delineation shall include the following:

1. **All material listed in (d) above;**
2. **All supporting hydrologic and hydraulic calculations, which are necessary to demonstrate that the proposed revision meets the requirements of this chapter. The Flood Hazard Area Technical Manual, available from the Department at the address listed at N.J.A.C. 7:13-1.1(g), provides guidance in how to perform the calculations required for various delineation revisions;**
3. **A narrative that explains the submitted calculations and describes why each particular calculation or methodology was used; and**
4. **All maps, references and other supporting materials that were used to prepare the submitted calculations.**

(h) After reviewing an application for a major delineation revision, the Department shall:

1. **Notify the applicant that the application did not include all the material required at (g) above, or that supplemental information is needed to determine if the application complies with this chapter, and request the missing information. The Department may cancel the application if the missing information is not provided within 60 calendar days. When the requested material is received, the Department shall take one of the actions in (h)2 or 3 below;**
2. **Notify the applicant that the application does not meet the requirements of this section, deny the application, and provide the technical reasons for this decision; or**
3. **Determine that the revision is accurate and necessary and proceed with the**

revision according to (i) below.

(i) If the Department determines that a major delineation revision is accurate and necessary, the Department shall proceed with the revision as follows:

1. **The Department shall publish notice of its intent to revise the delineation in the New Jersey Register, one newspaper of local circulation and one newspaper of regional circulation (relative to the location of the project). This notice shall include:**
   - i. **The location of the delineation to be revised;**
   - ii. **The reason the Department intends to revise the delineation;**
   - iii. **An invitation for interested parties to submit written comments and to attend a public hearing to be held in one or more of the affected municipalities; and**
   - iv. **The mailing address and telephone number of a contact person within the Department who is able to discuss the proposed revision.**
2. **During the public hearing, the Department shall:**
   - i. **Explain the proposed revision, including any impacts the Department expects from revising the delineation; and**
   - ii. **Collect public comments.**
3. **Upon consideration of the available information and public comments, if the Department concludes that revising the delineation is in the best interest of public health, safety and welfare, the Department shall:**
   - i. **Revise the delineation as the Department deems necessary;**
   - ii. **Publish a description of the revision in the New Jersey Register, including a response to any public comments;**

iii. Publish a public notice describing the revision in one newspaper of local circulation and one newspaper of regional circulation (relative to the location of the project); and

iv. Provide the applicant and affected municipalities with a copy of the revised flood hazard area and/or floodway map (except in cases where the Department initiates the revision pursuant to N.J.A.C. 7:13-13.5).

(j) Workload permitting, the Department shall make a final decision on an application for a major delineation revision within 180 calendar days of receiving a complete application.

7:13-13.5 Revision or suspension of a Department delineation by the Department

(a) If the Department determines, independent of an application pursuant to N.J.A.C. 7:13-13.4, that an existing delineation underestimates the extent of the floodway and/or flood hazard area, and that it is in the best interest of public health, safety and welfare to revise a delineation, the Department shall do one of the following:

1. If the Department has sufficient topographic, hydrologic and hydraulic data to adequately revise the delineation, the Department shall initiate a revision as follows:

i. For a minor delineation revision as described at N.J.A.C. 7:13-13.4(b)1, the Department shall revise the delineation as necessary; or

ii. For a major delineation revision as described at N.J.A.C. 7:13-13.4(b)2, the Department shall follow the procedure described at N.J.A.C. 7:13-13.4(i); or

2. If the Department does not have sufficient topographic, hydrologic and hydraulic data to adequately revise the delineation, or if the Department determines that a

serious threat to public health, safety and welfare will exist if an existing delineation is allowed to remain in place, the Department shall initiate an emergency suspension of the delineation for a one-year period pursuant to (b) below. The purpose of this suspension is to allow the Department adequate time to acquire data necessary to accurately revise the delineation.

(b) To initiate an emergency one-year suspension of a delineation as described in (a)2 above, the Department shall:

1. Publish notice of its intent to suspend the delineation in the New Jersey Register, one newspaper of local circulation and one newspaper of regional circulation (relative to the location of the project). This notice shall include:

i. The location of the delineation to be suspended;

ii. The reason the Department is suspending the delineation; and

iii. A request for public comments regarding the proposed suspension and subsequent need for amendment of the suspended delineation.

2. The Department shall consider the portion of the delineation described in the notice to be suspended for a one-year period beginning with the publication date of the notice in the New Jersey Register.

3. The Department shall, within one year of the suspension date:

i. Revise the delineation in accordance with (a)1 above;

ii. Reinstate the delineation without revision, and explain why the delineation was found to be acceptable after suspension; or

iii. Take no action, in which case the delineation shall be automatically reinstated.

(c) During the suspended period described in (b)2 above, any application made under

this chapter shall not reference the flood hazard area and/or floodway of the suspended delineation. Applicants must instead rely on another delineation method to determine the extent of the flood hazard area and/or floodway as provided at N.J.A.C. 7:13-3. Furthermore, the Department shall review all valid verifications, general permits and individual permits issued for the flood hazard area of the suspended delineation and will suspend or terminate such approvals where necessary to protect public safety, in accordance with N.J.A.C. 7:13-14.

(d) The Department shall issue a revision of a delineation only for a section of water already promulgated by the Department. The Department shall add or remove a section of delineated water from Appendix 2 only through an amendment to this chapter.

(e) If the Department approves an individual permit under this chapter for an activity which alters the flood hazard area design flood elevation, flood hazard area limit and/or floodway limit of a regulated water, such as the construction of a flood control project, or the construction, modification or removal of a bridge or culvert, the Department shall automatically revise the delineation as necessary after the construction is completed. No public notice or hearing is necessary to revise the delineation in such a case.

SUBCHAPTER 14. TRANSFER, SUSPENSION AND TERMINATION OF AN APPROVAL

7:13-14.1 Transfer of an approval

(a) An approval authorized under this chapter (see N.J.A.C. 7:13-1.3) can be transferred to another person, provided:

1. The approval is valid;

2. The approval is not an emergency permit or an individual permit based on a hardship exception;

3. The approval is transferred to a person who currently owns the site or who is under contract to purchase the site that is the subject of the approval. A transfer to a contract purchaser shall become valid only upon the actual transfer of the site to the new owner; and

4. The Department determines that the transfer will not alter a basic condition upon which the original approval was granted or otherwise circumvent a requirement of this chapter as described in (b) below.

(b) The Department shall not transfer an approval if doing so would alter a basic condition or premise upon which the original approval was granted or would otherwise circumvent a requirement of this chapter. For example, an existing lot may be shaped in such a way that the owner must construct a road across a channel in order to access the rear portion of the lot in order to construct a house. In such a case, the Department would consider whether there is another means of accessing the site that would reduce the amount of disturbance to the channel, or which would avoid crossing the channel altogether, such as crossing through a neighboring property, as provided at N.J.A.C. 7:13-10.1. If the owner of a lot demonstrates that there is no feasible means of accessing the rear portion of the lot without crossing the channel, the Department would authorize a road crossing provided all other requirements of this chapter are met. However, if the owner of the lot first obtains an individual permit for such a road crossing, and then sells

the lot to an adjacent land owner who already has a roadway across the channel, the basic premise upon which the individual permit was granted no longer exists. Therefore, the Department would not approve the transfer of the approval to the new owner in such a case.

(c) If the Department approves a regulated activity and the subject property is subsequently sold to a new owner, the new owner must obtain a transfer of said approval before commencing or continuing any work authorized under the approval. Should the new owner engage in a regulated activity without the prior transfer of the approval, the approval shall be void and the new owner shall be in violation of this chapter and subject to enforcement action pursuant to N.J.A.C. 7:13-19.

(d) An applicant seeking to transfer an approval to a new owner (or contract purchaser) shall submit the following to the Department:

1. **The application fee for a transfer as described at N.J.A.C. 7:13-17; and**
2. **A written request to transfer the approval, which includes the following:**
   - **i. The notarized signature of each original owner of the site, or any legal designee thereof;**
   - **ii. The name and address of each new owner (or contract purchaser) of the site;**
   - **iii. A list of any adjacent property already owned by the new owner(s); and**
   - **iv. The date the property will be or has been transferred to the new owner(s).**

(e) Workload permitting, the Department shall make a final decision on an application to transfer an approval within 30 calendar days of receiving a complete application.

(f) A person receiving a transferred approval shall comply with all conditions of the transferred approval.

7:13-14.2 Suspension of an approval

(a) The following are causes for the Department to suspend an approval authorized under this chapter:

1. **The permittee has not complied with a condition of the approval;**
2. **The permittee has undertaken activities onsite that are in violation of this chapter;**
3. **The permittee has misrepresented or failed to fully disclose all relevant facts pertaining to the approval;**
4. **The approval was based on false or inaccurate information; or**
5. **The approval has caused significant flooding or unanticipated adverse environmental impacts which have become apparent during the performance of the regulated activities. Examples of unanticipated adverse environmental impacts include excessive erosion, destabilization or undue migration of the channel, and destruction of biota, habitat or vegetation not authorized by the permit.**

(b) If the Department determines that cause exists to suspend an approval for a reason listed at (a) above, the Department shall provide written notice of suspension by certified mail to the permittee. This notice shall:

1. **State the reasons the Department is suspending the approval;**
2. **Order the permittee to immediately cease all regulated activities onsite; and**
3. **Notify the permittee of the right to make a request, within 10 calendar days of receipt of the notice, for a meeting with the Department.**

(c) Within 30 calendar days after receipt of a notice of suspension under (b) above, the permittee shall submit a plan to the Department proposing to remedy the reasons for the

suspension as stated in the notice. Such a plan shall be implemented immediately upon approval by the Department and shall propose to remedy all noncompliance and unanticipated impacts within 60 calendar days of approval.

(d) Within 15 calendar days after the Department receives a complete remediation plan under (c) above, the Department shall:

1. **Approve the remediation plan with conditions where necessary, and reinstate the approval with revisions where necessary to achieve compliance with this chapter; or**
2. **Determine that the remediation plan is inadequate to achieve compliance and notify the applicant of intent to terminate the approval pursuant to N.J.A.C. 7:13-14.3(b).**

(e) Nothing in this section shall prevent the Department from taking enforcement action pursuant to N.J.A.C. 7:13-19.

7:13-14.3 Termination of an approval

(a) The following are causes for the Department to terminate an approval which has been suspended under N.J.A.C. 7:13-14.2:

1. **The permittee has not ceased all regulated activities pursuant to N.J.A.C. 7:13-14.2(b)2;**
2. **The permittee has not submitted a remediation plan pursuant to N.J.A.C. 7:13-14.2(c);**
3. **The Department has determined that the remediation plan submitted pursuant to N.J.A.C. 7:13-14.2(c) is inadequate to achieve compliance; or**

4. The permittee fails to remedy non-compliance with a condition of the approval.

(b) If the Department determines that cause exists to terminate an approval for a reason listed at (a) above, the Department shall provide written notice of intent to terminate the approval by certified mail to the permittee. The permittee shall cease all regulated activities immediately upon receiving the notice. Within 10 calendar days after receiving the notice, the permittee shall:

1. Submit a plan to the Department proposing to remedy the causes for the termination as stated in the notice; or

2. Request an adjudicatory hearing under N.J.A.C. 7:13-18.

(c) If the permittee has not taken one of the actions required at (b) above within 10 calendar days after receiving the Department's notice, the approval shall automatically terminate and the permittee shall remedy any violations of this chapter and/or unanticipated adverse impacts to flooding or the environment caused by the project, and shall restore the site to its pre-activity condition where feasible. Once the impacts or violations are remedied, the Department may reinstate the permit or require the applicant to apply for a new permit.

(d) Nothing in this section shall prevent the Department from taking enforcement action pursuant to N.J.A.C. 7:13-19.

SUBCHAPTER 15. APPLICATION REQUIREMENTS

7:13-15.1 General provisions

(a) For each approval being sought under this chapter, the applicant shall provide all

information necessary for the Department to determine if the requirements of this chapter are satisfied. The application requirements for each type of approval are detailed in the sections pertaining to each approval under this chapter. However, the Department also provides application checklists, which include guidance and detail in order to assist applicants through the review and approval process. For example, the application checklist may recommend that the document to be folded or prepared in a certain manner to facilitate processing. To minimize application processing time, an applicant should carefully review the application checklist and verify that the application includes all required information. Checklists are provided at www.nj.gov/dep/landuse or can be obtained from the Department at the address listed in N.J.A.C. 7:13-1.1(f).

(b) If a proposed project requires more than one approval from the Division of Land Use Regulation, the Department encourages, but does not require, the applicant to submit one consolidated application for all the approvals. For example, an applicant wishing to construct a private residence can use one application to simultaneously apply for both an individual permit under this chapter and a freshwater wetlands permit under N.J.A.C. 7:7A. If an application requests more than one approval, the combined application shall comply with the application requirements of each permit program. A reduction in fees is also applied to joint applications as described at N.J.A.C. 7:13-17.1(e).

(c) An applicant is encouraged to keep copies of the data used to complete an application, the information submitted to the Department during the application review process, and all permits, approvals and Department-approved drawings for at least 10 years after the Department issues a decision.

(d) All calculations submitted under this chapter shall be performed at the applicant's

expense and shall be signed and sealed by an engineer. The Flood Hazard Area Technical Manual, available from the Department at the address listed at N.J.A.C. 7:13-1.1(g), provides examples and guidance for performing the calculations that are included in this chapter. For example, while the calculations required for determining the volume of flood storage that a project displaces are found at N.J.A.C. 7:13-10.4, the Flood Hazard Area Technical Manual provides samples of the different formats in which these calculations are often performed, as well as recommendations and guidance designed to facilitate their execution.

(e) All drawings submitted under this chapter shall be signed and sealed by an engineering, surveyor or architect as appropriate, unless the following apply, in which case the applicant can prepare his or her own drawings:

1. **The applicant solely proposes one or more of the following activities on his or her own property:**
    i. **The construction of a private residence, which is not being constructed as part of a larger residential subdivision; and/or**
    ii. **The construction of a building appurtenant to a private residence, such as a garage, barn or shed; and**
2. **No topography or calculations are necessary to demonstrate compliance with the requirements of this chapter.**

(f) All LURP-1 application forms submitted under this chapter shall be completed as directed by the form for the type of application being requested. The LURP-1 form requires basic information regarding the applicant and the proposed activities, such as the name and address of the applicant and any designated agents, the specific location of the

project, the types of applications being requested and a brief description of the activities being proposed. Where signatures are required on the form, original signatures shall be provided. The form also requires State plane coordinates for the approximate center of the site, except as provided at (f)1 and 2 below. The accuracy of the State plane coordinates shall be within 50 feet of the actual center point of the site. For assistance in determining the State plane coordinates for a site contact the Department's Geographic Information (GIS) Office at (609) 777-0672.

1. **State plane coordinates are not required if a project consists solely of the following activities:**
    i. **The construction of a private residence, which is not being constructed as part of a larger residential subdivision; and/or**
    ii. **The construction of a building appurtenant to a private residence, such as a garage, barn or shed.**
2. **State plane coordinates shall be provided for linear projects such as railroads, roadways and utility lines as follows:**
    i. **For a linear project of one-half mile or more in length, the State plane coordinates shall include the coordinates for the end points of the project and the coordinates for points located at 1,000 foot intervals along the entire length of the project; and**
    ii. **For a linear project of less than one-half mile in length, the State plane coordinates shall include the coordinates for the end points of the project.**

7:13-15.2 Pre-application conference

(a) A pre-application conference is a meeting between the Department and a prospective applicant to discuss the applicant's project. An applicant may request a pre-application conference for any project. A pre-application conference is highly recommended for large and/or complicated projects as it enables the Department to inform an applicant of the application procedures and standards that will apply to the project. There is no fee for a pre-application conference.

(b) A pre-application conference can be requested by telephone, electronic mail or by writing to the address listed at N.J.A.C. 7:13-1.1(f). Such a request shall be directed to the engineering section chief or review engineer responsible for the county wherein the project is located and shall include a description of the project.

(c) Prior to scheduling a pre-application conference, the Department shall require the applicant to submit a set of drawings depicting the proposed development and an application report, as described at N.J.A.C. 7:13-15.3, if the Department determines that such information is necessary to properly advise the applicant regarding the proposed project and application procedures. The information contained in an application report enables the Department to be better prepared for a pre-application conference, which often saves the applicant and the Department both time and effort.

(d) At a pre-application conference, Department staff will discuss various requirements of this chapter as they relate to a project and may offer guidance to assist the applicant. However, no discussion or guidance offered at a pre-application conference shall compel the Department to approve or deny an application.

(e) If a project requires approvals from multiple Department programs, the applicant is advised to contact the Office of Pollution Prevention and Right to Know at (609) 292-3600

before filing an application under this chapter. The Office of Pollution Prevention and Permit Coordination can help the applicant coordinate the various applications.

(f) If an applicant has reason to believe that construction is proposed in freshwater wetlands or transition areas, the Department encourages the applicant to obtain a freshwater wetlands letter of interpretation under the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A-8 prior to the pre-application conference.

(g) Workload permitting, the Department shall hold a pre-application conference within three weeks of receiving a request that complies with this section. The Department is not obligated to hold a pre-application conference with a prospective applicant if the Department determines that the questions raised can be adequately addressed by telephone.

7:13-15.3 Application report

(a) An application report required under this chapter shall include the following (photocopies of maps and documents are acceptable, except for the LURP-1 application form, which must include original signatures):

1. **A complete written description of the project and all proposed activities;**
2. **One original LURP-1 application form, completed as described at N.J.A.C. 7:13-15.1(f);**
3. **One copy of a USGS quad map with the site clearly outlined;**
4. **One copy of a municipal tax map with the site clearly outlined;**
5. **One copy of a Department flood hazard area map or FEMA flood insurance rate map with the site clearly outlined to scale, if such mapping exists;**

6. One copy of each previous approval received from the Department concerning the site, if such approvals exist; and

7. One set of color photographs depicting the entire project area, mounted on 8 1/2-inch by 11-inch paper and accompanied by a map showing the location and direction from which each photograph was taken. Copies of photographs are acceptable provided they are color copies. Black and white copies of photographs are not acceptable.

7:13-15.4 Engineering report

(a) An engineering report required under this chapter shall include the following, as applicable:

1. The signature and seal of an engineer;

2. The name, mailing address and telephone number of the engineer, as well as any other person designated by the engineer to answer questions about the report;

3. All supporting hydrologic, hydraulic, flood storage volume, stormwater and structural calculations, which are necessary to demonstrate that the proposed application meets the requirements of this chapter;

4. A narrative that explains the submitted calculations and describes why each particular calculation or methodology was used;

5. All maps, references and other supporting materials that were used to prepare the submitted calculations;

6. In the case of a verification application, all flood maps, drainage area maps and other material used to determine the flood hazard area and/or floodway limits;

7. In the case of an individual permit application, the total area of impervious surface proposed and the total land area that will be disturbed; and

8. In the case of an individual permit application for which stormwater management is required pursuant to N.J.A.C. 7:13-11.2, the following information where applicable:

i. An explanation of how nonstructural stormwater management strategies have been maximized on site, as required at N.J.A.C. 7:8-5.3;

ii. A demonstration of how the project meets the groundwater recharge standards at N.J.A.C. 7:8-5.4(a)2;

iii. A table which compares existing and proposed stormwater discharges for the two-year, 10-year and 100-year storm in order to demonstrate compliance with the runoff quantity standards at N.J.A.C. 7:8-5.4(a)3; and

iv. An explanation of how the project meets the water quality standards at N.J.A.C. 7:8-5.5.

7:13-15.5 Environmental report

(a) An environmental report required under this chapter shall include the following, as applicable:

1. A narrative that describes the proposed design and the construction techniques that will be used;

2. Maps (such as freshwater wetlands maps and USDA soil surveys) which provide an environmental inventory of the site; and

3. An analysis of any potential adverse impacts to the following resources and a

detailed description of how potential adverse impacts shall be minimized. This analysis shall include all temporary and permanent adverse impacts of each proposed activity, whether onsite or offsite, as follows:

i. Channels: compliance with the requirements of N.J.A.C. 7:13-10.1, as well as any anticipated effects on the size, shape and characteristics of existing channels, including low-flow aquatic passage, shall be addressed;

ii. Riparian zones: compliance with the requirements of N.J.A.C. 7:13-10.2 shall be addressed;

iii. Fishery resources: compliance with the requirements of N.J.A.C. 7:13-10.5 shall be addressed.

iv. Threatened or endangered species: if a survey for threatened or endangered species is required under N.J.A.C. 7:13-10.6, it shall meet the requirements of (c) below; and

v. Regulated waters: the effects on water quality due to stormwater runoff, exposure of acid producing soils, and potential for erosion and turbidity shall be addressed.

(b) If it is determined that a proposed project is likely to cause an adverse impact to any resource listed in (a)3 above, the environmental report shall include the following material, in addition to the information required at (a) above:

1. A justification for the project, including an explanation of why the proposed structures and their locations are the most appropriate for the site and how the proposed design minimizes environmental damage;

2. An analysis of alternatives to the proposed activity, including the no-build

alternative;

3. **A description of all measures to be taken to reduce temporary and permanent detrimental impacts to each resource listed at (a)3 above, whether onsite or offsite; and**
4. **A plan to mitigate to effects of all unavoidable adverse impacts.**

(c) If the Department requires a survey for threatened or endangered species under N.J.A.C. 7:13-10.6(d), the survey shall be performed by a person with education and experience in wildlife biology, zoology and/or botany, as appropriate, and shall include the following:

1. **The name, mailing address and qualifications of all persons participating in the survey;**
2. **The acreage of the surveyed area;**
3. **A USGS quad map with the surveyed area for each habitat outlined;**
4. **A description of each habitat and cover type onsite including vegetation, hydrology, soils and natural communities. These habitats shall be assessed for suitability and compatibility to the life history of the species being investigated. If no threatened or endangered species are observed, a discussion of the site's suitability for such species shall be provided;**
5. **The date and time of the investigation (including total number of hours spent by each individual for species observation);**
6. **The number of observers present on the site at any one time, including their location on the site relative to one another;**
7. **Site conditions during the survey, such as precipitation, temperature, wind speed**

and direction, artificial or natural noise, and nearest onsite or offsite human activity or development; and

8. If the survey reveals the presence or evidence of a threatened or endangered species, detailed information regarding each sighting, including:

i. Whether the subject was sighted directly or identified by call, track, scat, remains or other indirect evidence of presence;

ii. The date(s) and time(s) of each such sighting or discovery of evidence;

iii. The relative age and condition of any indirect evidence observed and its location on the property;

iv. A description of the techniques and methodologies employed by the observer during the site investigation;

v. If an animal species is observed directly, the number of each species observed, likely age, observed activity, gender, location on or near the site, and proximity to the observer at each sighting; and

vi. If a plant species is observed directly, the number of each species observed and its location on or near the site.

SUBCHAPTER 16. PUBLIC NOTICE OF APPLICATIONS

7:13-16.1 General requirements for public notice of applications

(a) This subchapter sets forth the requirements for providing public notice of an application for a verification and/or an application for an individual permit. Public notice is not required for an application for an applicability determination, permit-by-rule,

general permit, emergency permit or the revision or transfer of an approval.

(b) A person seeking a verification and/or an individual permit shall provide public notice of the application to the persons specified in this subchapter. The public notice shall be provided no more than 30 calendar days prior to the submittal of the application.

(c) If a person provides public notice for an application, and the Department determines that the application is incomplete, the following shall apply:

1. **If the applicant submits the material requested by the Department to render the application complete within 90 calendar days of the date that the public notice was provided for the application, and the Department determines that the revised application is substantially the same as the original application, the Department shall consider the original public notice to be valid.**
2. **If the applicant submits the material requested by the Department more than 90 calendar days after the date that the public notice was provided, or if the Department determines that the revised application is substantially different from the original application, the applicant must provide a new public notice of the application.**

(d) If a person concurrently applies for a verification and an individual permit, the joint application shall meet the public notice requirements for both a verification application under N.J.A.C. 7:13-16.2 and an individual permit application under N.J.A.C. 7:13-16.3.

(e) Except in cases where newspaper notice is allowed pursuant to N.J.A.C. 7:13-16.2(a)3, 16.3(c) and 16.3(d), the public notice required at N.J.A.C. 7:13-16.2 and 16.3 shall be provided by certified mail (return receipts requested) and shall be documented pursuant to N.J.A.C. 7:13-16.4.

7:13-16.2 Public notice requirements for an application for a verification

(a) An applicant for a verification based on Methods 4, 5 or 6, as provided at N.J.A.C. 7:13-3.4 and 3.5, shall provide public notice via certified mail, in the manner described at N.J.A.C. 7:13-16.6, as follows:

1. **Three copies to the municipal clerk in each municipality in which the site is located;**
2. **One copy to the county clerk in each county in which the site is located; and**
3. **One copy to each owner of property located within 200 feet of the property boundary of the site. If a property within 200 feet of the property boundary of the site is located outside the flood hazard area, newspaper notice pursuant to N.J.A.C. 7:13-16.5 can be provided for that property instead of certified mail notice.**

7:13-16.3 Public notice requirements for an application for an individual permit

(a) Except as provided in (b), (c) and (d) below, an applicant for an individual permit shall provide public notice via certified mail, in the manner described at N.J.A.C. 7:13-16.6, to the following:

1. **Three copies to the municipal clerk in each municipality in which the site is located;**
2. **Three copies to the municipal clerk in any municipality located within one mile of the site;**
3. **One copy to the county clerk in each county in which the site is located;**

4. **One copy to the local Soil Conservation District if the project will disturb at least 5,000 square feet of land; and**
5. **One copy to each owner of property located within 200 feet of the property boundary of the site, except as provided in (c) below.**

(b) Public notice does not need to be provided under (a) above if the project consists solely of the following activities:

1. **The construction of a private residence, which is not being constructed as part of a larger residential subdivision; and/or**
2. **The construction of a building appurtenant to a private residence, such as a garage, barn or shed.**

(c) Public notice to the owner of a property located within 200 feet of the property boundary of a site under (a)5 above may be satisfied via newspaper notice pursuant to N.J.A.C. 7:13-16.5 instead of via certified mail in the following circumstances:

1. **To any property that is located outside the flood hazard area and at least 500 feet from all proposed regulated activities onsite; and**
2. **If the application is solely for a linear project of one-half mile or more in length, to any property that is located more than 200 feet from any aboveground structure that is part of the project. Examples of aboveground structures include pumping stations, treatment plants, power substations and elevated roadways or railroads, but not telephone poles or similar utility line support structures.**

(d) An application for an individual permit for utility line repair or replacement pursuant to N.J.A.C. 7:13-11.9(f) is not subject to the public notice requirements of (a) above. Instead, the applicant shall provide public notice of the individual permit application and

of each repair and replacement as follows:

1. **At the time the application is submitted to the Department, the applicant shall provide newspaper notice that meets the requirements at N.J.A.C. 7:13-16.5;**
2. **At least five working days before performing any repair or replacement, the applicant shall provide a written description of each proposed activity (including the method and duration of construction and the location of each proposed activity on a USGS quad map) to the following:**
   i. **The Department, either at the address listed at N.J.A.C. 7:13-1.1(f) or by fax or electronic mail if prearranged with the Department;**
   ii. **The municipal clerk for each municipality in which the work is located, via certified mail;**
   iii. **The municipal engineer for each municipality in which the work is located, via certified mail; and**
   iv. **The owners of each property on which the applicant will perform the work, via certified mail.**

7:13-16.4 Documenting public notice of an application

(a) For applications that require public notice under this subchapter, the following shall be submitted to the Department to demonstrate that public notice was provided:

1. **The original certified U.S. postal receipt for each public notice that was mailed, mounted on 8 1/2-inch by 11-inch paper. All certified mail shall be sent with return receipts requested. An applicant shall submit either the white postal receipt or the green return receipt card with an application. However, the green cards, if not sent**

with the application, shall be sent collectively to the Department once they are received from the post office by the applicant;

2. A list of the persons to whom public notice was mailed, as follows:

i. A certified list of all property owners within 200 feet of the site (including name, mailing address, lot and block) prepared by the municipal government for each municipality in which the project is located; and

ii. The mailing address of each public entity notified; and

3. A copy of any newspaper notice provided under N.J.A.C. 7:13-16.5.

7:13-16.5 Newspaper notice

(a) Newspaper notice required for an application under this chapter shall consist of either a legal notice or a display add (at the applicant's discretion) published in one newspaper of local circulation and one newspaper of regional circulation (relative to the location of the project). The newspaper notice shall include:

1. The mailing address and telephone number of the Department, as listed at N.J.A.C. 7:13-1.1(f);

2. The name and mailing address of the applicant;

3. The type of approval sought from the Department and a description of any proposed activities on site; and

4. The location of the site, including a street address, the name of any regulated water within or adjacent to the site, and a list of each lot, block, municipality and county involved in the project.

7:13-16.6 Contents of public notice of an application

(a) Except for the newspaper notice provided under N.J.A.C. 7:13-16.5, public notice required under this subchapter shall include the following:

1. **A copy of the completed LURP-1 application form that was submitted to the Department for the application;**
2. **A cover letter as follows:**
   i. **For an application for a verification, the letter set forth at (c) below;**
   ii. **For an application for an individual permit, the letter set forth at (d) below; and**
   iii. **For a joint verification and individual permit application, the letter set forth at (e) below; and**
3. **If an application includes a request for a hardship exception under N.J.A.C. 7:13-9.8, the letter required under (a)2 above shall also include the following:**
   i. **A statement that a hardship exception is being requested;**
   ii. **The nature of the hardship; and**
   iii. **The citation and subject matter of each requirement in this chapter for which the hardship exception is requested.**

(b) Where public notice is required under this subchapter to be sent to a municipal or county clerk, the applicant shall send three copies of the public notice, accompanied by a letter requesting that the clerk keep one copy for public inspection, and distribute one copy of the public notice to the planning board and one copy to the environmental commission if any.

(c) The letter required in (a)2 above for an application for a verification shall state:

This letter is to notify you that an application for a flood hazard area verification will be submitted to the State of New Jersey Department of Environmental Protection (Department) for the site described on the attached application form. The Department regulates construction within flood hazard areas and riparian zones adjacent to certain waters. This application is a request for the Department to verify the extent of these areas on the subject property. A flood hazard area verification does not approve any construction. A separate application must be made to the Department if regulated activities are proposed within these areas. If you have any comments or questions regarding this application, please write to the Department at the following address and include a copy of the first page of the attached application form. Attn: Engineering Section Chief for (the county or counties where the property that is the subject of the application is located)State of New Jersey Department of Environmental Protection Division of Land Use Regulation P.O. Box 439 Trenton, New Jersey 08625-0439

Your comments must be sent within 15 calendar days of your receipt of this letter to ensure that the Department will be able to consider your concerns during its review of this application. You can submit comments after this date but the Department may not be able to address your concerns. You can also contact the Department by telephone at (609) 292-0060 and can obtain general information about the flood hazard area program at the following website: www.nj.gov/dep/landuse.

(d) The letter required in (a)2 above for an application for an individual permit shall state: This letter is to notify you that an application for a flood hazard area permit will be submitted to the State of New Jersey Department of Environmental Protection (Department) for the project described on the attached application form. A flood hazard

area permit is required for this project because some or all of the work is proposed in a flood hazard area or in a riparian zone. If you have any comments or questions regarding this application, please write to the Department at the following address and include a copy of the first page of the attached application form: Attn: Engineering Section Chief for (the county or counties where the property that is the subject of the application is located) State of New Jersey Department of Environmental Protection Division of Land Use Regulation P.O. Box 439 Trenton, New Jersey 08625-0439

Your comments must be sent within 15 calendar days of your receipt of this letter to ensure that the Department will be able to consider your concerns during its review of this application. You can submit comments after this date but the Department may not be able to address your concerns. You can also contact the Department by telephone at (609) 292-0060 and can obtain general information about the flood hazard area program at the following website: www.nj.gov/dep/landuse.

(e) The letter required in (a)2 above for a joint verification and individual permit application shall state:

This letter is to notify you that an application for a flood hazard area verification will be submitted to the State of New Jersey Department of Environmental Protection (Department) for the property described on the attached application form. The Department regulates construction within flood hazard areas and riparian zones adjacent to certain waters. This application is a request for the Department to verify the extent of these areas on the subject property. In addition, an application for a flood hazard area permit will also be submitted to the Department for the project described on the attached application form. A flood hazard area permit is required for this project because some or

all of the work is proposed in a flood hazard area or in a riparian zone. If you have any comments or questions regarding this application, please write to the Department at the following address and include a copy of the first page of the attached application form: Attn: Engineering Section Chief for (the county or counties where the property that is the subject of the application is located) State of New Jersey Department of Environmental Protection Division of Land Use Regulation P.O. Box 439 Trenton, New Jersey 08625-0439 Your comments must be sent within 15 calendar days of your receipt of this letter to ensure that the Department will be able to consider your concerns during its review of this application. You can submit comments after this date but the Department may not be able to address your concerns. You can also contact the Department by telephone at (609) 292-0060 and can obtain general information about the flood hazard area program at the following website: www.nj.gov/dep/landuse.

SUBCHAPTER 17. APPLICATION FEES

7:13-17.1 Application fees

(a) At Table E below, this subchapter sets forth the fees for an application for the following:

1. **A verification, pursuant to N.J.A.C. 7:13-6;**
2. **An authorization under a general permit, pursuant to N.J.A.C. 7:13-8, except for general permits 1 and 6, which have no application fee;**
3. **An individual permit, pursuant to N.J.A.C. 7:13-9 though 11;**
4. **A revision of an approval, pursuant to N.J.A.C. 7:13-13; and**

5. A transfer of an approval, pursuant to N.J.A.C. 7:13-14.

(b) There is no application fee for the following:

1. An applicability determination, pursuant to N.J.A.C. 7:13-5;

2. A permit-by-rule, pursuant to N.J.A.C. 7:13-7;

3. An authorization under general permit 1, pursuant to N.J.A.C. 7:13-8.3

4. An authorization under general permit 6, pursuant to N.J.A.C. 7:13-8.8; and

5. An emergency permit, pursuant to N.J.A.C. 7:13-12.

(c) The total application fee for a given project is calculated by summing the following:

1. The fee for each project element to be covered by an individual permit (if any);

2. The fee for the appropriate verification (if any); and

3. The fee for any general permit authorization, revision or transfer for which an application is submitted.

(d) All application fees shall be paid by money order, check (personal, bank, certified or attorney) or government purchase order. Fees shall be made payable to the "Treasurer, State of New Jersey".

(e) If a project requires approval under this chapter, and also requires Coastal Area Facilities Review Act (CAFRA), waterfront development, coastal wetlands and/or freshwater wetlands approvals issued under the respective rules for these regulatory programs, the application fee for the project shall be calculated as follows:

1. The total application fee for each regulatory program's approvals shall be calculated separately. For example, if a project requires a flood hazard area permit, a flood hazard area verification and three freshwater wetlands approvals, the total fee for all flood hazard area approvals shall be computed separately from

the total fee for all freshwater wetlands approvals; and

2. The application fee for the project shall be the sum of the following, provided all applications are submitted to the Department simultaneously:

i. The highest total application fee among the regulatory programs calculated under (e)1 above; and

ii. Seventy-five percent of the total application fee for each additional regulatory program calculated under (e)1 above.

(f) Any fee required under this chapter that is subject to N.J.A.C. 7:1L, Payment Schedule for Permit Application Fees, shall be payable in installments in accordance with N.J.A.C. 7:1L.

(g) For the purpose of determining the application fee for the review of a linear project, such as a verification of a flood hazard area limit or an individual permit for a bank stabilization project where a review of calculations is necessary, the length of the feature shall be measured along the centerline of the channel. Along intermittent streams and impounded areas such as lakes or ponds where no channel is discernible, the length of the channel (for calculating fees under this section) shall be determined by measuring the approximate centerline of the feature.

Table E
APPLICATION FEES

Verification (N.J.A.C. 7:13-6)

Type of Verification	**Fee**
Method 1 (Department delineation method)	$500.00
Method 2 (FEMA tidal method)	$500.00
Method 3 (FEMA fluvial method)	$500.00
Method 4 (FEMA hydraulic method)	$3,000 plus $300.00 per each 100 linear feet of channel (or portion thereof)
Method 5 (Approximate method)	$500.00
Method 6 (Calculation method)	$3,000 plus $300.00 per each 100 linear feet

	of channel (or portion thereof)

Note: The $500.00 fee for methods 1, 2, 3 and 5 above does not apply if the verification application is submitted concurrently with an application for any general permit authorization for which verification of the flood hazard area is required to determine compliance with the general permit; or with an individual permit application solely for the construction of one private residence (which is not being constructed as part of a larger residential subdivision), the construction of a residential addition and/or the construction of a building appurtenant to a private residence, such as a garage, barn or shed.

General Permit Authorization (N.J.A.C. 7:13-8)

Type of General Permit	**Fee**
General permits 2A, 2B, 2C, 2D, 2E, 2F, 2G, 3, 4, 5, 7, 8, 9 and 10	$500.00
General permit 1 and 6	No fee

Individual permit (N.J.A.C. 7:13-9 through 11)

Project Element	**Qualifier**	**Fee**
Bank stabilization, reestablishment, or protection	Review of hydrologic and/or hydraulic calculations necessary	$3,000 plus $300.00 per each 100-foot segment of channel (or portion thereof)
	Review of hydrologic and/or hydraulic calculations not necessary	$1,000
Bridge, culvert, footbridge, low dam or other water control structure (including up to 200 feet of channel modification if necessary for the placement of the water control structure)	Review of hydrologic and/or hydraulic calculations necessary (except as noted below)	$4,000
	Review of hydrologic and/or hydraulic calculations necessary for a bridge or culvert that provides access to one private residence (which is not being constructed as part of a larger residential subdivision)	$2,000
	Review of hydrologic and/or hydraulic calculations not necessary	$1,000
Channel modification	Review of hydrologic and/or hydraulic calculations necessary	$3,000 plus $300.00 per each 100-foot segment of channel (or portion thereof)
	Review of hydrologic and/or hydraulic calculations not necessary	$1,000
Excavation, fill and/or grading	Review of net fill calculations necessary (except as noted below)	$4,000
	Review of net fill calculations not necessary and project consists solely of excavation, fill and/or grading	$1,000

	Review of net fill calculations necessary and project consists solely of one private residence that is not being constructed as part of a larger residential subdivision (including any appurtenant structure such as a garage, barn or shed)	No fee
	Review of net fill calculations necessary for a bridge or culvert that is a major element	No fee
Hardship exception	Request associated with one private residence that is not being constructed as part of a larger residential subdivision (including any appurtenant structure such as a garage, barn or shed)	No fee
	All other requests	$4,000
Private residence	One private residence that is not being constructed as part of a larger residential subdivision (including any appurtenant structure such as a garage, barn or shed)	$1,000
	Addition and/or new appurtenant structure to an existing private residence, such as a garage, barn or shed	$1,000
Retaining wall	Extends 4 feet or more above the ground	$4,000
	Extends less than 4 feet above the ground	$1,000
Sediment removal from a channel	Each sediment removal project	$1,000 plus $100.00 per each 100-foot segment of channel (or portion thereof) not to exceed $4,000
Stormwater discharge structure	Each stormwater discharge structure (including any conduit outlet protection and/or conveyance channel)	$1,000
Utility line	Each crossing	$1,000
Any other activity	Each project element	$1,000

Additional Fee if permit is for a Major Development pursuant to N.J.A.C. 7:8-1.2

Qualifier	Area of Impact	Fee
Base fee for any major development	Any size project	$2,000
Additional fee for the review of groundwater recharge calculations (pursuant to N.J.A.C. 7:8-5.4(a)2) per area of land disturbed by the project	Up to 3 acres	$500
	More than 3 acres and up to 10 acres	$1,000
	More than 10 acres and up to 100 acres	$2,000
	More than 100 acres	$4,000
Additional fee for the review of runoff quantity calculations (pursuant to N.J.A.C. 7:8-5.4(a)3) per area of	Up to 3 acres	$500
	More than 3 acres and up to 10 acres	$1,000
	More than 10 acres and up to 100 acres	$2,000

land disturbed by the project	More than 100 acres	$4,000
Additional fee for the review of water quality calculations (pursuant to N.J.A.C. 7:8-5.5) per area of impervious surface under review	Up to 1 acre	$500
	More than 1 acre and up to 3 acres	$1,000
	More than 3 acres and up to 10 acres	$2,000
	More than 10 acres	$4,000
Additional fee if any vegetation is removed within a Special Water Resource Protection Area (pursuant to N.J.A.C. 7:8-5.5(h))	Any size project	$2,000

Revision of a verification, general permit authorization or individual permit (N.J.A.C. 7:13-13.1 through 13.3)

Qualifier	Fee
Each major revision	Fifty percent of the original permit application fee for each project element to be revised
Each minor revision	$200.00 per element to be revised

Revision of a Department delineation (N.J.A.C. 7:13-13.4)

Qualifier	Fee
Each major revision	$3,000 plus $300.00 per each 100-foot segment of channel (or portion thereof) to be re-delineated
Each minor revision	$200.00

Transfer an approval (N.J.A.C. 7:13-14.1)

Qualifier	Fee
Per approval transferred	$200.00

(h) The Department shall annually adjust the fees in this subchapter. The Department shall calculate a fee adjustment factor annually, and multiply each fee by that fee adjustment factor. The Department shall calculate the fee adjustment factor by taking the following steps:

1. Project the total amount of money required to fund the program in the coming year. This projection shall be based upon the following data:

i. The number and type of Department staff required to perform each activity for which fees are charged;

ii. The total salaries of those staff members;

iii. The cost of fringe benefits for those staff members, calculated as a percentage of salaries, which percentage is set by the New Jersey Department of the Treasury based upon costs associated with pensions, health benefits, workers' compensation, disability benefits, unused sick leave, and the employer's share of FICA;

iv. Indirect costs attributable to those staff members. "Indirect costs" means costs incurred for a common or joint purpose, benefiting more than one cost objective, and not readily assignable to the cost objective specifically benefited without effort disproportionate to the results achieved. Indirect costs shall be calculated at the rate negotiated annually between the Department and the United States Environmental Protection Agency, multiplied by the total of salaries and fringe benefits;

v. Operating expenses (including, without limitation, expenses for postage, telephone, travel, supplies and data system management) attributable to those staff members; and

vi. The budgeted annual cost of legal services rendered by the Department of Law and Public Safety, Division of Law, in connection with the program.

2. Project the total amount to be available from sources other than fees, such as State appropriations or Federal grants;

3. Subtract the amount in (h)2 above from the amount in (h)1 above. The remainder is the fee revenue necessary for the coming year;

4. Divide the fee revenue necessary for the coming year by the fee revenue which was necessary for the current year;

5. Divide the volume of applications the Department received in the current year by the volume it expects to receive in the coming year. In projecting the expected volume of applications, the Department shall consider the following factors:

i. The volume of applications received in previous years;

ii. Based on (h)5i above, any trends toward an increasing or decreasing volume of applications;

iii. Information indicating a trend toward increasing or decreasing construction activity in various areas of the State; and

iv. Other data concerning economic trends reasonably likely to influence the volume of applications; and

6. Multiply the number provided in (h)5 above by the number provided in (h)4 above. This result is the fee adjustment factor.

(i) Each year, the Department shall prepare an Annual Flood Hazard Area Control Act Fee Schedule Report. Promptly after completing the report, the Department shall publish in the New Jersey Register a notice of opportunity for public input setting forth the adjusted fees. The notice shall state that the report is available and direct interested persons to contact the Department for a copy of the report and to provide comments within 45 calendar days of the notice date. The Department shall promptly provide a copy to each person requesting a copy. The Department will evaluate the comments submitted and publish in the New Jersey Register its findings and the final adjusted fees with their operative dates in a notice of administrative change.

(j) The Department will not make the adjustment of fees provided in (h) above or prepare the report described in (i) above for any one-year period ending June 30, if in that period

the Department proposes or promulgates amendments to any fees for applications under this chapter.

SUBCHAPTER 18. REQUESTS FOR ADJUDICATORY HEARINGS

7:13-18.1 Requests for adjudicatory hearings

(a) Subject to the limitations of (j) below, a person may request an adjudicatory hearing to contest a decision on any of the following actions:

1. **An application for a verification;**
2. **An application for authorization to act under a general permit; or**
3. **An application for an individual permit.**

(b) To contest a decision listed at (a) above, a person shall submit a hearing request within 30 calendar days after public notice of the decision is published in the DEP Bulletin. If a person submits the hearing request after this time, the Department shall deny the request.

(c) A request for an adjudicatory hearing shall:

1. **Be in writing on a hearing request form available from the Department at the address in N.J.A.C. 7:13-1.1(f) and shall set forth:**
   - i. **The name, address and daytime telephone number of the person requesting the hearing;**
   - ii. **When the request is submitted by someone other than the applicant, evidence that a copy of the hearing request has been mailed to the applicant;**
   - iii. **A copy of the Department notice or decision for which a hearing is being requested;**

iv. The Department file number or project number on the notice or decision;

v. A statement requesting a hearing;

vi. A specific admission, denial or explanation of each fact appearing in the Department notice or decision or a statement that the person is without knowledge thereof; and

vii. A concise statement of the facts or principles of law asserted to constitute any factual or legal defense; and

2. Be submitted to the Department as follows:

i. Submit the original request to: Office of Legal Affairs Attention: Adjudicatory Hearing Requests Department of Environmental Protection P.O. Box 402401 East State Street Trenton, New Jersey 08625-0402

ii. Submit a copy of the request to: Division of Land Use Regulation Attention: Director Department of Environmental Protection P.O. Box 439501 East State Street Trenton, New Jersey 08625-0439

(d) As part of a request for an adjudicatory hearing, a person may request that the Department determine whether the matter for which the adjudicatory hearing is requested is suitable for mediation by the Department's Office of Dispute Resolution. The Department shall promptly notify the requester of its determination. If the Department determines the matter is suitable for mediation, the Department shall also notify the requester of the procedures and schedule for mediation.

(e) In some cases, a hearing request may result in a stay of operation of a general permit or individual permit being appealed, as follows:

1. If a permittee requests a hearing to appeal any portion of its permit, the hearing

request shall automatically stay operation of the permit, unless the permittee shows good cause in writing why the permit should continue in effect while being contested. All permitted activities shall stop upon the date the hearing request is submitted, and shall not be started again until the matter is resolved, unless the Department grants an exception in writing; and

2. If a person other than the permittee requests a hearing on a permit, the requester may include with the hearing request a request for a stay of the permit. The Department shall stay operation of the permit only upon its determination that good cause exists. If a stay is imposed, all permitted activities shall stop upon the date the stay is imposed, and shall not be started again until the matter is resolved, unless the Department grants an exception in writing.

(f) The Department shall notify the requester if the request for a hearing is granted and, if denied, the reasons why. If a hearing request is granted, the Department shall refer the matter to the Office of Administrative Law for an adjudicatory hearing in accordance with the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq., and the Uniform Administrative Procedure Rules, N.J.A.C. 1:1.

(g) If the Department and the person seeking a hearing agree to settle a matter for which a hearing request has been submitted under this section, and the settlement will result in Department approval of a regulated activity, notice of the settlement shall be provided as follows:

1. The person who requested the hearing shall send by certified mail a "notice of intent to settle" the matter, using the notice form available from the Department at the address in N.J.A.C. 7:13-1.1(f), to the following persons:

i. Each person provided public notice of the application for the permit or approval which is the subject of the appeal; and

ii. Each person who commented on the application;

2. The Department shall publish in the DEP Bulletin the notice of intent to settle, and shall accept comments on the public notice for at least 30 calendar days;

3. After the 30-day comment period provided for in (g)2 above, the person who requested the hearing shall send by certified mail a "notice of settlement" using the notice form available from the Department at the address in N.J.A.C. 7:13-1.1(f), to the following persons:

i. Each person provided a notice of intent to settle under (g)1 above; and

ii. Each person who commented on the notice of intent to settle within the 30-day comment period provided under (g)2 above; and

4. If the Department thereafter determines that no good cause exists for the Department to decline the proposed settlement or to significantly modify it, the Department shall publish a notice of the final settlement in the DEP Bulletin.

(h) At the conclusion of any adjudicatory hearing in the Office of Administrative Law, the administrative law judge will submit an initial decision to the Commissioner. The Commissioner shall issue a final decision affirming, rejecting or modifying the initial decision, in accordance with the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq., and the Uniform Administrative Procedure Rules, N.J.A.C. 1:1.

(i) The Commissioner's decision under (h) above shall be considered final agency action for the purposes of the Administrative Procedure Act, and shall be subject only to judicial review in the Appellate Division of the Superior Court, as provided in the Rules of Court.

(j) Nothing in this section shall be construed to provide a right to an adjudicatory hearing in contravention of the Administrative Procedure Act, N.J.S.A. 52:14B-3.1 through 3.3.

SUBCHAPTER 19. ENFORCEMENT

7:13-19.1 Penalties

(a) Pursuant to N.J.S.A. 58:16A-63, and subject to the grace period provisions applicable in accordance with N.J.A.C. 7:13-19.2, the Department may seek, in a court of competent jurisdiction, a civil penalty and/or injunctive relief for any violation of the Flood Hazard Area Control Act and/or this chapter, as follows:

1. **Any person who knowingly violates any provision of the Act or this chapter shall be subject to a penalty of not more than $ 2,500 for each offense; and**
2. **Any person who otherwise violates any provision of the Act or this chapter shall be subject to a penalty of not more than $ 1,500 for each offense.**

(b) If a violation is of a continuing nature, each day that the violation continues constitutes an additional, separate and distinct offense. A violation is of a continuing nature as long as the adverse impact of the violation continues. For example, if a violation involves placement of fill in a floodway, each day that the fill remains in the floodway is an additional, separate and distinct offense, because the increased flood hazard caused by the fill continues each day that the fill is present. In such a case, the Department may seek a separate penalty for each day that the fill remains in the floodway.

7:13-19.2 Grace period applicability; procedures

(a) Each violation identified in Table F at (f) below by an "M" in the Type of Violation column, for which the conditions of (d)1 through 6 below are satisfied, is a minor violation and is subject to a 30-day grace period as described at (e) below.

(b) Each violation identified in Table F at (f) below by an "NM" in the Type of Violation column is a non-minor violation and is not subject to a grace period.

(c) If a violation is not listed in Table F at (f) below, the designation of the violation as minor or non-minor is determined as follows:

1. **If the violation is not listed in Table F at (f) below but is comparable to a violation designated as "M" in Table F and the violation meets all of the criteria of (d)1 through 6 below, then the violation is minor. The minor violation shall be subject to a grace period of 30 calendar days as described at (e) below.**
2. **If the violation is not listed in Table F at (f) below and is not comparable to a violation listed in Table F but the violation meets all of the criteria at (d)1 through 9 below, then the violation is minor. The minor violation shall be subject to a grace period of 30 calendar days as described at (e) below.**
3. **If the violation is not listed in Table F at (f) below but is comparable to a violation designated as "NM" in Table F, then the violation is a non-minor violation and is not subject to a grace period.**
4. **If the violation is not listed in Table F at (f) below and is not comparable to a violation listed in Table F, and the violation does not meet all of the criteria at (d)1 through 9 below, the violation is non-minor and is not subject to a grace period.**
5. **Comparability of a violation to a violation in Table F at (f) below is based on the nature of the violation(s) (for example recordkeeping, accuracy of information**

provided to the Department, amount and type of impacts to the protected resources). A violation shall not be considered comparable to any violation designated as "M" in Table F unless the violation also meets the criteria at (d)7 through 9 below.

(d) The Department shall provide a grace period of 30 calendar days for any violation identified as minor under this section, provided the following conditions are met:

1. **The violation is not the result of the purposeful, knowing, reckless or criminally negligent conduct of the person responsible for the violation;**
2. **The activity or condition constituting the violation has existed for less than 12 months prior to the date of discovery by the Department or a local government agency;**
3. **In the case of a violation that involves a permit, the person responsible for the violation has not been identified in a previous enforcement action by the Department or a local government agency as responsible for a violation of the same requirement of the same permit within the preceding 12-month period;**
4. **In the case of a violation that does not involve a permit, the person responsible for the violation has not been identified in a previous enforcement action by the Department or a local government agency as responsible for the same or a substantially similar violation at the same facility within the preceding 12-month period;**
5. **In the case of a violation of the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq. or any rule or regulation promulgated thereunder, or permit issued pursuant thereto, the person responsible for the violation has not been identified in**

a previous enforcement action by the Department or a local government agency as responsible for the same or a substantially similar violation at the same site or any other site within the preceding 12-month period;

6. In the case of any violation, the person responsible for the violation has not been identified by the Department or a local government agency as responsible for the same or substantially similar violations at any time that reasonably indicate a pattern of illegal conduct and not isolated incidents on the part of the person responsible;

7. The violation poses minimal risk to the public health, safety and natural resources;

8. The violation does not materially and substantially undermine or impair the goals of the regulatory program; and

9. The activity or condition constituting the violation is capable of being corrected and compliance achieved within the time prescribed by the Department.

(e) For a violation determined to be minor under (a) or (c) above, the following provisions apply:

1. The Department shall issue a notice of violation to the person responsible for the minor violation that:

i. Identifies the condition or activity that constitutes the violation and the specific regulatory provision or other requirement violated; and

ii. Specifies that a penalty may be imposed unless the minor violation is corrected and compliance is achieved within the specified grace period of 30 calendar days.

2. If the person responsible for the minor violation corrects that violation and

demonstrates, in accordance with (e)3 below, that compliance has been achieved within the specified grace period, the Department shall not impose a penalty for the violation.

3. In response to a notice of violation, the person responsible for the minor violation shall submit to the Department, before the end of the specified grace period, written information, signed and certified to be true by the responsible person or his or her designee, detailing the corrective action taken or how compliance was achieved.

4. If the person responsible for the minor violation seeks additional time beyond the specified grace period to achieve compliance, the person shall request an extension of the specified grace period in writing no later than one week before the expiration of the specified grace period. The request shall include the anticipated time needed to achieve compliance, the specific cause or causes of the delay, and any measures taken or to be taken to minimize the time needed to achieve compliance. The request shall be signed and certified to be true by the responsible party or their designee. The Department may, in its discretion, approve in writing an extension which shall not exceed 90 calendar days, to accommodate the anticipated delay in achieving compliance. In exercising its discretion to approve a request for an extension, the Department may consider the following:

i. Whether the violator has taken reasonable measures to achieve compliance in a timely manner;

ii. Whether the delay has been caused by circumstances beyond the control of the violator;

iii. Whether the delay will pose a risk to the public health, safety and natural resources; and

iv. Whether the delay will materially or substantially undermine or impair the goals of the regulatory program.

5. If the person responsible for the minor violation fails to demonstrate to the Department that the violation has been corrected and compliance achieved within the specified grace period, or within any approved extension, the Department may, in accordance with the provisions of this chapter, impose a penalty that is retroactive to the date on which the notice of violation under (e)1 above was issued.

6. The person responsible for a minor violation shall not request more than one extension of a grace period specified in a notice of violation.

(f) The designations of violations of the Flood Hazard Area Control Act and this chapter as minor (M) and non-minor (NM) are set forth in Table F below. The violation descriptions are provided for informational purposes only. In the event that there is a conflict between a violation description in Table F and the rule to which the violation description corresponds, the rule shall govern.

Table F
MINOR AND NON-MINOR VIOLATIONS

Rule Citation	Violation Description	Type of Violation
N.J.A.C. 7:13-1.3(d)	Failure of an applicant, or any consultant, engineer, surveyor or agent employed by an applicant, to provide all necessary information to the Department which is relevant to an application. Submittal of false information by the applicant, its consultants and/or agents.	NM
N.J.A.C. 7:13-1.4(a)2ii	Failure of a delegated county governing body to uphold the requirements of this chapter	NM

N.J.A.C. 7:13-1.4(c)	Failure of a delegated county governing body to permanently retain a copy of all required documents that document that it has discharged its delegated duties	NM
N.J.A.C. 7:13-2.1(a)	Initiating a regulated activity in a regulated area not in conformance with a permit-by-rule, general permit authorization, individual permit, emergency permit or appropriate CAFRA or waterfront development permit.	NM
N.J.A.C. 7:13-6.1(g)	Failure of an applicant to record the metes and bounds description of a verified flood hazard area and/or floodway limit on the property deed within 90 calendar days of issuance of the verification	NM
N.J.A.C. 7:13-6.1(g)	Failure of an applicant to submit proof to the Department of recording of the metes and bounds description of the verified flood hazard area and/or floodway limit on the property deed within 90 calendar days of issuance of the verification	M
N.J.A.C. 7:13-8.2	Failure to comply with all conditions of a general permit except as indicated directly below	NM
N.J.A.C. 7:13-8	Failure to submit to the Department any documentation required by a general permit	M
N.J.A.C. 7:13-9.2	Failure to comply with all conditions of an individual permit except as indicated directly below	NM
N.J.A.C. 7:13-9	Failure to submit to the Department any documentation required by an individual permit	M
N.J.A.C. 7:13-12.2	Commencement of activities authorized under an emergency permit later than 30 calendar days after verbal approval; failure to complete commenced activities within 60 calendar days after verbal approval; failure to file a complete permit application and “as built” drawings for completed activities within 90 calendar days after verbal approval; and failure to modify the activities to comply with the requirements of this chapter where directed to do so by the Department.	NM
N.J.A.C. 7:13-13	Failure of an applicant to record a revised verification	NM
N.J.A.C. 7:13-13	Failure of an applicant to provide proof that a revised verification has been properly recorded	M
N.J.A.C. 7:13-16.1(c)	Failure of an applicant to comply with notice requirements	NM

APPENDIX 1:
APPROXIMATING THE FLOOD HAZARD AREA DESIGN FLOOD ELEVATION

As described in detail at N.J.A.C. 7:13-3, the Department and FEMA have adopted flood mapping along many of the State's waters. In absence of a Department delineation[1], or a FEMA flood insurance study that meets the requirements of N.J.A.C. 7:13-3.4(b), an applicant may use the approximation method described at N.J.A.C. 7:13-3.5 in conjunction with this appendix.

Note that this method approximates only the flood hazard area design flood elevation. This method does not approximate the floodway limit. Many activities are restricted within floodways and some calculations cannot be performed if the floodway limit is unknown. Therefore, the Department shall issue a written permit for a regulated activity within an approximated flood hazard area only if the regulated activity meets the requirements at N.J.A.C. 7:13-8.7.

HOW TO USE METHOD 5 (APPROXIMATION METHOD)

1. Determine which Watershed Management Area (WMA) the project is located within based on Figure 5 below. The Department can help in this determination at the applicant's request.[2]
2. Determine the contributory drainage area (CDA) of the water in question. USGS provides topographical mapping that can be used to make this determination. The Department can also help in this determination at the applicant's request.
3. Find the approximate depth of flooding from Table 1 below based on the WMA and CDA.
4. Find the low point elevation of each roadway crossing or other water control structure within 1 mile downstream of the site.[3] Figure 1 illustrates a typical roadway profile with a low point.
5. The approximate flood hazard area design flood elevation will be the higher of the following (see Figures 1 through 4):
    - The depth from Table 1, measured above the average streambed.[4]
    - The depth from Table 2, measured above the highest roadway low point described in 4 above.

NOTES

1. See Appendix 2 for a complete list of delineations and N.J.A.C. 7:13-3.3 for more detail.
2. If a project spans more than one WMA, the approximate flood hazard area shall be determined separately within each WMA.
3. Some roadway or railroad crossings over very large bridges need not be included if the Department determines that such crossings will not affect flooding on the site. Contact the Department for further information.
4. The average streambed is the general "smooth" grade of the bottom the channel, and does not include small pockets of erosion, individual boulders, or minor irregularities. The average streambed always has a positive slope toward downstream.

WMA[1] ↓	CONTRIBUTORY DRAINAGE AREA[2] Shaded box indicates area in acres. Unshaded box indicates area in square miles.														
	FOR DRAINAGE AREAS UP TO ➡ THE FLOOD DEPTH IS SHOWN↓														
1		80	195	495	1.9	4.8	12.1	30.0							
2		80	195	495	1.9	4.8	12.1	30.0							
3			80	150	290	550	1.7	3.2	6.1	11.8	22.6	30.0			
4		70	130	235	430	1.2	2.3	4.1	7.6	13.9	25.4	30.0			
5		95	255	1.0	2.8	7.3	19.2	30.0							
6				85	280	1.4	4.7	15.3	30.0						
7							115	245	510	1.7	3.5	7.4	15.6	30.0	
8			60	115	210	395	1.2	2.2	4.0	7.5	14.1	26.3	30.0		
9		80	130	200	310	485	1.2	1.8	2.9	4.5	7.0	11	17.1	26.7	30.0
10	70	110	165	255	390	605	1.5	2.2	3.4	5.3	8.2	12.6	19.4	30.0	
11		80	145	265	490	1.4	2.6	4.8	8.8	16.1	30.0				
12				115	280	1.1	2.6	6.2	15.0	30.0					
13		85	210	530	2.1	5.1	12.7	30.0							
14		85	210	530	2.1	5.1	12.7	30.0							
15		85	210	530	2.1	5.1	12.7	30.0							
16		85	210	530	2.1	5.1	12.7	30.0							
17		85	210	530	2.1	5.1	12.7	30.0							
18	75	125	205	350	590	1.6	2.6	4.4	7.5	12.6	21.3	30.0			
19	60	115	225	440	1.3	2.6	5.1	9.9	19.2	30.0					
20	60	115	225	440	1.3	2.6	5.1	9.9	19.2	30.0					
DEPTH[3] (feet) ➡	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**

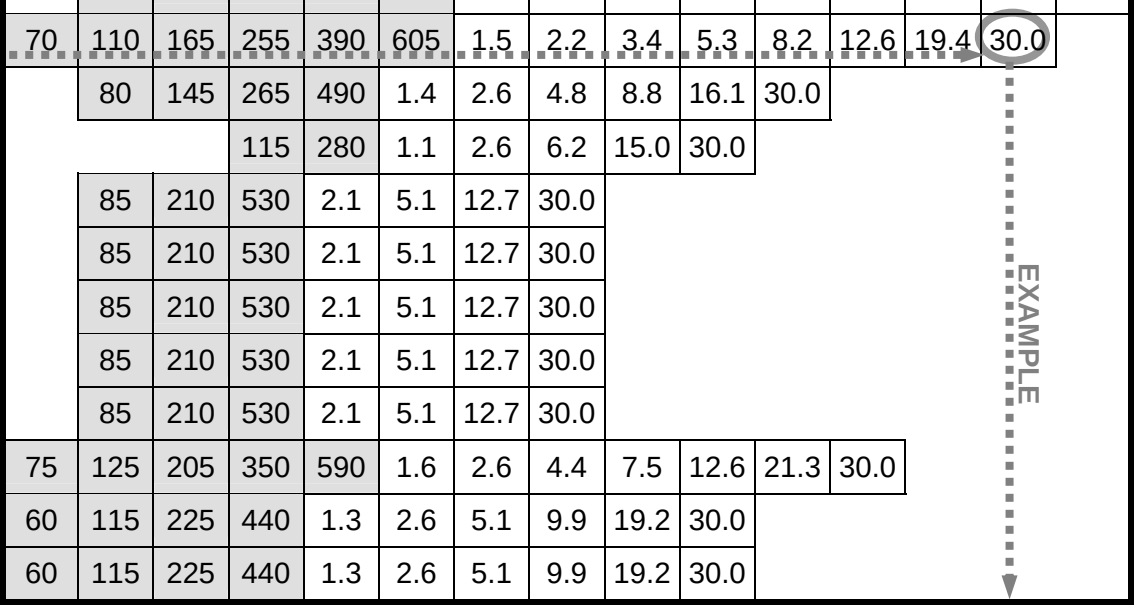


TABLE 1
APPROXIMATE FLOOD DEPTHS ABOVE AVERAGE STREAMBED ELEVATION
(SEE N.J.A.C.-7:13-3.5)

EXAMPLE: Going from left to right in any row, each number represents the upper drainage area limit for the flood depth shown at the bottom of the column. For example, in the row for WMA 10, a water with a drainage area of 70 acres or less has a flood depth of 5 feet. Similarly, any water draining between 70 and 110 acres has a flood depth of 6 feet. In the example illustrated with arrows above, any water with a drainage area of between 19.4 and 30.0 square miles in WMA 10 has a flood depth of 18 feet.

NOTES
1. The numbers in this column denote the Watershed Management Areas shown in Figure 5.
2. Flood depths shall be measured above the average streambed elevation as described elsewhere in this Appendix and as shown in Figure 3 below.

TABLE 2: DEPTH OF FLOOD OVER ROADWAY

FOR A CONTRIBUTORY DRAINAGE AREA OF NO MORE THAN:	200 ACRES	1 MI^2	3 MI^2	10 MI^2	30 MI^2
THE DEPTH OF FLOODING OVER THE LOW POINT OF THE ROADWAY IS:	1.0 FEET	1.5 FEET	2.0 FEET	2.5 FEET	3.0 FEET

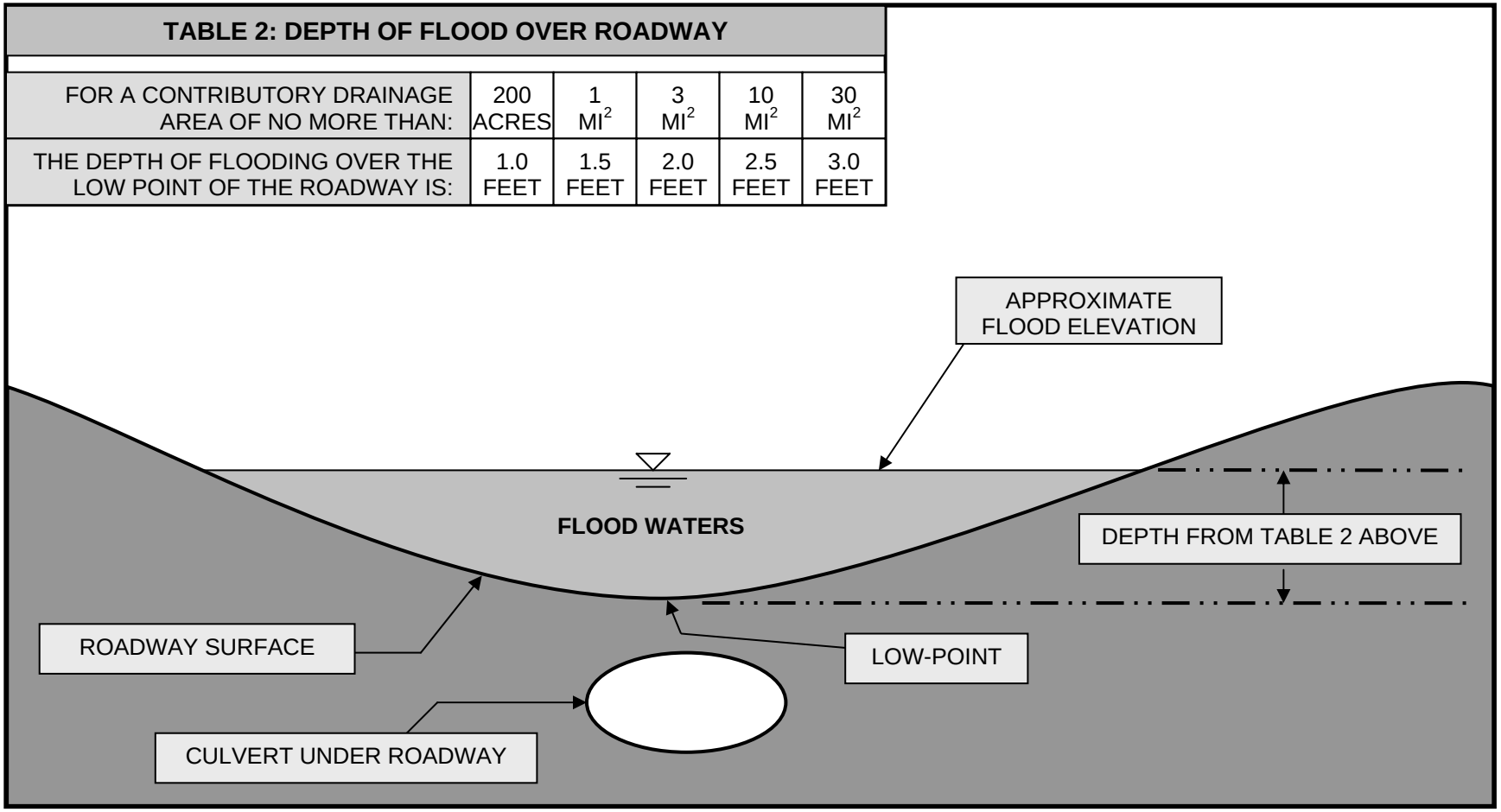


FIGURE 1
PROFILE OF A ROADWAY OVERTOPPED BY FLOOD WATERS
NOT DRAWN TO SCALE

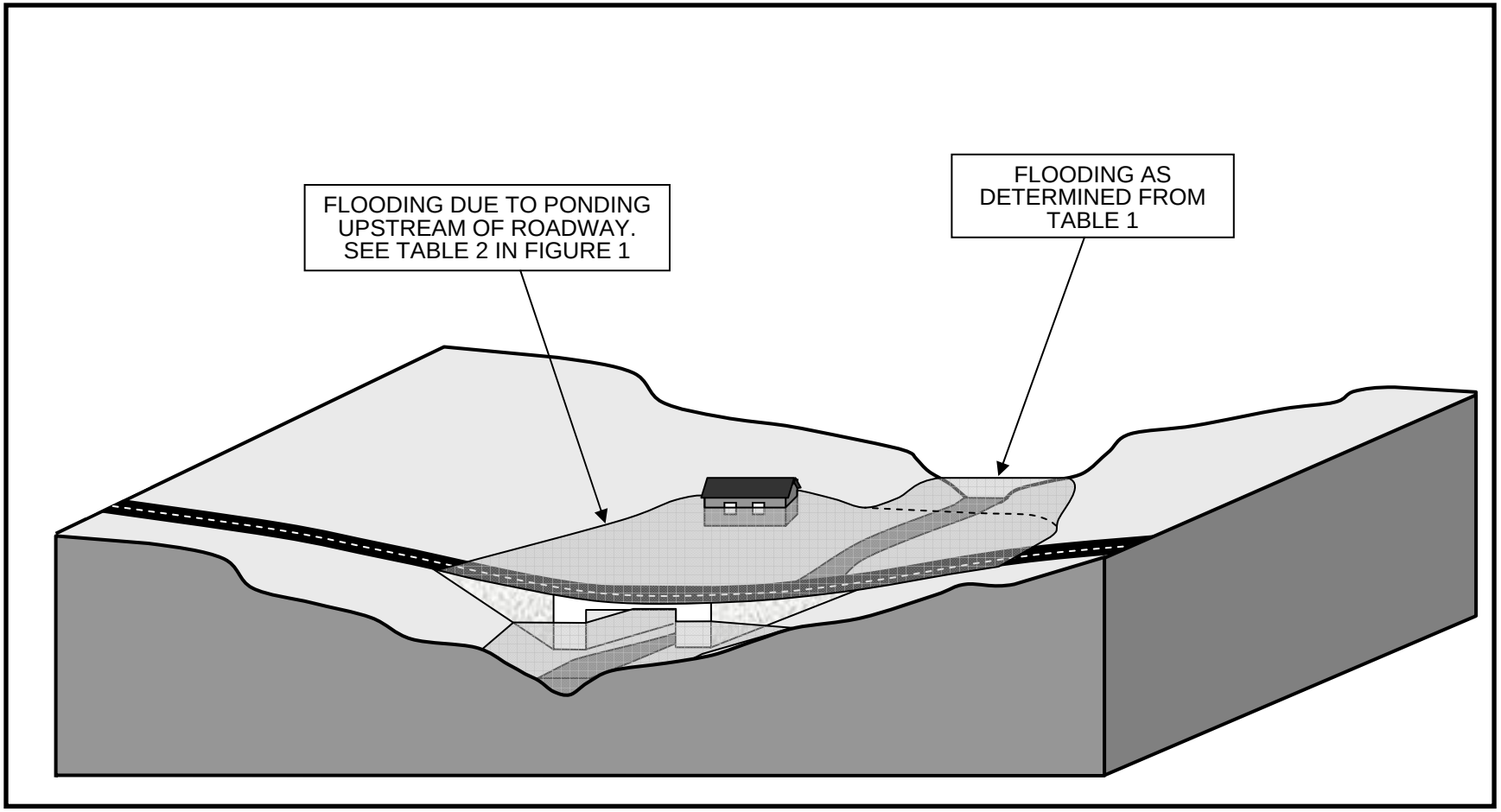


FIGURE 2
THREE-DIMENSIONAL VIEW OF APPROXIMATE FLOOD HAZARD AREA
NOT DRAWN TO SCALE

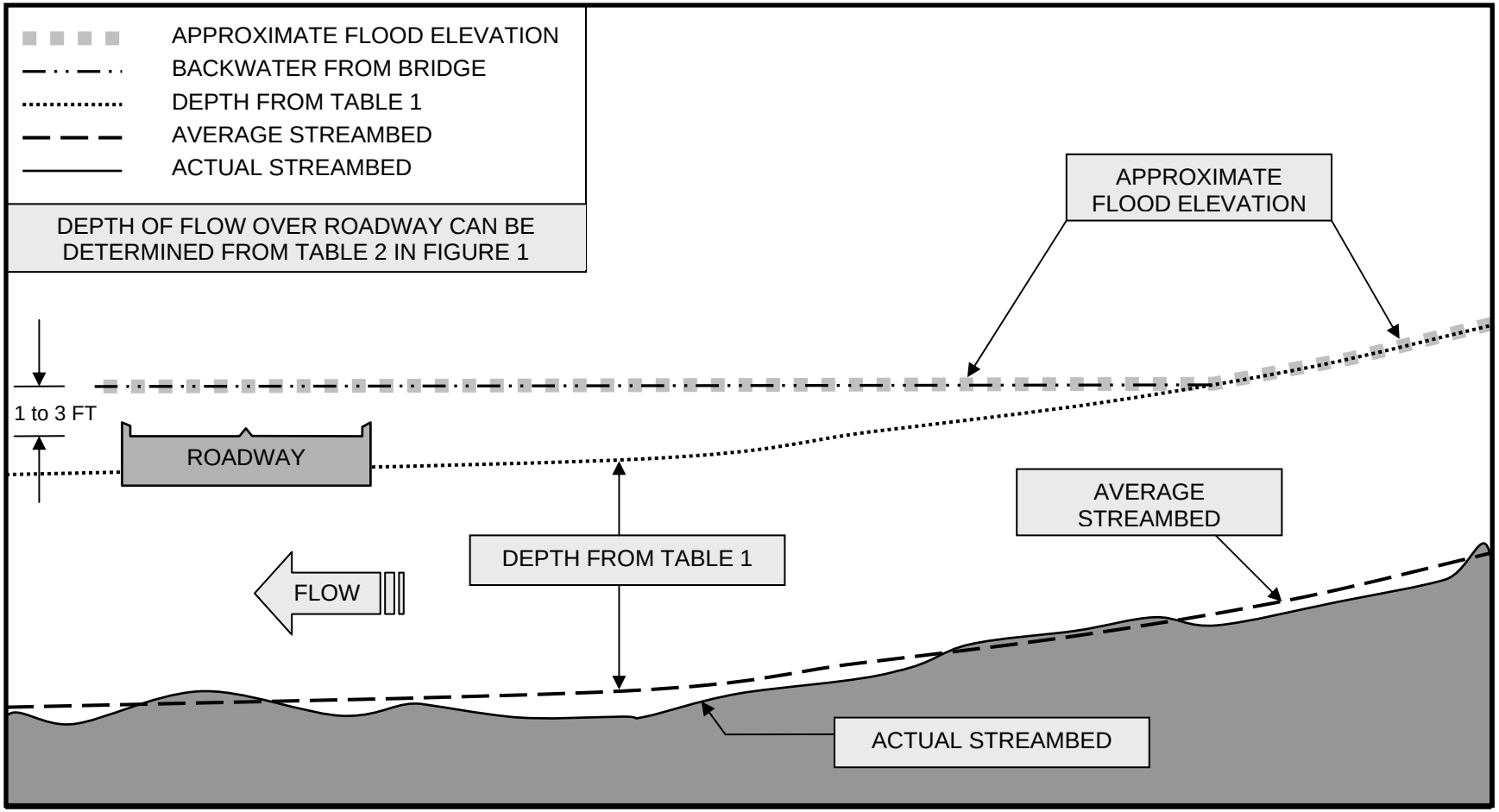


FIGURE 3
PROFILE OF A TYPICAL CHANNEL WITH AN APPROXIMATE FLOOD HAZARD AREA
NOT DRAWN TO SCALE

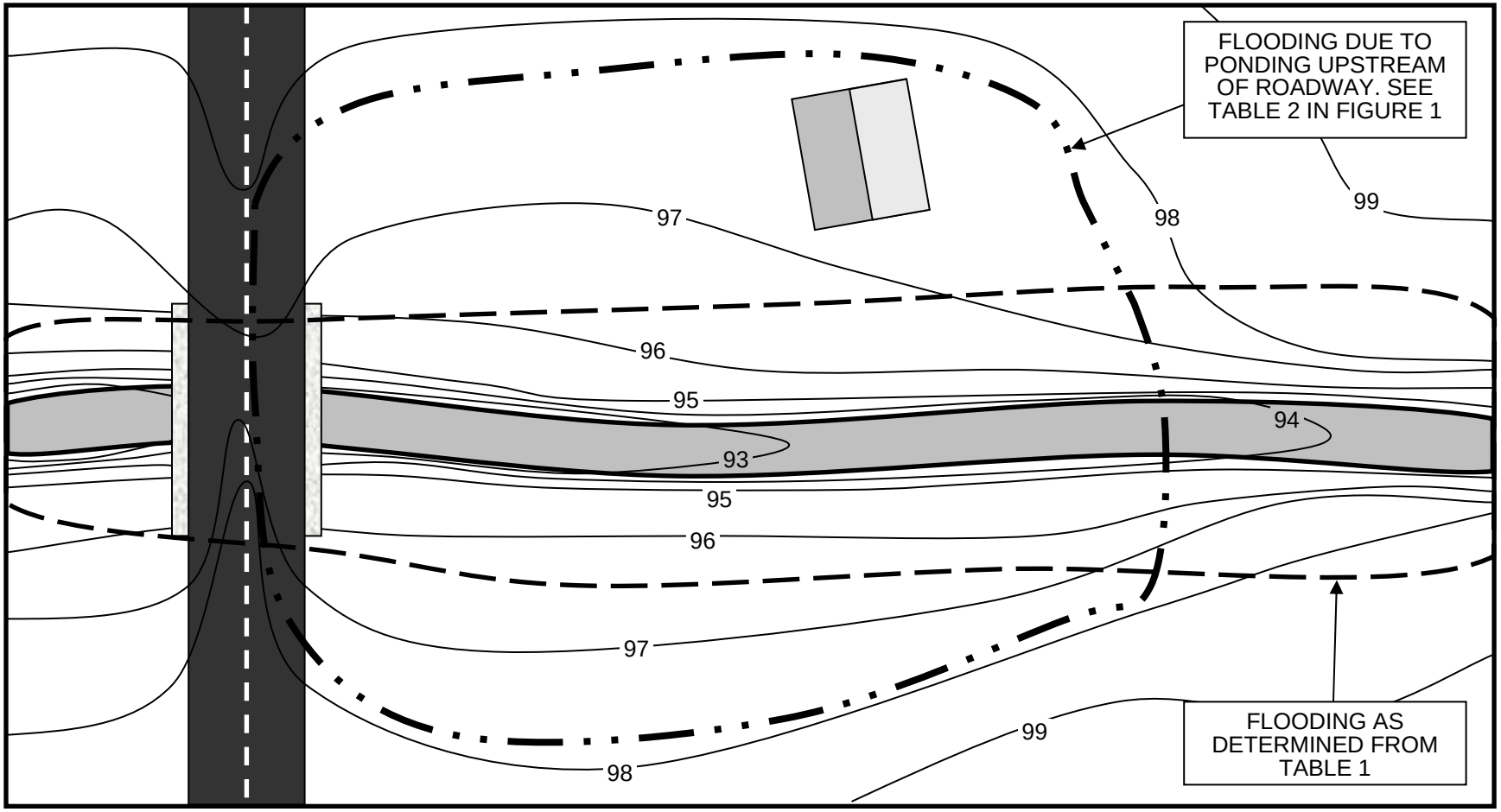
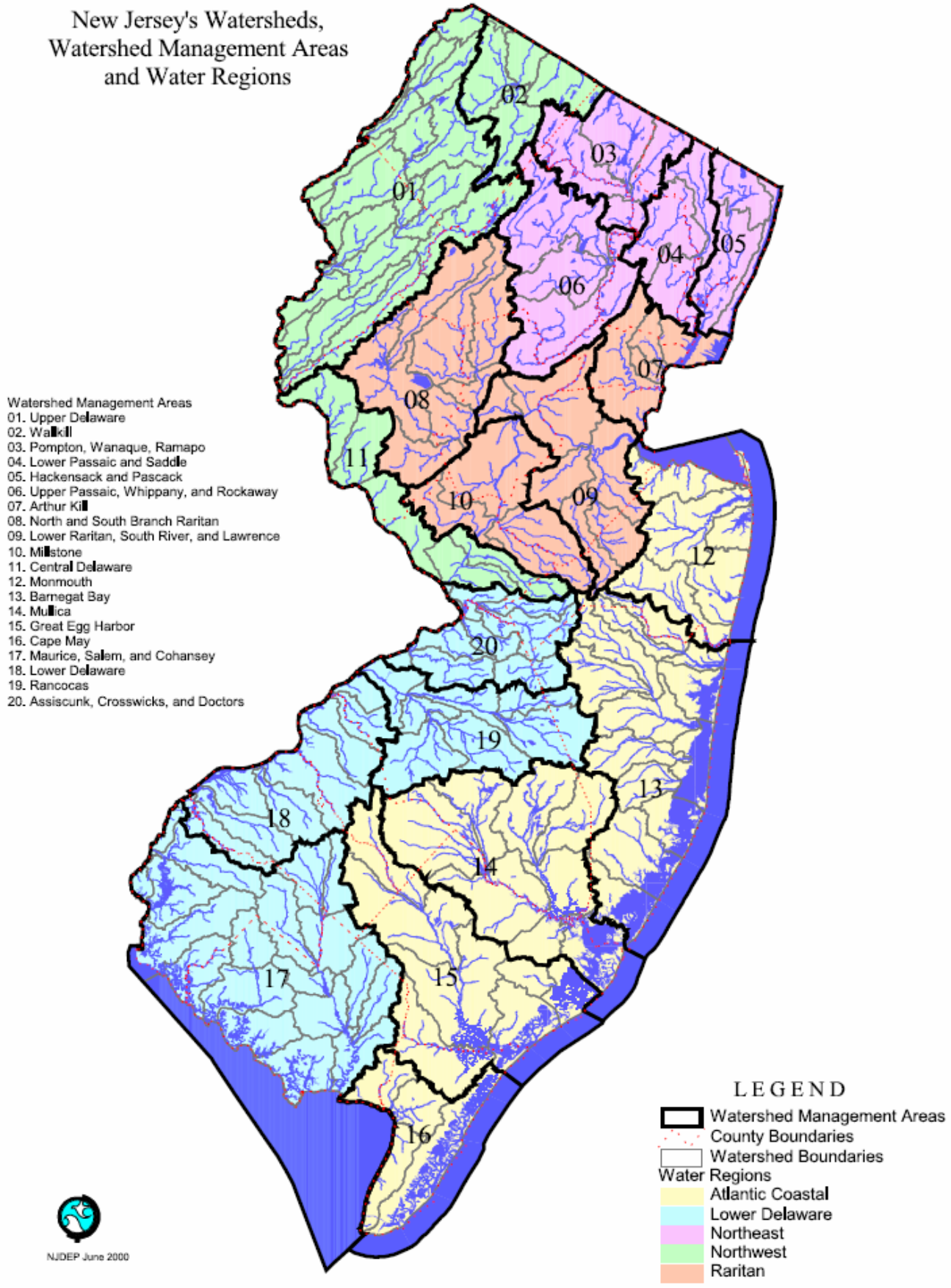


FIGURE 4
PLAN VIEW OF AN APPROXIMATE FLOOD HAZARD AREA
NOT DRAWN TO SCALE



Appendix 2 List Of Department Delineated Waters

The following table lists the waters for which the Department has adopted a delineation of the flood hazard area. This list is organized by county and municipality. In most cases the delineation includes both the flood hazard area design flood elevation and the floodway limit. To determine which mapping is available for a particular water, or to obtain copies of maps or other information regarding the use or revision of these studies, contact the Department as described at N.J.A.C. 7:13-3.3.

Atlantic County		
Municipality	**Name of Studied Water**	**Section Studied**
Absecon City	None	N/A
Atlantic City	None	N/A
Brigantine City	None	N/A
Buena Borough	None	N/A
Buena Vista Township	None	N/A
Corbin City	Tuckahoe River	Entire reach
Egg Harbor City	Landing Creek	Upstream of confluence with Union Creek
	Mullica River	Entire reach
	Union Creek	Upstream of confluence with Landing Creek
	Union Creek Tributary	Entire reach
Egg Harbor Township	None	N/A
Estell Manor City	None	N/A
Folsom Borough	Great Egg Harbor River	Upstream of State Highway 54
	Great Egg Harbor River Tributary	Entire reach
	Hospitality Brook	Upstream of State Highway 54
Galloway Township	None	N/A
Hamilton Township	None	N/A
Hammonton Township	Cedar Brook	Between Wharton State Forest and Liberty Street
Linwood City	None	N/A
Longport Borough	None	N/A
Margate City	None	N/A
Mullica Township	Mullica River	Downstream of County Route 542
Northfield City	None	N/A
Pleasantville City	None	N/A
Port Republic City	None	N/A
Somers Point City	None	N/A

Ventnor City	None	N/A
Weymouth Township	None	N/A

Bergen County		
Municipality	**Name of Studied Water**	**Section Studied**
Allendale Borough	None	N/A
Alpine Borough	None	N/A
Bergenfield Borough	Hirschfield Brook	Entire reach
	Hirschfield Brook Tributary	Entire reach
Bogota Borough	Hackensack River	Entire reach
Carlstadt Borough	None	N/A
Cliffside Park Borough	None	N/A
Closter Borough	Dwars Kill	Downstream of Piermont Road
	Kips Brook	Entire reach
	Oradell Reservoir	Entire reach
	Steinals Ditch	Entire reach
	Tenakill Brook	Entire reach
Cresskill Borough	Cresskill Brook	Entire reach
	Demarest Brook	Entire reach
	Tenakill Brook	Entire reach
Demarest Borough	Cresskill Brook	Downstream of County Road
	Demarest Brook	Downstream of County Road
	Tenakill Brook	Entire reach
Dumont Borough	Hirschfield Brook	Entire reach
	Hirschfield Brook Tributary	Downstream of Rucereto Avenue
Elmwood Park Borough	Passaic River	Entire reach
East Rutherford Borough	Passaic River	Entire reach
Edgewater Borough	None	N/A
Emerson Borough	Haunsmans Ditch	Downstream of Orchard Avenue
	Musquapsink Brook	Entire reach
	Oradell Reservoir	Entire reach
	Pascack Brook	Entire reach
Englewood City	Flat Rock Brook	Downstream of Flatbrook Nature Center
	Metzlers Creek	Entire reach
	Overpeck Creek	Entire reach
	Overpeck Creek Tributary 1	Downstream of a point located 350 feet downstream of Forest Avenue
Englewood Cliffs Borough	None	N/A
Fair Lawn Borough	Beaverdam Brook	Downstream of a point located 1,050 feet upstream of Morlot Avenue
	Diamond Brook	Entire reach
	Henderson Brook	Downstream of New Jersey Transit Railroad
	Jordan Brook	Downstream of Berdan Avenue

	Passaic River	Entire reach
	Saddle River	Entire reach
Fairview Borough	Wolf Creek	Downstream of a point located 1,250 feet upstream of South Broad Avenue
Fort Lee Borough	None	N/A
Franklin Lakes Borough	Hohokus Brook	Downstream of a point located 400 feet upstream of Old Mill Drive
	Pond Brook	Downstream of Franklin Lake
Garfield City	Passaic River	Entire reach
	Saddle River	Entire reach
Glen Rock Borough	Diamond Brook	Entire reach
	Hohokus Brook	Entire reach
	Saddle River	Entire reach
Hackensack City	Coles Brook	Along municipal boundary with Paramus Borough, Bergen County
	Hackensack River	Entire reach
Harrington Park Borough	Blanch Brook	Downstream of a point located 50 feet downstream of Blanch Avenue
	Dorotockeys Run	Entire reach
	Hackensack River	Entire reach
	Oradell Reservoir	Entire reach
	Pascack Brook	Entire reach
	Tappan Run	Entire reach
Hasbrouck Heights Borough	None	N/A
Haworth Borough	Charles Brook	Downstream of Delaware Avenue
	Goffle Brook	Entire reach
	Kips Brook	Downstream of a point located 1,750 feet upstream of Haworth Avenue
	Oradell Reservoir	Entire reach
	Steinal Ditch	Entire reach
Hillsdale Borough	Hillsdale Brook	Entire reach
	Holdrum Brook	Entire reach
	Musquapsink Brook	Entire reach
	Pascack Brook	Entire reach
	Tandy Brook	Downstream of Pascack Road
	Township Brook	Entire reach
Ho-Ho-Kus Borough	Hohokus Brook	Entire reach
Leonia Borough	Flat Rock Brook	Entire reach
	Overpeck Creek	Entire reach
Little Ferry Borough	Hackensack River	Entire reach
	Overpeck Creek	Entire reach
Lodi Borough	Saddle River	Entire reach
Lyndhurst Township	Passaic River	Entire reach
Mahwah Township	Hohokus Brook	Along municipal boundary with Franklin

		Lakes Borough, Bergen County
	Mahwah River	Entire reach
	Masonicus Brook	Downstream of a point located 60 feet upstream of Constantine Drive
	Ramapo River	Entire reach
Maywood Borough	None	N/A
Midland Park Borough	None	N/A
Montvale Borough	Bear Brook	Downstream of a point located 1,050 feet upstream of Grand Avenue
	Cherry Brook	Entire reach
	Echo Glen Brook	Downstream of a point located 500 feet upstream of Akers Avenue
	Fieldstone Brook	Downstream of Woodland Avenue
	Laurel Brook	Downstream of a point located 3,020 feet upstream of Mill Brook
	Mill Brook	Downstream of Summit Avenue
	Muddy Creek	Entire reach
	Pascack Brook	Entire reach
	Stateline Brook	Entire reach
Moonachie Borough	Hackensack River	Entire reach
New Milford Borough	Frenchs Creek	Downstream of New Bridge Road
	Hackensack River	Entire reach
	Hackensack River Bypass	Entire reach
	Hirschfield Brook	Entire reach
North Arlington Borough	Passaic River	Entire reach
Northvale Borough	Sparkill Brook	Entire reach
	Sparkill Creek	Entire reach
Norwood Borough	Dwars Kill	Downstream of Piermont Road
	Norwood Brook	Downstream of Broadway
	Oradell Reservoir	Entire reach
	Sparkill Brook	Downstream of Piermont Road
	Tappan Run	Downstream of a point located 1,200 feet upstream of Broadway
Oakland Borough	Ramapo River	Entire reach
Old Tappan Borough	Hackensack River	Entire reach
Oradell Borough	Hackensack River	Entire reach
	Hackensack River Bypass	Entire reach
	Oradell Reservoir	Entire reach
Palisades Park Borough	Overpeck Creek	Entire reach
Paramus Borough	Behnke Brook	Downstream of Midland Avenue
	Coles Brook	Entire reach
	Herring Brook	Downstream of a point located 125 feet upstream of State Highway 4
	Mannings Brook	Downstream of a Footbridge Located near

		Van Binsberger Boulevard
	Saddle River	Entire reach
	Sprout Brook	Downstream of a point located 1,700 feet upstream of Sears Drive
	Van Saun Mill Brook	Downstream of a point located 1,100 feet upstream of Continental Avenue
Park Ridge Borough	Bear Creek	Entire reach
	Echo Glen Brook	Entire reach
	Hillsdale Brook	Downstream of New Street
	Holdrum Brook	Downstream of a point located 1,600 feet upstream of Rolling Hills Road
	Mill Brook	Entire reach
	Pascack Brook	Entire reach
Ramsey Borough	Darlington Brook	Between a point located 750 feet downstream of the confluence with Darlington Brook Tributary and a point located 1,500 feet upstream of said confluence (along municipal boundary with Mahwah Township, Bergen County)
	Darlington Brook Tributary	Entire reach
	Masonicus Brook	Entire reach
	Ramsey Brook	Downstream of a point located 550 feet upstream of State Highway 17
	Valentine Brook	Downstream of Darlington Avenue
	Valentine Brook Tributary 1	Downstream of Darlington Avenue
	Valentine Brook Tributary 2	Downstream of East Main Street
Ridgefield Borough	Bellmans Creek	Between Susquehanna Western Railroad and confluence with Wolf Creek
	Hackensack River	Upstream of a point located 400 feet upstream of the New Jersey Turnpike
	Overpeck Creek	Entire reach
	Wolf Creek	Downstream of a point located 1,250 feet upstream of South Broad Avenue
Ridgefield Park Village	Hackensack River	Entire reach
	Overpeck Creek	Entire reach
Ridgewood Village	Goffle Brook	Entire reach
	Hohokus Brook	Entire reach
	Saddle River	Entire reach
River Edge Borough	Coles Brook	Entire reach
	Hackensack River	Entire reach
	Van Saun Mill Brook	Downstream of a point located 1,100 feet upstream of Continental Avenue
River Vale Township	Cherry Brook	Entire reach
	Hackensack River	Entire reach
	Hillsdale Brook	Entire reach

	Holdrum Brook	Downstream of a point located 1,600 feet upstream of Rolling Hills Road
	Pascack Brook	Entire reach
	River Vale Brook	Downstream of a point located 250 feet upstream of Ridge Road
Rochelle Park Township	Saddle River	Entire reach
	Sprout Brook	Entire reach
Rockleigh Borough	Sparkill Brook	Entire reach
Rutherford Borough	Passaic River	Entire reach
Saddle Brook Township	Coalberg Brook	Downstream of U.S. Highway 46
	Coalberg Brook Tributary	Downstream of U.S. Highway 46
	Saddle River	Entire reach
Saddle River Borough	None	N/A
South Hackensack Township	Hackensack River	Entire reach
	Saddle River	Entire reach
Teaneck Township	Frenchs Creek	Entire reach
	Hackensack River	Entire reach
	Metzlers Creek	Entire reach
	Overpeck Creek	Entire reach
	Teaneck Creek	Downstream of a point located 2,000 feet upstream of Degraw Avenue
Tenafly Borough	Tenakill Brook	Downstream of Norman Place
Teterboro Borough	None	N/A
Upper Saddle River Borough	None	N/A
Waldwick Borough	Hohokus Brook	Along municipal boundary with Ridgewood Village, Bergen County
Wallington Borough	Passaic River	Entire reach
	Saddle River	Entire reach
Washington Township	Musquapsink Brook	Entire reach
	Musquapsink Brook Bypass	Downstream of Washington Lake
	Pine Brook	Downstream of a point located 175 feet upstream of Ridgewood Boulevard
Westwood Borough	Musquapsink Brook	Entire reach
	Pascack Brook	Entire reach
	Westdale Brook	Upstream 2,335 feet from Pascack Brook
Woodcliff Lake Borough	Bear Brook	Entire reach
	Hillsdale Brook	Downstream of New Street
	Musquapsink Brook	Downstream of Saddle River Road
	Pascack Brook	Entire reach
	Reservoir Brook	Downstream of Woodcliff Avenue
Wood-Ridge Borough	Saddle River	Entire reach
Wyckoff Township	None	N/A

Burlington County		
Municipality	**Name of Studied Water**	**Section Studied**
Bass River Township	None	N/A
Beverly City	None	N/A
Bordentown City	Blacks Creek	Entire reach
	Crosswicks Creek	Entire reach
Bordentown Township	Blacks Creek	Downstream of U.S. Highway 206
	Crosswicks Creek	Entire reach
	Delaware River	Entire reach
	Delaware River Back Channel	Entire reach
Burlington City	None	N/A
Burlington Township	Crosswicks Creek	Entire reach
	Delaware River	Entire reach
	Mill Creek	Downstream of Interstate Highway 295
Chesterfield Township	None	N/A
Cinnaminson Township	None	N/A
Delanco Township	Delaware River	Entire reach
	Rancocas Creek	Entire reach
Delran Township	Rancocas Creek	Entire reach
Eastampton Township	North Branch Rancocas Creek	Entire reach
Edgewater Park Township	None	N/A
Evesham Township	Barton Run	Entire reach
	Barton Run Tributary 1	Downstream of New Road
	Barton Run Tributary 2	Downstream of Taunton Lake Road
	Black Run	Downstream of a private driveway located near Braddock Mill Road
	Black Run Tributary	Downstream of Braddock Mill Road
	Cropwell Brook	Downstream of North Cropwell Road
	Kettle Creek	Downstream of a point located 1,600 feet upstream of Hopewell Road
	South Branch Pennsauken Creek	Downstream of a point located 1,500 feet upstream of Old Marlton Pike
	Southwest Branch Rancocas Creek	Downstream of a point located 1,200 feet upstream of Bon Air Drive
Fieldsboro Borough	Delaware River	Entire reach
Florence Township	Bustleton Creek	Downstream of U.S. Highway 130
	Crafts Creek	Downstream of U.S. Highway 130
	Delaware River	Entire reach
	Delaware River Back Channel	Entire reach
Hainesport Township	Masons Creek	Entire reach
	North Branch Rancocas Creek	Entire reach
	South Branch Rancocas Creek	Entire reach
Lumberton Township	Bobbys Run	Downstream of Newbolds Corner-Mount Holly Road

	Little Creek	Entire reach
	Masons Creek	Downstream of Stacy Haines Road
	South Branch Rancocas Creek	Entire reach
	South Branch Rancocas Creek Tributary	Downstream of Stacy Haines Road
	Southwest Branch Rancocas Creek	Entire reach
Mansfield Township	Crafts Creek	Downstream of U.S. Highway 130
	Delaware River Back Channel	Entire reach
Maple Shade Township	None	N/A
Medford Township	Ballinger Run	Downstream of the head of Lake Stockwell
	Ballinger Run Tributary	Downstream of a point located 90 feet upstream of Birchwood Drive
	Barton Run	Entire reach
	Barton Run Tributary 1	Entire reach
	Blue Lake Run	Entire reach
	Haynes Creek	Entire reach
	Little Creek	Downstream of State Highway 70
	Mimosa Lake Run	Downstream of Scout Drive
	Sharps Run	Downstream of Oliphants Mill-Hartford Road
	Skeet Run	Downstream of Hawkin Road
	Southwest Branch Rancocas Creek	Entire reach
	Taunton Lake Tributary	Downstream of Centennial Avenue
Medford Lakes Borough	Ballinger Run	Entire reach
	Lake Mishe-Mokwa Run	Downstream of Hiawatha Trail
Moorestown Township	Rancocas Creek	Entire reach
Mount Holly Township	Buttonwood Run	Downstream of Branch Street
	Mill Race	Entire reach
	Mount Holly By-Pass	Entire reach
	North Branch Rancocas Creek	Entire reach
Mount Laurel Township	Masons Creek	Entire reach
	Rancocas Creek	Downstream of the confluence of the North and South Branches
	South Branch Rancocas Creek	Entire reach
New Hanover Township	None	N/A
North Hanover Township	None	N/A
Palmyra Borough	None	N/A
Pemberton Borough	Budds Run	Downstream of a point located 850 feet upstream of Hanover Street
	North Branch Rancocas Creek	Entire reach
Pemberton Township	Baffin Brook	Downstream of Upton Station-Whitesbogs Road

	Budds Run	Downstream of a point located 850 feet upstream of Hanover Street
	County Lake Tributary	Downstream of Upton Station-Whitesbogs Road
	Cranberry Branch	Downstream of Lakehurst Road
	Jefferson Lake	Upstream of Oregon Trail
	Little Pine Lake	Entire reach
	Mirror Lake	Upstream 11,600 feet from Lakehurst Road
	Mount Misery Creek	Downstream of a point located 1,300 feet upstream of Greenwood Bridge Road
	North Branch Rancocas Creek	Downstream of Mirror Lake
	Ong Run	Upstream 4,230 feet from Little Pine Lake
	Pole Bridge Branch	Between County Lakes Spillway and Whitesbogs Road
	Pole Bridge Branch Tributary	Downstream of Lakehurst Road
Riverside Township	Rancocas Creek	Entire reach
Riverton Borough	None	N/A
Shamong Township	None	N/A
Southampton Township	Beaverdam Creek	Downstream of U.S. Highway 206
	Friendship Creek	Downstream of State Highway 70
	Jade Run	Entire reach
	Little Creek	Downstream of a point located 2,000 feet upstream of Ridge Road
	North Branch Rancocas Creek	Entire reach
	South Branch Rancocas Creek	Downstream of Bed Beg Hill Road
Springfield Township	None	N/A
Tabernacle Township	None	N/A
Washington Township	Mullica River	Downstream of County Route 542
Westampton Township	Assiskunk Creek Tributary	Downstream of a point located 1280 feet upstream of Oxmead Road
	Mill Creek	Downstream of Interstate Highway 295
	Mill Creek Tributary	Downstream of Woodlane Road
	Rancocas Creek	Downstream of the confluence of the North and South Branches
	North Branch Rancocas Creek	Entire reach
Willingboro Township	Mill Creek	Entire reach
	Rancocas Creek	Entire reach
	South Branch Mill Creek	Downstream of Kennedy Parkway
Woodland Township	Bisphams Mill Creek	Between State Highway 70 and Cooper Road
	Burrs Mill Brook	Between a point located 9,350 feet upstream of Burrs Mill Road and a point located 17,150 feet upstream of Burrs Mill Road
	Shinns Branch	Downstream of Lebanon State Forest

	West Branch Wading River	Between County Route 532 and Lebanon State Forest
Wrightstown Borough	None	N/A

Camden County		
Municipality	**Name of Studied Water**	**Section Studied**
Audubon Borough	None	N/A
Audubon Park Borough	None	N/A
Barrington Borough	None	N/A
Bellmawr Borough	Big Timber Creek	Upstream of Interstate Highway 295
Berlin Borough	None	N/A
Berlin Township	None	N/A
Brooklawn Borough	None	N/A
Camden City	None	N/A
Cherry Hill Township	South Branch Pennsauken Creek	Between the municipal boundary of Evesham Township and Mount Laurel Township, Burlington County, and a point located 1,500 feet upstream of Old Marlton Pike
Chesilhurst Borough	None	N/A
Clementon Borough	None	N/A
Collingswood Borough	None	N/A
Gibbsboro Borough	None	N/A
Gloucester Township	Big Timber Creek	Entire reach
	South Branch Big Timber Creek	Downstream of the head of Blackwood Lake, and also between a point located 2,800 feet downstream of Main Street and a point located 50 feet upstream of Redwood Street
Gloucester City	None	N/A
Haddon Township	None	N/A
Haddonfield Borough	None	N/A
Haddon Heights Borough	None	N/A
Hi-Nella Borough	None	N/A
Laurel Springs Borough	None	N/A
Lawnside Borough	None	N/A
Lindenwold Borough	None	N/A
Magnolia Borough	None	N/A
Merchantville Borough	None	N/A
Mount Ephraim Borough	None	N/A
Oaklyn Borough	None	N/A
Pennsauken Township	None	N/A
Pine Hill Borough	None	N/A
Pine Valley Borough	None	N/A

Runnemede Borough	Big Timber Creek	Entire reach
Somerdale Borough	None	N/A
Stratford Borough	None	N/A
Tavistock Borough	None	N/A
Voorhees Township	None	N/A
Waterford Township	None	N/A
Winslow Township	Fourmile Branch	Downstream of a point located 900 feet upstream of an unimproved access road near the Atlantic City Expressway
	Great Egg Harbor River	Between New Brooklyn-Cedarbrook Road and Conrail Railroad
	Pump Branch	Between Waterford-Blue Anchor Road and Conrail Railroad (near the intersection of Old Egg Harbor Road and Steelton Road)
Woodlynne Borough	None	N/A

Cape May County		
Municipality	**Name of Studied Water**	**Section Studied**
Avalon Borough	None	N/A
Cape May City	None	N/A
Cape May Point Borough	None	N/A
Dennis Township	None	N/A
Lower Township	None	N/A
Middle Township	None	N/A
North Wildwood City	None	N/A
Ocean City	None	N/A
Sea Isle City	None	N/A
Stone Harbor Borough	None	N/A
Upper Township	Tuckahoe River	Downstream of the municipal boundary of Corbin City and Manor City, Atlantic County
West Cape May Borough	None	N/A
West Wildwood Borough	None	N/A
Wildwood City	None	N/A
Wildwood Crest Borough	None	N/A
Woodbine Borough	None	N/A

Cumberland County		
Municipality	**Name of Studied Water**	**Section Studied**
Bridgeton City	Cohansey River	Entire reach
	Cohansey River Raceway	Entire reach

	Indian Fields Branch	Entire reach
	Jackson Run	Entire reach
Commercial Township	Buckshutem Creek	Downstream of Buckshutem Road
	Maurice River	Entire reach
Deerfield Township	Maurice River	Entire reach
Downe Township	None	N/A
Fairfield Township	None	N/A
Greenwich Township	None	N/A
Hopewell Township	None	N/A
Lawrence Township	None	N/A
Maurice River Township	Manantico Creek	Downstream of State Highway 55
	Manumuskin River	Along municipal boundary with Vineland City, Cumberland County
	Maurice River	Entire reach
Millville City	Buckshutem Creek	Downstream of Buckshutem Road
	Manantico Creek	Downstream of State Highway 55
	Maurice River	Entire reach
	Petticoat Stream	Downstream of Tenth Street
	White Marsh Run	Downstream of Rieck Avenue
Shiloh Borough	None	N/A
Stow Creek Township	None	N/A
Upper Deerfield Township	None	N/A
Vineland City	Blackwater Branch	Entire reach
	Cedar Branch	Downstream of Maple Avenue
	Long Branch	Entire reach
	Manantico Creek	Between the Manantico Lake Dam and Italia Avenue
	Manumuskin River	Entire reach
	Maurice River	Downstream of the Willow Grove Lake Dam
	Piney Branch	Downstream of North Valley Avenue
	Scotland Run	Entire reach

Essex County		
Municipality	**Name of Studied Water**	**Section Studied**
Belleville Town	Passaic River	Entire reach
	Second River	Entire reach
	Third River	Entire reach
Bloomfield Town	Second River	Entire reach
	Second River Tributary	Entire reach
	Third River	Entire reach
Caldwell Borough	None	N/A
Cedar Grove Township	Peckman River	Entire reach
	Peckman River Tributary	Downstream of a point located 90 feet

		upstream of State Highway 23
	Taylor Brook	Downstream of Ridge Road
East Orange City	Nishuane Brook	Entire reach
	Second River Tributary	Entire reach
Essex Fells Borough	Pine Brook	Entire reach
Fairfield Township	Deepavaal Brook	Downstream of Clinton Road
	Green Brook	Entire reach
	Passaic River	Entire reach
	Pine Brook	Entire reach
Glen Ridge Borough	Nishuane Brook	Entire reach
	Second River	Downstream of Hillside Avenue
Irvington Town	Elizabeth River	Entire reach
Livingston Township	Bear Brook	Downstream of a point located 1,800 feet upstream of East Cedar Street
	Canoe Brook	Downstream of a point located 300 feet downstream of Interstate Highway 280
	Canoe Brook Tributary	Entire reach
	Passaic River	Entire reach
	Slough Brook	Downstream of a point located 150 feet upstream of Irving Avenue
Maplewood Township	East Branch Rahway River	Entire reach
Millburn Township	East Branch Rahway River	Entire reach
	Passaic River	Entire reach
	Slough Brook	Entire reach
	Van Winkles Brook	Downstream of Millburn Avenue
	West Branch Rahway River	Between Interstate Highway 78 and Glen Avenue
Montclair Town	Nishuane Brook	Downstream of a point located 100 feet downstream of Draper Terrace
	Second River	Downstream of a point located 100 feet upstream of Park Street
	Third River	Entire reach
Newark City	Passaic River	Entire reach
	Second River	Entire reach
North Caldwell Borough	Green Brook	Downstream of a point located 60 feet upstream of Mountain Avenue
	Passaic River	Entire reach
Nutley Town	Passaic River	Entire reach
	Third River	Entire reach
Orange City	East Branch Rahway River	Downstream of Forest Hill Road
	East Branch Rahway River East Fork	Between a point located 320 feet downstream of Freeman Street and Joyce Street
	Nishuane Brook	Entire reach
	Wigwam Brook	Downstream of Watchung Avenue

Roseland Borough	Canoe Brook	Entire reach
	Foulertons Brook	Downstream of a point located 50 feet upstream of Locust Avenue
	North Branch Foulertons Brook	Downstream of Livingston Avenue
	Passaic River	Entire reach
South Orange Village Township	East Branch Rahway River	Entire reach
Verona Borough	Peckman River	Entire reach
West Caldwell Borough	Deepavaal Brook	Entire reach
	Green Brook	Entire reach
	Kane Brook	Downstream of Central Avenue
	Passaic River	Entire reach
	Pine Brook	Entire reach
West Orange Town	East Branch Rahway River	Downstream of Forest Hill Road
	Peckman River	Downstream of a point located 80 feet downstream of Prospect Avenue
	West Branch Rahway River	Downstream of a point located 50 feet upstream of Hooper Avenue
	West Branch Rahway River Crystal Lake Branch	Downstream of a point located 1,800 feet upstream of Suburban Drive

Gloucester County		
Municipality	**Name of Studied Water**	**Section Studied**
Clayton Borough	None	N/A
Deptford Township	Big Timber Creek	Entire reach
East Greenwich Township	Mantua Creek	Entire reach
	Edwards Run	Downstream of a point located 700 feet upstream of the New Jersey Turnpike
Elk Township	None	N/A
Franklin Township	Little Ease Run	Entire reach
	Scotland Run	Downstream of Washington Avenue
	Still Run	Entire reach
Glassboro Borough	Mantua Creek	Downstream of Fish Pond Road
Greenwich Township	None	N/A
Harrison Township	None	N/A
Logan Township	Raccoon Creek	Entire reach
	Oldmans Creek	Entire reach
Mantua Township	Mantua Creek	Downstream of State Highway 45
Monroe Township	Fourmile Branch	Downstream of a point located 900 feet upstream of an unimproved access road near the Atlantic City Expressway
	Hospitality Branch	Between the Diamond Lake Dam and the Spruce Lake Dam
National Park Borough	Woodbury Creek	Entire reach

Newfield Borough	None	N/A
Paulsboro Borough	Mantua Creek	Entire reach
Pitman Borough	None	N/A
South Harrison Township	None	N/A
Swedesboro Borough	Raccoon Creek	Downstream of a point located 125 feet upstream of County Route 551
Washington Township	Duffield Run	Downstream of a point located 1,350 feet upstream of the Kandle Lake Dam
	Mantua Creek	Between State Highway 47 and Fish Pond Road
	South Branch Big Timber Creek	Downstream of the head of Blackwood Lake, and also between a point located 2,800 feet downstream of Main Street and a point located 50 feet upstream of Redwood Street
Wenonah Borough	None	N/A
West Deptford Township	Mantua Creek	Entire reach
	Woodbury Creek	Entire reach
Westville Borough	None	N/A
Woodbury City	Woodbury Creek	Downstream of Underwood Avenue
Woodbury Heights Borough	None	N/A
Woolwich Township	Raccoon Creek	Downstream of a point located 125 feet upstream of County Route 551

Hudson County		
Municipality	**Name of Studied Water**	**Section Studied**
Bayonne City	None	N/A
East Newark Borough	Passaic River	Entire reach
Guttenberg Town	None	N/A
Harrison Town	Passaic River	Entire reach
Hoboken City	None	N/A
Jersey City	Hackensack River	Downstream of Newark Avenue
	Passaic River	Entire reach
Kearny Town	Hackensack River	Downstream of Newark Avenue
	Passaic River	Entire reach
North Bergen Township	Bellmans Creek	Between Susquehanna Western Railroad and confluence with Wolf Creek
Secaucus Town	None	N/A
Union City	None	N/A
Weehawken Township	None	N/A
West New York Town	None	N/A

Hunterdon County

Municipality	Name of Studied Water	Section Studied
Alexandria Township	Delaware River	Entire reach
	Harihokake Creek	Downstream of a point located 3,170 feet upstream of County Route 519
Bethlehem Township	Musconetcong River	Entire reach
	Spruce Run	Entire reach
Bloomsbury Borough	Musconetcong River	Entire reach
Califon Borough	South Branch Raritan River	Entire reach
Clinton Town	South Branch Raritan River	Entire reach
Clinton Township	Beaver Brook	Downstream of a point located 2,700 feet upstream of Interstate Highway 78 Exit Ramp
	South Branch Raritan River	Entire reach
	South Branch Rockaway Creek	Entire reach
Delaware Township	Alexauken Creek	Entire reach
	Brookville Creek	Upstream 3752 feet from the Delaware River
	Delaware River	Entire reach
	Third Neshanic River	Downstream of County Route 523
	Wickecheoke Creek	Downstream of County Route 604
East Amwell Township	Back Brook	Downstream of State Highway 179
	Neshanic River	Entire reach
	Neshanic River Tributary a	Downstream of a point located 50 feet upstream of Manners Road
	South Fork Third Neshanic River	Downstream of the intersection of Dunkard Church Road and Haines Road
	Stony Brook	Downstream of a point located 50 feet upstream of Linvale Road
Flemington Borough	None	N/A
Franklin Township	Cakepoulin Creek	Between a point located 3650 feet downstream of Quakertown Road and a point located 2700 feet upstream of Quakertown Road
	South Branch Raritan River	Entire reach
	South Branch Raritan River Tributary A	Entire reach
Frenchtown Borough	Delaware River	Entire reach
	Little Nishisakawick Creek	Entire reach
	Nishisakawick Creek	Entire reach
Glen Gardner Borough	Spruce Run	Entire reach
Hampton Borough	Musconetcong River	Entire reach
High Bridge Borough	South Branch Raritan River	Entire reach
	Willoughby Brook	Entire reach
Holland Township	Delaware River	Entire reach to confluence with

		Musconetcong River
	Delaware River Tributary 1	Downstream of Phillips Road
	Milford Creek	Downstream of Spring Garden Road
	Milford Creek Tributary 1	Downstream of Spring Garden Road
	Musconetcong River	Entire reach
Kingwood Township	Delaware River	Entire reach
	Lockatong Creek	Downstream of a point located 5,908 feet upstream of State Highway 12
	Lockatong Creek Tributary 1	Downstream of County Route 519
	Lockatong Creek Tributary 2	Downstream of a point located 150 feet upstream of Oak Grove Road
	Muddy Run	Downstream of Fitzer Road
Lambertville City	Alexauken Creek	Entire reach
	Delaware River	Entire reach
	Swan Creek	Entire reach
	Swan Creek Tributary 1	Entire reach
Lebanon Borough	South Branch Rockaway Creek	Entire reach
	South Branch Rockaway Creek Tributary A	Downstream of U.S. Highway 22
	South Branch Rockaway Creek Tributary B	Downstream of a point located 150 feet upstream of Interstate Highway 78
Lebanon Township	Musconetcong River	Entire reach
	Rocky Run	Upstream 6,185 feet from Spruce Run
	South Branch Raritan River	Entire reach
	Spruce Run	Downstream of Glen Gardner Borough, Hunterdon County
	Willoughby Brook	Downstream of Buffalo Hollow Road
Milford Borough	Delaware River	Entire reach
	Milford Creek	Entire reach
	Milford Creek Tributary 1	Entire reach
	Quequacommisacong Creek	Entire reach
Raritan Township	Neshanic River	Downstream of the Third Neshanic River
	Third Neshanic River	Entire reach
	South Branch Raritan River	Entire reach
Readington Township	Chambers Brook	Downstream of a point located 400 feet downstream of Pulaski Road
	Holland Brook	Downstream of County Route 523
	Lamington River	Entire reach
	Pleasant Run	Downstream of U.S. Highway 202
	Rockaway Creek	Entire reach
	South Branch Raritan River	Entire reach
	South Branch Raritan River Tributary A	Downstream of a point located 100 feet upstream of Barley Sheaf Road
	South Branch Rockaway Creek	Entire reach

Stockton Borough	Brookville Creek	Entire reach
	Delaware River	Entire reach
	Wickecheoke Creek	Entire reach
Tewksbury Township	Lamington River	Entire reach
	Lamington River Tributary a	Downstream of a point located 650 feet upstream of Homestead Road
	Rockaway Creek	Downstream of County Route 512
	Rockaway Creek Tributary B	Downstream of a point located 1400 feet upstream of Guinea Hollow Road
	South Branch Raritan River	Entire reach
Union Township	Mulhockaway Creek	Downstream of a point located 420 feet upstream of Gravel Hill Road
	South Branch Raritan River Tributary A	Downstream of Conrail Railroad (7,960 feet upstream of Race Street)
	Spruce Run	Entire reach
	Mulhockaway Creek Tributary B	Entire reach
	Mulhockaway Creek Tributary C	Entire reach
	Mulhockaway Creek Tributary D	Downstream of Interstate Highway 78
	Mulhockaway Creek Tributary E	Downstream of Interstate Highway 78
	Mulhockaway Creek Tributary F	Downstream of a point located 200 feet upstream of Baptist Church Road
	Spruce Run	Entire reach
West Amwell Township	Alexauken Creek	Downstream of State Highway 179
	Delaware River	Entire reach

Mercer County		
Municipality	**Name of Studied Water**	**Section Studied**
East Windsor Township	Bear Creek	Downstream of a point located 3,800 feet upstream of Dutch Neck Road
	Big Bear Brook	Downstream of State Highway 33
	Millstone River	Entire reach
	Rocky Brook	Entire reach
Ewing Township	Delaware River	Entire reach
	Ewing Creek	Downstream of Scotch Road
	Jacobs Creek	Entire reach
	Shabakunk Creek	Entire reach
	West Branch Shabakunk Creek	Downstream of a point located 2,000 feet upstream of Carlton Avenue
Hamilton Township	Assunpink Creek	Entire reach
	Miry Run	Entire reach
	North Branch Pond Run	Downstream of a point located 100 feet

		upstream of County Route 533
	Pond Run	Downstream of a point located 1,150 feet upstream of White Horse-Hamilton Square Road
Hightstown Borough	Rocky Brook	Entire reach
Hopewell Borough	Bedens Brook	Downstream of a point located 200 feet downstream of County Route 518
Hopewell Township	Bedens Brook	Entire reach
	Delaware River	Entire reach
	Ewing Creek	Downstream of Scotch Road
	Jacobs Creek	Downstream of confluence with Ewing Creek
	Stony Brook	Entire reach
Lawrence Township	Assunpink Creek	Entire reach
	Little Shabakunk Creek	Downstream of a point located 200 feet upstream of Driveway within Rider University
	Sand Run	Downstream of a point located 6,000 feet upstream of Interstate Highway 295
	Shabakunk Creek	Entire reach
	Shipetaukin Creek	Downstream of Cold Soil Road
	Stony Brook	Entire reach
	West Branch Shabakunk Creek	Entire reach
Pennington Borough	Stony Brook	Entire reach
Princeton Borough	None	
Princeton Township	Cherry Run	Downstream of Cherry Hill Road
	Harrys Brook	Downstream of a point located 50 feet upstream of Snowden Lane
	Harrys Brook Branch 1	Downstream of a point located 100 feet upstream of Bertrand Drive
	Harrys Brook Branch 2	Downstream of Harrison Street
	Harrys Brook Branch 2-1	Downstream of Van Dyke Road
	Harrys Brook Branch 2-2	Downstream of a point located 850 feet upstream of Grover Avenue
	Millstone River	Entire reach
	Mountain Brook	Downstream of a point located 1,000 feet upstream of Stuart Road
	Mountain Brook Branch 2	Downstream of a point located 80 feet downstream of Red Hill Road
	Stony Brook	Entire reach
	Van Horn Brook	Downstream of a point located 240 feet downstream of Arreton Road
	Van Horn Brook Tributary	Downstream of Herrontown Road
Trenton City	Assunpink Creek	Entire reach
Washington Township	Assunpink Creek	Entire reach

	Bear Creek	Downstream of a point located 3,800 feet upstream of Dutch Neck Road
	Hancock Creek	Upstream 3,900 feet from Assunpink Creek
	Miry Run	Downstream of Sharon Road
	New Sharon Branch	Entire reach
West Windsor Township	Assunpink Creek	Entire reach
	Bear Creek	Entire reach
	Big Bear Brook	Entire reach
	Bridegroom Run	Downstream of a point located 3,250 feet upstream of County Route 535
	Canoe Brook	Downstream of Penn Lyle Road
	Duck Pond Run	Downstream of Penn Lyle Road
	Little Bear Brook	Downstream of Meadow Lane
	Millstone River	Entire reach
	Miry Run	Entire reach
	Stony Brook	Entire reach

Middlesex County		
Municipality	**Name of Studied Water**	**Section Studied**
Carteret Borough	None	N/A
Cranbury Township	Cedar Brook	Entire reach
	Cranbury Brook	Entire reach
	Millstone River	Entire reach
	Millstone River Tributary	Downstream of a point located 3,250 feet upstream of County Route 535
	Shallow Brook	Entire reach
Dunellen Borough	Green Brook	Entire reach
East Brunswick Township	Beaverdam Brook	Downstream of Dutch Road
	Bog Brook	Downstream of Dutch Road
	Cedar Brook	Downstream of a point located 7,000 feet upstream of Manalapan Brook
	Ireland Brook	Downstream of a point located 1,700 feet upstream of Fern Road
	Lawrence Brook	Entire reach
	Raritan River	Entire reach
	Sawmill Brook	Downstream of a point located 300 feet downstream of Summerhill Road
	South River	Entire reach
Edison Township	Bound Brook	Downstream of Conrail Railroad
	Raritan River	Entire reach
Helmetta Borough	Manalapan Brook	Entire reach
	Sawmill Brook	Downstream of a point located 700 feet upstream of Washington Street
	Sawmill Brook Tributary	Entire reach

Highland Park Borough	Raritan River	Entire reach
Jamesburg Borough	Barclays Brook	Entire reach
	Manalapan Brook	Entire reach
	Wigwam Brook	Entire reach
Metuchen Borough	Dismal Brook	Downstream of a point located 850 feet upstream of Conrail Railroad near Norcross Avenue
	Mill Brook Tributary	Downstream of Conrail Railroad
Middlesex Borough	Ambrose Brook	Upstream 1,100 feet from Green Brook
	Bound Brook	Entire reach
	Green Brook	Entire reach
	Raritan River	Entire reach
Milltown Borough	Bog Brook	Downstream of Dutch Road
	Lawrence Brook	Entire reach
	Sucker Brook	Entire reach
Monroe Township	Barclays Brook	Downstream of State Home Road
	Bentleys Brook	Downstream of a point located 2,700 feet upstream of State Highway 33
	Cedar Brook	Downstream of Possum Hollow-Applegarth Road
	Clear Brook	Downstream of a point located 200 feet upstream of Union Valley-Half Acre Road
	Cranbury Brook	Downstream of Longstreet Road
	Cranbury Brook Tributary	Downstream of a point located 75 feet upstream of Union Valley Road
	Manalapan Brook	Entire reach
	Manalapan Brook Tributary	Downstream of Mott Avenue
	Matchaponix Brook	Entire reach
	Millstone River	Entire reach
	Shallow Brook	Downstream of the New Jersey Turnpike
	Wigwam Brook	Upstream 3,750 feet from Jamesburg Borough, Middlesex County
New Brunswick City	Lawrence Brook	Entire reach
	Mile Run	Entire reach
	Mile Run Tributary	Downstream of a point located 500 feet upstream of Triangle Road
	Raritan River	Entire reach
North Brunswick Township	Lawrence Brook	Entire reach
	Mae Brook	Downstream of Adams Lane
	Mile Run	Downstream of State Highway 171
	Oakeys Brook	Entire reach
	Six Mile Run	Downstream of a point located 3,150 feet upstream of Cozzens Lane
	Sucker Brook	Downstream of a point located 850 feet

		downstream of U.S. Highway 1
	Sucker Brook Tributary	Downstream of U.S. Highway 130
Old Bridge Township	Barclay Brook	Entire reach
	Cheesequake Creek	Downstream of Melvins Creek
	Matchaponix Brook	Entire reach
	Melvins Creek	Along Municipal Border with Sayerville Borough, Middlesex County
	South River	Entire reach
Perth Amboy City	Raritan River	Entire reach
	Spa Spring Creek	Between a point located 2,350 feet downstream of Amboy Avenue and a point located 1000 feet upstream of Amboy Avenue
Piscataway Township	Bound Brook	Entire reach
	Raritan River	Entire reach
Plainsboro Township	Bee Brook	Downstream of a point located 2,900 feet upstream of Scudders Mills Road Bypass
	Cedar Brook	Entire reach
	Cranbury Brook	Entire reach
	Devils Brook	Entire reach
	Millstone River	Entire reach
	Shallow Brook	Entire reach
Sayreville Borough	Cheesequake Creek	Entire reach
	Crossway Creek	Downstream of Bordentown-Amboy Turnpike
	Melvins Creek	Entire reach
	Raritan River	Entire reach
	South River	Entire reach
	Tennents Brook	Entire reach
South Amboy City	Raritan River	Entire reach
South Brunswick Township	Carters Brook	Entire reach
	Carters Brook Tributary	Entire reach
	Cow Yard Brook	Downstream of a point located 400 feet upstream of Deans Lane
	Devils Brook	Downstream of Hay Press Road
	Great Ditch	Upstream 1,270 feet from Lawrence Brook
	Heathcote Brook	Downstream of a Dam Located 2,450 feet upstream of New Road
	Heathcote Brook Branch	Downstream of U.S. Highway 1
	Heathcote Brook Tributary	Entire reach
	Ireland Brook	Entire reach
	Lawrence Brook	Downstream of Amtrak near Ridge Road
	Lawrence Brook Tributary	Downstream of a point located 400 feet downstream of Deans Lane

	Millstone River	Entire reach
	Oakeys Brook	Downstream of Henderson Road
	Oakeys Brook Tributary	Downstream of a point located 900 feet upstream of Henderson Road
	Shallow Brook	Entire reach
	Six Mile Run Branch	Downstream of a point located 1,700 feet upstream of Stillwell Road
	Six Mile Run Branch Tributary	Downstream of a point located 325 feet upstream of Hawthorne Road
	Switzgable Brook	Downstream of New Road
	Ten Mile Run	Downstream of a point located 110 feet upstream of Hastings Road
	Ten Mile Run Tributary 1	Downstream of a point located 50 feet upstream of Allstone Road
	Ten Mile Run Tributary 2	Downstream of Springdale Road
South Plainfield Borough	Bound Brook	Entire reach
	Cedar Brook	Entire reach
	Stream 14-14-2-2	Downstream of a point located 550 feet upstream of Grant Avenue
	Stream 14-14-2-2 Tributary	Downstream of a point located 275 feet upstream of Tompkins Avenue
	Stream 14-14-2-3	Entire reach
South River Borough	South River	Entire reach
Spotswood Borough	Cedar Brook	Entire reach
	Cedar Brook Tributary	Downstream of a Culvert Located near Gover Court
	Manalapan Brook	Entire reach
	Matchaponix Brook	Entire reach
	South River	Entire reach
Woodbridge Township	Arthur Kill	Entire reach
	Heards Brook	Downstream of a point located 30 feet upstream of U.S. Highway 9
	Parkway Branch	Downstream of the Garden State Parkway
	Pumpkin Patch Brook	Downstream of Inwood Avenue
	Rahway River	Entire reach
	Raritan River	Entire reach
	South Branch Rahway River	Entire reach
	Spa Spring Creek	Between a point located 2,350 feet downstream of Amboy Avenue and a point located 1,000 feet upstream of Amboy Avenue
	Woodbridge Creek	Downstream of Omar Avenue

Monmouth County

Municipality	Name of Studied Water	Section Studied
Aberdeen Township	None	N/A
Allenhurst Borough	None	N/A
Allentown Borough	Indian Run	Entire reach
	Doctors Creek	Entire reach
Asbury Park City	None	N/A
Atlantic Highlands Borough	Many Mind Creek	Downstream of State Highway 36
	Wagner Brook	Downstream of a point located 200 feet downstream of State Highway 36
Avon-By-The-Sea Borough	None	N/A
Belmar Borough	None	N/A
Bradley Beach Borough	None	N/A
Briele Borough	None	N/A
Colts Neck Township	Barren Neck Creek	Downstream of a point located 1,450 feet upstream of Long Bridge Road
	Big Brook	Downstream of Laurelwood Drive
	Hockhockson Brook	Downstream of Hockhockson Road
	Marl Brook	Upstream 4,950 feet from Mine Brook
	Mine Brook	Downstream of Mercer Road
	Pine Brook	Downstream of Water Street
	Willow Brook	Entire reach
	Yellow Brook	Entire reach
	Yellow Brook Tributary	Downstream of a point located 1,600 feet upstream of Cedar Drive
Deal Borough	Poplar Brook	Entire reach
Eatontown Borough	Parkers Creek	Downstream of Conrail Railroad
	Wampum Brook	Between Fort Monmouth Military Reservation and a point located 500 feet upstream of Maxwell Road
	Whale Pond Brook	Entire reach
Englishtown Borough	Mcgellairds Brook	Entire reach
	Weamaconk Creek	Entire reach
	Weamaconk Creek Tributary	Entire reach
Fair Haven Borough	None	N/A
Farmingdale Borough	None	N/A
Freehold Borough	None	N/A
Freehold Township	Applegates Creek	Downstream of Willow Brook Road
	Burkes Creek	Entire reach
	Debois Creek	Downstream of Center Street
	Debois Creek Tributary	Downstream of Three Brooks Road
	Manasquan River	Downstream of a point located 2,000 feet upstream of Georgia Road
	Manasquan River Tributary A	Downstream of a point located 2,000 feet

		upstream of County Route 524
	Manasquan River Tributary B	Downstream of Winchester Drive
	Manasquan River Tributary C	Downstream of a point located 2,200 feet upstream of Old Post Road
	Mcgellairds Brook	Downstream of Pond Road
	South Branch Tepehemus Brook	Downstream of Robertsville Road
	Weamaconk Creek	Downstream of Pond Road
	Wemrock Brook	Downstream of State Highway 33 (Business)
	Yellow Brook	Downstream of Randolph Road
	Yellow Brook Tributary	Downstream of Paulette Drive
Hazlet Township	None	N/A
Highlands Borough	None	N/A
Holmdel Township	Willow Brook	Downstream of a point located 100 feet upstream of Schanck Road
Howell Township	Bannen Meadow Brook	Downstream of a point located 650 feet upstream of Fort Plains Road
	Bills Brook	Downstream of County Route 524
	Gravelly Run	Downstream of a point located 500 feet upstream of Western Drive
	Ground Hog Brook	Downstream of a point located 300 feet downstream of Locust Avenue
	Haystack Brook	Downstream of a point located 4,300 feet upstream of Maxim-Southard Road
	Long Brook	Downstream of State Highway 33 (Business)
	Manasquan River	Upstream of Southard Road
	North Branch Metedeconk River	Entire reach
	Polipod Brook	Upstream 825 feet from Lake Louise
Interlaken Borough	None	N/A
Keansburg Borough	None	N/A
Keyport Borough	None	N/A
Little Silver Borough	Little Silver Creek	Entire reach
Lock Arbour Village	None	N/A
Long Branch City	Whale Pond Brook	Entire reach
Manalapan Township	Manalapan Brook	Entire reach
	Matchaponix Brook	Entire reach
	Mcgellairds Brook	Entire reach
	Milford Brook	Entire reach
	Pine Brook	Entire reach
	South Branch Tepehemus Brook	Entire reach
	Tepehemus Brook	Entire reach

	Weamaconk Creek	Entire reach
Manasquan Borough	None	N/A
Marlboro Township	Barclay Brook	Downstream of U.S. Highway 9
	Milford Brook	Downstream of a point located 50 feet downstream of County Route 520
	Pine Brook	Downstream of U.S. Highway 9
	South Branch Tepehemus Brook	Downstream of Robertsville Road
	Tepehemus Brook	Downstream of Robertsville Road
	Willow Brook	Downstream of a point located 100 feet upstream of Schanck Road
Matawan Borough	Gravelly Run	Entire reach
	Matawan Creek	Between the Garden State Parkway and County Route 516
Middletown Township	None	N/A
Millstone Township	Manalapan Brook	Downstream of County Route 524
	Millstone River	Downstream of Sweetmans Lane
	Rocky Brook	Between a point located 2,240 feet downstream of Perrineville Road and a point located 1,800 feet upstream of Sweetmans Lane
	Toms River	Downstream of a point located 1,600 feet upstream of Squan Road
Monmouth Beach Borough	None	N/A
Neptune Township	Jumping Brook	Entire reach
	Shark River	Entire reach
Neptune City Borough	None	N/A
Ocean Township	Hog Swamp Brook	Between a point located 100 feet downstream of State Highway 71 and a point located 1600 feet upstream of State Highway 18
	Poplar Brook	Downstream of a point located 300 feet upstream of Poplar Road
Oceanport Borough	Turtle Mill Brook	Downstream of State Highway 71
Red Bank Borough	None	N/A
Roosevelt Borough	None	N/A
Rumson Borough	None	N/A
Sea Bright Borough	None	N/A
Sea Girt Borough	None	N/A
Shrewsbury Borough	Parkers Creek	Entire reach
	North Branch Parkers Creek	Downstream of State Highway 35
Shrewsbury Township	None	N/A
South Belmar Borough	None	N/A
Spring Lake Borough	None	N/A

Spring Lake Heights Borough	Wreck Pond Brook	Entire reach
Tinton Falls Borough	Jumping Brook	Downstream of a point located 2,600 feet upstream of Asbury Avenue
	Parkers Creek	Downstream of Conrail Railroad
	Pine Brook	Downstream of Water Street
	Shark River	Downstream of Shafto Road
	Swimming River	Upstream of County Route 520
Union Beach Borough	None	N/A
Upper Freehold Township	New Sharon Branch	Downstream of a point located 3,450 feet upstream of Egglington Road
	New Sharon Branch North Tributary	Downstream of Egglington Road
Wall Township	Hannabrand Brook	Downstream of State Highway 34
	Shark River	Downstream of Shafto Road
	Shark River Tributary E	Downstream of a point located 4,844 feet upstream of State Highway 34
	Wreck Pond Brook	Downstream of a point located 4,700 feet upstream of the Garden State Parkway
West Long Branch Borough	Turtle Mill Brook	Downstream of State Highway 71
	Whale Pond Brook	Entire reach

Morris County		
Municipality	**Name of Studied Water**	**Section Studied**
Boonton Town	Rockaway River	Entire reach
Boonton Township	Rockaway River	Entire reach
Butler Borough	Pequannock River	Entire reach
Chatham Borough	Passaic River	Entire reach
Chatham Township	Passaic River	Entire reach
Chester Borough	None	N/A
Chester Township	Burnett Brook	Downstream of a point located 60 feet upstream of South Road
	Gladstone Brook	Downstream of a point located 4,845 feet upstream of the municipal boundary with Peapack-Gladstone Township, Somerset County
	Indian Brook	Upstream 5,840 feet from Burnett Brook
	Lamington River	Upstream of Black River Wildlife Management Area
	Peapack Brook	Downstream of a Private Driveway Located 6070 feet upstream of the municipal boundary with Peapack-Gladstone Township, Somerset County
Denville Township	Beaver Brook	Entire reach

	Den Brook	Entire reach
	Rockaway River	Entire reach
	Rockaway River Tributary 1	Downstream of the head of Rock Ridge Lake
Dover Town	Jackson Brook	Entire reach
	Mckeels Brook	Entire reach
	Rockaway River	Entire reach
East Hanover Township	Black Brook	Entire reach
	Pinch Brook	Entire reach
	Rockaway River	Entire reach
	Whippany River	Entire reach
Florham Park Borough	Passaic River	Entire reach
	Spring Garden Brook	Entire reach
Hanover Township	Black Brook	Entire reach
	Malapardis Brook	Downstream of South Jefferson Road
	Whippany River	Downstream of Interstate Highway 287 (near Hanover Avenue)
Harding Township	Great Brook	Upstream of Woodland Road
	Great Brook Tributary	Downstream of a point located 69 feet upstream of James Street
	Passaic River	Entire reach
	Primrose Brook	Between Great Swamp National Wildlife Refuge and a point located 1,821 feet upstream of Interstate Highway 287
	Silver Brook	Downstream of Interstate Highway 287
Jefferson Township	Lake Hopatcong	Entire reach
	Lake Hopatcong Tributary 2	Downstream of a point located 25 feet upstream of Lorettacong Drive
	Rockaway River	Downstream of a point located 7,500 feet upstream of Weldon Road
	Rockaway River Tributary 5	Downstream of a point located 1,700 feet upstream of Cozy Lake Dam
	Rockaway River Tributary 5-1	Downstream of the head of Moospac Lake
	Rockaway River Tributary 6	Downstream of a point located 100 feet upstream of Milton Road
	Rockaway River Tributary 7	Downstream of Weldon Road
	Weldon Brook	Downstream of East Shawnee Trail
	Pequannock River	Downstream of Oak Ridge Reservoir
Kinnelon Borough	Pequannock River	Downstream of a point located 600 feet upstream of the State Highway 23 U-Turn Across the River
Lincoln Park Borough	Beaver Dam Brook	Entire reach
	East Ditch	Entire reach
	Passaic River	Entire reach
	Pompton River	Entire reach

	West Ditch	Entire reach
Long Hill Township	Passaic River	Entire reach
Madison Borough	Spring Garden Brook	Downstream of a point located 400 feet upstream of Cross Street
Mendham Borough	None	N/A
Mendham Township	Burnett Brook	Entire reach
	Dawsons Brook	Entire reach
	Harmony Brook	Downstream of the Clyde Potts Reservoir Dam
	North Branch Raritan River	Entire reach
	Passaic River	Downstream of a point located 1,300 feet upstream of Tempe Wick Road
	Whippany River	Downstream of Harmony Brook
Mine Hill Township	Lamington River	Downstream of the head of a lake located 5,100 feet upstream of State Highway 10
Montville Township	Beaver Dam Brook	Downstream of Waughaw Road
	Crooked Brook	Downstream of Lake Valhalla
	Crooked Brook Tributary	Entire reach
	Hatfield Creek	Downstream of a point located 800 feet upstream of Brittany Road
	Passaic River	Entire reach
	Rockaway River	Entire reach
	Stony Brook	Entire reach
Morris Township	Great Brook	Entire reach
	Watnong Brook	Entire reach
	Whippany River	Entire reach
Morris Plains Borough	Jaquis Brook	Entire reach
	Watnong Brook	Entire reach
Morristown Town	Great Brook	Downstream of a point located 70 feet upstream of James Street
	Whippany River	Entire reach
Mountain Lakes Borough	None	N/A
Mount Arlington Borough	None	N/A
Mount Olive Township	Budd Lake Tributary	Downstream of U.S. Highway 46
	Conlon Pond Brook	Downstream of a point located 2,600 feet upstream of the Northerly U.S. Highway 206 Crossing
	Drakes Brook	Entire reach
	Musconetcong River	Entire reach
	South Branch Raritan River	Downstream of Budd Lake
	Wills Brook	Downstream of a point located 4,150 feet upstream of Interstate Highway 80
Netcong Borough	Musconetcong River	Entire reach

Parsippany-Troy Hills Township	Eastmans Brook	Downstream of the head of Lake Parsippany
	Rockaway River	Entire reach
	Troy Brook	Downstream of a point located 900 feet upstream of Ulysses Street
	Watnong Brook	Downstream of Powder Mill Pond
	West Brook	Downstream of a point located 1,250 feet upstream of Preston Road
	Whippany River	Entire reach
Pequannock Township	East Ditch	Downstream of Mountain Avenue
	Pequannock River	Entire reach
	Pompton River	Entire reach
	Ramapo River	Entire reach
	West Ditch	Entire reach
Randolph Township	Lamington River	Entire reach
	Rockaway River	Entire reach
Riverdale Borough	Pequannock River	Entire reach
Rockaway Borough	Beaver Brook	Entire reach
	Fox Brook	Entire reach
	Rockaway River	Entire reach
Rockaway Township	Beaver Brook	Downstream of Old Beach Glen Road
	Green Pond Brook	Downstream of An Interstate Highway 80 Ramp Located 2,025 feet upstream of State Highway 15
	Rockaway River	Entire reach
Roxbury Township	Drakes Brook	Downstream of Canal Street
	Lake Hopatcong	Entire reach
	Lamington River	Downstream of the head of a lake located 5,100 feet upstream of State Highway 10
	Musconetcong River	Downstream of Hopatcong State Park
	Rockaway River	Entire reach
	Succasunna Brook	Downstream of Eyland Avenue
Victory Gardens Borough	None	N/A
Washington Township	Drakes Brook	Entire reach
	Electric Brook	Downstream of the Lake George Dam
	Musconetcong River	Entire reach
	Musconetcong River Tributary B	Downstream of State Highway 24
	South Branch Raritan River	Entire reach
	Stephensburg Brook	Downstream of a point located 1,960 feet upstream of Stephensburg Road
	Stony Brook	Downstream of Fairview Avenue
	Tanners Brook	Downstream of Old Farmers Road
Wharton Borough	Rockaway River	Entire reach

	Green Pond Brook	Downstream of an Interstate Highway 80 ramp located 2,025 feet upstream of State Highway 15

Ocean County		
Municipality	**Name of Studied Water**	**Section Studied**
Barnegat Township	None	N/A
Barnegat Light Borough	None	N/A
Bay head Borough	None	N/A
Beach Haven Borough	None	N/A
Beachwood Borough	Jakes Branch	Along municipal boundary with South Toms River Borough, Ocean County, downstream of a point located 2,000 feet upstream of Double Trouble Road
Berkeley Township	None	N/A
Brick Township	None	N/A
Dover Township	Toms River	Along municipal boundary with Manchester Township, Ocean County, and also downstream of South Main Street
Eagleswood Township	None	N/A
Harvey Cedars Borough	None	N/A
Island Heights Borough	None	N/A
Jackson Township	North Branch Metedeconk River	Along municipal boundary with Howell Township, Monmouth County
	Toms River Tributary	Upstream 7,840 feet from County Route 571
Lacey Township	None	N/A
Lakehurst Borough	Manapaqua Brook	Downstream of a point located 1,500 feet upstream of County Route 547
	Union Branch	Entire reach Including Horicon Lake
Lakewood Township	North Branch Metedeconk River	Along municipal boundary with Howell Township, Monmouth County
Lavallette Borough	None	N/A
Little Egg Harbor Township	None	N/A
Long Beach Township	None	N/A
Manchester Township	Davenport Branch	Downstream of Lacey Road
	Manapaqua Brook	Downstream of a point located 1,500 feet upstream of County Route 547
	Ridgeway Branch	Downstream of County Route 547
	Ridgeway Branch Tributary	Downstream of Wilbur Avenue
	Toms River	Along municipal boundary with Dover Township, Ocean County
	Union Branch	Downstream of State Highway 70 including Horicon Lake

Mantoloking Borough	None	N/A
Ocean Township	None	N/A
Ocean Gate Borough	Toms River	Entire reach
	Toms River Tributary	Downstream of a point located 200 feet upstream of West Point Pleasant Avenue
Pine Beach Borough	None	N/A
Plumsted Township	Crosswicks Creek	Entire reach
	Stonyford Brook	Downstream of Moorehouse Road
Point Pleasant Borough	None	N/A
Point Pleasant Beach Borough	None	N/A
Seaside Heights Borough	None	N/A
Seaside Park Borough	None	N/A
Ship Bottom Borough	None	N/A
South Toms River Borough	Jakes Branch	Downstream of a point located 2,000 feet upstream of Double Trouble Road
	Toms River	Downstream of South Main Street
Stafford Township	None	N/A
Surf City Borough	None	N/A
Tuckerton Borough	None	N/A

Passaic County		
Municipality	**Name of Studied Water**	**Section Studied**
Bloomingdale Borough	Cold Spring Brook	Downstream of a point located 600 feet upstream of Glenwild Avenue
	Oakwood Lake Brook	Downstream of a point located 550 feet upstream of Woodward Avenue
	Pequannock River	Entire reach
	Posts Brook Tributary 1	Downstream of Glen Wild Lake
	Posts Brook Tributary 2	Downstream of Lake Ioscoe
	Van Dam Brook	Downstream of a point located 700 feet upstream of Knolls Road
	Van Dam Brook Tributary	Downstream of a point located 900 feet upstream of Tice Street
Clifton City	Passaic River	Entire reach
	Plog Brook	Downstream of a point located 150 feet downstream of Van Houten Avenue near Clifton Avenue
	Third River	Entire reach
	Wabash Brook	Downstream of a point located 150 feet downstream of Louise Street
	Weasel Brook	Downstream of a point located 150 feet upstream of Rutgers Place
	Weasel Brook Branch	Downstream of Garden State Parkway
	Weasel Brook Branch 3-5-2	Downstream of Athenia Avenue

Haledon Borough	Molly Anns Brook	Entire reach
Hawthorne Borough	Deep Brook	Entire reach
	Goffle Brook	Entire reach
	Passaic River	Entire reach
Little Falls Township	Great Notch Brook	Downstream of the municipal boundary with West Paterson Borough, Passaic County, near the Intersection of U.S. Highway 46 and Lower Notch Road
	Peckman River	Entire reach
North Haledon Borough	Buttermilk Falls Brook	Downstream of a point located 1,000 feet upstream of Belmont Avenue
	Glen Place Brook	Entire reach
	Molly Anns Brook	Entire reach
	Molly Anns Brook Tributary 3	Downstream of a point located near the intersection of Walray Avenue and Manor Road
	Molly Anns Brook Tributary 4	Downstream of a point located 130 feet downstream of Gemeinhardt Place
	Molly Anns Brook Tributary 6	Downstream of Pleasant View Drive
	Squaw Brook	Downstream of a point located 950 feet upstream of Squaw Brook Road
Passaic City	Macdonald Brook	Downstream of a point located 300 feet downstream of Broadway
	Passaic River	Entire reach
	Weasel Brook	Entire reach
Paterson City	Molly Anns Brook	Entire reach
	Passaic River	Entire reach
	Slippery Rock Brook	Entire reach
Pompton Lakes Borough	Pequannock River	Entire reach
	Posts Brook	Downstream of the Lower Twin Lake Dam
	Ramapo River	Entire reach
	Wanaque River	Downstream of the Lake Inez Dam
Prospect Park Borough	Molly Anns Brook	Entire reach
	Passaic River	Entire reach
Ringwood Borough	Burnt Meadow Brook	Entire reach
	Burnt Meadow Brook Branch 5	Downstream of a point located 600 feet upstream of Woodside Avenue
	Cupsaw Brook	Downstream of a point located 50 feet upstream of Kraft Place
	Cupsaw Brook Branch 1	Downstream of a point located 200 feet downstream of Kendall Drive
	Cupsaw Brook Branch 2	Downstream of a point located 50 feet upstream of Skylands Road
	Cupsaw Brook Branch 3	Downstream of a point located 50 feet upstream of Skylands Road

	Cupsaw Brook Branch 4	Downstream of a point located 850 feet upstream of Kraft Place
	Erskine Brook	Downstream of the head of Upper Erskine Lake
	High Mountain Brook	Downstream of a point located 5,400 feet upstream of the James Drive cul-de-sac
	Meadow Brook	Downstream of the head of Skyline Lakes
	Meadow Brook Branch 2	Downstream of the head of Hidden Valley Lake
	Ringwood Creek	Downstream of a point located 100 feet upstream of Farm Road
	Ringwood Creek Branch 1	Downstream of a point located 35 feet upstream of Sloatsburg Road
	Stephens Lake Brook	Entire reach
	Stephens Lake Brook Branch 1	Upstream 1,420 from Conklintown Road
	Stephens Lake Brook Branch 2	Downstream of a point located 2,000 feet upstream of Poplar Driver
	Wanaque River	Entire reach
	West Brook	Entire reach
Totowa Borough	Naachtpunkt Brook	Downstream of Totowa Road
	Passaic River	Entire reach
	Preakness Brook (Signac Brook)	Entire reach
Wanaque Borough	Meadow Brook	Entire reach
	Posts Brook	Entire reach (matches with Posts Brook Tributary 2 in Bloomindale Borough, Passaic County)
	Posts Brook Branch 1	Entire reach (matches with Posts Brook Tributary 1 in Bloomindale Borough, Passaic County)
	Posts Brook Branch 2	Downstream of a point located 1,100 feet upstream of Dupont Avenue
	Stephens Lake Brook	Downstream of a point located 3,380 feet upstream of the Stephens Lake Dam
	Stephens Lake Brook Branch 2	Entire reach
	Wanaque River	Entire reach
Wayne Township	Naachtpunkt Brook	Downstream of Totowa Road
	Packanack Brook	Downstream of a point located 300 feet upstream of Ratzer Road
	Passaic River	Entire reach
	Pequannock River	Entire reach
	Pompton River	Entire reach
	Preakness Brook (Signac Brook)	Downstream of County Route 504
	Ramapo River	Entire reach

West Milford Township	Belcher Creek	Downstream of a point located 20 feet upstream of Union Valley Road
	Belcher Creek Branch 1	Downstream of a point located 25 feet upstream of Union Valley Road
	Belcher Creek Branch 2	Downstream of a point located 7,750 feet upstream of the Reflection Lake Dam
	Cooley Brook	Downstream of a point located 1,925 feet upstream of Warwick Turnpike
	Green Brook	Downstream of a point located 1,300 feet upstream of Union Valley Road
	Greenwood Lake	Entire reach
	Longhouse Brook	Downstream of the head of Bearfort Waters
	Morsetown Brook	Downstream of the head of Carpi Lake
	Pequannock River	Downstream of Oak Ridge Reservoir along Jefferson Township, Morris County, and also downstream of a point located 600 feet upstream of the State Highway 23 U-Turn across the river
	Posts Brook	Downstream of the head of Algonquin Waters
	Posts Brook Branch 3	Downstream of a point located 2,800 feet upstream of Weaver Road
	Posts Brook Branch 4	Downstream of a point located 440 feet upstream of Weaver Road
	West Brook	Between the Lower Mount Glen Lake Dam and the head of Indian Trail Lake By Pleasant View Drive
	West Brook Branch 7	Downstream of a point located 1,840 feet upstream of Lindys Road
West Paterson Borough	Dowling Brook	Downstream of a point located 90 feet upstream of Lackawanna Avenue
	Great Notch Brook	Entire reach
	Passaic River	Entire reach
	Pearl Brook	Downstream of a point located 940 feet upstream of Casson Lane
	Peckman River	Entire reach
	Slippery Rock Brook	Downstream of a point located 1,200 feet upstream of Wealelsdrift Road

Salem County		
Municipality	**Name of Studied Water**	**Section Studied**
Alloway Township	None	N/A
Carneys Point Township	None	N/A
Elmer Borough	None	N/A
Elsinboro Township	Salem River	Entire reach

	Alloways Creek	Entire reach
Lower Alloways Creek Township	Alloways Creek	Downstream of Salem-Hancocks Bridge Road
Mannington Township	Fenwick Creek	Downstream of Keasbey Creek
	Keasbey Creek	Between Fenwick Creek and a point located 50 feet upstream of Quaker Neck Road
Oldmans Township	Oldmans Creek	Downstream of the municipal boundary of Logan Township and Woolwich Township, Gloucester County
Penns Grove Borough	None	N/A
Pennsville Township	Salem River	Along municipal boundary with Both Elsinboro Township and Salem City, Salem County
Pilesgrove Township	None	N/A
Pittsgrove Township	Maurice River	Downstream of the Willow Grove Lake Dam
Quinton Township	None	N/A
Salem City	Fenwick Creek	Entire reach
	Keasbey Creek	Between Fenwick Creek and a point located 50 feet upstream of Quaker Neck Road
	Salem River	Entire reach
Upper Pittsgrove Township	None	N/A
Woodstown Borough	None	N/A

Somerset County		
Municipality	**Name of Studied Water**	**Section Studied**
Bedminster Township	Chambers Brook	Downstream of the head of Echo Lake
	Clucas Brook	Downstream of County Route 523
	Herzog Brook	Downstream of County Route 512
	Hoopstick Brook	Downstream of County Route 523
	Lamington River	Entire reach
	Middle Brook	Downstream of a point located 50 feet upstream of Spook Hollow Road
	North Branch Raritan River	Entire reach
	Peapack Brook	Entire reach
Bernards Township	Dead River	Downstream of a point located 300 feet downstream of Interstate Highway 287
	Harrison Brook	Downstream of a point located 80 feet upstream of South Alward Avenue
	Harrison Brook Branch 2	Downstream of a point located 250 feet downstream of Debra Lane
	Passaic River	Entire reach
Bernardsville Borough	Indian Grave Brook	Entire reach
	Indian Grave Brook Tributary	Downstream of a point located 100 feet

	K	downstream of Washington Corner Road
	North Branch Raritan River	Entire reach
	Passaic River	Entire reach
Bound Brook Borough	Green Brook	Entire reach
	Raritan River	Entire reach
Branchburg Township	Holland Brook	Entire reach
	Lamington River	Entire reach
	North Branch Raritan River	Entire reach
	South Branch Raritan River	Entire reach
Bridgewater Township	Chambers Brook	Downstream of the head of Echo Lake
	Green Brook	Entire reach
	North Branch Raritan River	Entire reach
	Raritan River	Entire reach
Far Hills Borough	North Branch Raritan River	Entire reach
Franklin Township	Mile Run	Entire reach
	Millstone River	Entire reach
	Raritan River	Entire reach
Green Brook Township	Green Brook	Entire reach
	Stony Brook	Entire reach
Hillsborough Township	Millstone River	Entire reach
	Raritan River	Entire reach
	South Branch Raritan River	Entire reach
Manville Borough	Millstone River	Entire reach
	Raritan River	Entire reach
Millstone Borough	Millstone River	Entire reach
Montgomery Township	Bedens Brook	Entire reach
	Cruser Brook	Downstream of Belle Mead-Blawenburg Road
	Millstone River	Entire reach
	Pike Run	Entire reach
	Rock Brook	Downstream of Camp Meeting Avenue
	Van Horn Brook	Entire reach
North Plainfield Borough	Green Brook	Entire reach
	Stoney Brook	Entire reach
Peapack and Gladstone Borough	North Branch Raritan River	Entire reach
	Raritan River	Entire reach
Rocky Hill Borough	Millstone River	Entire reach
	Van Horn Brook	Entire reach
Somerville Borough	Macs Brook	Entire reach
	Peters Brook	Entire reach
	Raritan River	Entire reach
	Ross Brook	Downstream of U.S. Highway 22
South Bound Brook	Raritan River	Entire reach

Borough		
Warren Township	Corys Brook	Downstream of a point located 1,250 feet upstream of Powder Horn Drive
	Dead River	Entire reach
	Passaic River	Entire reach
Watchung Borough	Green Brook	Downstream of a point located 1,660 feet upstream of Apple Tree Road
	Stony Brook	Entire reach
	Stony Brook East Branch	Downstream of a point located 2,240 feet upstream of Valley Drive
	Stony Brook West Branch	Entire reach
	Stony Brook West Branch Tributary	Downstream of a point located 360 feet upstream of Carrar Drive

Sussex County		
Municipality	**Name of Studied Water**	**Section Studied**
Andover Borough	Kymers Brook	Downstream of U.S. Highway 206
Andover Township	Pequest River	Downstream of U.S. Highway 206
	Kymers Brook	Entire reach
	Paulins Kill	Entire reach
Branchville Borough	Culvers Creek	Entire reach
	Dry Brook	Downstream of a point located 700 feet upstream of Maple Avenue
Byram Township	Lubbers Run	Entire reach
	Musconetcong River	Downstream of Hopatcong State Park
Frankford Township	Culvers Creek	Downstream of U.S. Highway 206
	Dry Brook	Entire reach
	Paulins Kill	Entire reach
Franklin Borough	None	N/A
Fredon Township	Pequest River	Section of River adjacent to Andover Township near Springdale Road
Green Township	Kymers Brook	Entire reach
	Pequest River	Entire reach
Hamburg Borough	None	N/A
Hampton Township	Paulins Kill	Entire reach
Hardyston Township	None	N/A
Hopatcong Borough	Lubbers Run	Downstream of a point located 3,500 feet upstream of County Route 605
Lafayette Township	Lafayette Township Tributary	Downstream of a point located 700 feet upstream of Little Road
	Paulins Kill	Entire reach
	Sparta Junction Tributary	Entire reach
Montague Township	None	N/A
Newton Town	Moores Brook	Downstream of a point located 1,350 feet upstream of Lake Avenue

	Paulins Kill	Upstream 100 feet from the municipal boundary with Hampton Township and Andover Township, Sussex County
Ogdensburg Borough	None	N/A
Sandyston Township	None	N/A
Sparta Township	Sparta Junction Tributary	Downstream of Layton Road
Stanhope Borough	Musconetcong River	Entire reach
Stillwater Township	Paulins Kill	Upstream of County Route 614
Sussex Borough	None	N/A
Vernon Township	None	N/A
Walpack Township	None	N/A
Wantage Township	None	N/A

Union County		
Municipality	**Name of Studied Water**	**Section Studied**
Berkeley Heights Township	Blue Brook	Along municipal boundary with Scotch Plains Township
	Green Brook	Downstream of a point located 1,660 feet upstream of Apple Tree Road
	Passaic River	Entire reach
Clark Township	Pumpkin Patch Brook	Entire reach
	Rahway River	Entire reach
	Robinsons Brook	Entire reach
Cranford Township	College Branch	Downstream of Springfield Avenue
	Gallows Hill Road Brook	Downstream of the Brookside Detention Basin
	Orchard Street Branch	Entire reach
	Rahway River	Entire reach
	Rahway River Drainage Ditch	Adjacent to dike along Rahway River
Elizabeth City	None	N/A
Fanwood Borough	None	N/A
Garwood Borough	None	N/A
Hillside Township	Elizabeth River	Entire reach
Kenilworth Borough	Black Brook	Between the Rahway River Drainage Ditch and a point located 750 feet upstream of Springfield Road
	Branch 10-24	Downstream of South 31st Street
	Rahway River	Entire reach
	Rahway River Drainage Ditch	Between Rahway River and Black Brook
	Stream 10-30	Between the Rahway River Drainage Ditch and a point located 30 feet upstream of Wilshire Drive
	Stream 10-30-1	Between the Rahway River Drainage Ditch and 14th Street
	West Brook	Entire reach

Linden City	Rahway River	Along municipal boundary with Woodbridge Township, Middlesex County
Mountainside Borough	Nomahegan Brook	Downstream of U.S. Highway 22
New Providence Borough	Passaic River	Entire reach
	Salt Brook	Downstream of a Railroad Located 1,200 feet upstream of Maple Street
	West Branch Salt Brook	Downstream of a point located 300 feet upstream of Morris Avenue
Plainfield City	Green Brook	Entire reach
	Cedar Brook	Downstream of Stelle Avenue
Rahway City	Orchard Creek	Entire reach
	Rahway River	Entire reach
	Robinsons Branch	Entire reach
	South Branch Rahway River	Entire reach
Roselle Borough	West Brook	Upstream of Raritan Road
Roselle Park Borough	None	N/A
Scotch Plains Township	Ash Brook Swamp	Entire reach
	Blue Brook	Entire reach
	Branch 22	Downstream of a point located 1,500 feet upstream of Sleepy Hollow Lane
	Green Brook	Entire reach
	Robinsons Branch	Entire reach
	Winding Brook	Downstream of Elizabeth Avenue
Springfield Township	Bryant Brook	Between Van Winkles Brook and Bryant Brook Branch at Interstate Highway 78
	Bryant Brook Branch	Between Van Winkles Brook and Bryant Brook at Interstate Highway 78
	Rahway River	Entire reach
	Rahway River Drainage Ditch	Adjacent to dike along Rahway River
	Van Winkles Brook	Entire reach
Summit City	Passaic River	Entire reach
Union Township	Black Brook	Entire reach
	East Branch Rahway River	Entire reach
	Elizabeth River	Entire reach
	Rahway River	Entire reach
Westfield Town	Nomahegan Brook	Entire reach
	Rahway River Tributary	Downstream of a point located 720 feet upstream of Gallows Hill Road
	Robinsons Branch 15	Downstream of a point located 180 feet downstream of Shackamaxon Drive
	Robinsons Branch 15-1	Downstream of a point located 130 feet downstream of Rahway Avenue
	Robinsons Branch 15-2	Downstream of a point located 500 feet downstream of Grove Street

Winfield Township	Rahway River	Entire reach

Warren County		
Municipality	**Name of Studied Water**	**Section Studied**
Allamuchy Township	Musconetcong River	Entire reach
	Pequest River	Entire reach
Alpha Borough	None	N/A
Belvidere Town	Pequest River	Entire reach
Blairstown Township	Paulins Kill	Entire reach
Franklin Township	Mill Brook	Downstream of a point located 2,050 feet upstream of State Highway 57
	Montana Brook	Downstream of a point located 100 feet upstream of State Highway 57
	Musconetcong River	Entire reach
	Musconetcong River Tributary A	Downstream of a point located 1,400 feet upstream of Asbury Road
	Pohatcong Creek	Entire reach
	Sigler Brook	Downstream of Bloomsbury Road
Frelinghuysen Township	None	N/A
Greenwich Township	Lopatcong Creek	Entire reach
	Merrill Creek (Including Left Channel)	Entire reach
	Musconetcong River	Entire reach
	Pohatcong Creek	Entire reach
Hackettstown Town	Hackettstown Brook	Downstream of a private road located 400 feet upstream of Franklin Street
	Musconetcong River	Entire reach
	Trout Brook	Entire reach
Hardwick Township	None	N/A
Harmony Township	Buckhorn Creek	Entire reach
	Buckhorn Creek Tributary 1	Downstream of a point located 1,700 feet upstream of County Route 519
	Delaware River	Entire reach
	Lopatcong Creek	Downstream of a point located 250 feet upstream of Allen Mills Road
Hope Township	Beaver Brook	Downstream of Interstate Highway 80
	Honey Run	Downstream of a point located Swayze Mill Road
Independence Township	Pequest River	Upstream of a point located 100 feet downstream of U.S. Highway 46
Knowlton Township	None	N/A
Liberty Township	None	N/A
Lopatcong Township	Delaware River	Entire reach
	Dry Run	Downstream of a point located 650 feet upstream of Powder Horn Road

	Lopatcong Creek	Entire reach
Mansfield Township	Hances Brook	Downstream of Highland Avenue
	Musconetcong River	Entire reach
	Pohatcong Creek	Downstream of Janes Chapel Road
	Trout Brook	Entire reach
Oxford Township	None	N/A
Pahaquarry Township	None	N/A
Phillipsburg Town	Delaware River	Entire reach
	Lopatcong Creek	Entire reach
Pohatcong Township	Delaware River	Entire reach
	Lopatcong Creek	Entire reach
	Musconetcong River	Entire reach
	Pohatcong Creek	Entire reach
	Pohatcong Creek Tributary 1	Downstream of a point located 800 feet upstream of Conrail Railroad
Washington Borough	Shabbecong Creek	Entire reach
Washington Township	Musconetcong River	Entire reach
	Musconetcong River Tributary B	Downstream of State Highway 57
	Pohatcong Creek	Entire reach
	Shabbecong Creek	Downstream of Washington Borough, Warren County
White Township	Beaver Brook	Entire reach
	Pequest River	Entire reach