ENVIRONMENTAL PROTECTION LAND USE MANAGEMENT LAND USE REGULATION PROGRAM

Highlands Water Protection and Planning Act Rules

Proposed Readoption with Amendments: N.J.A.C. 7:38

Authorized By: Bradley M. Campbell, Commissioner, Department of Environmental Protection

Authority: N.J.S.A. 13:20-1 et seq., 13:1D-1 et seq., 13:1B-15.128 et seq., 13:9B-1 et

seq.,23:2A-1 et seq., 58:1A-1 et seq., 58:10A-1 et seq., 58:11-23 et seq., 58:11A-1 et

seq., 58:12A-1 et seq., 58:16A-50 et seq.

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

DEP Docket Number: 39-05-11/578

Proposal Number: PRN 2005-472

A public hearing concerning the proposal will be held from 4:00 P.M. to close of

comments on:

January 25, 2006 Highlands Council Conference Room Highlands Council 100 North Road-Rt. 513 Chester, NJ 07930

Submit written comments on this proposal by February 17, 2006, to:

Janis Hoagland, Esq. Attn.: DEP Docket No. 39-05-11/578 Office of Legal Affairs Department of Environmental Protection PO 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.

A copy of the proposal is available on paper or on disk by calling the Department at (609) 633-7021. The rule proposal can also be found at the Department's website (<u>www.nj.gov/dep</u>). The agency proposal follows:

Summary

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

The Highlands Water Protection and Planning Act (Highlands Act) (N.J.S.A. 13:20-1 et al) became effective on August 10, 2004. The Highlands Act documents the geographical boundary of the Highlands Region and establishes the Highlands preservation and planning areas. In adopting the Highlands Act, the Legislature found and declared that the Highlands Region is an essential source of drinking water for approximately one-half of the State's population, that it contains exceptional natural resources including clean air, contiguous forest lands, wetlands, pristine watersheds, and habitat for fauna and flora, that it includes many sites of historic significance and that it provides abundant recreational opportunities for the citizens of the State (see N.J.S.A. 13:20-2).

The Highlands Act directs the Department to "prepare rules and regulations" establishing the environmental standards for the preservation area...." (see N.J.S.A. 13:20-32). Therefore, in accordance with N.J.S.A. 13:20-31, the Department adopted the Highlands Water Protection and Planning Act Rules at N.J.A.C. 7:38 effective May 9, 2005. In accordance with the Highlands Act and N.J.S.A. 52:14B-5.1c, these rules, effective until November 2, 2006 (one year after the date of filing of the special adoption plus 180-days upon filing of notice of proposed readoption), are to be adopted, amended, or readopted after consultation with the Highlands Water Protection and Planning Council (Highlands Council), the State Planning Commission and the Departments of Agriculture, Community Affairs and Transportation. Consequently, the Department afforded these agencies a 45-day review period on the May 9, 2005 adoption. The Department is now proposing to readopt the Highlands rules with amendments reflecting the consultation with the above-mentioned agencies, as well as other agencies and individuals who provided input to the Department regarding the rules. As a result of this consultation, the Department acknowledges that there are municipalities in the Highlands region that have outstanding second round Council on Affordable Housing (COAH) obligations and to the extent that the Highlands Act and this chapter allows, will support the efforts of such municipalities when proposing to construct developments that are comprised exclusively of low or moderate income dwellings.

The rules proposed for readoption, as well as amendments to them, are described below. Throughout the rules, the Department is proposing technical amendments that correct capitalization, grammar, and usage, update addresses, and correct crossreferences.

Subchapter 1. General information

Subchapter 1 of N.J.A.C. 7:38 contains general information.

7:38-1.1 Scope and authority

N.J.A.C. 7:38-1.1 establishes the scope of and authority for the Highlands rules. N.J.A.C. 7:38-1.1(a) also briefly describes the relationship between the Department's rules, the Highlands Council and the Highlands Regional Master Plan (RMP). The Department and the Highlands Council have worked together to formulate these rules. However, the RMP is not scheduled for completion until after the Department readopts these rules. The Department may also amend the Highlands rules in the future as necessary to make them consistent with the RMP. The Department is proposing to amend N.J.A.C. 7:38-1.1(a) to clarify that the chapter is authorized by the Highlands Act and referenced statutory authorities and to state that the Department will be considering the RMP when making permitting or other planning decisions (for example, when considering whether or not it is appropriate to amend a Water Quality Management Plan (WQMP)) in the Highlands Region as a whole. In addition, the Department is proposing to delete the sentence at the end of the subsection regarding the approval of Water Quality Management Plan amendments pending completion of the Regional Master Plan because this subject is covered by proposed new N.J.A.C. 7:38-1.1(k).

N.J.A.C. 7:38-1.1(b), instructs applicants who are undertaking agricultural activities in the Highlands to contact the State Department of Agriculture because the Highlands Act designates that entity to work with those with farming and horticultural interests in the Highlands preservation area.

N.J.A.C. 7:38-1.1(c), (d) and (e) provide a brief outline of the types of Department determinations that may be obtained and cross references to the appropriate rule sections for details.

N.J.A.C. 7:38-1.1(f) prohibits regulated activity in the Highlands preservation area without first obtaining a Highlands Preservation Area Approval (HPPA) from the Department.

Proposed new N.J.A.C. 7:38-1.1(g) through (l) describe the interaction of the Department's rules in this chapter with the standards to be adopted as part of the RMP. When adopted, the RMP will address the entire Highlands region.

Proposed N.J.A.C. 7:38-1.1(g) states that the Department will give great consideration and weight to the RMP when making decisions in or affecting the Highlands region, while proposed N.J.A.C. 7:38-1.1(h) more specifically states that in the planning area, so long as it is consistent with its statutory and regulatory authority, the Department will not issue any approval, authorization or permit if it is incompatible with the resource protection goals of the RMP.

Proposed N.J.A.C. 7:38-1.1(i) states that the Department will apply both the rules contained in this chapter and the standards contained within the RMP, when adopted. Where the Department, in consultation with the Highlands Council determines that the two standards are inconsistent in some aspect, the Department will only apply the RMP standards insofar as they are consistent with the Highlands Act in all ways, and comply with the specific environmental standards set forth in the Highlands Act at N.J.S.A. 13:20-32.

Proposed N.J.A.C. 7:38-1.1(j) states that the Department will also give great weight and consideration to the RMP when reviewing applications for HPAAs with waivers or when reviewing other hardship requests in conjunction with other types of applications in the planning area.

Proposed N.J.A.C. 7:38-1.1(k) states that the Department will consider the RMP and consider amending its Water Quality Management Plans (WQMP) to maintain consistency with the RMP and shall only approve a WQMP amendment after receiving a determination of consistency with the RMP from the Highlands Council. In the interim before the RMP is completed the Department will obtain a recommendation from the

Highlands Council when determining whether or not to approve a Water Quality Management Plan.

Finally, proposed N.J.A.C. 7:38-1.1(1) describes the components of the RMP and includes it by reference into this chapter.

7:38-1.2 Forms and information

N.J.A.C. 7:38-1.2 provides contact information for application forms and assistance to applicants. Since the Highlands regulatory program consolidates aspects of several different Department programs, applicants may need forms or information from various offices within the Department. Using a pre-application process, the Department will guide applicants through the Highlands review process in its entirety.

The Highlands regulatory program is primarily implemented by two Department programs: Watershed Management and Land Use Regulation. The contact information for these programs is provided at N.J.A.C. 7:38-1.2(a)1 and 2, respectively.

The Watershed Management Program is responsible for making applicability determinations, which include determining whether a project is regulated, its exemption status, and its consistency with the applicable Water Quality Management Plan. The Land Use Regulation Program conducts Highlands Resource Area Determinations (HRAD)(see Subchapter 4 summary) and reviews applications for Highlands Preservation Area Approvals (HPAAs)(see Subchapter 6 summary).

Because the Division of Water Quality will be processing New Jersey Pollutant Discharge Elimination System (NJPDES) permits and approvals for projects that receive a HPAA, contact information for that program is provided at N.J.A.C. 7:38-1.2(a)3.

N.J.A.C. 7:38-1.2(a)4 provides contact information for the Division of Water Supply for applicants with projects requiring new or extended public water sources.

Applicants for HRADs or HPAAs are required to provide the Department information regarding rare, threatened or endangered plant and animal species and ecological communities from the Office of Natural Lands Management, Natural Heritage Program. N.J.A.C. 7:38-1.2(a)5 contains the relevant contact information.

Finally, N.J.A.C. 7:38-1.2(a)6 provides contact information for the Highlands Council. Applicants for any determination, permit, exemption or approval under the rules are required to provide notice of their application to the Highlands Council.

7:38-1.3 Other statutes and regulations

N.J.A.C. 7:38-1.3 describes statutes and regulations in addition to the Highlands Act that are applicable to the developments regulated under this chapter. N.J.A.C. 7:38-1.3(a) restates the provision from the Highlands Act at N.J.S.A. 13:20-33a that the regulations consolidate but do not eliminate related aspects of several other State environmental laws administered by the Department. N.J.A.C. 7:38-1.3(a)8 repeats the provision from the Highlands Act that excludes from the 90-day Law applications for an HPAA that also include the need for a review in accordance with the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq.

N.J.A.C. 7:38-1.3(b) states that the Highlands rules shall not be construed to limit, alter or eliminate the requirements of any other applicable Federal, State or local laws, rules, regulations, codes or ordinances.

N.J.A.C. 7:38-1.3(c) states that if any provision of the Highlands rules is invalidated by any court of competent jurisdiction, the remainder of the rules remain in effect.

Proposed new N.J.A.C. 7:38-1.3(d) is a statement of the Department's public trust responsibilities in protecting the resources of the Highlands region as described in the legislatures findings in the Act at N.J.S.A. 13:20-2.

7:38-1.4 Definitions

The term "administrative consent order" is defined because it is one of the "oversight documents" (see definition elsewhere in N.J.A.C. 7:38-1.4) an applicant must have obtained in order for a site to be eligible for consideration for Department-designation as a brownfield site under N.J.A.C. 7:38-6.6.

The definitions of "agricultural or horticultural development" and "agricultural or horticultural use" appear in the Highlands Act at N.J.S.A. 13:20-3 and the terms are used in the definition of "major Highlands development" to identify classes of activities that are not major Highlands development and are therefore not subject to the Highlands rules.

The definition of "application for development" is proposed to be deleted because it is not used in the rules.

The term "aquatic ecosystem" is defined for purposes of N.J.A.C. 7:38-6.2(a)4, one of the findings the Department must make in order to issue a HPAA.

The term "capability class and subclass" is defined for purposes of N.J.A.C. 7:38-3.8 for determining the extent of activities permitted on a steep slope.

The term "capital improvement" is defined in the Highlands Act and is used within the definition of "facility expansion," both at N.J.S.A. 13:20-3. The term "capital project" is not defined in the Highlands Act although the Act uses the term within the definition of "major Highlands development" and also to describe a certain category of exemption at

N.J.S.A. 13:20-28a(13). Thus, it appears that the two terms are used interchangeably. Therefore, the Department is adding "capital project" to the term "capital improvement." The term "capital improvement" is used in N.J.A.C. 7:38-3.2(i)1. The term "capital project" is used within the Department's definition of "major Highlands development" at N.J.A.C. 7:38-1.4 and 2.2 and to describe the exemption at N.J.A.C. 7:38-2.3.

The definition of "closed" is proposed to be deleted in this rule because N.J.A.C. 7:38-6.6, as it is proposed to be amended, does not use this term.

The term "conservation restriction" is defined for purposes of N.J.A.C. 7:38-6.3 and is a mechanism used by the Department to limit environmental impacts to properties after the successful completion of the permitting process.

The definition of "construction beyond site preparation" appears in the Highlands Act at N.J.S.A. 13:20-3 and the term is used in one of the criteria at N.J.A.C. 7:38-2.3(a)3iv for the expiration of the exemption at N.J.A.C. 7:38-2.3(a)3 for the construction of certain major Highlands developments.

The definitions of "construction materials facility," "development," "development regulation," and "environmental land use or water permit" all appear in the Highlands Act at N.J.S.A. 13:20-3 and the terms are used for the purposes of the exemption provisions at N.J.A.C. 7:38-2.3.

The definition of the term "contaminated site" is drawn from the Department's Technical Requirements for Site Remediation, N.J.A.C. 7:26E, and is used in these rules for purposes of the priorities related to the exemption for sites being remediated in accordance with the Brownfield and Contaminated Site Remediation Act.

The definition of "contamination" or "contaminant describes certain discharged hazardous substances, hazardous waste, and pollutants for purposes of the provisions

related to the redevelopment of previously developed areas, specifically, Departmentdesignated Highlands brownfields.

The term "contiguous" is defined for purposes of identifying a site at N.J.A.C. 7:38-6.6(a), as proposed to be amended.

The term "Department " refers to the Department of Environmental Protection.

The term "designated planning agency" is used in the provisions at N.J.A.C. 7:38-9.6 and N.J.A.C. 7:38-11.6 to describe the Department's application and review procedures for Water Quality Management Plan amendments.

The term "discharge" is defined for purposes of N.J.A.C. 7:38-6.6 in identifying sites that are eligible for consideration for Department-designation as a brownfield site.

The definition of "disturbance" appears in the Highlands Act at N.J.S.A. 13:20-3 and the term is used in the definition of "major Highlands development" to identify activities and projects that are subject to these rules.

The term "ecological community" is defined for purposes of N.J.A.C. 7:38-3.12 to identify one of the categories of unique and irreplaceable resources that is to be protected under these rules.

The term "endangered species" refers to the list of wildlife endangered species that is promulgated under the Endangered and Nongame Species Conservation Act (N.J.A.C. 7:25-4.13) and the list of plant species that is promulgated under the Endangered Plant Species List Act (N.J.A.C. 7:5C-5.1). With respect to wildlife, N.J.A.C. 7:25-4.2 defines "endangered species" as "a species whose prospects for survival within the state are in immediate danger due to one or many factors: a loss of or change in habitat, overexploitation, predation, competition, disease. An endangered species requires

immediate assistance or extinction will probably follow." The term endangered species also includes any species or subspecies appearing on any Federal endangered species list. The Federal endangered species list promulgated pursuant to the Endangered Species Act of 1973, 16 U.S.C. §§ 1531 et seq. is found at 50 C.F.R.17.11. With respect to plants, N. J.A.C. 7:5C-1.4 defines "endangered species" as "any native plant species whose survival in the State or the nation is in jeopardy, including, but not limited to, plant species designated as listed, proposed, or under review by the Federal government as endangered or threatened throughout its range in the United States pursuant to the Endangered Species Act of 1973, Pub. L. 93-205 (16 USC §1533), any additional species known or believed to be rare throughout its worldwide range, and any species having five or fewer extant populations within the State."

The definition of "facility expansion" appears in the Highlands Act at N.J.S.A. 13:20-3 and the term is used in the criteria to be considered by the Department before reducing a water allocation in accordance with N.J.A.C. 7:38-3.2.

The term "Federal Act" is defined because several of the consolidated programs that form the basis for a Highlands review and HPAA draw some of their authority from and reference the Federal Clean Water Act. This term is used in the standard conditions in Subchapter 12.

The term "forest" is part of the definition of "upland forest." Both terms are used to describe the Highlands resource area referred to as "upland forest area" at N.J.A.C. 7:38-3.9. In addition, the term "forest" is used to identify areas for which a specific septic density is required at N.J.A.C. 7:38-3.4.

The Department is proposing to add a definition for "hazardous substance." The term is used for the purposes of designation of brownfields at N.J.A.C. 7:38-6.6. The definition is that set forth in the Department's Discharges of Petroleum and Other Hazardous Substances rules at N.J.A.C. 7:1E-1.6.

The definition of "Highlands Act" identifies the enabling statute for these rules.

The term "Highlands Council" refers to the Highlands Water Protection and Planning Council.

The definition of "Highlands open waters" " appears in the Highlands Act at N.J.S.A. 13:20-3 and identifies a category of resource that is to be protected under these rules.

The definition of "Highlands Preservation Area Approval" or "HPAA" appears in the Highlands Act at N.J.S.A. 13:20-30 and describes the document that will result from the Department's review of a specific project as compliant with all relevant provisions of the Highlands Act. The term "Highlands Preservation Area Approval" means a Highlands permit for which property owners may apply. In addition, the term includes Highlands Preservation Area Approvals with waivers. The Department is proposing to amend the definition of Highlands Preservation Area Approval to indicate that Highlands general permits are also included in the definition of Highlands Preservation Area Approval and to indicate that when a provision of the rules refers to an HPAA, the provision applies to Highlands general permits unless explicitly excluded.

The definition of "Highlands Region" is set forth in the Highlands Act at N.J.S.A. 13:20-3 and describes the jurisdiction of the Highlands Act.

The term "Highlands Resource Area Determination" or "HRAD" describes a document for which a property owner may apply pursuant to N.J.A.C. 7:38-4, which identifies the extent and location of resources regulated under this chapter. Obtaining an HRAD is voluntary except when applying for brownfields designation pursuant to N.J.A.C. 7:38-9.6(f)

The term "Highlands resource areas" is defined to make it easier to refer to multiple physical features and natural resources that are subject to regulation under this chapter.

The Department is proposing to amend the definition of "HUC 14" to clarify and update it, and include reference to the Department's website from which the HUC 14 boundaries can be obtained. The "HUC 14" drainage area or watershed is used in these rules to identify the area within which a water diversion is acceptable under N.J.A.C. 7:38-3.2, the determination for net fill under N.J.A.C. 7:38-3.7, and for the purpose of aggregating lots in order to enable clustered development by transferring "unused" septic system density and impervious surface percentages under N.J.A.C. 7:38-3.4 and 3.5, respectively.

The definition of "immediate family member" appears in the Highlands Act at N.J.S.A. 13:20-3 and the term is used in the exemption for single-family home construction at N.J.A.C. 7:38-2.3(a)1.

The definition of "impervious surface" appears in the Highlands Act at N.J.S.A. 13:20-3 and describes the types of materials that to which the 3 percent impervious surface limitation at N.J.A.C. 7:38-3.5 applies. It is important to note that "impervious surface" includes porous paving, paver blocks, gravel, and crushed stone.

The definition of "Landscape Maps of Habitat for Endangered, Threatened and Other Priority Wildlife" or "Landscape Maps" refers to the maps used by the Department to identify rare, threatened and endangered species habitat at N.J.A.C. 7:38-4.1(d). The Landscape Maps are used for the same purposes under the Freshwater Wetland Protection Act rules (N.J.A.C. 7:7A) and the Coastal Zone Management rules (N.J.A.C. 7:7E).

The term "linear development" describes the type of activities that can be conducted under certain circumstances in Highlands open waters and buffers, steep slopes and upland forest areas (see N.J.A.C. 7:38-3.6, 3.8 and 3.9, respectively).

The definition of "local government unit" is set forth in the Highlands Act at N.J.S.A. 13:20-3 and the term is used in the definition of "major Highlands development."

The term "lot" is defined with reference to the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq, to describe the boundaries of a tract or area of land.

The definition of "major Highlands development" is set forth in the Highlands Act at N.J.S.A. 13:20-3 and identifies the types and categories of activities that are subject to the requirements of these rules.

The term "memorandum of agreement" is one of the terms included in the definition of "oversight document," which is used to identify sites that are eligible for consideration for Department-designation as a brownfield site at N.J.A.C. 7:38-6.6. In addition, the term "memorandum of agreement" is used at N.J.A.C. 7:38-2.4(b)6 to identify those projects for which a Highlands Applicability Determination is not required.

The definitions of "mine" and "mine site" are set forth in the Highlands Act at N.J.S.A. 13:20-3 and relate to an exemption found at N.J.A.C. 7:38-2.3.

The term "Natural Heritage Database" refers to the database containing information regarding endangered, threatened and rare species and ecological communities for New Jersey maintained by the New Jersey Natural Heritage Program. The Department will use this database to identify rare, threatened and endangered plant and animal species as well as the ecological communities to be protected under this chapter.

"New Jersey Pollutant Discharge Elimination System" or "NJPDES" is defined because it is one of the component pieces of the comprehensive review required for an HPAA. The term is used in Subchapter 2 (Applicability). The requirements for a NJPDES approval related to an HPAA appear in Subchapter 9 (Application Contents).

The term "no further action letter" describes a legal document demonstrating compliance with site remediation requirements for the purpose of obtaining brownfields designation from the Department in accordance with N.J.A.C. 7:38-6.6. The Department is proposing to amend the existing definition to make it consistent with the Technical Requirements for Site Remediation since these are the standards the Department will be applying to remediate the sites seeking brownfield designation.

The Department is proposing to add a definition for the term "non-contiguous" for the purposes of the calculation of the limits of impervious surface on a lot at N.J.A.C. 7:38-3.5.

The term "oversight document" describes a legal document demonstrating compliance with site remediation requirements for the purpose of obtaining brownfields designation from the Department in accordance with N.J.A.C. 7:38-6.6.

The term "person" refers to one who is subject to these rules, including an applicant for an HPAA or other approval or determination under these rules.

The definitions of "planning area" and "preservation area" are set forth in the Highlands Act at N.J.S.A. 13:20-3 and identify the two component parts of the Highlands Region.

The Department is proposing to add a definition for the term "preliminary assessment" as one of the steps necessary to demonstrate that a site qualifies for a Highlands brownfield designation under N.J.A.C. 7:38-6.6(b).

The term "property as a whole" is defined for the purpose of determining whether to issue a waiver of the HPAA requirements to avoid the taking of property without just compensation under N.J.A.C. 7:38-6.8.

The terms "public community water system," "public noncommunity water system," "public nontransient noncommunity water system," "public transient noncommunity water system," and "public water system" identify the types of water systems that may be permitted under these rules, as provided at N.J.A.C. 7:38-3.3.

The Department is proposing to clarify the definition of "public utility" by including the text of the definition of this term set forth in the Department of Public Utilities Act, N.J.S.A. 48:2-13. This term is used in the context of the exemption at N.J.A.C. 7:38-2.3(a)11.

The term "rare species" is used at N.J.A.C. 7:38-3.11 and refers to wildlife species of special concern that warrant special attention because of population decline or inherent vulnerability to environmental deterioration, or habitat modification, and to plant species of concern listed at N.J.A.C. 7:5C-3.1.

The definition of "recreation and conservation purposes" is the same as that set forth in the Highlands Act at N.J.S.A. 13:20-3, which refers to the Garden State Preservation and Trust Act (N.J.S.A. 13:8C-3) definition. This term is used at N.J.A.C. 7:38-3.12(c) to identify existing scenic attributes.

The definition of "Regional master plan" is set forth in the Highlands Act at N.J.S.A. 13:20-3 and describes the document to be developed by the Highlands Council in consultation with the Department and other government entities that addresses planning throughout the Highlands Region. The term "Regional master plan" is used in these rules at N.J.A.C. 7:38-1.1(g) through (l) to describe the interaction between the Department's rules and the Regional master plan and at N.J.A.C. 7:38-6.1(d) to acknowledge that the Department shall not issue an approval in those areas designated by the Highlands Council in the Regional master plan as special areas. The Department is proposing to amend the definition of "Regional master plan" to include all of its components parts.

The term "regulated activity" is a simplified phrase for activities regulated because they constitute a "major Highlands development." The definition is proposed to be amended to clarify that "regulated activity" is "major Highlands development."

The terms "remedial action workplan" or "RAW" and " sanitary landfill facility" are defined for the purposes of the requirements for brownfields designation at N.J.A.C. 7:38-6.6. "RAW" refers to a legal document demonstrating compliance with site remediation requirements. "Sanitary landfill facility" is a category of facility eligible for designation as a brownfield.

The Department is proposing to add a definition for "site investigation" because it is one of the steps that must be taken to demonstrate that a site qualifies for a Highlands brownfield designation under N.J.A.C. 7:38-6.6(b).

The term "soil conservation district" is used at N.J.A.C. 7:38-2.6(d) in the context of a New Jersey Pollutant Discharge Elimination System (NJPDES) permit.

The term "soil survey" refers to documentation for identifying steep slopes at N.J.A.C. 7:35-3.8.

The Department is proposing to delete the definition for "State Development and Redevelopment Plan" because the term is not used in these rules.

The definition of "State entity" is set forth in the Highlands Act at N.J.S.A. 13:20-3 and the term is used within the definition of "major Highlands development."

The Department is proposing to delete the definition of "State soil conservation committee" because the term is not used in these rules.

The definition of "steep slope" is adapted from the Highlands Act at N.J.S.A. 13:20-32, which provides standards for slopes exceeding 20 percent and requires the Department to establish standards for slopes between 10 and 20 percent. The term is used in the rules to establish criteria for the protection of such areas at N.J.A.C. 7:38-3.8.

The definition of "swimming pool" establishes the type of features excluded from the definition of "Highlands open waters" as provided in the Highlands Act at N.J.S.A. 13:20-3 and at N.J.A.C. 7:38-3.6.

The term "threatened species" refers to the list found at N.J.A.C. 7:25-4.17 that defines the status of indigenous nongame wildlife species of New Jersey. The term is used at N.J.A.C. 7:38-3.11 to describe one category of animal species afforded special consideration under these rules.

The term "treatment works approval" or "TWA" refers to one of the components of the comprehensive review required for a HPAA. The phrase is used in Subchapter 2, Applicability, and the requirements necessary for submittal of a TWA approval are contained in Subchapter 9, Application contents.

The definition of "upland forested area" describes a type of Highlands resource area that is identified for protection under the Highlands Act and at N.J.A.C. 7:38-3.9. The definition distinguishes an upland forested area from a forest that is a "Highlands open water" in order to exclude forested wetlands from the definition, since forested wetlands are protected under the provisions set forth for Highlands open waters at N.J.A.C. 7:38-3.6.

The definition of "Waters of the Highlands" is set forth in the Highlands Act at N.J.S.A. 13:20-3 and refers to all types of water located wholly or partially within the boundaries of the Highlands Region. The term is used for purposes of assessing penalties for violations of the Highlands Act and these rules under N.J.A.C. 7:38-13.

The term "Water Quality Management Plan" or "WQMP" refers" to a plan prepared in accordance with Sections 208 and 303 of the Federal Clean Water Act, 33 U.S.C. § 1251 et seq., (33 U.S.C. § 1288 et seq and 1313 respectively) and the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., and implementing rules at N.J.A.C. 7:15. The Department cannot approve an HPAA without a finding that the proposed activity is consistent with the applicable WQMP. The determination of consistency with a WQMP is part of the Highlands applicability determination process described at N.J.A.C. 7:38-2.4.

7:38-1.5 Requests for adjudicatory hearings

The rules at N.J.A.C. 7:38-1.5 address the adjudicatory hearing process for contesting Department decisions under these rules. A person may request a hearing to contest Highlands applicability determinations, HRADs, HPAAs and HPAAs with waivers. The Department is proposing to amend this provision to include the opportunity to appeal Highlands general permit authorizations.

N.J.A.C. 7:38-1.5(b) provides that those seeking to administratively contest an enforcement action issued under these rules must do so in accordance with N.J.A.C. 7:38-13.13 rather than this section.

N.J.A.C. 7:38-1.5(c) sets out the requirements for requesting an adjudicatory hearing. The Department is proposing an amendment to provide that a copy of the hearing request be submitted to the Land Use Regulation Program.

N.J.A.C. 7:38-1.5(d) provides that the facts asserted in the Department's notice or decision will be deemed to have been admitted by the person requesting the hearing unless the requester specifically admits or denies or explains those asserted facts.

N.J.A.C. 7:38-1.5(e) provides that this section does not establish any right to an adjudicatory hearing that would conflict with the Administrative Procedure Act provisions regarding third party appeals at N.J.S.A. 52:14B-3.1 through 3.3.

N.J.A.C. 7:38-1.5(f) requires that a request for an adjudicatory hearing under this section must be submitted no later than 30 days after notice of the decision or determination is published in the DEP Bulletin.

N.J.A.C. 7:38-1.5(g) allows a person requesting a hearing to also request a determination whether the case is suitable for mediation.

N.J.A.C. 7:38-1.5(h) provides that the HPAA or determination is automatically stayed during the course of an appeal by the permittee unless good cause is shown why the permit should continue in effect. The rule provides that all regulated activities must cease when a hearing is requested by a permittee unless the Department, in writing, allows them to resume. If a person other than a permittee requests a hearing, the requester may ask the Department stay the HPAA or determination.

N.J.A.C. 7:38-1.5(i) provides that the Department will notify the requester whether a hearing is granted or denied, and, if granted, will refer the matter to the Office of Administrative Law for a hearing.

Under N.J.A.C. 7:38-1.5(j), if the Department agrees to settle a case and the settlement results in the approval of a regulated activity, the person who requested the hearing must notify the same individuals and groups that were originally notified when the application was first submitted, as well as anyone who submitted comments on that application. The Department will publish notice of the pending settlement in the DEP Bulletin and accept comments on the proposed settlement for at least 30 days. At the end of the comment period, the applicant must again notify the same individuals and groups

interested in the application and the Department will publish notice of the final settlement in the DEP Bulletin.

N.J.A.C. 7:38-1.5(k) explains that the DEP Commissioner will affirm, reject or modify the initial decision issued by the Administrative Law Judge who conducted the hearing.

N.J.A.C. 7:38-1.5(l) states that the Commissioner's decision may be appealed to the Appellate Division of the Superior Court within the time provided by the court rules.

Subchapter 2 Jurisdiction, Applicability and Exemptions

Subchapter 2 establishes the Department's jurisdiction, the activities to which the regulations shall apply, and the activities that are exempt from the regulations.

7:38-2.1 Jurisdiction

N.J.A.C. 7:38-2.1(a) through (d) identify the boundaries of the Highlands Region as a whole, and the specific limits of the preservation and planning areas, as set forth in the Highlands Act at N.J.S.A. 13:20-7. The Department is proposing to amend N.J.A.C. 7:38-2.1(a) to make it clear that the chapter also applies to the planning area to the extent described at N.J.A.C. 7:38-1.1.

7:38-2.2 "Major Highlands development" regulated by the Department

N.J.A.C. 7:38-2.2(a) states that a Highlands Applicability Determination and/or a Highlands Preservation Area Approval must be obtained before beginning work on any major Highlands development in the preservation area.

N.J.A.C. 7:38-2.2(a)1 through 5 describe the activities regulated as major Highlands development under this chapter. The Highlands Act specifies activities that

constitute major Highlands development when proposed within the preservation area. See the definition of "major Highlands development" at N.J.S.A. 13:20-3.

N.J.A.C. 7:38-2.2(a) lists those activities included in the statutory definition of "major Highlands development".

At N.J.A.C. 7:38-2.2(a)2 includes the authorizing statutes for the environmental land use or water permits required for residential development in the preservation area that is regulated as major Highlands development under these rules. The statutes are those listed in the Act and at N.J.A.C. 7:38-1.4 in the definition of "environmental land use or water permit."

The qualifier "ultimate" is proposed to be added at N.J.A.C. 7:38-2.2(a)3, 4, and 5 as it appears in the definition of major Highlands development in the statute. Existing N.J.A.C. 7:38-2.2(a)3, 4 and 5 provide a method for calculating disturbance and impervious surface on a lot that has been subdivided after the August 10, 2004 effective date of the Act, in order to determine if the threshold for regulation as a major Highlands development is met. However, the existing provisions do not distinguish between the calculation of "ultimate" disturbance and "cumulative increase" (of impervious surface). The Department is therefore proposing to delete the existing provisions for this caluation and is proposing a new provision at N.J.A.C. 7:38-2.2(a)6 to clarify how ultimate disturbance and cumulative impervious surface will be determined on lots subdivided after August 10, 2004. Under proposed new N.J.A.C. 7:38-2.2(a)6i, the calculation of ultimate disturbance includes all existing and proposed disturbance on both the newly created lot or lots and the previously existing or remainder lot. For a residential development where the existing disturbance equals one acre or more, in order to reduce the ultimate disturbance below one acre the applicant may cease all disturbance in a given area, remove all impervious surface and permanently deed restrict that area so that there will be no continuing or future disturbance.

Existing N.J.A.C. 7:38-2.2(a)3 and 4 treat both existing disturbance and existing impervious surfaces in an identical fashion where a lot is subdivided after August 10, 2004. However, for impervious surface, the statutory definition of "major Highlands development" uses a "cumulative increase in impervious surface by one-quarter acre or more on a lot" as the threshold criterion. Where a lot is subdivided after August 10, 2004, the existing provisions would include existing impervious surface on both the proposed lot and the existing or remainder lot in the one-quarter acre calculation. Proposed new N.J.A.C. 7:38-2.2(b)2 clarifies that only impervious surface added to the proposed lot(s) and the existing or remainder lot after August 10, 2004 are included in the calculation of cumulative increase in impervious surface. Impervious surfaces that lawfully existed prior to August 10, 2004 is not included in this calculation.

The purpose of proposed new N.J.A.C. 7:38-2.2(b) is to articulate that the major Highlands development thresholds apply to lots as they existed on the date of enactment of the Highlands Act and that the thresholds cannot be circumvented by a subsequent division of land.

N.J.A.C. 7:38-2.2(c) (current (b)) provides that, in accordance with the Highlands Act, agricultural and horticultural development activities are not major Highlands development. To be consistent with the definition of major Highlands development in the Highlands Act, agricultural and horticultural uses are proposed to be included in this subsection.

N.J.A.C. 7:38-2.2(d) (current (c)) establishes that an approval issued under the Highlands rules satisfies the requirements for and constitutes an approval under certain other specified State environmental statutes. The Highlands rules have been designed to incorporate the appropriate requirements of such other State regulations. For example, an applicant who obtains an HPAA for a major Highlands development that includes a stream crossing will have satisfied the applicable Flood Hazard Area Control Act requirements, including notice, and engineering and environmental reviews.

N.J.A.C. 7:38-2.2(e) (current (d)) provides that the permittee to whom a HPAA is issued is responsible for ensuing all activity conducted on a site meets the requirements of these rules, regardless of who actually performs the work. Further, the permittee is obligated to immediately notify the Department if the property changes ownership before the work allowed under the permit is completed.

N.J.A.C. 7:38-2.2(f) (current (e)) reiterates that only those activities identified in a valid HPAA may be undertaken on the property to which the HPAA applies.

7:38-2.3 Exemptions

N.J.A.C. 7:38-2.3 lists the projects and activities that are exempted from regulation under these rules, as provided in the Highlands Act at N.J.S.A. 13:20-28. The rule clarifies that projects exempt from the Highlands rules must still meet any and all other Federal, State, and local requirements applicable to the work. The Department is proposing to amend 2.3(a) to specify that for the purposes of this section a single family dwelling will include all of the types of community group homes, shelters and residences contained within the Municipal Land Use Law at N.J.S.A. 40:55D-1 et seq. so long as the dwelling is using or proposes to use an individual subsurface disposal system or aggregate of equivalent disposal units where the sanitary wastewater design flow is 2,000 gallons per day or less.

N.J.A.C. 7:38-2.3(a)1 and 2 provide exemptions for single family dwellings to be constructed on lots that were in existence on August 10, 2004 (the effective date of the Highlands Act). N.J.A.C. 7:38-2.3(a)1 allows for construction of one single-family dwelling for an individual's own use or the use of an immediate family member. The lot has to have been owned by the individual proposing construction on August 10, 2004, or

have been under a binding contract of sale for purchase by that individual on or before May 17, 2004, as set forth in the Act.

N.J.A.C. 7:38-2.3(a)2 exempts the construction by anyone of a single family dwelling on a lot in existence on August 10, 2004. However, this exemption is limited so that the construction of the single family dwelling cannot result in the ultimate disturbance of more than one acre, or a cumulative increase in impervious surface by one-quarter acre or more. Therefore, a lot legally existing on August 10, 2004 can be bought and sold at any time and construction of a single-family dwelling exempt from these rules if the construction meets these thresholds. If the construction exceeds these thresholds, an HPAA will be required.

An applicant may subdivide a lot that was legally existing on August 10, 2004 into two or more single family lots. However, in order for the construction of single family homes on the lots to remain exempt, the combined development on all of the lots cannot result in the ultimate disturbance of more than one acre or a cumulative increase in impervious surface by one-quarter acre or more. If either threshold would be exceeded by the combined development on all of the lots, only the construction on the lot (or lots) that can be developed without exceeding the thresholds is exempt. Development on the remaining lots will require an HPAA.

N.J.A.C. 7:38-2.3(a)3 exempts development based upon receipt of a combination of local and State approvals. A development may be exempt under this rule if any one of the local approvals under the Municipal Land Use Law enumerated in (a)3i was obtained on, or prior to, March 29, 2004, as set forth in the Act, and remains valid. If none of these approvals were required for the project, this exemption does not apply.

In addition to obtaining one of the types of municipal approval listed at (a)3i, if the proposed project required a permit from the Department under the Water Supply Management Act or Safe Drinking Water Act, a certification or authorization pursuant to

the Realty Improvement Sewerage and Facilities Act, or a treatment works approval, such permit had to have been obtained prior to March 29, 2004, as set forth in the Act, in order to qualify for this exemption.

Finally, if none of the above-mentioned Department-issued permits were required for the proposed project, but a permit was required pursuant to the Freshwater Wetlands Protection Act or Flood Hazard Area Control Act, such permit had to have been obtained prior to March 29, 2004 (in addition to one of the municipal approvals listed at (a)3i) in order to qualify for this exemption.

If none of the Department permits was required for the proposed development, all that is necessary to be exempt is one of the municipal approvals described at (a)3i.

The exemption is restricted to the land area and scope of the municipal approval upon which it is based. The exemption also includes some time limitations on the completion of work, as established in the Highlands Act at N.J.S.A. 13:20-28c. The exemption expires if any of the qualifying approvals expires, including the municipal approval or the permit). In addition, the exemption expires if construction beyond site preparation does not commence by August 10, 2007 (3 years after the effective date of the Highlands Act). The Department is proposing to permit construction to continue to completion (when it has progressed beyond site preparation) unless construction ceases for a cumulative total of one year after August 10, 2007. This is necessary to avoid the circumstance where the applicant commences construction but then ceases construction for an extended period of time or abandons construction altogether. In those cases, the Department believes that a project should be subject to the Highlands Act.

N.J.A.C. 7:38-2.3(a)4 exempts reconstruction for any reason of any building or structure within 125 percent of the footprint of the lawfully existing impervious surfaces on the site, provided that the reconstruction or development does not increase the lawfully existing impervious surface by one-quarter acre of more. For example, a home

to be reconstructed on the footprint of an existing home, or a company proposing to expand its facilities by increasing the lawfully existing impervious footprint by 125 percent would be exempt under this provision. The Department is proposing to amend this provision to clarify that the impervious surface had to be lawfully existing on August 10, 2004, the effective date of the Highlands Act. This provision is proposed to prevent the repeated use of this exemption and the eventual exceedance of the acreage limits set therein.

N.J.A.C. 7:38-2.3(a)5 exempts improvements to a legally existing single-family dwelling in existence on August 10, 2004 so long as the improvement maintains the use as a "single-family dwelling," as defined by the code of the municipality. Additions, garages, sheds, driveways, porches, decks, patios, swimming pools, and septic systems are examples of such improvements. The Department is proposing to amend N.J.A.C. 7:38-2.3(a)5 and (a)5i to refer to "lawfully existing" dwellings and to define "lawfully existing" since "lawfully" is the qualifier used in the Highlands Act. The definition of "lawfully existing" provides that all existing construction must have obtained all applicable State, Federal, and municipal approvals in order to qualify for the exemption.

Existing N.J.A.C. 7:38-2.3(a)6 exempts any improvement for non-residential purposes to a place of worship owned by a non-profit entity, society or association, organized primarily for religious purposes, or a public or private school, or a hospital that was in existence on August 10, 2004. Such improvements include new structures, additions to existing structures, site improvements and sanitary facilities. .] The Department is proposing to amend the paragraph to make it consistent with the Act at N.J.S.A. 13:20-28 such that the exemption applies to a non-profit entity, society, or association, or to an association that has been organized primarily for religious purposes.

N.J.A.C. 7:38-2.3(a)7 exempts activities conducted in accordance with an approved woodland management plan and normal harvesting of forest products in

accordance with an approved forest management plan. The criteria for Woodland management plans are established by the Farmland Assessment Act, N.J.S.A. 54:4-23.3. Woodland management plans are voluntary management plans prepared by landowners that describe various activities to be conducted in a woodland in order to maintain the health of the woodland and to sustain the production of wood over time. Compliance with the woodland management plan must be certified each year by the landowner and an Approved Forester (from a list maintained by the Department in accordance with the Forestry rules, N.J.A.C. 7:3) in order to enable the landowner to obtain reduced property taxes. A forest management plan must be approved by the State Forester and is generally based on guidelines associated with the Federal Forest Stewardship Program. While forest management plans are typically undertaken by public landowners it is possible that a private landowner, who is not participating in the farmland assessment program, may seek a forest management plan in order to qualify for this exemption. As such, the Department is proposing to delete the reference to "public lands" with regard to the forest management plan. Furthermore, the "public lands" qualifier is not in the Highlands Act exemption. The effect of the proposed amendment will be to enable property owners who have forest management plans approved by the State Forester, but who do not have woodland management plans, to be covered by the exemption.

N.J.A.C. 7:38-2.3(a)8 exempts the construction or extension of trails with nonimpervious surfaces on publicly owned lands or on privately owned lands where a conservation or recreational use easement has been established and filed with the deed for the lots on which the easement exists.

N.J.A.C. 7:38-2.3(a)9 exempts routine maintenance and operations, rehabilitation, preservation, reconstruction, or repair of transportation or infrastructure systems by a State entity or local government unit. This exemption applies to various road maintenance activities, provided the activities are consistent with the goals and purposes of the Highlands Act and do not result in the construction of any new, through-capacity travel lanes.

N.J.A.C. 7:38-2.3(a)10 exempts the construction of transportation safety projects and bicycle and pedestrian facilities by a State entity or local government unit, provided the activity does not result in the construction of any new through-capacity travel lanes.

N.J.A.C. 7:38-2.3(a)11 provides the same routine maintenance exemption for public utility lines, rights-of-way, or systems as provided by N.J.A.C. 7:38-2.3(a)9 for road projects. To be exempt under this provision, the maintenance activities must be conducted by a public utility. The Department is proposing to amend N.J.A.C. 7:38-2.3(a)11 to also exempt the installation of cellular equipment on a legally existing overhead utility tower and the construction of the attendant 10-foot by 20-foot pad, when located within the four footings of such tower within a right-of-way owned or controlled by a public utility, constructed with the consent of the public utility.

N.J.A.C. 7:38-2.3(a)12 exempts the reactivation of rail lines and rail beds existing on August 10, 2004, the effective date of the Highlands Act.

N.J.A.C. 7:38-2.3(a)13 exempts the construction of public infrastructure projects approved by public referendum prior to January 1, 2005 or a capital project approved by public referendum prior to January 1, 2005.

N.J.A.C. 7:38-2.3(a)14 exempts mining, quarrying, or production of ready mix concrete, bituminous concrete, or Class B recycling materials occurring or which are permitted to occur on any mine, mine site, or construction materials facility existing on June 7, 2004.

N.J.A.C. 7:38-2.3(a)15 exempts the remediation of any contaminated site, pursuant to the Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-1, et seq.

N.J.A.C. 7:38-2.3(a)16 exempts activities on Federal military installations in the Highlands Region existing on August 10, 2004, the effective date of the Highlands Act.

Finally, N.J.A.C. 7:38-2.3(a)17 exempts major Highlands development located in areas designated as Planning Area 1 (Metropolitan) or Planning Area 2 (Suburban) under the State Planning Act that on or before March 29, 2004 has been the subject of a settlement agreement and stipulation of dismissal filed in the Superior Court or a builder's remedy issued by the Superior Court to satisfy the constitutional requirement to provide for the fulfillment of the fair share obligation of the municipality. Consistent with the Highlands Act at N.J.S.A. 13:20-28c(17), the exemption contains a requirement that in order to remain exempt, construction beyond site preparation must begin within three years of receiving all final municipal approvals.

N.J.A.C. 7:38-2.3(b) reiterates that an exemption from the Highlands Act does not exempt a development from all other applicable State laws and regulations.

7:38-2.4 Highlands applicability determination

The Highlands Act establishes several exemptions from the requirement to obtain from the Department an HPAA. The statutory exemptions are listed in these rules at N.J.A.C. 7:38-2.3. In order to verify that a proposed project meets a particular exemption, the Department will need to conduct an in-depth analysis of documentation regarding the project. Similarly, projects for which an HPAA is required will be subject to an extensive review that combines the reviews under several environmental programs into one. Upon receipt of an application under these rules, the Department must be able to screen the application expeditiously and determine whether the applicant with a project in the preservation area should be applying for an HPAA or qualifies for an exemption under these rules but should be applying for another land use or water permit. In order to facilitate such a screening process, the Department has established the "Highlands

applicability determination" described at N.J.A.C. 7:38-2.4. The Highlands applicability determination will answer three questions: (a) is a proposed project a "major Highlands development;" (b) if it is a major Highlands development, is there an exemption that applies; and (c) regardless of the exemption status, is the project consistent with the applicable water quality management plan (WQMP).

A determination of a project's consistency with the applicable areawide Water Quality Management Plans is required because the New Jersey Water Quality Planning Act prohibits the Department from issuing permits that conflict with the adopted areawide Water Quality Management Plan (N.J.S.A. 58:11A-10). The New Jersey Water Quality Planning Act (N.J.S.A. 58:11A-1 et seq.), requires the adoption of areawide Water Quality Management Plans that provide control or treatment of all point and nonpoint sources of pollution; and regulate the location, modification, and construction of any facilities which may result in a discharge of pollution. The Highlands preservation area is located partially within four areawide Water Quality Management Plans: Northeast, Sussex, Upper Delaware and Upper Raritan. Wastewater management plans, which specify allowable sewage treatment alternatives, are incorporated into the areawide Plans. However, approved wastewater management alternatives in the Highlands preservation area were modified in part by the Highlands Act. The Highlands Act amended the Water Quality Planning Act to revoked all approved sewer service area in the Highlands preservation area except where wastewater collection systems existed on August 10, 2004, and as they pertain to exempted projects. See N.J.S.A. 58:11A-7.1. The Department published a notice proposing to amend the Areawide Water Quality Mangement Plans accordingly under N.J.A.C. 7:15 on September 19, 2005 (see 37 NJR 3731(a)). Mapping of the sewer service areas as they are proposed to be amended can be viewed at http://www.state.nj.us/dep/gis/digidownload/zips/statewide/highpressa.zip. As a result of these changes to the sewer service areas in the Highlands preservation area, there is a need to conduct a review of all major Highlands developments, including those meeting an exemption under the Act and these rules, to ensure that the wastewater

management method for the proposed project is consistent with the applicable areawide Water Quality Management Plan.

Some applicants may already know that a proposed project is not exempt from the Highlands Act. Therefore, N.J.A.C. 7:38-2.4(a) allows an applicant to stipulate, as part of the application for an HPAA, that he or she is not claiming an exemption from the Highlands Act and is acknowledging that an HPAA is required. For these projects, the consistency determination will be conducted as part of the HPAA review.

The Highlands Act requires that an HPAA consist of the related aspects of other regulatory programs including, but not limited to: the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 et seq.), the Endangered and Nongame Species Conservation Act (N.J.S.A. 23:2A-1 et seq.), the Water Supply Management Act (N.J.S.A. 58:1A-1 et seq.), the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.), The Realty Improvement Sewerage and Facilities Act (N.J.S.A. 58:11-23 et seq.), the Water Quality Planning Act (N.J.S.A. 58:11A-1 et seq.), the Safe Drinking Water Act (N.J.S.A. 58:12A-1 et seq.), the Flood Hazard Area Control Act (N.J.S.A. 58:16A-50 et seq.). To ensure that every project that is regulated under the Act and these rules is in fact reviewed under these rules, N.J.A.C. 7:38-2.4(b) requires that a Highlands applicability determination be obtained by applicants for projects in the Highlands preservation area that submit applications to the Department for any environmental land use or water permit. However, while many of the exemptions in the Highlands Act are complicated and thus require a detailed and consistent review procedure to ensure the requirements are being met, the Department has identified certain projects and activities for which the determination of exemption under the Act and these rules is straightforward, such that a Highlands applicability determination review under this section is not necessary. These include additions and improvements to single-family homes that existed on August 10, 2004; routine maintenance and operations, rehabilitation, preservation, reconstruction and repair of transportation or infrastructure systems; transportation safety projects and

bicycle and pedestrian facilities; agricultural and horticultural activities; and forest management activities.

Under N.J.A.C. 7:38-2.4(b), applicants whose proposed projects are subject to NJPDES or TWA permitting will, in accordance with N.J.A.C. 7:38-2.4(c), be notified by the Department upon submittal of a permit application to the NJPDES/TWA program if the project requires a Highlands applicability determination under these rules. This distinction in process is made because NJPDES permits are operating permits requiring renewal even where new construction is not proposed. In these cases, a Highlands applicability determination would not be required. Treatment Works Approvals may be required for treatment plant upgrades that would improve effluent quality without expanding a treatment plant, or for the reconstruction of existing infrastructure without an expansion in the capacity of the system. These activities would be exempt from the Highlands Act and thus would not require a Highlands applicability determination.

N.J.A.C. 7:38-2.4(b)1 identifies improvements to single-family dwellings that existed on the date of enactment among the activities that do not require a formal Highlands applicability determination. This exemption is specifically listed in the Highlands Act at N.J.S.A. 13:20-28. Since the only qualification in the Act is that the house existed on the date of enactment (August 10, 2004), the determination of eligibility for this exemption is straightforward. However, because of the statutory onequarter acre limit on the cumulative increase of impervious surface and one acre limit on ultimate disturbance imposed through the definition of "major Highlands development," this exemption cannot be assumed to automatically apply to improvements to a house on a lot that has been further subdivided after August 10, 2004. In these cases, the proposed improvements would have to reviewed in consideration of any construction on the lot(s) created by subdivision to determine if the entire project remains exempt from the regulatory requirements of the Highlands Act.

The Highlands Act at N.J.S.A. 13:20-28 exempts routine government maintenance and repair of transportation or infrastructure systems, and the construction of transportation safety projects and bicycle and pedestrian facilities that does not result in the construction of any new through-capacity travel lanes. N.J.A.C. 7:38-2.4(b)2 provides that transportation and infrastructure maintenance activities that are undertaken by a government entity, do not require a formal Highlands applicability determination under certain circumstances.

The Department is proposing to amend N.J.A.C. 7:38-2.4(b)2 to separate routine maintenance and operations, preservation or repair from rehabilitation or reconstruction of transportation systems only. The Department is proposing that routine maintenance and operations, preservation or repair projects do not need a Highlands applicability determination so long as the activity does not create a new, or increase an existing, lane by more than 2, 640 feet. In addition, the Department is proposing a new N.J.A.C. 7:38-2.4(b)3 to address rehabilitation and reconstruction of transportation systems. The Department is proposing that rehabilitation and reconstruction activities do not require a Highlands applicability determination so long as the activities do not increase impervious surface by 0.5 acres or more, result in the ultimate disturbance of one or more acres of land, or create a new, or increase an existing, lane by more than 2, 640 feet.

Finally, the Department is proposing a new N.J.A.C. 7:38-2.4(b)4 to specifically address maintenance, operation, rehabilitation, preservation, reconstruction and repair of other infrastructure systems. The Department is proposing that such activities do not require an applicability determination provided that the activities are confined to the existing footprint of development and do not increase the conveyance capacity by increasing the pipe size of a sewer or water system.

The Department is proposing to recodify N.J.A.C. 7:38-2.4(b)3 through 5 as 2.4(b)5 through 7.

Recodified N.J.A.C. 7:38-2.4(b)5 provides that transportation safety improvements and bicycle and pedestrian facilities undertaken by a State or local government entity do not require a formal Highlands applicability determination, provided the construction does not create any new travel lane or increase the length of an existing land by more than one-half mile not including transitional tapers; does not involve the placement of one acre or more of new impervious surfaces; and does not ultimately disturb two acres or more of land. The half-mile length limitation was determined by the Department in consultation with the New Jersey Department of Transportation to be a threshold below which new through capacity would not be created. The impervious surface and disturbance limitations on the construction of transportation projects were based on Section 16 of the Highlands Act, which requires review and approval of capital construction projects by the highlands Council where that construction would increase impervious surfaces by one acre or more or would result in the disturbance of two acres or more of land. Projects exceeding these thresholds may still qualify as exempt, but will require a formal Highlands applicability determination.

Recodified N.J.A.C. 7:38-2.4(b)6 provides that a formal Highlands applicability determination is not necessary prior to applying for Department permits for agricultural and horticultural developments and uses. "Agricultural or horticultural development" and "agricultural or horticultural use" are expressly excluded from the definition of "major Highlands development" in the Highlands Act, which means that this chapter does not apply to them. The activities contemplated by these terms are specified in the statutory definitions at N.J.S.A. 13:20-3 as well as in the definitions of these terms in these rules at N.J.A.C. 7:38-1.4.

Recodified N.J.A.C. 7:38-2.4(b)7 provides that woodland and forest management activities, which are exempted under the Highlands Act, do not need a formal Highlands applicability determination from the Department prior to applying for Department permits. The Department is proposing to amend N.J.A.C. 7:38-2.4(b)5 to delete reference to "public lands." This brings the language into conformity with the text of the

statutory exemption. The effect of the change is to include in the exemption under these rules at N.J.A.C. 7:38-2.3 everyone conducting activities in accordance with a forest management plan approved by the State Forester and, for purposes of N.J.A.C. 7:38-2.4(b), to enable them to proceed without obtaining a Highlands applicability determination.

The Department is proposing to add to the list of activities at N.J.A.C. 7:38-2.4(b) for which a Highlands applicability determination need not be obtained. Proposed N.J.A.C. 7:38-2.4(b)8 identifies site remediation activities for which the applicant has entered into a fully executed memorandum of agreement (MOA) signed by the Department or remedial action workplan (RAW) approved by the Department as not requiring a formal Highlands applicability determination. The Highlands Act at N.J.S.A. 13:20-28 exempts any remediation pursuant to the Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-1 et seq. N.J.A.C. 7:38-2.4(b)8 limits the remediation projects that can proceed without a formal Highlands applicability determination to those for which a remediation program rules. Only those activities determined to be necessary and approved by the Department for the remediation of the site are covered by this provision. Concurrent or subsequent redevelopment of the site are covered by this provision. Subsequent redevelopment of the site, for residential, commercial or industrial use is not exempted and will require an applicability determination and an HPAA.

Proposed N.J.A.C. 7:38-2.4(b)9 provides that the addition of telecommunication equipment and antennas, at telecommunications facilities existing on the date of enactment of the Highlands Act (August 10, 2004), does not need a Highlands applicability determination. The activities are limited to the existing fenced-in area or impervious pad, where the "cabinet" to house such equipment would be placed. Within these limitations, such construction would not result in a change in the use of property, nor in the addition of new impervious surfaces or disturbance. Therefore, the Department

has determined that these types of installations will not result in impacts to Highlands resources and do not meet the definition of "major Highlands development."

Proposed N.J.A.C. 7:38-2.4(b)10 provides that the installation of cellular equipment on a legally existing overhead utility tower and the construction of the attendant 10-foot by 20-foot pad, when located within the four footings of such tower within a right-of-way owned or controlled by a public utility, constructed with the consent of the public utility does not require a Highlands applicability determination. The Department is proposing to exempt such activities at amended N.J.A.C. 7:38-2.3(a)11.

As noted previously, N.J.A.C. 7:38-2.4(c) establishes that applicants whose proposed projects are subject to NJPDES or TWA permitting will be notified by the Department upon submittal of a permit application to the NJPDES/TWA program if the project is a major Highlands development, in which case the applicant will need to obtain a Highlands applicability determination under these rules.

N.J.A.C. 7:38-2.4(d) states that while a project may not require a Highlands applicability determination, a WQMP consistency determination may still be required. However, in most cases, the activities identified in the exceptions at N.J.A.C. 7:38-2.4(b) will not require consistency determinations because they would not result in the construction of wastewater generating facilities. Consequently, the Department is proposing a minor amendment to the language at N.J.A.C. 7:38-2.4(d) to clarify that a person will only be required to obtain a formal consistency determination if required by the Water Quality Management Planning Act Rules.

N.J.A.C. 7:38-2.4(e) states that, regardless of whether a proposed activity is exempt from the Highlands Act or is not a major Highlands development regulated by this chapter, the Department will not issue any permit or approval for an application that is inconsistent with the applicable WQMP. This is a requirement of the Water Quality Planning Act, N.J.S.A. 58:11A-10.

N.J.A.C. 7:38-2.4(f) states that projects that meet the definition of major Highlands development are not exempt and are consistent with the WQMP will require an HPAA.

N.J.A.C. 7:38-2.4(g) allows an applicant for an HPAA whose proposed project is inconsistent with the existing applicable WQMP to apply simultaneously for the HPAA and the necessary WQMP amendment.

7:38-2.5 Applicability for purposes of public water supply systems, water allocations and water use registrations

N.J.A.C. 7:38-2.5 describes the applicability of the Highlands rules to public water systems and water supply allocations. The Highlands Act amended the Safe Drinking Water Act to require the Department to limit or prohibit the construction of new public water systems and the extension of existing public water systems to serve development in the Highlands preservation area, unless there is a demonstrated public health and safety need for the project or the development it serves is exempt from the Highlands Act. See N.J.S.A. 58:12A-4.1. Accordingly, N.J.A.C. 7:38-2.5(a) prohibits new public water systems or extension of public water systems to serve development in the Highlands preservation area unless the development either meets one of the exemptions at N.J.A.C. 7:38-2.3 and is consistent with the applicable areawide water quality management plan, or satisfies the standards for issuing an HPAA with waiver under N.J.A.C. 7:38-6. The Department proposes to amend N.J.A.C. 7:38-2.5(a)2 to include the words "with waiver" to clarify that HPAAs with a waiver are the only exception to the prohibition on the construction or extension of a new public community water supply system.

The Highlands Act amended the Water Supply Management Act at N.J.S.A. 58:1A-5.1 to establish the threshold for water supply diversion permits at 50,000 gallons per day (gpd) for waters of the Highlands in the preservation area. N.J.A.C. 7:38-2.5(b)

describes the categories of diversions to which the rules apply. Existing N.J.A.C. 7:38-2.5(b)1 and 2 cover those intending to divert or proposing a project that upon completion will divert more than 50,000 gpd of water from a single source or a combination of sources, within the preservation area. The Department will not issue a water use registration, which applies to those who can but who do not divert more than 50,000 gpd, if an applicant's initial water supply needs do not exceed 50,000 gpd but will ultimately exceed 50,000 gpd when the development is complete. The total diversion from a single or combination of sources will be determined using the criteria established in the Water Supply Allocation Permits rules at N.J.A.C. 7:19-1.6(f).

Existing N.J.A.C. 7:38-2.5(b)3 and 4 address water use registrations. Under the Water Supply Allocation Permits rules at N.J.A.C. 7:19-2.18, any person with the capability to divert 100,000 gpd or more but who diverts less than that quantity is required to register with Department. Those who divert more than 100,000 gpd are required to obtain a water allocation permit under N.J.A.C. 7:19. N.J.A.C. 7:38-2.5(b)3 addresses the several existing water use registrants who are diverting less than 100,000 gpd but more than 50,000 gpd. For these registrants, the Department established monthly and annual limits under the provisions of N.J.A.C. 7:38-3.2(i)2. Under N.J.A.C. 7:38-2.5(b)3, if the registrant with an existing diversion diverts water in an amount that exceeds the limits in the registration established under N.J.A.C. 7:38-3.2(i), the registrant must obtain a HPAA for the diversion. N.J.A.C. 7:38-2.5(b)4 establishes a registration category for diverters with the capability to divert more than 50,000 gpd, but who divert less than that amount. This requirement parallels the water use registration requirements under the water allocation rules at N.J.A.C. 7:19-2.18, and will enable the Department to monitor those diversions with the potential to exceed the 50,000 gpd to ensure they remain below the regulatory threshold for an HPAA.

The Department is proposing to amend the subsection to delete existing N.J.A.C. 7:38-2.5(b)2, which is essentially redundant to paragraph (b)1. In addition, the Department is proposing to amend paragraph (b)3 (recodified as (b)2) to include March 29, 2004 as the date by which a person must have had a water use registration since this

is the date established in the Act by which projects qualifying as major Highlands development were required to have obtained Department approvals in accordance with N.J.S.A. 13:20-28a(3)(b). An amendment to cross-reference the rule under which the monthly and annual limits are established is also proposed. The Department is proposing to amend (b)4 (recodified as (b)3) to state specifically that the provision applies only to those who have the capability to divert more than 50,000 gallons of water per day in the preservation area.

N.J.A.C. 7:38-2.5(c)1 provides, in accordance with the Highlands Act, that water diversions for agricultural, aquacultural and horticultural activities are not subject to approval under these rules. N.J.A.C. 7:38-2.5(c)2 provides for emergency water diversions and establishes requirements if the emergency diversion continues for more than 31 days. The exemption for emergency diversion based on that established in the water allocation rules at N.J.A.C. 7:19-1.4 allows the Department and water users necessary flexibility in the event of an emergency. If an emergency diversion is expected to continue for 31 days or more, the potential long-term impacts associated with the diversion must be assessed.

7:38-2.6 Applicability for purposes of wastewater discharges and treatment systems

N.J.A.C. 7:38-2.6 describes the applicability of the Highlands rules to activities and projects involving wastewater discharges and treatment systems. The Highlands Act amended the Water Quality Planning Act to revoke designated sewer service areas and to render any associated treatment works approvals (TWAs) expired as of August 10, 2004 (the effective date of the Highlands Act) where wastewater collection systems had not been installed by that date, unless the sewer service areas and TWAs serve exempt Highlands preservation area development. N.J.A.C. 7:38-2.6(a) notes the revocation of the sewer service areas and expiration of the TWAs by the Highlands Act, as well as the exceptions for exempt projects and for projects for which an HPAA with a waiver has been issued. The Department proposes to amend N.J.A.C. 7:38-2.6(a)2 to include the

words "with a waiver" to clarify that HPAAs with a waiver are the only exception to this prohibition on the extension of sewer service.

N.J.A.C. 7:38-2.6(b) requires applicants for individual NJPDES permits or TWAs or those requesting authorization under a NJPDES general permit for activities in the Highlands preservation area to submit applications directly to the Division of Water Quality for review. If the Department determines the application is for a project that is a major Highlands development, the applicant must obtain a Highlands applicability determination before the NJPDES or TWA application will be considered administratively complete under N.J.A.C. 7:14A. The Department is proposing to amend N.J.A.C. 7:38-2.6(b) to clarify that it refers to applicants seeking NJPDES individual permits and NJPDES general permit authorizations under the applicable rules at N.J.A.C. 7:14A.

N.J.A.C. 7:38-2.6(c) provides that NJPDES permits, TWA, and certifications under the Realty Improvement Sewerage and Facilities Act for activities subject to the Highlands rules will not be approved unless an HPAA is first obtained.

N.J.A.C. 7:38-2.6(d) provides that, other than projects undertaken by NJDOT, requests for authorization under the NJPDES general permit for construction activity must be submitted directly to the appropriate Soil Conservation District. Projects by NJDOT will be submitted to and reviewed by the Department. The rule notes that such requests for authorization will not be considered complete for review under the NJPDES rules unless accompanied by an HPAA or a Highlands applicability determination finding that the activity is exempt. This is consistent with the requirement at N.J.A.C. 7:38-6.2(b) for all other NJPDES permits and TWAs.

7:38-3 SUBCHAPTER 3 PRESERVATION AREA STANDARDS

The Highlands Act at N.J.S.A. 13:20-32 requires the Department to establish in rules "the environmental standards for the preservation area upon which the regional

master plan adopted by the council and the Highlands permitting review program administered by the department pursuant to this act shall be based." This section of the Act also sets forth the environmental standards that must, at a minimum, be included in the rules. Subchapter 3 contains the Department's environmental standards for the Highlands permitting program.

7:38-3.1 Scope and applicability

N.J.A.C. 7:38-3.1(a) provides that an HPAA will be issued only if the proposed regulated activity satisfies all standards in this subchapter and the requirements of N.J.A.C. 7:38-6.2 (standard requirements for all HPAAs, including findings the Department must make in order to issue an HPAA). N.J.A.C. 7:38-3.1(b) states that in the absence of reliable documentation to the contrary, the Department will rely upon photography from its 2002 aerial overflight to establish whether a resource exists on a site. This photography is the most current available statewide. Applicants will have the opportunity to provide site-specific documentation demonstrating that the resource shown on the photography was legally disturbed after the 2002 overflight but before the August 10, 2004 enactment of the Highlands Act. The Department is proposing to amend N.J.A.C. 7:38-3.1 to clarify that it will use aerial photography to identify Highlands resources that may have been disturbed at the time of the aerial overflight. "Disturbed" is a more appropriate term than "removed from the site" since many Highlands resources may be disturbed (for example, Highlands open waters) but not physically removed from a site.

7:38-3.2 Standards for water supply diversion sources

N.J.A.C. 7:38-3.2 establishes, in accordance with N.J.S.A. 13:20-32d, the standards for water supply diversion sources in the Highlands preservation area. Under N.J.A.C. 7:38-3.2(a) an HPAA must be obtained for a new or modified water supply allocation or water use registration if at least one of the water sources for the allocation or

registration is in the preservation area. The water supply allocation or water use registration shall be in compliance with the standards in this subchapter and the regulations at N.J.A.C. 7:19. The Department is proposing to amend this subsection to clarify that an increase in a diversion under an existing water use registration established under N.J.A.C. 7:38-3.2(i) will trigger the requirement to obtain an HPAA.

N.J.A.C. 7:38-3.2(b) specifies the conditions under which a new or increased diversion located within the preservation area greater than 50,000 gallons per day (gpd) may be approved as part of an HPAA. A proposed amendment clarifies that this provision applies only to diversions within the preservation area. Specifically, the Department will assess the individual and cumulative impacts associated with diversions of 50,000 gpd or greater, ensure that stream base flows and existing water quality are maintained, reduce depletive losses from the preservation area and ensure the protection of ecological uses. At N.J.A.C. 7:38-3.2(b)3, the Department is proposing an amendment that explains that, for purposes of this section of the rules, "sub-drainage basin," which is terminology from the Act, means a HUC 14 (subwatershed).

N.J.A.C. 7:38-3.2(c) establishes additional protections for surface waters by requiring an HPAA to include passing flows for the affected portion of the surface water body. Establishing a passing flow will ensure that there is adequate water in the surface water body to protect other users who hold a valid water allocation permit or HPAA, and meet the needs of aquatic and water-dependent species. N.J.A.C. 7:38-3.2(c)1 indicates that the Department will also use passing flow assessment methods to protect the ecological integrity of the water bodies in the preservation area. The Department intends to use these methods to foster the maintenance of the natural flow regimes of the surface water systems. The Department is proposing to amend this provision to make it clear that it applies to diversions located within the preservation area.

N.J.A.C. 7:38-3.2(d) in the existing rules is proposed to be deleted because it is duplicative of the requirements already established elsewhere in the rules. N.J.A.C. 7:38-3.2(d) emphasized that the Department would not approve an allocation as part of an

HPAA to a new or expanded public water system unless the development to be served by the system met certain requirements. N.J.A.C. 7:38-3.3 adequately addresses the prerequisites for the approval of such systems. N.J.A.C. 7:38-3.2(e) emphasized that an allocation would not be approved to serve any development in the preservation area that was not exempt and consistent with the areawide WQMP or received an HPAA with waiver. The only part of this provision not covered elsewhere is the requirement that a new or increased diversion approved as part of an HPAA must incorporate water conservation measures to the maximum extent practicable, which is required under the Act at N.J.S.A. 13:20-32d. The Department is therefore proposing to amend subsection (d) to state this and reference acceptable conservation measures identified at paragraph (g)2.

Consistent with the provisions of the Highlands Act at N.J.S.A. 13:20-32d, N.J.A.C. 7:38-3.2(f), proposed to be recodified as (e), specifies that the Department will not approve any new or increased diversion for more than 50,000 gpd for a non-potable use that is greater than 50 percent consumptive, unless the applicant demonstrates that the diversion will not result in a net increase in this type of use in the sub-drainage area. A proposed amendment deletes the sentence defining sub-drainage area because it has been moved to paragraph (b)3 of this section. The purpose of N.J.A.C. 7:38-3.2(e) is to limit impacts to water resources by activities that can utilize a lower quality water for the intended use and to help ensure high quality water is available for potable and natural resource protection purposes. The provision also includes some measures by which the standard of no net increase in this type of use can be achieved, including ground water recharge of stormwater, beneficial reuse of reclaimed wastewater, and the permanent termination of an existing equivalent use within the sub-drainage area. Consumptive use means water diverted from a stream or ground waters that is not returned to the surface or ground water at or near the point at which it was taken without substantial diminution in quantity or substantial impairment of quality. Examples of highly consumptive uses include lawn irrigation at office complexes and irrigation of golf courses.

N.J.A.C. 7:38-3.2(d)2, recodified as (e)2, reinforces the ban on diversions for highly consumptive, non-potable uses by prohibiting water purveyors or other potable users from allowing the use of allocated water for new activities within the preservation area that are non-potable and more than 50 percent consumptive.

The Highlands Act at N.J.S.A. 13:20-32d enables the Department to revoke an existing unused water supply allocation approval for non-potable purposes where demand reduction is not implemented to the maximum extent practicable, and to otherwise reduce approved allocations to eliminate the unused portion. N.J.A.C. 7:38-3.2(g) through (i), recodified as (f) through (h), implement this provision, and describe the circumstances under which the Department may exercise this authority, the steps that a person holding an existing water allocation permit can take to avoid having an allocation reduced, and the procedure the Department will follow before altering an existing water allocation. Reducing existing unused approved allocations enables the Department to reserve such water to meet other needs in the preservation area without further impacting the resource or, if natural systems are being adversely impacted, return this water to the system, thereby making it available to serve ecological functions. Managing demands on water resources in the ways described above will further the goal of meeting the demand necessary for economic development while protecting the water supply and natural resources in the preservation area.

N.J.A.C. 7:38-3.2(j), as recodified as (i), provides the requirement for persons in the preservation area with the capability to divert more than 50,000 gpd but who divert less than that quantity to obtain a water use registration in accordance with the provisions of this section and the Water Supply Allocation Permits rules at N.J.A.C. 7:19. As described above with reference to N.J.A.C. 7:38-2.5, under the water allocation rules at N.J.A.C. 7:19- 2.18, any person with the capability to divert more than 100,000 gpd who diverts less than that quantity is required to register with Department. Those that divert greater than 100,000 gpd are required to obtain a water allocation permit under N.J.A.C. 7:19. There are several existing water use registrants diverting less than 100,000 gpd but

more than 50,000 gpd within the preservation area. In order to address these registrations existing as of March 29, 2004, the Department established monthly and annual limits under existing N.J.A.C. 7:38-3.2(j)2 and 3, recodified as (i)1 and 2. The Department established limits based on the highest amount of water diverted in any one month for the five-year period from March 29, 1999 to March 29, 2004. The current annual diversion has been established based on the highest annual diversion during that same time period. If the established diversion amount in the water use registration is exceeded, or the existing source of the diversion is modified, an HPAA will be required and the impacts associated with the diversion will be assessed based on the standards identified within this subchapter. The provision in the existing rules at (j) requiring that a water use registration under these rules be issued only for a project or activity subject to the Highlands Act and that is consistent with the Water Quality Management Plan is proposed to be deleted because registrations will be issued for any person with the ability to divert 50,000 gpd but who do not currently do so regardless of whether the water diverted is for or related to a regulated activity under the Highlands rules. In addition, the Department is proposing to amend existing (j)2 (recodified as (i)2) to clarify that the water use registrations referred to therein were issued under the Water Supply Allocation Rules, N.J.A.C. 7:19.

7:38-3.3 Public community water systems

N.J.A.C. 7:38-3.3 addresses, in accordance with N.J.S.A. 13:20-32i, the requirements for constructing new or expanding existing public community water systems to serve preservation area development (see also NJAC 7:38-2.5 (a)). N.J.A.C. 7:38-3.3(a) states that construction of new or the extension of existing systems in the preservation area is prohibited unless the development that the system serves is exempt from the Highlands Act and is consistent with the applicable areawide water quality management plan (WQMP), or qualifies for an HPAA under N.J.A.C. 7:38-6. The Department proposes to amend N.J.A.C. 7:38-3.3(a) to state that the construction of a new public community water system or extension of an existing public community water system is prohibited if it will serve development in the preservation area in order to

correctly track the mandate of the Act at N.J.S.A. 13:20-32i. In addition, the Department is proposing to delete existing (a)4, which states that the prohibition on constructing a new public community water system or extension of an existing public community water system does not apply if the development served by the system is located outside the preservation area because it is unnecessary in view of the just-described amendment. The Department proposes to amend N.J.A.C. 7:38-3.3(a)3 to include the words "with waiver" to clarify that HPAAs with a waiver are the only are the only HPAAs issued under subchapter 6 that qualify for the exception to the prohibition on constructing new or expanding existing public community water systems.

N.J.A.C. 7:38-3.3(b) requires that any new public water system constructed as provided in this section must comply with the Safe Drinking Water Act rules, N.J.A.C. 7:10.

7:38-3.4 Wastewater treatment facilities

The heading of this section has been amended to "NJPDES permitted discharges and wastewater facilities" to more accurately reflect the subjects it contains. The Highlands Act amended the Water Quality Planning Act at N.J.S.A. 58:11A-7.1 to revoke existing designated sewer service areas and any associated treatment works approvals where wastewater collection systems had not been installed by August 10, 2004 (see also 39 NJR 3731(a) for notice of proposal to amend the applicable areawide Water Quality Management Plans). Consequently, proposed major Highlands development within the preservation area must rely on septic systems or individual subsurface sewage disposal systems (ISSDSs) to dispose of domestic wastewater. In addition, pursuant to the Highlands Act at N.J.S.A.13:20-32g, the antidegradation provisions of the Surface Water Quality Standards applicable to Category One waters apply to Highlands open waters.

The antidegradation provisions of the Surface Water Quality Standards at N.J.A.C. 7:9B-1.5(d)6iii state that Category One Waters shall be protected from any

measurable changes (including calculable or predicted changes) to the existing water quality. Similarly, the Highlands Act at N.J.S.A. 13:20-32(b) provides that any new or expanded point source discharge, except discharges from water supply facilities, shall not degrade existing water quality in all Highlands open waters and waters of the Highlands which include all surface and ground waters. The absolute prohibition on the degradation of water quality means that new discharges of pollutants from point sources are also prohibited. Consequently, the Highlands Rule at N.J.A.C. 7:38-3.4(a) makes clear that new surface water and ground water point source discharges that would require issuance of a NJPDES permit (that is, those that are greater than 2,000 gallons per day) are prohibited and any extension of a sewer line that would require a treatment works approval (TWA) is prohibited, unless the development for which the NJPDES permit or TWA is needed is exempt from the Highlands Act under N.J.A.C. 7:38-2.3. The Department is proposing to amend N.J.A.C. 7:38-3.4(a)1 to require, in addition to the Highlands exemption, consistency with the applicable areawide WQMP because under the New Jersey Water Quality Planning Act (N.J.S.A. 58:11A) the Department cannot approve a permit for an activity that is inconsistent with the appropriate WQMP. The other possible exception to the prohibition on new point source discharges and the extension of wastewater infrastructure in the Highlands preservation area is where a project receives a HPAA under these rules that allows the new point source discharge or the extension of wastewater infrastructure. It should be noted that in order to obtain an HPAA approval, a project must meet all of the standards at N.J.A.C. 7:38-6, including the standard at N.J.A.C. 7:38-6.1(b)3, which reiterates the antidegradation provision found in the Act. Consequently, the Department believes that in almost all cases it will not be possible to obtain an HPAA without also requesting a waiver. However, because there may be some limited cases where an applicant may be able to comply with the requirements for an HPAA without requesting a waiver, the Department citing N.J.A.C. 7:38-6 (Highlands Preservation Area Approval) which incorporates standards for both HPAAs and HPAAs with waivers.

The Department is also proposing new N.J.A.C. 7:38-3.4(a)3 to reiterate that projects that are not considered major Highlands development, and therefore not regulated pursuant to this chapter, are not subject to the prohibition on new point source discharges and the extension of wastewater infrastructure in the Highlands preservation area.

The Highlands Act at N.J.S.A. 13:20-32e mandates that a septic system density standard be established in the rules at a level to prevent the degradation of existing water quality or to require the restoration of degraded water quality, and to protect the ecological uses from individual, secondary, and cumulative impacts, taking into consideration deep aquifer recharge available for dilution. To meet this mandate, the Department established in the existing rules two septic system density standards, depending upon the amount of forest on a lot. Existing N.J.A.C. 7:38-3.4(b)1 provides that a new individual subsurface disposal system that discharges less than 2000 gallons per day is permitted in the preservation area on a lot that contains forest on more than 50 percent of its area, subject to the limitation that only one such septic system serving a single-family home can be proposed on each 88 acres of land. For non-residential development or residential development other than single-family homes on a lot with forest, no more than 500 gallons of wastewater per day can be discharged for each 88 acres of land. Existing N.J.A.C. 7:38-3.4(b)2 establishes the septic density standard for lots containing less than 50 percent forest at 25 acres of land for each septic system for a single-family home and for the discharge of 500 gallons of wastewater per day from other types of development.

The Department is proposing to amend the rules to clarify the method for determining the total number of acres required per septic system. Different land uses generate different amounts of wastewater, and subsurface disposal systems are permitted up to 2000 gallons per day (gpd) in size. These larger systems would require a larger number of acres to provide the dilution needed to prevent degradation of existing ground water quality compared to the size system upon which the septic density standard was

developed. Therefore, the term "equivalent disposal unit" is introduced in N.J.A.C. 7:38-3.4(b) to provide a common wastewater generation capacity for all types of land uses that can be compared to the septic density standard in this section. The Department is proposing to define an "equivalent disposal unit" to be either an individual subsurface disposal system for a single family residential unit or a subsurface disposal system for 500 gallons of wastewater per day generated from multifamily or nonresidential development. For these types of development the 500 gpd equivalent disposal units can be aggregated into a single unit provided that the single unit does not discharge more than 2000 gallons of wastewater per day. Once the 2,000 gpd threshold is reached, a NJPDES permit is required and the discharge is considered a point source subject to the requirements in subsection (a). The Department is proposing to amend N.J.A.C. 7:38-3.4(b) to clarify that the design flow of the sanitary wastewater system must be 2000 gallons per day or less since this is consistent with the requirements for a NJPDES permit. All equivalent disposal units as defined in this subsection must be designed in accordance with the Standards for Individual Subsurface Sewage Disposal Systems, N.J.A.C. 7:9A. The acreage required to avoid the degradation of ground water quality is applied to each equivalent disposal unit. N.J.A.C. 7:38-3.4(b) has also been amended to specify that forest on a lot shall be identified and calculated in accordance with the procedures at N.J.A.C. 7:38-3.9.

N.J.A.C. 7:38-3.4(b)1 and 2 establish the number of acres required for each equivalent disposal unit to avoid degradation of ground water quality. In forest areas where ground water is of higher quality, 88 acres of dilution is required for each equivalent disposal unit to prevent degradation. In areas that are not forest, 25 acres of dilution are required to prevent degradation. The basis for these standards is provided in detail below. In the existing rules, the determination of which acreage standard to apply is based on whether the lot is more or less than 50 percent forest. Proposed new N.J.A.C. 7:38-3.4(b)4 modifies the method by which the number of disposal units that can be permitted on a lot is calculated. The proposed modified method establishes the number of equivalent disposal units that may be constructed on a lot based on the acreage of

forest and the acreage that is not forest on the lot. This requires an applicant to determine how much of a lot is forest and how much of a lot is not forest, with forest being determined in accordance with N.J.A.C. 7:38-3.9. The acreage of the lot that is forest is divided by 88 acres, to determine how many septic units would be permitted in the forested areas. The area of the lot that is not forest, which is the remainder of all other land uses on the lot, is divided by 25 acres to determine how many septic units would be permitted in the nonforest areas. The results of those calculations are then added together to determine how many equivalent disposal units will be permitted on the lot as a whole.

For example, a piece of property is 210 acres total, with 176 acres forested. The remainder of the lot with various land covers is 34 acres and is considered not forested. Under the existing rules, because greater than 50 percent of the lot is forest, the applicant would be entitled to two septic units (that is, 210 acres divided by 88 acres per septic results in two units when rounding down). Under the proposed modified method, 176 acres of forest would be divided by 88 for a total of two units, 34 unforested acres would be divided by 25 for a total of one unit (rounding down to the nearest whole number) and the total number of septic units for the lot as a whole would be three.

It is important to note that the proposed change in method will mainly affect large parcels of land containing both forested and unforested areas. In these cases, although the proposed change in method might allow more units than allowed under the existing rules, the water quality of the region will be adequately protected because the number of units permitted still is directly correlated with the types of land use, that is, a higher septic density where the land is not forested and a lower density where it is forested.

The Department is also proposing to add a provision at N.J.A.C. 7:38-3.4(b)5 that would permit the aggregation of lots such that all development would be placed on one or more lots, with the remaining lots deed-restricted against future disturbance. The purpose of this provision is to encourage clustering of development on one or more lots, provided that the lot or lots can support the clustered development and meet the requirements of

the Highlands Act and this chapter. At N.J.A.C. 7:38-3.4(b)5iv, the Department is proposing to require that all lots to be aggregated be located in the preservation area and in the same HUC 14. The HUC 14 scale was selected to reasonably facilitate aggregation while still requiring applicants to propose the aggregation of land in the same subwatershed so that the effects from clustering are balanced within the same subwatershed.

N.J.A.C. 7:38-3.4(c) requires that the construction of an individual subsurface sewage disposal system in the Highlands preservation area must comply with the Department's rules for such systems at N.J.A.C. 7:9A, and cannot necessitate extraordinary measures to do so. Such measures include replacement of in situ soil or rock that is not amenable to placement of a septic system drainage field, and construction of mounded systems in which additional soil is placed to accept septic effluent because of an existing, constraining, underlying condition such as shallow depth to bedrock or groundwater. Septic systems are intended to be the long term method of wastewater management in the preservation area and it is therefore important to maximize the likelihood of successful long-term operation. Widespread placement of systems where conditions are marginal for acceptance of the effluent from the system is contrary to this objective. Further, the cumulative impact of multiple systems that require soil amendment would alter the premise conditions under which the density requirements were developed and compromise the objective of antidegradation of water quality. For consistency with the amendment at N.J.A.C. 7:38-3.4(b), subsection (c) is proposed to be amended to also apply to equivalent disposal units.

Basis for N.J.A.C. 7:38-3.4 septic density standards

In order to prevent degradation, one has to know the existing water quality and select a measurable parameter to evaluate degradation. To establish the septic density standards at N.J.A.C. 7:38-3.4, the Department needed to identify existing, measurable water quality data, a parameter to assess degradation, and a method to measure or approximate deep aquifer recharge in order to identify a standard for dilution and to

approximate the effect of wastewater from a typical system. All factors were considered in accordance with accepted scientific models and methodologies.

The Department evaluated and selected model parameters, the concentration of the parameter selected to represent ambient conditions, the model to relate load to concentration, and the load per unit that may be allowed without degrading water quality. Using this methodology, the Department established in the existing rules and is proposing to readopt a standard of 88 acres per septic system or equivalent disposal unit where the land use/land cover existing on August 10, 2004 is forest and a standard of 25 acres per septic system or equivalent disposal unit for all other land uses/land covers. A document entitled "Basis and Background of the Septic Density Standard of the Highlands Water Protection and Planning Act Rule at N.J.A.C. 7:38-3.4" with further detail, including charts, graphs and other data used to develop the standards as described below can be obtained at from the Department's web site at <u>www.state.nj.dep/highlands/</u>.

Model Parameter Selection

Individual subsurface sewage disposal systems (ISSDSs) discharge constituents including nitrates, bacteria, and organic compounds (USEPA, 2002). Some constituents are present in significant and predictable amounts while other constituents are present in minute and/or variable amounts based on user behavior. Some constituents are significantly attenuated by the action of microorganisms and chemical reactions in the soil through which the effluent travels. Others, such as nitrate and dissolved solids like sodium and chloride, are attenuated primarily by dilution. The Department tested nitrate, phosphorus and total dissolved solids (TDS) as possible parameters to use in the model because they are present in septic effluent in relatively large and predictable amounts. Phosphorus was rejected because the input amount is modified significantly by travel through soil. This makes predicting the effect on groundwater uncertain. Nitrate is a fairly stable and soluble ion that moves freely through the soil profile. Consequently, the presence of nitrate is often monitored as an indicator of groundwater quality (for

example, Hoffman and Canace, 2004, and Bachman, 1987). TDS are also mobile and soluble; therefore, nitrates and TDS were considered further.

Mathematical models have been developed that relate nitrate load to ground water concentration using dilution and a suite of geologic and atmospheric variables. These mass-dilution models, driven in large part by the anticipated volume of recharge available for dilution, estimate the average land-area required per disposal system to generate enough recharge to dilute that system's effluent to acceptable concentrations before it reaches ground or surface water. The Trela-Douglas nitrate-dilution model (1978), updated or modified accordingly by the program or entity using it, has been used in New Jersey for over 20 years. It has been employed in Realty Improvement Sewerage and Facilities Act reviews by the Department's Division of Water Quality to determine appropriate septic density, as well by the New Jersey Pinelands Commission. An initial application of *A Recharge-based Nitrate-dilution Model for New Jersey* (Hoffman and Canace, 2004) model to nitrate and TDS revealed that nitrate was more critical than TDS. That is, it takes more recharge water to adequately dilute the levels of nitrate delivered by a septic system than is needed to adequately dilute TDS in order to protect ground water quality. Therefore, nitrate was selected as the model parameter.

Estimating Recharge

The Highlands Act specifically mandates consideration of deep aquifer recharge in establishing the septic density standard. However, there is no widely accepted means to estimate deep aquifer recharge. Science cannot yet identify every subterranean fracture and pathway and then quantify the volumes of water that enter each aquifer and at what rate. While much progress is being made, there is no agreed-upon methodology to take what is commonly accepted as "shallow" recharge and to determine the percentage of that volume that enters the fracture network in bedrock aquifers and travels deeper to become "deep aquifer recharge." The difference between "shallow" and "deep" aquifer recharge may not be as significant in unconsolidated granular aquifers, such as the glacial sand and gravel aquifers of the Highlands preservation area. Most,

and in many cases, all, of the mixing and dilution of nitrate nitrogen from septic effluent occurs in and below the root zone in what is commonly referred to as the "shallow" zone, although the "shallow" zone can be 100-feet deep or more.

In consolidated rock aquifers, also present in the Highlands preservation area, there may be a sharp contrast between the soil horizon(s) and rock, and significant partitioning of the ground water between "shallow" and "deep" aquifers is likely. This partitioning will vary both spatially and vertically as fractures close with depth, and cannot be quantified without detailed site studies.

There are, however, two basic approaches used to estimate aquifer recharge: one method measures what goes in (ground water recharge), and the other measures what comes out (base-flow).

The Department applied two methodologies to assess ground water recharge to estimate recharge rates in the Highlands preservation area. The first uses the ground water recharge model commonly referred to as New Jersey Geological Survey (NJGS) Report 32 (GSR-32), established in 1993 (Charles, *et al*). This ground water recharge model determines ground water recharge rates subject to conditions specific to New Jersey, and is applicable only to New Jersey. The second uses a base-flow separation method (Posten, 1984), that attempts to separate base-flow into two components: storm water runoff, which enters the stream by direct overland flow, and base-flow derived from water that infiltrates into the ground and discharges to the stream at a later time.

The Department performed its recharge analysis using *A Recharge-based Nitratedilution Model for New Jersey*, also developed by the NJGS (Hoffman and Canace, 2004). This model was developed by coupling the Trela-Douglas nitrate-dilution model with the GSR-32 model. It incorporates variations in land use, soil type, and a municipality-based climate factor that addresses regional variations for parameters such as rainfall and temperature, using over 30 years of data. These and other factors are

assessed together to estimate the rate of recharge for a given soil type in a given locale. For complete details on the methodology and assumptions of *A Recharge-based Nitratedilution Model for New Jersey*, refer to the NJGS Technical Guidance: A Recharge-Based Nitrate-Dilution Model for New Jersey, Hoffman and Canace, 2004.

The Department incorporated several changes into *A Recharge-based Nitratedilution Model for New Jersey* for its analyses. First, it revised the climate factors into a smoother approximation of meteorological conditions across the state. Second, the Department added climate factors based solely on the drought conditions of 1961-1965, the "drought of record" for New Jersey, in order to assess recharge during protracted drought conditions and thereby provide a more conservative, water-quality protective result. The third change is to replace an impervious cover (IC) gradient that estimates a residential lot's percentage of IC as a function of lot size, with the fixed value of 3 percent IC, since that is the limit required by the Highlands Act at N.J.S.A. 13:20-32h. The result of applying the groundwater recharge model is an overall regional recharge value of 9.8 inches per year.

A hydrograph-separation analysis was then performed using base-flow data from US Geological Survey (USGS) stream gauges in the Highlands Region. These stations were selected because:

- (1) The majority of their watershed derives from the Highlands Region (preservation and planning areas).
- (2) They generally lack significant control of their flow (for example, no manmade impoundments).
- (3) The hydrogeology of the watershed does not give rise to significant questions about the presence of ground-water underflow.

Based on data from the selected gauging stations for the drought of record, the regional recharge rate for the Highlands was determined to be 10.2 inches per year using the Posten hydrograph-separation method (1984). This value is supportive of the value determined through the recharge method.

In order to ensure a conservative result, the Department has determined that the more conservative recharge value of 9.8 inches/year should be used as the regional annual recharge rate for establishing the septic density in the Highlands preservation area.

Loading Rate for Nitrate

The Department used the value of 10 pounds per person per year for the per capita nitrate loading rate because this value is well-established in New Jersey and is consistent with the USEPA Onsite Wastewater Treatment Systems Manual (2002). For a household occupation rate, the Department examined the latest U.S. census data to determine a representative residential density (U.S. Census Bureau data can be accessed at www.census.gov). Based on the most recent data available, the national average for household size is 2.7 people (U.S. Census Bureau, 2005). This value represents an average of all areas and housing types. Considering only those New Jersey counties relevant to the Highlands Region, that is, Bergen, Hunterdon, Morris, Passaic, Somerset, Sussex, and Warren, the average household size is 2.8 people (U.S. Census Bureau, 2005). None of these counties lies wholly within the Highlands Region or preservation area, and some contain portions that are highly urbanized while others have large sections of agricultural and rural areas. Relying on the county data alone may result in a skewed average household size; however, data for each individual municipality is not available. Of the 45 municipalities that have at least a portion within the Highlands preservation area, 20 have individual data available either as a municipality or as a Census Designated Place (CDP). A CDP is an area identified by the U.S. Census Bureau for statistical reporting. It is a recognized concentration of population but one that is not legally incorporated under the laws of the state in which they are located, such as an urbanized area that extends beyond the boundary of an incorporated municipality. CDP boundaries

may change from one census to the next to reflect changes in settlement patterns. The range of average household size is 2.2 to 3.1 persons per household. The municipal and CDP data was then further analyzed to calculate the percentage of each household size, that is, the number of 1-person, 2-person, up to 7 person households relative to the total number of households per municipality and CDP. As much as 40.1 percent of the residential population lives in households of 4 or more, with a weighted average of 30.6 percent.

The dilution model is designed to predict nitrate values on a regional basis. If mixing on a basin-wide to regional basis is assumed, the substantial percentages of 1, 2, and 3-person households will adequately offset those with 5 persons or more. Because 30.6 percent of households have four or more persons, and the majority of households that contain four or more people are those with four people, a representative occupancy rate of four persons per household was used to establish a conservative loading per unit.

Water-Quality Target Selection

There have been centuries of human-related activity throughout the Highlands Region. Nitrate concentration in the Highlands Region has been detected as low as <0.01 mg/L, but also as high as 9.1 mg/L(Nicholson *et al.* 1996). Lower concentrations are generally associated with forested areas. In order to protect areas where water quality is good, selection of two water quality targets was appropriate; one for forested areas and one for nonforested areas.

For forested areas, ambient quality was determined by reviewing groundwater quality data from wells located in the Highlands preservation and planning areas. The range of nitrate/nitrite concentration in those wells was 0.03 mg/L to 0.41 mg/L, with a mean of 0.21 mg/L. This value compares favorably to the average ambient surface water quality of 0.17 mg/L measured at a reference location (Double Kill at Wawayanda) and was selected as the target for forested areas. Considering all land uses, a more extensive groundwater quality data base was available. An analysis of 388 wells in the Highlands

with 602 data points produced a mean value of 0.8 mg/L. This compares well to a USGS study of the Highlands (Serfes, 2004), which identified the overall median nitrate concentration is 0.76 mg/L. This value, which includes all land uses, was selected for nonforested areas in order to provide for some restoration of the water quality. Thus, the septic densities to be established by these regulations will protect ground water quality in pristine areas, prevent an increase in the overall regional average of nitrate concentration in the ground water, and will provide for restoration of areas where the existing ambient concentration is greater than the overall regional average.

Nitrate-Dilution Model Results

The amount of recharge needed to dilute the effluent coming out of a septic tank is dependent on the volume of recharge available and the amount of nitrate discharged. In the Highlands preservation area, the Highlands Act mandates the maximum impervious cover (IC) to be 3 percent. By assuming a constant percentage of impervious cover, the mathematical equation to calculate the nitrate concentration is fairly simple.

The following are the relevant recharge and nitrate-loading parameters:

 $A_{97\%}$ = size of the lot (with 3% IC) in acres

P = number of people per home

- N = nitrate loading rate (pounds per person per year)
- R = recharge rate (inches/year)
- T = nitrate standard (mg/L)

Using the Trela-Douglas (1978) approach, the lot size needed to generate enough clean recharge to dilute the nitrate in the effluent to the standard is:

(1)
$$A_{97\%} = 4.56 \frac{PN}{RT}$$

where the units are as defined above, and the 4.56 is a conversion factor for acres per lot. As explained above, the values for nitrate-loading parameters were evaluated as follows:

- P = 4 people per home
- N = 10 pounds per person per year
- T = 0.76 mg/L (nonforested) or 0.21 mg/L (forested)
- R = 9.8 inches/year (recharge model)

For the forested area target of 0.21 mg/L, using the dilution factor yields a lot size of 88.4 acres. This figure was rounded to 88 acres. For nonforested areas, the area target is 0.76 mg/L, and using the dilution factor yields a lot size of 24.5. This lot size was rounded up to 25 acres.

In order to establish a density for multi-residential development (for example, duplex or triplexes) and for non-residential development that will use septic systems that discharge less than 2,000 gallons per day, an equivalency to residential development using ISSDS was established. The persons per dwelling unit selected for the loading parameter was four; it is assumed that a dwelling supporting this number of people would have at least three bedrooms. As established in the Standards for Individual Subsurface Sewage Disposal Systems at N.J.A.C. 7:9A-7.4(b)1, the equivalent flow from a household of this size (four persons, three bedrooms) is 500 gallons per day. Therefore for all multi-residential and non-residential development, for each 500 gallons per day of wastewater, the applicable acreage, 88 acres in a forested area or 25 acres in other areas, applies. The gallons generated by such development will be determined as set forth in the Standards for Individual Subsurface Sewage Disposal Systems at N.J.A.C. 7:9A-7.4.

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7:38-3.5 Impervious Surfaces

The Highlands Act at N.J.S.A. 13:20-32h sets forth a prohibition on impervious

surfaces in the preservation area of greater than three percent of the land area, excluding

from the calculation of that land area Highlands open waters. N.J.A.C. 7:38-3.5(a)

codifies this standard and establishes that the total three percent impervious surface limit

is determined based on the configuration of any particular lot as it existed as of August

10, 2004. Subsequent subdivision of that lot does not enable additional impervious

surface to be placed on the resulting lots beyond the three percent limit allowed on the overall lot that existed as of August 10, 2004. The Department includes an example of how this provision is currently being implemented when an application is received for a lot that already contains impervious surface and for which the applicant may propose additional impervious surface. The Department is proposing several minor amendments to this provision to clarify the rule language. In addition, the Department is proposing to amend this provision to add a description of how impervious surface will be assessed on a lot that already contains impervious surface and is further subdivided.

Under N.J.A.C. 7:38-3.5(a)1, if the amount of impervious surface on a lot existing as of August 10, 2004, already is three percent or more, and the lot is subdivided, no further impervious surface can be placed on any of the resulting lots. However, under N.J.A.C. 7:38-3.5(a)2, non-contiguous lots in existence as of August 10, 2004, may be aggregated for the purpose of transferring the unused allowable percentage impervious surface from one lot to another, so long as the development and placement of impervious surface on the receiving lot complies with all other provisions of this chapter and the lots from which the unused allowable percentage impervious surface was transferred are permanently deed-restricted against additional disturbance. For example, if there are three lots with a total combined area of 100 acres, the total impervious surface allowable is 3 acres. The owner(s) of two of the lots would permanently deed-restrict their lots against additional disturbance. The unused percentage impervious surface from the first two lots would be transferred to the third lot, which consequently could have up to 3 acres of impervious coverage. The Department is proposing to amend N.J.A.C. 7:38-3.5(a)2 to reorganize and clarify how the aggregation for purposes of transferring unused

percentage impervious surface is intended to work. The proposed amended provision parallels proposed new N.J.A.C. 7:38-3.4(b)5 regarding aggregation of non-contiguous lots for purposes of transferring septic system density. In addition, the Department is proposing to add a condition to require that the lots to be aggregated must be located in the Highlands Preservation Area and within the same HUC 14 or subwatershed. The Department believes that it is necessary to limit lot aggregation to the same HUC 14 because the HUC 14 designates an area containing similar surface water quality conditions within a watershed. Expanding the area where aggregation can occur could result in excessive impervious surface in a particular subwatershed that could lead to an impairment of surface water quality. Since the primary reason for limiting impervious surfaces is to protect water quality, it is logical to require that the areas that are to be deed restricted be located within the same HUC 14 as the lot receiving the impervious surface. This will ensure that the impacts of the aggregation will be balanced by preservation within the same subwatershed. The Department is also limited the aggregation to the preservation area since at this time it is unknown what standards may be established by the Highlands Council for the Planning area.

N.J.A.C. 7:38-3.5(b) requires that Highlands open waters be excluded from the calculation of the total land area, as required by the Highlands Act.

N.J.A.C. 7:38-3.5(c) requires that all impervious surface existing on a lot when application for an HPAA is made to the Department must be included in the calculation of the three percent limit.

Existing N.J.A.C. 7:38-3.5(d) merely refers exempt projects back to the requirements for exemption. Exempt projects do not require an HPAA and as a result N.J.A.C. 7:38-3.5 would not apply to them. Therefore this subsection is proposed to be deleted.

Existing N.J.A.C. 7:38-3.5(e) is being recodified at (d). This subsection makes clear that where lawfully existing impervious surface on August 10, 2004 exceeded three percent of the land area of that lot there is no requirement to reduce the impervious surface. However, where lawfully existing impervious surface exceeds three percent, no additional impervious surface may be approved under an HPAA.

7:38-3.6 Highlands open waters

N.J.A.C. 7:38-3.6 establishes, in accordance with N.J.S.A. 13:20-32a the standards for development that has the potential to affect Highlands open waters. N.J.A.C. 7:38-3.6(a) provides that no disturbance is permitted in the 300-foot buffers adjacent to Highlands open waters other than as allowed under the Highlands rules. N.J.A.C>7:38-3.6(b) prohibits new major development in Highlands open waters and their buffers except for linear development projects for which there is no feasible alternative. The criteria for demonstrating "no feasible alternative" are set forth at N.J.A.C. 7:38-3.6(b)1 through 4. An applicant must demonstrate that the linear development is required as the only possible point of access to an otherwise developable parcel of land. The Department is proposing a new provision at N.J.A.C. 7:38-3.6(b)2 to require applicants proposing driveways through Highlands open waters and/or their 300foot buffer to investigate as part of an alternatives analysis the possibility of using a transfer of development rights (TDR) or selling the property outright, before the Department will approve a driveway linear development. The Department believes this additional test is necessary because the Highlands Act limits incursions into these sensitive areas for all but the most necessary projects. Therefore, if there is another use for the property that would avoid the need to damage the resource with a driveway, the

Department will not approve the driveway. The requirement to offer the property for sale at an amount no greater than fair market value is not intended to reduce the appraised value of a parcel but, rather, to give a prospective buyer the opportunity to make an offer that may be below market value. The owner of the property is not obligated to accept such an offer but may choose to accept it if it is close to market value and is adequate for his or her needs. Proposed new N.J.A.C. 7:38-3.6(b)4 provides that the Department will deny an HPAA for a proposed driveway linear development in those cases where the owner is offered fair market value and declines.

N.J.A.C. 7:38-3.6(c) requires that applicants receiving approvals to encroach within a Highlands open water that is also a wetland or State open water as defined in the Freshwater Wetlands Protection Act (FWPA) rules, N.J.A.C. 7:7A, shall mitigate for the approved impacts. This requirement is in part necessary because while the Department is not requiring a separate FWPA permit, the Department must incorporate all standards and requirements for such approvals as part of the HPAA in order to continue to administer the Federal wetlands program including any amendments and supplements, and implementing regulations program under the Federal Water Pollution Control Act (33 U.S.C. §§1251 et seq. also known as the Federal Clean Water Act. Consequently, it is possible that an approved linear development under this chapter would require mitigation under the FWPA rules. However, the Department is requiring mitigation for all wetland impacts under this subsection because the intent of the Highlands Act is to strictly protect water quality and supply and other ecological resources, and because wetlands play a critical role for the protection of water quality and provide habitats for rare, threatened and endangered plants and animals.

The provisions at N.J.A.C. 7:38-3.6(d) provides that existing structures and land uses in the buffers to Highlands open waters may remain if the area of disturbance is not increased. N.J.A.C. 7:38-3.6(e) explains that the Department may establish buffers and other protections limiting development along Category One waters in the Highlands pursuant to other State statutes or regulations.

7:38-3.7 Flood hazard areas

N.J.A.C. 7:38-3.7 sets forth requirements that apply to regulated activities in flood hazard areas within the Highlands preservation area. Specifically, a major Highlands development cannot cause any net displacement of flood storage volume within a flood plain. This codifies the provision of the Highlands Act at N.J.S.A. 13:20-32f imposing a zero net fill requirement for flood hazard areas pursuant to the Flood Hazard Area Control Act at N.J.S.A 58:16A-50 et seq.

When material is placed aboveground in a flood plain, 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.

Increased displacement of flood storage volume increases the depth and velocity of flooding and spreads the area subject to flooding. Greater flooding increases the threat to public safety and results in greater property loss. Furthermore, higher flood flows in channels also increase the potential for erosion, stream bank failure and sediment deposition, which adversely impacts fishery resources and other aquatic life.

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. Continuing development has reduced flood storage causing floods 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 (see the Flood Hazard Area Control Act rules at N.J.A.C. 7:13-2.15) and a 20% net-fill limitation along all non-tidal flood hazard areas throughout the rest of the State in 1984 (see N.J.A.C. 7:13-2.14). The Highlands Act imposes a zero net fill restriction within the Highlands preservation area, since this portion of the State has been identified as warranting the highest level of protection against undue development and over use of the State's natural resources.

N.J.A.C. 7:38-3.7(a) explains that a "flood hazard area" is any land that is defined as a "flood plain" in the Flood Hazard Area Control Act rules at N.J.A.C. 7:13-1.2.

N.J.A.C. 7:38-3.7(b) sets forth the zero net fill requirement for flood hazard areas. N.J.A.C. 7:38-3.7(b)1 provides for balancing regulated activities so that no flood storage volume is displaced onsite. As explained with reference to N.J.A.C. 7:38-3.7(c), below, "flood storage volume," is a more accurate way of describing the ability of fill or structures to displace floodwaters during a flood. Under N.J.A.C. 7:38-3.7(b)1, all fill proposed on one portion of the site is balanced by an equal "cut" or creation of flood storage elsewhere on site. The base flood storage volume is considered to be the flood storage volume that existed onsite on August 10, 2004, which is the date of enactment of the Highlands Act. Any flood storage displacement that occurs onsite after August 10, 2004, that is associated with a major Highlands development must therefore be compensated by creation of an equal volume of flood storage. N.J.A.C. 7:38-3.7(d) sets forth the requirements for the creation of flood storage onsite.

The Department recognizes that there will be cases where it will be impossible to develop a site without some flood storage displacement. Therefore, as an alternative way to meet the statutory zero net fill standard, N.J.A.C. 7:38-3.7(b)2 allows for the placement of fill onsite, that displaces no more than 20 percent of the flood storage volume provided an equal or greater volume of flood storage is created offsite in accordance with N.J.A.C. 7:38-3.7(e). An applicant may take advantage of this alternative in the situation where, for instance, a roadway is proposed across a stream in

order to reach an otherwise inaccessible upland area. The construction of a roadway through a flood hazard area generally requires some fill to be placed within the flood hazard area. Fill can be minimized by lowering the roadway elevation or constructing a narrower roadway. However, these modifications can sometimes contradict the requirements of the Flood Hazard Area Control Act rules. For example, a hospital may need to construct an emergency access road for ambulances to reach its facility and it would be in the best interest of public safety to elevate the roadway surface above the flood plain elevation. The alternative may also be appropriate in situations where compensating for flood storage displacement onsite could require disturbing upland forest or other areas that are regulated under the Highlands Act and these regulations.

Fill is limited to 20 percent of the flood storage volume onsite under N.J.A.C. 7:38-3.7(b)2 because the Flood Hazard Area Control Act rules impose this restriction throughout the majority of the State. The base flood storage volume for this purpose is considered to be the flood storage volume that existed onsite on January 31, 1980, which is the date the Flood Hazard Area Control Act was enacted. Using this date is consistent with the Flood Hazard Area Control Act rules at N.J.A.C. 7:13-2.14(a), and is also more restrictive than using the August 10, 2004 date that is the baseline for the onsite zero net fill alternative at N.J.A.C. 7:38-3.7(b)1, since any fill or construction onsite that has occurred since January 31, 1980, will count toward the 20 percent limitation. For example, if development occurred onsite five years ago which displaced 12 percent of the flood storage volume that existed on January 31, 1980, further development of the site would be limited to 8 percent of the remaining flood storage volume.

N.J.A.C. 7:38-3.7(c) explains that the flood storage volume of a site is the volume of space that exists in the flood hazard area outside the floodway. This is the volume of water that is temporarily stored onsite during a flood. The volume within the floodway is not counted, since the floodway conducts floodwater and does not store it. This is consistent with the Flood Hazard Area Control Act rules. N.J.A.C. 7:38-3.7(c) explains that flood storage volume can be created by excavating material from below the surface of the ground and removing the material outside of the flood plain. This increases the

area onsite available to floodwaters, provided floodwaters can freely enter and exit the excavated area. The rule also explains that removing fill or structures that have been previously and lawfully placed within the flood plain and outside the floodway will also create flood storage. "Previously" means either prior to August 10, 2004, if N.J.A.C. 7:38-3.7(b)1 governs, or prior to January 31, 1980, if N.J.A.C. 7:38-3.7(b)2 governs. "Lawfully" means in accordance with all local, State and Federal laws, requirements and statutes that existed at the time the fill or structure was placed. Removing a fill or structure that was illegally placed onsite does not count toward creating flood storage volume for the purposes of this section.

N.J.A.C. 7:38-3.7(d) sets forth five requirements for creating flood storage volume onsite to compensate for regulated activities. These are basic standards intended to ensure that the created flood storage volume is effective and will not adversely impact the environment.

N.J.A.C. 7:38-3.7(d)1 requires that flood storage is created along the flood plain of the same water as the proposed fill, or along a tributary to the same water as the proposed fill, provided the flood plain of both waters connect on site. In order to effectively balance the effects of fill, flood storage must be created within a contiguous flood plain system. A site may also have two or more streams with separate flood hazard areas. An applicant cannot fill in the flood hazard area of one stream and compensate by creating flood storage along the other unless the streams meet onsite, because this could cause increased flooding along the filled stream. Thus N.J.A.C. 7:38-3.7(d)1 ensures the created flood storage is effective.

N.J.A.C. 7:38-3.7(d)2 requires that flood storage is not created in a floodway, since, as noted above, flood storage does not exist within the floodway. This is consistent with the Flood Hazard Area Control Act rules.

N.J.A.C. 7:38-3.7(d)3 requires that flood storage is not created within 300 feet of a Highlands open water, unless the area has been previously disturbed. Compensating for displaced flood storage, while important, should not destroy previously undisturbed vegetation within the 300-ft buffer, since this conflicts with the goals of the Highlands Act. Applicants who cannot find an area onsite to compensate for fill which meets this requirement can compensate offsite under N.J.A.C. 7:38-3.7(e).

N.J.A.C. 7:38-3.7(d)4 requires that the onsite compensation does not result in other significant adverse consequences to other Highlands resource areas.

N.J.A.C. 7:38-3.7(e) sets forth nine requirements for creating flood storage volume offsite to compensate for regulated activities, as referred to by N.J.A.C. 7:38-3.7(b)2. These are intended to ensure that the created flood storage volume is effective and will not adversely affect the environment.

N.J.A.C. 7:38-3.7(e)1 requires that the total flood storage volume created offsite equals or exceeds the volume of flood storage displaced by the regulated activities onsite. This is necessary to meet the zero net fill standard for regulated activities required by the Highlands Act.

N.J.A.C. 7:38-3.7(e)2 requires that flood storage is created along the flood plain of the same water as the proposed fill, or along a tributary to the same water as the proposed fill, provided the flood plain of both waters connect on site. This is necessary to ensure that the created flood storage is effective.

N.J.A.C. 7:38-3.7(e)3 limits the compensating flood storage to areas within the same HUC 14 subwatershed as the fill, since creating flood storage in a different subwatershed would not compensate for the displacement of onsite flood storage.

N.J.A.C. 7:38-3.7(e)4 explains that the offsite flood storage being created cannot be separated from the proposed fill by a water control structure, such as a bridge, culvert or dam. Generally, a water control structure changes the hydraulic characteristics (such as the size, shape and depth) of a flood hazard area. All compensating flood storage must be effective in balancing fill onsite in order to meet the zero net fill standard. Thus, creating flood storage within a flood plain that is not hydraulically contiguous and similar to the proposed fill does not constitute adequate compensation. However, the provision allows an applicant to may provide the Department information that demonstrates that a particular water control structure does not significantly change the flood plain elevation.

N.J.A.C. 7:38-3.7(e)5 requires that flood storage is not created in a floodway. As noted above, flood storage does not exist within the floodway. This is consistent with the Flood Hazard Area Control Act rules.

N.J.A.C. 7:38-3.7(e)6 requires that flood storage is not created within 300 feet of a Highlands open water, unless the area has been previously disturbed. Compensating for displaced flood storage, while important, should not destroy previously undisturbed vegetation within the 300-foot buffer, since this conflicts with the goals of the Highlands Act.

N.J.A.C. 7:38-3.7(e)7 requires that the onsite compensation does not result in other significant adverse consequences to other Highlands resource areas.

N.J.A.C. 7:38-3.7(e)8 requires that the owners of the land on which the offsite compensation is proposed must agree in writing to allow the compensation on their property. This is necessary to ensure that the applicant can accomplish the proposed creation of flood storage.

N.J.A.C. 7:38-3.7(e)9 requires that any area involved in offsite compensation shall be deed restricted against future flood storage volume displacement. This is

necessary to ensure that future development does not eliminate or reduce the flood storage that was created to compensate for development onsite.

7:38-3.8 Steep slopes

The Highlands Act at N.J.S.A. 13:20-32j states that the Department's regulations shall include, "a prohibition on development, except linear development for infrastructure, utilities, and the rights-of-way therefor, provided that no other feasible alternative, as determined by the department, exists for the linear development, on steep slopes in the preservation area with a grade of 20 percent or greater." It also directs the Department to establish standards for development on slopes in the preservation area exhibiting a grade of between 10 percent and 20 percent. The Highlands Act provides that the goal of the standards for developments on slopes between 10 and 20 percent shall be "to prevent soil erosion and sedimentation, protect water quality, prevent stormwater runoff, protect threatened and endangered animal and plant species sites and designated habitats, provide for minimal practicable degradation of unique or irreplaceable land types, historical or archeological areas, and existing scenic attributes at the site and within the surrounding area, protect upland forest, and restrict impervious surface; and shall take into consideration differing soil types, soil erodability, topography, hydrology, geology, and vegetation types." (See N.J.S.A. 13:20-32j.)

N.J.A.C. 7:38-3.8(a) states that a major Highlands development on a steep slope must meet the requirements of this section. N.J.A.C. 7:38-3.8(b) establishes the procedure by which a slope shall be measured. Contours are to be measured at no greater than 2-foot intervals and over a 10-foot distance to avoid the effects of flattening a slope by averaging across a longer distance.

N.J.A.C. 7:38-3.8(c) contains the conditions for development on slopes 20 percent or greater. The Highlands Act permits linear development for which there is no feasible alternative on slopes 20 percent or greater. N.J.A.C. 7:38-3.8(c)1 through 5 establish the

criteria an applicant must meet to demonstrate there is "no feasible alternative" to a project. These criteria are also used to examine alternatives for projects in Highlands open waters, as described above with regard to N.J.A.C. 7:38-3.6. These provisions are being amended in the same way and for the same reasons as the linear development provisions at N.J.A.C. 7:38-3.6 to require additional efforts to sell a property or employ transfer of development rights if available, if the proposed linear development is a driveway.

The standards for development on slopes of between 10 and 20 percent are designed to prevent soil erosion and sedimentation. The Department notes that although the Act at N.J.S.A. 13:20-32j states that steep slope standards must also ensure protection of water quality, threatened and endangered plant and animal species habitat, historical or archaeological areas, and upland forest, and restriction of impervious surface, the preservation area standards established in Subchapter 3 of these rules specifically and collectively address the protection of all Highlands resources.

The Department has determined that the best generally available source of information relating to soil erosion and sedimentation is the Natural Resource Conservation Service (NRCS formerly, the Soil Conservation Service), a Federal agency responsible for the publication of the Soil Surveys for counties nationwide. Soil erodability is a function of soil type, vegetative cover and slope (Chris Smith, NRCS, personal communication). Each of these factors is addressed within the County Soil Surveys. Further, the Soil Surveys employ a soil classification system that addresses soil erodability factors. The soil "capability class and subclass" is a numeric and alphabetic ranking system, respectively, provided in Soil Surveys that identifies limitations in soils for agricultural usage according to the following:

Class I soils have few limitations;

Class II soils have moderate limitations;

Class IIe soils have moderate limitations due to risk of erosion;

Class IIs soils have moderate limitations due to shallow, droughty or stony conditions; Class IIw soils have moderate limitations due to wetness; Class III-VIII soils have various severe limitations that limit their use.

Often, the hazard of erosion relates to vegetation removal, especially removal of forest. Consequently, at N.J.A.C. 7:38-3.8(d)1, the Department is prohibiting all but linear development on forested slopes between 10 and 20 percent.

For steep slopes that are not forested, N.J.A.C. 7:38-3.8(d)2 requires applicants to review the relevant Soil Survey for the soil and slope percentage upon which they are seeking to do construction. If the Soil Survey classifies the soils as anything but Class I (few limitations), or IIw (limitations due to wetness), nothing but linear development is permitted there. Since the Soil Survey indicates moderate or severe limits for farming on all soils classified as Class IIe, IIs and higher, the Department has concluded that construction activities, which require complete vegetation removal, will result in an unacceptable degree of erosion and sedimentation. Consequently, development on such slopes is severely limited.

For steep slopes that are not forested and that are Class I or Class IIw, N.J.A.C. 7:38-3.8(d)3 permits major Highlands development provided that encroachment is minimized to that necessary to accomplish the desired project. Although the soil types themselves may not be prone to erosion, construction on steep slopes may result in secondary water quality impacts or increased stormwater runoff. For example, rocky soils may make it difficult to establish vegetation for lawns, making stormwater management and control more difficult after construction. Thus, while the Department is not prohibiting major Highlands development in such areas, unnecessary disturbances on steep slopes is discouraged.

N.J.A.C. 7:38-3.8(d)2 and 3 are proposed to be amended to clarify that the specific soil class may include the subclass (alphabetic portion, that is, "w" in IIw) as well.

7:38-3.9 Upland forested areas

N.J.A.C. 7:38-3.9 establishes the standards for activities that may affect an upland forested area. The Highlands Act at N.J.S.A. 13:20-32k requires the Department to devise standards to protect upland forested areas by avoiding impacts or disturbance and, where avoidance is not possible, to establish appropriate measures to minimize and mitigate impacts to upland forested areas to prevent soil erosion and sedimentation, protect water quality, prevent stormwater runoff, and protect threatened and endangered animal and plant species sites and designated habitats.

In the existing rules at N.J.A.C. 7:38-3.9, the Department provided a sampling technique to establish the presence of a forest on a site. However, at N.J.A.C. 7:38-3.9(e), the Department stated that it would also consider forest identified by the Highlands Council. As a result of comments from the Highlands Council and extensive discussion, the Department is proposing to amend the sampling method in this section to ensure that the method correctly identifies and protects the type of forest existing in the Highlands Region.

As proposed to be amended, N.J.A.C. 7:38-3.9(b)1 requires an applicant to first identify forest on a site using the Department's aerial photography. The Department believes that an analysis using aerial photography is the appropriate first step since it is easier and less costly than doing extensive sampling onsite. N.J.A.C. 7:38-3.9(b)2 requires an applicant to overlay a grid system on the photograph(s) to determine whether areas with sporadic coverage contain sufficient coverage to be identified as forest. The Department will provide this grid on its website. The use of the grid to identify forest cover is a method consistent with the New Jersey No Net Loss Reforestation Act, N.J.S.A. 13:1L-14.1 et seq. This methodology is not intended to identify the outer limits

of the forest but, rather, to identify areas within the forest that should be classified as forest if an applicant has excluded such areas from his/her identification of forest on the site.

As proposed to be amended, N.J.A.C. 7:38-3.9(c) sets forth the method to determine forest on a site by measuring trees and their density on the ground. The applicant is not required to do onsite sampling unless the Department identifies additional areas of potential forest that were not identified by the applicant using aerial photography. The Department uses a similar forest assessment methodology in its Coastal Zone Management regulations at N.J.A.C. 7:7E-5.6. The proposed amendments are intended to better adapt this method to forests typical of the Highlands Region.

N.J.A.C. 7:38-3.9(c)1i requires sample plots to be located in the portion of each acre with the highest density of trees as determined by visual inspection.

N.J.A.C. 7:38-3.9(c)1ii is proposed for deletion because (c)1i already requires selection of plots in areas with a high tree density. N.J.A.C. 7:38-3.9(c)1iii is recodified as (c)1ii. It allows the use of one plot instead of two if the forest is uniform overall. However, the Department is proposing to amend N.J.A.C. 7:38-3.9(c)1iii to require that, for the purposes of the point total calculation under (c)5, if only one plot is sampled, the point total resulting from the tree diameters on the one plot shall be doubled since the (c)5 calculation is based on the points determined from sampling two plots.

N.J.A.C. 7:38-3.9(c)2 requires that trees be measured at four and one half feet above ground (dbh).

The Department is proposing to amend N.J.A.C. 7:38-3.9(c)3 to include a category for trees one to three inches in diameter. Without this size group, areas of forest regeneration in the Highlands Region would be excluded from the analysis inappropriately. The Department is also proposing to amend the diameter groupings to

provide different ranges of tree size and to change the total number of points for each diameter category. The proposed amendments are based upon data from the U.S. Forest Inventory (USFI) Field Procedures Manual (U.S. Forest Service), Forest Statistics for New Jersey 1987 and 1999 (Griffith and Widmann, 2001), and Forests of the Garden State Resource Bulletin NE163 (Widmann, 2005). The USFI program provides an overall analysis of tree size statewide and the percentage of such trees per acre in New Jersey's forests. Based upon this data, the Department has determined that it is necessary to adjust both the grouping of diameter categories and the point assignments for each size class in order to accurately capture trees that typically represent forests in the Highlands.

In reviewing the U.S. Forest Service data, the Department discovered that its method of forest assessment (borrowed originally from the State of Maine) in the existing rules was based upon a U.S. Forest Service method that required point values from both sample plots within an acre of proposed forest to be totaled in order to reach a final conclusion. Therefore, the Department is proposing to amend N.J.A.C. 7:38-3.9(c)5 to require that the total point scores for both sample plots be totaled in order to get a final score.

Because of the changes to the point distribution and the proposed requirement to total point values from both sample plots, the Department is proposing to amend N.J.A.C. 7:38-3.9(c)5 to reflect the total score for both sample plots and to provide an appropriate example of how to do a final evaluation of the sample plots.

The Department is proposing to amend N.J.A.C. 7:38-3.9(c)6 to emphasize that the sample plots are intended to identify an acre as forested. This provision is also intended to assist applicants in locating the outermost limits of the forest sample.

Proposed new N.J.A.C. 7:38-3.9(c)7 establishes the parameters by which areas containing seedlings and saplings will be assessed. The rule provides that areas containing 408 seedlings or saplings per acre constitute regenerating forest.

Proposed new N.J.A.C. 7:38-3.9(c)8 clarifies that orchards, Christmas tree farms and nurseries are not considered forest under this section. They are agricultural or horticultural uses and therefore and are not regulated by the Department under these rules. See N.J.A.C. 7:38-2.2(b).

Existing N.J.A.C. 7:38-3.9(c) is proposed to be recodified as N.J.A.C. 7:38-3.9(d) and is amended to correct cross-references.

The Department is proposing to delete existing N.J.A.C. 7:38-3.9(d) because it has been incorporated into proposed N.J.A.C. 7:38-3.9(c). In addition, the Department is proposing to delete N.J.A.C. 7:38-3.9(e) since the Department's method, as amended, was designed in consultation with the Highlands Council and will be used by both agencies for forest identification.

N.J.A.C. 7:38-3.9(f) is proposed to be recodified as N.J.A.C. 7:38-3.9(e). This provision prohibits the disturbance of upland forest to conduct any activity except linear development if the forest is located on a steep slope.

N.J.A.C. 7:38-3.9(g) is proposed to be recodified as N.J.A.C. 7:38-3.9(f). This provision establishes the criteria for disturbance of upland forested areas. Among other things an applicant must explore alternatives to the proposed project (N.J.A.C. 7:38-3.9(f)2) so the Department can assess whether or not an applicant has avoided and minimized encroachment into such areas. The Department is proposing to amend this provision to include an evaluation of forest "edge." "Edge" is a measure of the number of breaks that occur within a contiguous forest parcel. Increased "edge" results in the breakup or fragmentation of a forest and causes changes in the ecological community. Increased openings in the forest may discourage forest use by wildlife species requiring large tracts of contiguous forest and contributes to species endangerment. In addition, increased edge provides the opportunity for invasive plant species and destructive insects

to enter the forest community. The Department is also proposing to require avoidance of mature tree specimens when evaluating alternatives to forest impacts.

When the alternatives test has been satisfied, recodified N.J.A.C. 7:38-3.9(f)3 limits disturbance to a total encroachment of 20 feet directly adjacent to a structure and no more than 10 feet on each side of a driveway as needed to access a non-forested area. These criteria are set forth in the Highlands Act at N.J.S.A. 13:30-30b(8) and took effect as of the August 10, 2004 effective date of the statute. The Department is proposing to amend this provision to also include a forest disturbance of 20 feet adjacent to a septic disposal bed since at least this amount of area will be required for installation.

Finally, in order to further discourage encroachment into upland forested areas, N.J.A.C. 7:38-3.9(f) requires that all impacts to upland forest be mitigated in accordance with recodified N.J.A.C. 7:38-3.9(g). The Department is proposing to amend N.J.A.C. 7:38-3.9(g) to require applicants to implement mitigation according to the hierarchy of options in (g)1 through 4. Onsite tree planting is required in all cases unless the applicant can demonstrate why onsite planting is not feasible. Offsite planting in the planning or preservation area must be done in the same HUC 14 where upland forest was removed or damaged under the HPAA. The purpose of limiting the planting to the same HUC 14 is to assure that replanted trees provide water quality benefits to the same watershed from which trees are being lost.

If neither onsite planting or offsite planting within the same HUC 14 is feasible, N.J.A.C. 7:38-3.9(g)3 as amended permits the planting of trees outside the HUC 14 from which trees are being removed but requires that the new planting occur within the preservation area.

If none of the options at paragraphs (g)1 through 3 are feasible, N.J.A.C. 7:38-3.9(g)4 permits payment into a fund for the purchase of upland forest areas in the Highlands Region.

Recodified N.J.A.C. 7:38-3.9(h) (current (i)) describes how a forest mitigation planting is to be implemented. In addition, the Department is proposing to amend N.J.A.C. 7:38-3.9(h) to state that mitigation will not be considered successful unless 85 percent of the trees survive after three years. N.J.A.C. 7:38-3.9(h)1, 2 and 3 establish the tree replacement factor and spacing for tree planting. These are currently used by the State to avoid deforestation in accordance with N.J.S.A. 13:1L-14.2 (the Reforestation Act). The Reforestation Act sets out reforestation requirements including a tree replacement factor for State entities proposing to deforest areas and provides an appropriate model for the Highlands Region. N.J.A.C. 7:38-3.9(g) 4, 5 and 6 describe the general types of trees to be planted to assure survival and create a more natural forest planting. N.J.A.C. 7:38-3.9(h)7 establishes protective measures that promote a successful tree planting. N.J.A.C. 7:38-3.9(h)8 and 9 require that the location of the tree planting be permanently marked and that the location be deed restricted to protect the new plantings in perpetuity. Proposed new N.J.A.C. 7:38-3.9(h)10 requires submittal of an annual postplanting monitoring plan so the Department can assess the progress that is being made after planting has occurred and whether or not the mitigation has achieved the required 85 percent survival rate. In addition, if 85 percent survival is not achieved at the end of three years, additional planting and years of monitoring will be required until the stipulated survival rate is reached.

Finally, proposed new N.J.A.C. 7:38-3.9(i) sets forth the information an applicant must provide if mitigating in the form of a monetary contribution is being proposed. The information includes the amount of forest area to be replaced, the number and type of trees that would be required according to the tree replacement factor, and the cost to purchase and plant those trees.

7:38-3.10 Historic or Archaeological Areas

N.J.A.C. 7:38-3.10(a) defines the type of historic and archaeological areas subject to regulation under this chapter. While the Highlands Act refers to such resources as "areas," State and Federal historic preservation statutes and regulations refer to such areas as "properties." Thus, N.J.A.C. 7:38-3.10(a) affirms the equivalence of the two terms. However, to make it easier for those engaged in historic preservation work to recognize the terminology, the Department is also proposing to amend the regulations to replace the reference to "areas" with a reference to "properties" as appropriate.

At N.J.A.C. 7:38-3.10(b) the Department states that no one may engage in regulated activities that would impact historic or archaeological properties without first conducting an intensive-level architectural survey. Further, (b)1 through 4 provide the types of project to which this requirement applies. The items described at (b)1 through 4 are consistent with the checklist items the Department has used in its Freshwater Wetlands program to identify historic and archaeological resources upon receipt of an application. The Department is proposing to amend N.J.A.C. 7:38-3.10(b)4 to replace the term "feature" with property because "feature" has a specific meaning to those engaged in historic preservation work that was not intended in this context.

N.J.A.C. 7:38-3.10(c) requires that applicants seeking an HPAA that might impact a historic or archaeological property to provide a Phase I (identification of resources) survey. Further, (c)1 through 5 provide a listing of the types of activities to which this provision applies. Like the list of items provided in (b) above, the items described at (c)1 through 5 are also consistent with the checklist items the Department uses in its freshwater wetlands regulatory program. The difference between the historic or archaeological properties that are affected by the activities identified in (b) and (c) is that those at (b) are generally above-ground historic properties, while at (c) are generally below-ground archaeological resources that require a different method for identification and documentation.

N.J.A.C. 7:38-3.10(d) requires that applicants who complete a Phase 1 assessment that results in a positive finding complete a Phase II assessment and submit it with an HPAA application.

N.J.A.C. 7:38-3.10(e) specifies the criteria by which an applicant is required to conduct the Phase I and II surveys and reports.

N.J.A.C. 7:38-3.10(f) and (g) specify the findings that the Department must make in order to determine that a proposed activity will not have an impact on historic or archaeological properties. The Department is proposing to amend N.J.A.C. 7:38-3.10(f) to delete the phrase "and the site upon which the regulated activity is proposed" because an "historic property" includes the site and therefore the additional phrase is not necessary. The Department is proposing to amend N.J.A.C. 7:38-3.10(g) to clarify that the Department will consider that a regulated activity will not be deemed to have an impact on an archaeological property unless that property is listed on or would be eligible for listing on the New Jersey or National Register of Historic Places. Properties listed on or eligible for listing on the New Jersey or National Register of Historic Places are subject to regulation in accordance with N.J.A.C. 7:38-3.10.

N.J.A.C. 7:38-3.10(h) describes the demonstration that must be made by an applicant when the Department determines that an activity will have an impact to a historic or archaeological property. In general, the applicant will have to demonstrate that a historic structure cannot be preserved and reused, or, for an archaeological resource, why a project cannot be designed to avoid impacts.

The proofs that an applicant must provide to make the determination required by subsection (h) are detailed at N.J.A.C. 7:38-3.10(i)1 through12 and vary depending upon the type of proposed project and the resource to be affected by the proposed activity. The requirements are intended to provide the Department with a document demonstrating minimal practicable degradation of historic and archaeological properties through an

analysis of all potential project variables that should result in a full justification of the project design. N.J.A.C. 7:38-3.10(i)1 through 3 request basic information to identify the resource in question. N.J.A.C. 7:38-3.10(i)4 requires a statement of alternatives and the reasons that each was rejected. N.J.A.C. 7:38-3.10(i)5 requires specific considerations for a structure when an alternative is rejected due to engineering concerns. N.J.A.C. 7:38-3.10(i)6 addresses the factors to be explored when evaluating alternatives relating to road, culvert and bridge projects. N.J.A.C. 7:38-3.10(i)7 describes the information that must be considered when evaluating the reuse of a historic building. N.J.A.C. 7:38-3.10(i)8 requires the applicant to evaluate the public benefit and need for the proposed project. N.J.A.C. 7:38-3.10(i)9 requires the applicant to provide findings relating to whether or not the project will have an adverse effect on a historic or archaeological property, and the type and scope of proposed mitigation. Finally, N.J.A.C. 7:38-3.10(i)10 through 12 require submittal of all communications received regarding the project, and information regarding the persons who prepared materials submitted by the applicant.

N.J.A.C. 7:38-3.10(j), provides that the Department will review any NPAA application containing Phase I and II surveys in accordance with the procedures outlined in N.J.A.C. 7:4-8.1 through 8.3, Procedures Concerning the New Jersey Register of Historic Places.

N.J.A.C. 7:38-3.10(k) provides that the Department may condition an approved HPAA to require mitigation necessary to achieve the minimum practicable degradation on the historic or archaeological area.

Finally, N.J.A.C. 7:38-3.10(1) provides that the Department will deny an HPAA application if the regulated activity will result in more than the minimum practicable degradation or impact to a historical or archaeological area. It further clarifies that the demolition of an historic building or archaeological feature is considered more than minimum practicable degradation.

7:38-3.11 Rare, threatened or endangered plant and animal species

N.J.A.C. 7:38-3.11 provides the standards for issuance of an HPAA with respect to rare, threatened or endangered plant and animal species. The Department will not approve a major Highlands development that would jeopardize the continued existence of any rare, threatened or endangered plant or animal species or that would result in the likelihood of the destruction or adverse modification of habitat for such species. This is consistent with the findings that the Department must make before approving an HPAA in accordance with the Highlands Act at N.J.S.A. 13:20-34a(4).

7:38-3.12 Unique or irreplaceable land types and existing public scenic attributes

The Highlands Act at N.J.S.A. 13:20-34a(6) requires that, before issuing an HPAA, the Department must find that the regulated activity would result in "minimal practicable degradation of unique or irreplaceable land types, historical or archaeological areas, and existing public scenic attributes at the site and within the surrounding area." N.J.A.C. 7:38-3.12(a) provides that unique or irreplaceable land types include ecological communities that are identified in the Department's Natural Heritage Database, and vernal habitats.

The ecological communities that the Department identifies in the Natural Heritage Database are unique interacting assemblages of plants, animals and other organisms, their physical environment and the natural processes that affect them. For example, a calcareous fen is an ecological community that combines limestone formations that are themselves unique with plants specifically suited to life in this habitat. Such unique communities cannot be replaced and the Department believes that these are the types of areas intended for protection under the provisions of the Highlands Act.

N.J.A.C. 7:38-3.12(b) defines vernal habitats. Vernal habitats, also known in other states as vernal pools, are small (usually less than an acre), temporary ponded depressions

isolated from a flowing stream system. Water is supplied by surface runoff and/or ground water. Various studies [Texas (Wiest 1982), California (Semlitsch et al. 1996), Tennessee (Scott and Bufalino 1997) Florida (Dodd and Cade 1998), and Connecticut (Victoria 1998)] have identified vernal pools as ecologically important habitats because:

- They support a unique ecological community which may feature greater species diversity than that found in larger, more permanently wet areas;
- Due to their rapid life cycle, vernal pool species may act as indicators of changes in the environment.
- Certain amphibians, because they require aquatic habitats for only a portion of their life history, are able to exploit the seasonally rich resource provided by vernal pools;
- The drying of the pool eliminates fish and other large predators so that when the poolfills, tadpoles have an initial size advantage over invertebrate predators;
- They are very productive immediately after seasonal flooding, causing rapid growth and high population densities in amphibians;
- They are scattered widely across the landscape, and provide an important local source of drinking water to many forms of terrestrial wildlife;
- They provide important foraging and nesting habitat for a variety of birds; and
- Some species (crayfish and some aquatic salamanders) escape desiccation by burrowing into the bottom and remaining there until rains again fill the pool.

Vernal habitat communities have been specifically identified as unique attributes by the Delaware (River) Estuary Program, that includes the State of New Jersey, and the Natural Heritage Program.

The Department is proposing minor amendments to N.J.A.C. 7:38-3.12 as it relates to scenic attributes consistent with the language of the Highlands Act, the Department is inserting the word "public" before the term "scenic attributes." In addition, the Department is proposing to add Federal public lands to the list of resources that are protected as "public" scenic attributes since there are some rivers within the preservation

area that are under consideration for addition to the Federal Wild and Scenic River System.

Subchapter 4 Highlands resource area determinations

7:38-4.1 Highlands resource area determinations

N.J.A.C. 7:38-4.1(a) describes a Highlands Resource Area Determination (HRAD). The HRAD identifies and/or verifies the location of any feature that is a Highlands resource area such as Highlands open waters and associated buffers; flood hazard areas; steep slopes; forested areas; rare, threatened or endangered species habitat; rare or threatened plant habitat; areas with historic or archaeological features; and unique or irreplaceable land types. There is no requirement for anyone to obtain an HRAD. It is a voluntary process provided by the Department to assist property owners to identify for planning purposes the Highlands resources on a site that may limit the scope or location of development activities.

N.J.A.C. 7:38-4.1(b) clarifies that an HRAD is not a permit or authority to conduct regulated activities on a site. The HRAD is intended to confirm the presence, absence, or location of a Highlands resource area on a site as well as its boundary, if applicable. This section also stipulates that an HRAD may be applied for either as a stand-alone determination or in conjunction with an application for a HPAA.

N.J.A.C. 7:38-4.1(c) outlines the three types of HRAD available from the Department as well as the information that must be submitted for the application.

N.J.A.C. 7:38-4.1(c)1 describes a "footprint of disturbance HRAD." This type of HRAD allows an applicant to determine whether a Highlands resource area is present within a certain area of a larger project site. An applicant may apply for up to three (3) "footprint of disturbance HRADs" on a single site provided that each footprint area is an

acre or less in size and that a separate fee is submitted for each footprint area. Each "footprint of disturbance HRAD" application must contain the information located at N.J.A.C. 7:38-9.3 and 9.4(b) and (c).

N.J.A.C. 7:38-4.1(c)2 describes a "boundary delineation HRAD." This type of HRAD is available for sites that are an acre or less in size and will only be issued for an entire site. The Department itself will delineate the limits of all Highlands open waters, buffers and forest on the site and will also determine the presence, absence and location of the remaining resource areas. Each "Boundary Delineation HRAD" application must contain the information required at N.J.A.C. 7:38-9.3 and 9.4(b) and (d).

N.J.A.C. 7:38-4.1(c)3, describes a "boundary verification HRAD." In this type of HRAD, the Department confirms and may modify, as necessary, the applicant's delineation of Highlands resource areas on the entire site regardless of the size of the site. The Department will also confirm and modify, as appropriate, the applicant's conclusions regarding the presence, absence or location of all other Highlands resource areas on the site. Each "boundary verification HRAD" application must contain the information required at N.J.A.C. 7:38-9.3 and 9.4(b) and (e).

N.J.A.C. 7:38-4.1(d) references how an HRAD issued by the Department, will address the presence, absence or location for each individual feature listed as a Highlands resource area.

N.J.A.C. 7:38-4.1(d)1, states that each HRAD will identify the location of Highlands open waters and their buffers, as described at N.J.A.C. 7:38-3.6, on or adjacent to the applicant's site. When Highlands open waters are freshwater wetlands, the freshwater wetlands shall be identified and delineated in accordance with the Freshwater Wetlands Protection Act Rules at N.J.A.C. 7:7A-2. The Department is proposing to amend N.J.A.C. 7:38-4.1(d)1iii to state that that forested wetlands (Highlands open

waters) will have to be identified and used in the calculation for septic density contained at N.J.A.C. 7:38-3.4.

N.J.A.C. 7:38-4.1(d)2 states that each HRAD will identify the location of steep slopes using the methodology described at N.J.A.C. 7:38-3.8.

N.J.A.C. 7:38-4.1(d)3 states that each HRAD will identify the location of rare or threatened and/or endangered wildlife habitat as described at N.J.A.C. 7:38-3.11. N.J.A.C. 7:38-4.1(d)3i through iv details how the Department will determine the presence, absence or location of the habitat in question.

N.J.A.C. 7:38-4.1(d)3i describes how the Department will identify the location of any area on or adjacent to the project site that has ecological characteristics that make a particular area "suitable habitat" for breeding, feeding, resting or sheltering of any rare threatened and/or endangered species. In addition, the Department will provide a list of many of the ecological characteristics to be considered during the HRAD review process.

N.J.A.C. 7:38-4.1(d)3ii requires that each application to the Department for an HRAD or HPAA include a letter obtained from the Department's Natural Heritage Program as to the presence of rare, threatened or endangered wildlife species or habitat ranked 3, 4, or 5 on the Landscape mapping. If that letter indicates that the species or the habitat is present, the Department shall presume that the site constitutes rare, endangered, and/or endangered species habitat unless a habitat evaluation prepared by the applicant in accordance with N.J.A.C. 7:38-5 provides sufficient and convincing evidence to the Department to the contrary. Upon determining that the habitat evaluation is accurate, the Department shall issue a written determination of the absence of rare, endangered, and/or endangered species habitat on the project site.

N.J.A.C. 7:38-4.1(d)3iii describes other information that the Department may use to determine the existence of rare, threatened and/or endangered species. The

Department may take into account information including but not limited to historical documentation, public comment, previous species surveys or other pertinent information regarding the species in question.

N.J.A.C. 7:38-4.1(d)3iv alerts applicants that applications may be received by the Department during seasonal conditions which are not conducive to an accurate assessment of habitat suitability on a project site for rare, threatened and/or endangered species. In this instance, the applicant would be notified by the Department that the time is not suitable for habitat assessment and would be given the option of either accepting a finding that the site is suitable habitat or waiting until the weather/seasonal conditions are optimum for investigation of habitat suitability.

N.J.A.C. 7:38-4.1(d)4 describes the part of an HRAD that will identify the location of rare or endangered plant species habitat as described at N.J.A.C. 7:38-3.11. N.J.A.C. 7:38-4.1(d)4i thru iv details how the Department will determine the presence, absence or location of the habitat in question.

Pursuant to N.J.A.C. 7:38-4.1(d)4i, each HRAD issued by the Department will identify the location of any area on or adjacent to the project site that is habitat for rare or endangered plant species.

N.J.A.C. 7:38-4.1(d)4ii reiterates that is necessary for each applicant for an HRAD or HPAA to obtain a letter from the Department's Natural Heritage Program as to the presence of rare or endangered plant species on the site, near the site or within the proposed footprint of disturbance, as listed in the Natural Heritage database for inclusion in the application. If that letter indicates that the species or the habitat is present, the Department shall presume that the site constitutes rare or endangered plant species habitat unless a habitat evaluation prepared by the applicant in accordance with N.J.A.C. 7:38-5 provides sufficient and convincing evidence to the Department shall issue a written

determination regarding the absence of rare, endangered, and/or endangered species habitat on the project site.

N.J.A.C. 7:38-4.1(d)4iii describes other sources of information that the Department may use to determine the existence of rare or endangered plant species habitat. The Department may take into account information including but not limited to historical documentation, public comment, previous species surveys or other pertinent information regarding the species in question.

N.J.A.C. 7:38-4.1(d)4iv reiterates that applications may be received by the Department during seasonal conditions which are not conducive to an accurate assessment of the suitability of habitat available on a project site for rare or endangered plant species habitat. In such cases, the applicant would be notified by the Department that the time is not suitable for habitat assessment and would be given the option of either accepting a finding that the site is suitable habitat or waiting until the weather/seasonal conditions are optimum for investigation of habitat suitability.

N.J.A.C. 7:38-4.1(d)5 states that each HRAD will identify the location of upland forest area using the methodology described at N.J.A.C. 7:38-3.9.

N.J.A.C. 7:38-4.1(d)6 states that each HRAD will identify the location of unique or irreplaceable land types such as "vernal habitat" and "existing scenic attributes" as described at N.J.A.C. 7:38-3.12. In addition, N.J.A.C. 7:38-4.1(d)6i requires applicants to obtain a letter from the Natural Heritage Program since that program will also identify ecological communities as part of its assessment of the property.

N.J.A.C. 7:38-4.1(d)7 cross references the rules at N.J.A.C. 7:38-3.10 since that is the method for identifying historic and archaeological resources.

The Department omitted N.J.A.C. 7:38-4.1(e) when codifying the subsections within this rule. Consequently, N.J.A.C. 7:38-4.1(f), (g) and (h) will be recodified as N.J.A.C. 7:38-4.1(e), (f) and (g) respectively.

Recodified N.J.A.C. 7:38-4.1(e) states that all information must be accurate in order for the Department to issue an HRAD.

Recodified N.J.A.C. 7:38-4.1(f) requires the boundaries of Highlands open waters be surveyed on plans and flagged in the field. The surveyed line is not required until after the boundaries have been verified.

Recodified N.J.A.C. 7:38-4.1(g) requires that the boundaries of a footprint also be surveyed for those applicants requesting a footprint of disturbance HRAD. In addition, to continue correcting the codification, the reference to "(g) above" has been changed to "(f) above."

7:38-4.2 Application for an HRAD

N.J.A.C. 7:38-4.2(a) and (b) provide cross references to the provisions elsewhere in the rules describing the application and review processes, respectively, for HRADs.

7:38-4.3 Effect, duration, and extension of an HRAD

N.J.A.C. 7:38-4.3 explains the effect, duration and extension of an HRAD. N.J.A.C. 7:38-4.3(a) states that an HRAD is considered valid for five years provided that the information upon which it was based was accurate and complete as of the date the HRAD was issued. The Department is proposing to amend N.J.A.C. 7:38-4.3(a) to delete the phrase "when the HRAD was issued" because in no case can the Department perpetuate a determination based upon inaccurate or incomplete information. If the Department determines that information was not accurate or complete, the Department

may revoke the HRAD. The Department is proposing to amend this provision to clarify that upon issuance of an HPAA, the Department will no longer revoke an HRAD. This is consistent with the provision at N.J.A.C. 7:38-4.3(d) that states that the Department reserves the right to re-examine an HRAD if an HPAA application is submitted in order to ensure the Department's review of the HPAA is based upon accurate and current information.

N.J.A.C. 7:38-4.3(b) and (c) provide for the extension of an HRAD for five additional years provided that the information upon which the original HRAD was based remains accurate, and the extension is requested in writing before the original HRAD expires.

Subchapter 5. Rare, threatened and endangered species habitat evaluations

7:38-5.1 Rare, threatened and endangered species habitat evaluations

After an applicant reviews the information contained within the letter obtained from the Heritage Program and provided by the Department's landscape maps, an applicant may believe that the habitat on a particular site is not consistent with that information and should not be classified as rare, or threatened or endangered species habitat or classified as a unique resource. In some cases, the alteration of the habitat will be obvious and a sight inspection by the Department may be all that is necessary to confirm that the area is no longer suitable habitat. However, many cases may be less obvious. This subchapter provides detailed information regarding the habitat evaluation that must be submitted to the Department to rebut its habitat findings. N.J.A.C. 7:38-5.2(b) provides the requirements for animals and N.J.A.C. 7:38-5.3(b) provides

7:38-5.2 Rare, or threatened or endangered animal species habitat evaluation7:38-5.3 Rare, or endangered plant species habitat evaluation

N.J.A.C. 7:38-5.2(b) and 5.3(b) outline the four components of the rebuttal process: the original information upon which the Department's findings were made; any species surveys that may have been conducted on the site in question; scientific information relating to the life histories of the species in question; and how the site or footprint in question meets or fails to meet the habitat requirements for the species in question.

7:38-5.4 Submittal requirements for habitat evaluations

N.J.A.C. 7:38-5.4(a) outlines three parts of a habitat evaluation document: an introduction, a description of the species and habitat for which the applicant is providing the habitat evaluation, and the credentials for the person conducting the habitat evaluation. N.J.A.C. 7:38-5.4(b) contains the detailed information necessary for describing the species and habitat for animals, while N.J.A.C. 7:38-5.4(c) provides the same requirements for plants. These requirements include, for a footprint or site: at N.J.A.C. 7:38-5.4(b)1i and (c)1i, a detailed description of the vegetation and topographic features; at (b)1ii and (c)1ii, information regarding geology; at (b)1iii and (c)1iii, soil types and other important soil features; at (b)liv and (c)liv, hydrologic features; at (b)lv and (c)1v, natural and man-made disturbances; at (b)1vi and (c)1vi, a detailed analysis and description of all ecological communities including upland, wetland and aquatic ecological communities; at (b)1vii and (c)1vii, a map locating the ecological communities as previous described; at (b)1viii and (c)1viii, the results of any specifies surveys conducted; at (b)lix and (c)lix, any other relevant survey or report that may have been completed; and at (b)1x and (c)1x, any other information that the applicant deems relevant to provide documentation to the Department that would assist in an accurate assessment of the habitat in question.

Subchapter 6

7:38-6.1 General provisions

Subchapter 6 contains the requirements for obtaining a Highlands Preservation Area Approval (HPAA). A HPAA is a permit to conduct regulated activities (a "major Highlands development") in the preservation area. In order to conduct regulated activities in the preservation area, an HPAA must be obtained as stated at N.J.A.C. 7:38-6.1(a). N.J.A.C. 7:38-6.1(b) outlines all the standards for approval of an HPAA. They included all provisions in subchapter 3 and the requirements at N.J.A.C. 7:38-6.2 and 6.3. In cases where a proposed activity is approved and involves a water system, the activity will also have to comply with the Safe Drinking Water Act rules at N.J.A.C. 7:10-1 et seq. In cases where a proposed activity is approved and requires a NJPDES or TWA, it will have to comply with the requirements at N.J.A.C. 7:14A, the Surface Water Quality Standards at N.J.A.C. 7:14B, and the Stormwater Management rules at N.J.A.C. 7:8 that apply to Category One waters. It is important to note, however, that the only applications likely to involve a water system or other permit described above will be those projects for which a HPAA with waiver is approved, as explained earlier at sections N.J.A.C. 7:38-2.5 and 2.6 above. Waivers are discussed in greater detail below.

N.J.A.C. 7:38-6.1(c) specifies that the issuance of an HPAA applies to the entire site upon which regulated activities occur.

N.J.A.C. 7:38-6.1(d) states that the Department shall not approve a regulated activity in an area designated by the Highlands Council in its Regional Master Plan as a "special area." The Highlands Act at N.J.S.A. 13:20-6n authorizes the Highlands Council with the authority to identify, through the Master Plan, special areas in the preservation area where no development shall occur. When such areas are so identified, the Department will not approve permits for activities in those areas.

N.J.A.C. 7:38-6.1(e) requires that HPAAs must also satisfy the Department's Stormwater Management rules. The Department anticipates that compliance with the preservation area standards will, in most cases, satisfy the Stormwater Management rules.

7:38-6.2 Standard requirements for all HPAAs

N.J.A.C. 7:38-6.2 contains the findings from the Highlands Act that the Department is required to make in order to issue a HPAA. First, N.J.A.C. 7:38-6.2(a)1 requires the applicant to satisfy all of the requirements contained in Subchapter 3, the preservation area standards. N.J.A.C. 7:38-6.2(a)2 through 8 contain the findings the Department must make in order to approve an application for an HPAA. These findings are taken verbatim from the Highlands Act at N.J.S.A. 13:20-34. Unless considering an application in accordance with one of the waivers to be discussed below, the Department has to make these findings in every case before issuing a HPAA. The application must provide the basis for the Department to make the finding required in these rules.

7:38-6.3 Protecting Highlands preservation area resources from future development

N.J.A.C. 7:38-6.3 provides requirements for a conservation restriction on those undeveloped areas remaining after an HPAA is obtained. N.J.A.C. 7:38-6.3(a) and (b) require that Highlands resources that were not approved for disturbance or elimination as part of the Highlands Preservation Area Approval process shall be deed restricted against any future activities and shall be maintained in their natural state, except for those activities necessary to maintain the conservation restriction. For example, if an owner wants to manage forest on a site by obtaining a forest management plan, the Department would consider this when imposing the conservation restriction. The Department believes conservation restrictions are necessary because, as noted in N.J.A.C. 7:38-6.1(c), the entire site is evaluated when assessing compliance with this chapter. The resources that will not be altered by a proposed project remain an important part of the preservation area. In many cases, upon satisfying the requirements for an HPAA, the owner/developer

of the property will have already maximized use of all resources (for example, all 3 percent impervious coverage may have been used for the development). Therefore, placement of a conservation restriction is necessary to put future owners on notice that the site is restricted from future development.

N.J.A.C. 7:38-6.3(b)1 and 2, require the applicant to file the conservation restriction with the county clerk, and send copies to the Highlands Council and appropriate municipal clerk.

N.J.A.C. 7:38-6.3(c) states that a conservation restriction shall be enforceable by the Department, Highlands Council or other agency so long as that agency has no ownership interest in the land. The entity entitled to enforce the conservation restriction will be determined at the time the restriction is put in place.

N.J.A.C. 7:38-6.3(d) and (e) require that the features protected in a conservation restriction be clearly described and identified on plans using a metes and bounds description.

7:38-6.4 Waivers

Applicants are required to comply with all of the standards contained at N.J.A.C. 7:38-6.1 and 6.2 in order to obtain a HPAA. However, some applicants will have projects that do not comply entirely with all of the standards. The Highlands Act anticipates that there are limited circumstances when a project does not comply with all standards but should still be approved. The Highlands Act at N.J.S.A. 13:20-33b creates three categories of waivers to address these circumstances: (1) to protect health and safety; (2) for redevelopment in certain previously developed areas in the preservation area identified by the Highlands Council; or (3) to avoid the taking of property without just compensation. Applicants seeking one of these waivers shall comply with the standards at N.J.A.C. 7:38-6.5, 6.6, 6.7 or 6.8.

The Department is proposing amendments to the waiver provisions under N.J.A.C. 7:38-6.4 to include the construction of housing that is 100 percent affordable. The additional waiver criterion is necessary to provide municipalities with an opportunity to address their constitutional obligations under the State Fair Housing Act (N.J.S.A. 52:27D-301 et seq.) and to provide needed affordable housing opportunities for low- and moderate-income New Jersey residents in townships that are entirely contained within the Preservation area. Under the proposed amendments, only 100 percent low- and moderateincome housing development as defined by the Council on Affordable Housing (COAH), proposed within any one of the five municipalities that are contained entirely within the Preservation area (see N.J.A.C. 7:38-6.9(a)) would be eligible for the waiver. In accordance with proposed N.J.A.C. 7:38-6.4(a)4, a development would be required to be consistent with the COAH rules at N.J.A.C. 5:93-5.5 and N.J.A.C. 5:94-4.6 which outline the requirements for municipally sponsored and 100 percent affordable programs. The proposed new affordable housing waiver is designed only to exempt the proposed development from the requirements of these Highlands rules, N.J.A.C. 7:38, and would not relieve the successful applicant from compliance with all other applicable regulations pertaining to development.

N.J.A.C. 7:38-6.4(b) requires applicants to submit the request for a waiver along with the HPAA application. Exceptions to this requirement are described within the specific waiver provisions.

N.J.A.C. 7:38-6.4(c) requires all applicants planning to pursue a waiver to participate in a pre-application meeting before compiling and submitting an application. The Department believes a pre-application meeting benefits the applicant because it allows the Department to make a preliminary assessment of the proposed activity to determine in advance whether or not it appears to satisfy the criteria for one of the waivers. Further, applications that satisfy the requirements for a waiver may require several concurrent or sequenced reviews. The Department will identify these requirements and work with the applicant to establish the appropriate sequence. For

example, while the Highlands Act prohibits new public water systems in the preservation area, an applicant requesting a health and safety waiver may need a water allocation and/or safe drinking water review and approval in addition to complying to the "maximum extent possible" with all of the other provisions of these regulations. In another example, the Highlands Act prevents the construction of new sewage infrastructure in the preservation area. However, an applicant requesting a health and safety waiver may need the authority to construct this infrastructure. If the health and safety waiver is approved, the applicant will need an amendment to the WQMP to permit the new infrastructure (since the Highlands Act eliminated all new or expanded sewer service areas in the preservation area), and a Treatment Works Approval in addition to complying to the "maximum extent possible" with all of the other provisions of these regulations. Thus, the Department will use the mandatory pre-application meeting to preliminarily assess compliance with the specific waiver requirements, to evaluate the full scope of review that would be necessary to issue a HPAA, and to determine the appropriate timing for each part of that review.

N.J.A.C. 7:38-6.4(d) references the same list of findings that must be made in order for the Department to approve an HPAA. However, in accordance with the Highlands Act, the findings must be made "to the maximum extent possible" when applied to a waiver (see N.J.S.A. 13:20-33b).

N.J.A.C. 7:38-6.4(e), (f) and (g) refer the applicant to the provisions of the rules for the specific waiver being sought.

Proposed N.J.A.C. 7:38-6.4(h) cross-references the specific standards for the waiver for the construction of 100 percent affordable housing at N.J.A.C. 7:38-6.9.

N.J.A.C. 7:38-6.4(h) (recodified as (i)) states that the Department may include specific permit conditions as part of an HPAA with waiver if necessary to limit the potential for secondary impacts that could result from the approval. For example, if a new

sewer line is permitted as part of a health and safety waiver to remedy failing septic systems, the Department will include limitations on flows or sizing and perhaps use deed restrictions to limit the use of the line to those for whom the waiver was specifically approved.

7:38-6.5 Waiver for the protection of health and safety

N.J.A.C. 7:38-6.5 describes the standards for a waiver to protect public health and safety. N.J.A.C. 7:38-6.5(a) directs an applicant to the emergency permit standards at N.J.A.C. 7:38-7 if the anticipated threat to health or safety may occur before the Department can complete its review of a HPAA.

N.J.A.C. 7:38-6.5(b) describes in greater detail the factors that the Department will consider in determining whether or not a proposed project is necessary to protect public health and safety. It is important to note that the Department will ask an applicant to demonstrate that there is no other practical means to meet the established public need. For example, a water purveyor may experience a problem that results in the elimination of water to some customers. While the Department acknowledges that this is a health issue, there may be more than one way to alleviate the problem. There may be an alternate water source available from whom water can be purchased to serve those in need. Therefore, the Department will ask applicants requesting waivers to provide to the Department an explanation of the other methods available to meet the public need.

N.J.A.C. 7:38-6.5(b)1 address health and safety needs that correct or avoid a threat to life or health, severe loss of property or severe environmental degradation. Because the Highlands Act is designed to protect water quality and many other environmental benefits associated with the Highlands Region, the Department believes it is appropriate to explicitly include the alleviation of severe environmental degradation within this waiver category. In addition, depending upon the specific circumstances, avoiding a threat to property may also relate to health and safety and therefore has been

included for consideration in this waiver category. N.J.A.C. 7:38-6.5(b)2 requires that the activity continue to serve those needs. N.J.A.C. 7:38-6.5(b)3 sums up the section by stating that in serving those needs, the proposed activity shall not be intended or designed to support future development. Future development should be planned in such a way that it meets all of the requirements for an HPAA and all the needs of the public so that the health and safety problems would never again arise.

N.J.A.C. 7:38-6.5(c) provides examples of projects that would satisfy the health and safety waiver criteria. The examples are for illustration only and are not all-inclusive.

N.J.A.C. 7:38-6.5(d) provides the criteria necessary for applicants to demonstrate they have explored all practicable alternatives before requesting a public health and safety waiver. Applicants must demonstrate that regardless of the merits of the project, the project has been designed to avoid and minimize impacts to all Highlands resource areas and to comply with all provisions of the Highlands Act to the maximum extent possible. In addition, requiring an applicant to conduct an alternatives test will provide documentation upon which the Department will be able to base its findings for the issuance of a HPAA with a public health and safety waiver.

Finally, N.J.A.C. 7:38-6.5(e) establishes a mitigation requirement for impacts approved as part of an HPAA that affect freshwater wetlands or State open waters. As stated previously when discussing this same requirement for impacts to Highlands open waters at N.J.A.C. 7:38-3.6, this requirement is necessary in order to assure that activities permitted under the Highlands Act are consistent with activities permitted under the FWPA so that there will be no conflict with the State's Federally approved wetlands program.

7:38-6.6 Waiver for redevelopment in certain previously developed areas in the Highlands preservation area: Department-designated Highlands Brownfields

N.J.A.C. 7:38-6.6(a) describes the waiver provided in the Highlands Act at N.J.S.A. 13:20-33b(2) for the redevelopment of Department-designated brownfield sites and references the provisions in the Highlands Act that provide the authority for the Highlands Council to identify appropriate areas for redevelopment. In order to apply for this waiver two things must first occur: the Department must designate the site as a brownfield, and the Highlands Council must designate the site as appropriate for redevelopment. The Department will work with the Highlands Council and the Council on Affordable Housing (COAH) to ensure that the Council gives considerable weight to a municipality's affordable housing obligation, as defined by COAH, when considering sites to be designated for redevelopment. The provisions at N.J.A.C. 7:38-6.6(a) through (j) address the brownfield designation process. The provisions at N.J.A.C. 7:38-6.6(k) and (l) address the requirements to obtain a waiver based upon brownfield designation. The Department is proposing to amend 6.6(a) by adding the definition of "site."

N.J.A.C. 7:38-6.6(b)1 through 3 provide three types of facilities that may qualify for brownfield designation and assigns them to "Tracks" One through Three. N.J.A.C. 7:38-6.6(b)1 establishes Track One as a sanitary landfill facility. The details describing how the Department will designate a Track One site are described at N.J.A.C. 7:38-6.6(c).

N.J.A.C. 7:38-6.6(b)2 establishes Track Two brownfield sites as those for which the Department has issued a No Further Action letter as of July 1, 1993 or later. July 1, 1993 refers to the date when the Department's current standards for obtaining a No Further Action letter were implemented. The Department is proposing to amend 6.6(b)2 to include more detailed requirements necessary to demonstrate at (b)2i that a site was contaminated, at (b)2ii that the site has been sufficiently remediated to obtain a No Further Action letter for the entire site, and at (b)2iii that the site has not be recontaminated since the No Further Action letter was obtained.

N.J.A.C. 7:38-6.6(b)3 establishes Track Three as a former or commercial industrial site with contamination that has not yet been remediated. The Department is proposing to amend 6.6(b)3 to delete the requirement that the site be contained on the Department's list of Known Contaminated Sites in New Jersey because the Department believes it would not include the full range of eligible sites. Instead the Department is proposing to include all sites, with contamination that is suspected or confirmed, and that have not yet received a No Further Action letter.

N.J.A.C. 7:38-6.6(c) addresses Track One, sanitary landfill facilities. The Department will consider for brownfield designation the part of a site containing the limit of the waste. The Department is proposing to amend this provision to also include as eligible for brownfield designation any other areas on the same site that were legally disturbed as of August 10, 2004.

N.J.A.C. 7:38-6.6(d) provides criteria for brownfield designation at Track Two sites. Track two sites will have already met the Department's most current remediation requirements (that is, the sites are "cleaned up"). This category has been included because the Department does not want to penalize those who previously took action to clean up a site by excluding them from an opportunity to apply for redevelopment. The Department will designate those areas upon which remediation has been completed or other areas that were legally disturbed as of August 10, 2004. The Department is proposing amendments that reorganize the provision for clarity.

N.J.A.C. 7:38-6.6(e) provides criteria for Track Three sites that meet the definition of a contaminated site, but limits the area eligible for designation to the extent of soil contamination and to areas previously disturbed on August 10, 2004. The Department is proposing to amend N.J.A.C. 7:38-6.6(e) to provide criteria for Track Three sites with either suspected or confirmed contamination onsite. The amendments are intended to include sites for which there is no record of contamination, but because of historical use, are suspected of being contaminated. Because these Track Three sites will

have undergone the first steps in remediation but have not proceeded far enough to adequately delineate the full extent of remediation onsite, the proposed amendments state that the brownfield designation for such sites may be limited to those portions of the site that were legally disturbed as of August 10, 2004.

The Department is proposing to amend the rules to add a new N.J.A.C. 7:38.6.6(f) to address brownfield designation for the remainder of the Track Three sites, that is, those sites that have progressed beyond a Preliminary Assessment and Site Investigation and for which remedial activity has occurred. For such sites, the Department will limit its designation to any area that has a Department approved soil contamination delineation, areas legally disturbed as of August 10, 2004, or areas disturbed for remediation activities.

The Department is proposing to add a new N.J.A.C. 7:38-6.6(g) to state that the Department will not include a Highlands open water in an area designated as a Highlands brownfield. Because of the importance of protecting Highlands open waters, the Department does not believe it is consistent with the intent of the Highlands Act to allow the destruction of such waters for redevelopment.

The Department is proposing to recodify existing N.J.A.C. 7:38-6.6(f) as 6.6(h). Recodified N.J.A.C. 7:38-6.6(h) requires applicants to apply for a brownfield designation using appropriate forms accompanied by a fee.

N.J.A.C. 7:38-6.6(h) (recodified (i)) permits the modification of a brownfield designation if the Highlands Council requests a modification following a public process, and as long as the Council provides the Department with documentation establishing that the modification will not result in significant impact to Highlands resource areas.

The Department is proposing new N.J.A.C. 7:38-6.6(j) to state that the Department may expand a Highlands brownfield designation based upon information that

was not previously available during the designation process. This is necessary because as a clean up proceeds, contamination may be discovered in new locations which may be appropriate to include in the brownfield designation.

The Department is recodifying N.J.A.C. 7:38-6.6(h) and (i), as (k) and (l), respectively.

Recodified N.J.A.C. 7:38-6.6(k) provides the criteria that must be satisfied for an applicant to obtain a waiver based upon brownfield designation. Specifically, recodified N.J.A.C. 7:38-6.6(k)1 reiterates that all requests for waivers must satisfy the requirements at N.J.A.C. 7:38-6.2 (standard requirements for all HPAAs) to the maximum extent possible. N.J.A.C. 7:38-6.6(k)2 requires that all onsite remediation be conducted in accordance with the Department's site remediation technical requirements. N.J.A.C. 7:38-6.6(k)3 describes the documentation that an applicant must produce to demonstrate that a landfill has been or will be properly closed in order to be considered for a waiver. The Department is proposing to amend 6.6(k)3 to enumerate the type of plans to be submitted to demonstrate that a landfill has been properly closed or is undergoing appropriate closure activities.

The Department is proposing new N.J.A.C. 7:38-6.6(k)4 to require an applicant for a Track Two landfill to document that there has been no discharge of a contaminant on a site after the Department's No Further Action letter was issued.

N.J.A.C. 7:38-6.6(k)4 (recodified as (k)5) contains the requirements for a Track Three brownfield. The Department is proposing to delete the requirement to provide a binding agreement since the Oversight Document contains all that is necessary to bind the applicant to complete appropriate remediation activities.

N.J.A.C. 7:38-6.6(k)5 through 7 (recodified as (k)6 through 8) address the redevelopment activities to be conducted in accordance with the waiver. N.J.A.C. 7:38-

6.6(k)6 requires that in addition to satisfying the requirements for a Track one, two, or three brownfield designation, the redevelopment site must also provide for stormwater management control. When the same footprint of impervious surface is proposed for reuse, existing stormwater management mechanisms are required to be retained if they remove at least 50 percent total suspended solids (TSS). If there is no existing stormwater management, the Department requires a site to be retrofitted to remove at least 50 percent TSS. In those cases where a different footprint is proposed for use, N.J.A.C. 7:38-6.6(k)6ii requires 80 percent removal of TSS. The Department believes that when a proposed project is being designed from the beginning, it is reasonable to require an applicant to incorporate a more effective stormwater management mechanism to achieve a higher level of water quality protection than when the project is confined to an existing footprint of impervious surface. These requirements are consistent with the Department's policy on stormwater management for redeveloped sites. If these or other specific criteria relating to redevelopment sites are adopted in the Department's stormwater management regulations in the future, the Department will re-evaluate the criteria contained in this chapter for consistency.

N.J.A.C. 7:38-6.6(k)7 encourages the removal of impervious surface where feasible, the planting of indigenous vegetation beneficial for water qualify and the placement of a conservation restriction to protect replanted areas from future development.

N.J.A.C. 7:38-6.6(k)8 requires mitigation for any activities that result in the disturbance of freshwater wetlands or State open waters.

N.J.A.C. 7:38-6.6(i) (recodified as (l)) requires that any waiver approved in accordance with the requirements of this chapter be conditioned upon the receipt of a No Further Action letter. This provision assures that the site will be successfully remediated before redevelopment begins since a brownfield waiver may be obtained before the site has been cleaned up. The Department is proposing to amend N.J.A.C. 7:38-6.6(l) to

require an equivalent condition for sanitary landfills that may not be required to obtain a No Further Action letter.

7:38-6.7 Waivers for redevelopment in certain previously developed areas in the Highlands preservation area: 70 percent impervious surface

The Council may also designate for redevelopment sites containing 70 percent or more impervious coverage. The requirements at N.J.A.C. 7:38-6.7 address the waiver provisions associated with such sites if and when so designated by the Council. N.J.A.C. 7:38-6.7(a) provides the citations for the authority of the Council to designate sites for redevelopment. The limitations on the waiver provided at N.J.A.C. 7:38-6.7(b) mirror those required for redevelopment of brownfield sites. This section requires the applicant to demonstrate that all of the findings necessary for approval of a Highlands Preservation Area Approval have been satisfied to the "maximum extent practicable," that the proposed project will not result in additional impervious coverage, and that the site has been designed to include stormwater management measures as previously described.

The Department is proposing to amend N.J.A.C. 7:38-6.7(b)2 to properly reference amended N.J.A.C. 7:38-6.6(k) 6, 7 and 8.

7:38-6.8 Waiver to avoid the taking of property without just compensation

N.J.A.C. 7:38-6.8 contains the standards for approval of a waiver to avoid taking of property without just compensation. N.J.A.C. 7:38-6.8(a) provides the citation in the Highlands Act where this waiver provision can be found. N.J.A.C. 7:38-6.8(b) requires that an applicant complete the application process for an HPAA before requesting a waiver under this provision. This is necessary because until the Department has rendered a decision on a request for a HPAA, the applicant will not know what use can be made of the property under the Highlands Act. The Department is proposing to amend N.J.A.C. 7:38-6.8(b) to clarify that it shall not process any application for a waiver based upon an

alleged taking of property until the conclusion of all legal challenges to the Department's HPAA decision under the rules as strictly applied. Proposed N.J.A.C. 7:38-6.8(b)1 describes the procedure by which the applicant concludes all legal challenges. The Department should not expend resources on an application to waive HPAA requirements when the applicant asserts in legal proceedings that the proposed activity complies with HPAA requirements. The documentation by which an applicant proves the conclusion of legal challenges is listed in N.J.A.C. 7:38-9.6(j)9.

N.J.A.C. 7:38-6.8(c) sets forth the factors the Department will consider in determining whether to waive any requirement for an HPAA. The factors are: the property owner's investments in the property, and the reasonableness of these investments; potential uses for the property which would be minimum beneficial economically viable uses; and the likely environmental impacts of any potential minimum beneficial economically viable uses of the property and their consistency with the goals of the Highlands Act.

N.J.A.C. 7:38-6.8(d) sets forth the factors the Department will consider in determining whether investments made in the property were reasonable. These factors are based on legal precedent and Department experience in past takings cases. N.J.A.C. 7:38-6.8(d)1 requires that the investment must have actually been incurred in pursuit of a legal and practically possible development on the specific site in question. Planned expenditures will not be included. For example, if a property is undevelopable under local zoning, and necessary utilities are unavailable to the site, substantial investments made in pursuit of development are likely unreasonable. This provision prevents a property owner who did not exercise due diligence or adequately investigate existing constraints prior to making an investment from recouping these unreasonable expenditures from the public.

N.J.A.C. 7:38-6.8(d)2 requires that costs relating to the expenditure of funds must have been lawful at the time of the expenditure. For example, if the property owner

violated state or local rules by starting construction without the proper permits, the cost of defending against an enforcement action would not be considered a reasonable investment expense.

N.J.A.C. 7:38-6.8(d)3 allows the Department to consider any other factor related to the reasonableness of the applicant's investment and/or the proposed use of the property. The situations in which takings issues arise are varied, and can involve a wide variety of types of ownership, property histories, and site conditions. This provision will allow the Department to consider any factors relevant to the reasonableness of the investment.

N.J.A.C. 7:38-6.8(e) addresses a minimum beneficial economically viable use for the property as a whole. Merely because a use diminishes the value or marketability of a property, does not result in a profit, or does not allow the property owner to recoup all investments in the property, this does not mean it is not a "minimum beneficial economically viable use." The Department is obligated only to ensure an applicant a minimum beneficial economically viable use of the property in accordance with constitutional standards and legal precedent, not to provide the specific use or rate of return desired by a property owner.

N.J.A.C. 7:38-6.8(f) sets forth the factors the Department will consider in evaluating the potential environmental harm of any minimum beneficial economically viable uses identified under N.J.A.C. 7:38-6.8(e) and determining how that harm might be minimized or mitigated. In determining whether to waive a provision of the Highlands Act, the Department must balance the economic interests of property owners against the environmental protection mandates of the Highlands Act. Consequently, N.J.A.C. 7:38-6.8(f) incorporates the findings for issuance of a HPAA contained in Highlands Act at N.J.S.A. 13:20-33b as the mechanism to evaluate environmental impacts.

N.J.A.C. 7:38-6.8(g) requires an applicant to submit of several proofs to assist the Department in assessing the potential for its decision to result in a taking of property without just compensation. The Department is proposing to amend N.J.A.C. 7:38-6.8(g) to require that all legal challenges to the Department's decision be concluded in order for the applicant to pursue a waiver for taking of property without just compensation. N.J.A.C. 7:38-6.8(g)1 requires an applicant to assess alternatives to the proposed activity. N.J.A.C. 7:38-6.8(g)2 requires an applicant to make a good faith effort to transfer development rights (TDR) for the site in question. The Highlands Act at N.J.S.A. 13:20-13 requires the Highlands Council to establish a TDR program for the Highlands Region, as part of the Regional Master Plan. Property owners may obtain development rights in a location identified for development in exchange for relinquishing development rights in areas that are not so designated. Such a transfer would provide a minimum beneficial economically viable use and eliminate the taking without just compensation claim.

N.J.A.C. 7:38-6.8(g)3 requires an applicant to offer a property for sale at or below fair market value, to fully disclosure Highlands resource areas on the property, and to send such letters to neighbors, conservation organizations, the Highlands Council and local governments as they may be interested in purchasing the property for preservation. The Department is proposing to clarify this language to require that an owner offer the property for sale at an amount not to exceed fair market value. As previously stated, while the Department requires an offer not to exceed fair market value it is only to provide the applicant with an option to consider an offer that may be below market value but sufficient for the applicant's needs. As provided at N.J.A.C. 7:38-6.8(h), the Department will only deny a waiver for taking of land without just compensation of the owner rejects an offer for the property at full market value.

While the Highlands Council is contained on the list of entities to whom an offer letter must be sent, it will not be purchasing land. However, obtaining the offer letter will assist the Council in monitoring the types, locations and values of land for which waivers are being requested. The offering letter must contain all relevant information necessary

for a recipient to determine whether or not they are interested in purchasing the property in question.

N.J.A.C. 7:38-6.8(g)4 lists the documentation required to demonstrate compliance with (g)3. It includes submission of the letter required in (g)3, copies of all responses, a list of the names and addresses of all property owners within 200 feet of the subject property, certified mail receipts, and a copy of the fair market value appraisal. The Department is proposing to amend N.J.A.C. 7:38-6.8(g)4 to delete the requirement for a letter or resolution from the Highlands Council documenting its decision regarding purchase of the property in question since, as stated previously, the Council will not be purchasing land.

N.J.A.C. 7:38-6.8(h) states that the Department will not approve a waiver if an applicant has received a fair market value offer to purchase the property or if the Department has identified an alternative that would comply with the requirements for a HPAA and provide a minimal economically viable use. This reiterates that the Department's obligation is to grant a waiver to ensure a minimum beneficial economically viable use of the property in accordance with constitutional standards and legal precedent, not to provide a specific use or rate of return sought by a property owner. If, after approving such use, there are areas of the property remaining undeveloped, the Department will require such areas to be conservation restricted against further development.

N.J.A.C. 7:38-6.8(i) states that upon written notice from the Department that the applicant has satisfied the conditions for the waiver contained in 6.8(g), the applicant can proceed to apply for a waiver in accordance with the application requirements at N.J.A.C. 7:38-9.

N.J.A.C. 7:38-6.8(j) provides that the Department will complete a written analysis of the factors it has considered in determining whether to waive any requirement of the chapter to avoid an alleged taking of property without just compensation no later than 180 days from the Department's receipt of a complete request.

Finally, N.J.A.C. 7:38-6.8(k) states that an approved HPAA with waiver to avoid a taking of property without just compensation shall only allow the minimum relief necessary to enable the property owner to realize the minimum beneficial economically viable use of the property as a whole and that the project shall be designed and built in a manner to conserve the resources of the Highlands, to the maximum extent possible. In addition, such waiver shall require a recorded conservation restriction to ensure that any part of the property that is not allowed to be developed is protected from future development.

7:38-6.9 Waiver for the construction of a 100 percent affordable housing development

The Department is proposing a new rule to supplement the waiver provisions to include the construction of housing, that is exclusively comprised of low and moderate income housing units, in townships that are entirely contained within the preservation area. The additional waiver criteria is necessary to provide the five municipalities that are entirely within the preservation area with an opportunity to address their constitutional obligations under the State Fair Housing Act (N.J.S.A. 52:27D-301 et seq.) and to provide needed affordable housing opportunities for low and moderate income residents.

Under the proposed new rule, only those developments that are100 percent comprised of low and moderate income housing development as defined by COAH, proposed for construction within any one of the five municipalities located entirely within the preservation area would be eligible for the waiver. The Department acknowledges that there are additional municipalities in the Highlands region that have outstanding second round Council on Affordable Housing (COAH) obligations and to the extent that the Highlands Act and this chapter allows, will support the efforts of such municipalities when proposing to construct developments that are comprised exclusively of low or moderate income dwellings.

Proposed N.J.A.C. 7:38-6.9(a) requires that a proposed development be included in a Fair Share Plan and be consistent with N.J.A.C. 5:93-5.5 and N.J.A.C. 5:94-4.6, which outline the requirements for municipally sponsored and 100 percent affordable

programs. In addition, at N.J.A.C. 7:38-6.9(b) the applicant will have to demonstrate that there is no practicable alternative to satisfy the affordable housing obligation, that the project has been designed to comply with the preservation area standards to the maximum extent feasible and are meeting the conditions for approval of all HPAAs at N.J.A.C. 7:38-6.2 to the maximum extent possible. Finally, N.J.A.C. 7:38-6.9(c) requires that applicants who affect freshwater wetlands or State open waters as defined in the Freshwater Wetlands Protection Act regulations provide mitigation for those impacts.

Aside from those projects exempt from regulation pursuant to N.J.S.A. 13:20-28, any fair market value dwelling in the preservation area that constitutes major Highlands development must obtain an HPAA, regardless of whether COAH affordable housing obligations result from or are conditional upon its construction.

Subchapter 7 Emergency Permits

7:38-7.1 Emergency permits

N.J.A.C. 7:38-7.1(a), authorizes the Department to issue a temporary emergency permit (HPAA) if an unacceptable threat to life, severe loss of property, or severe environmental degradation will occur before the Department can review an HPAA application. The Department anticipates that the number and type of activities that may require the issuance of an emergency permit will be limited because most maintenance and rehabilitation activities related to single family structures or commercial/industrial developments, and transportation and infrastructure projects for which an emergency may arise are specifically exempted from these regulations in accordance with N.J.A.C. 7:38-2.3. Consequently, the Department anticipates very few situations in which an emergency permit would be needed. For example the loss of potable water or a catastrophic failure relating to sewage treatment that would require new piping or a new connection to a facility in the preservation area are activities that might qualify for an emergency permit, pending submission of an HPAA application.

The Department will respond to a request for an emergency permit no later than 10 business days following submission of a written request in accordance with N.J.A.C. 7:38-7.1(b). Requests may be submitted in writing or faxed. An emergency permit may be approved orally by the Director of the Land Use Regulation Program (Director) or issued in writing in accordance with N.J.A.C. 7:38-7.1(c). The Department is proposing amendments at N.J.A.C. 7:38-7.1(c) that delete the limitation that the Director's designee can authorize an emergency permit only if the Director is unavailable in order to allow such delegation in other appropriate circumstances. N.J.A.C. 7:38-7.1(c) further requires that an applicant comply with any condition or requirement contained in an emergency permit. If an emergency permit is approved orally, the Department will provide a letter memorializing the oral authorization.

N.J.A.C. 7:38-7.1(d) and (e) state that the Department will incorporate into emergency permits compliance with the standards and criteria required for nonemergency regulated activities, including mitigation, to the greatest extent practicable. However, the full permit review will not take place unless or until the applicant is required to submit a regular HPAA in accordance with N.J.A.C. 7:38-7.1(f). The Department is proposing to amend 7.1(d)3 to clarify that an applicant for an emergency permit must demonstrate compliance with both the standards at N.J.A.C. 7:38-3 and the conditions at N.J.A.C. 7:38-6.2.

N.J.A.C. 7:38-7.1(g) states that an emergency authorization will expire on a date stipulated by the Department as part of the emergency permit, upon completion of the regulated activities, but no longer than 90-days from the date the written authorization is issued.

N.J.A.C. 7:38-7.1(h) requires that an emergency HPAA fully describe the activities that the Department is authorizing.

N.J.A.C. 7:38-7.1(i) requires an applicant to post a copy of the emergency permit at the work site.

At N.J.A.C. 7:38-7.1(j), requires the Department to provide notice of the issuance of the emergency permit to the clerk of the municipality, the Highlands Council, and the Coastal and Land Use Enforcement Program so that there is local and regional notice of the permit approval and so a site inspection can be made to verify the emergency. If the emergency activity impacts a freshwater wetland, the Director is also required to notify the Environmental Protection Agency, consistent with the requirements under the State's assumed freshwater wetlands program.

N.J.A.C. 7:38-7.1(k) states that the Department can terminate an emergency permit if necessary to protect human health or the environment or if the work no longer satisfies the criteria for an emergency permit at N.J.A.C. 7:38-7.1(a). The Department will notify the same entities specified in N.J.A.C. 7:38-7.1(j) if there is early termination.

At N.J.A.C. 7:38-7.1(l) the Department provides that it may extend an emergency HPAA only for the purpose of allowing the permittee to complete mitigation.

7:38-7.2 Obtaining an emergency permit

N.J.A.C. 7:38-7.2(a) enumerates the information the Department requires in order to consider an emergency permit request. This is intended to be a basic list of information readily available to the applicant so that time is not lost compiling it for submittal. The Department is proposing to amend N.J.A.C. 7:38-7.2(a)12 to clarify that an applicant must demonstrate compliance with both the standards at N.J.A.C. 7:38-3 and the conditions at N.J.A.C. 7:38-6.2.

N.J.A.C. 7:38-7.2(b) states that the Department requires the applicant to provide weekly updates regarding the progress of the emergency work and to inform the Department if the scope of the approved emergency work must change.

N.J.A.C. 7:38-7.2(c) reminds applicants that no regulated activities may be performed unless they are specifically included in the emergency permit.

Subchapter 8 Pre-application procedures

7:38-8.1 Procedure for determining when a pre-application meeting is required

N.J.A.C. 7:38-8.1, Pre-application procedures, contains information necessary for an applicant to determine when a pre-application meeting is required. At N.J.A.C. 7:38-8.1(a) the Department enumerates all of the regulatory review authorities and the Program within the Department responsible for implementing each review. N.J.A.C. 7:38-8.1(b) states that the Department intends to consolidate its reviews to issue one HPAA. To accomplish this goal, a pre-application meeting is required at N.J.A.C. 7:38-8.1(c) if two or more programs within the Department have to review aspects of a proposed application. A pre-application meeting is also required if an applicant is requesting any of the waivers described at N.J.A.C. 7:38-6.4.

The Department is requiring pre-application meetings to ensure that the applicant and the Department are aware at the beginning of the review process, of the issues and reviews that shall be necessary in order to issue an HPAA and the sequence of reviews. If a project cannot meet some of the more basic standards for approval and there is no waiver existing for relief, the applicant is informed early and saves time and money by revising an application in advance of submittal. It is also possible that in the course of a review, the scope of a project may be reduced. Therefore, the Department will use the mandatory pre-application meeting to preliminarily assess compliance with the all

provisions of this chapter including specific waiver requirements, to evaluate the full scope of review that would be necessary to issue a HPAA, and to determine the appropriate timing for each part of that review.

N.J.A.C. 7:38-8.1(d) lists the information an applicant should provide in writing in advance of a pre-application meeting. The Department is proposing to amend N.J.A.C. 7:38-8.1(d) to include the Program to which the applicant should submit the information for the pre-application meeting. N.J.A.C. 7:38-8.1(d)1 requires a description of the project and a list of the programs the applicant believes will need to review the application. This will assist the project reviewer to include appropriate program representatives in the pre-application meeting.

N.J.A.C. 7:38-8.1(d)2 through 5 lists all basic information designed to help the Department locate generally the property (plan view of the project, tax lot and block, location of the project site, including the municipality and county, and United States Geological Survey quadrangle map showing the site).

N.J.A.C. 7:38-8.1(d)6 requires the applicant to seek an applicability determination. As previously stated, the applicability determination will help the Department to identify all programs that may need to be involved in a Highlands application. The Department is proposing to amend this provision to require an applicant to submit certain information for the Department to determine whether a project is consistent with a WQMP. The amendment is necessary because applicants are not required to have an applicability determination if they have stipulated that they know they are not exempt from the Highlands Act. However, since all proposed projects are required to be consistent with a WQMP, the Department will have to make this determination before issuing any approval.

N.J.A.C. 7:38-8.1(d)7 asks for a copy of an HRAD. Ideally, if the applicant has obtained an HRAD, site-specific information will already be available for discussion. In

the absence of an HRAD, the applicant is asked to submit, as available, information that will help the Department make a preliminary assessment of the resources on the site and prepare to discuss the appropriate standards that will apply to the applicant's proposed project. For example, the Soil Survey requested at N.J.A.C. 7:38-8.1(d)8 will give the Department an indication of the limitations that the regulations may impose on steep slopes on the property. The Department is proposing to delete N.J.A.C. 7:38-8.1(d)9 since it requires the applicant to obtain information from the Heritage database regarding rare, threatened and endangered plants and animals, and ecological communities that may be associated with the site and this is contrary to N.J.A.C. 7:38-8.1(e) which encourages, but does not require, that the letter be obtained before the pre-application meeting. The Department is proposing a new N.J.A.C. 7:38-8.1(d)9 requiring a fee for a preapplication meeting. The fee was already established in the adopted rules at N.J.A.C. 7:38-10 but the reference to the fee was missing. In addition, the Department is proposing to add a cross-reference to the requirement for obtaining a letter from the Natural Heritage Program at N.J.A.C. 7:38-8.1(e). While the Department will not require an applicant to obtain a letter in advance of a pre-application conference, applicants who do not have a letter at that time may not receive full and complete guidance from the Department about the site.

N.J.A.C. 7:38-8.1(f) states that the Department will contact the applicant within 15 days after receiving a request to schedule the pre-application meeting. The Department will schedule a pre-application meeting as quickly as it can given the number of such requests received by the Department at that time.

Subchapter 9 Application Contents

7:38-9.1 Basic application information

N.J.A.C. 7:38-9.1 lists the information required for Highlands applicability determinations, HRADs, HPAAs, the newly proposed Highlands general permits,

HPAAs with waivers, and requests for modifications or extensions to HPAAs. N.J.A.C. 7:38-9.1(b) affirms that a person engaging in a major Highlands development without the appropriate approval is in violation of the Highlands Act.

N.J.A.C. 7:38-9.1(c) specifies who may sign an application to the Department while (d) provides the criteria by which an applicant's duly authorized representative may submit application material.

N.J.A.C. 7:38-9.1(e) states that the permittee is solely responsible for ensuring that the project complies with the permit regardless of who conducts the work on the site.

N.J.A.C. 7:38-9.1(f), (g), and (h) provide that only the specific activity authorized by a HPAA is permitted, that all planned activities need to be shown as part of an application, and that failure to provide all required information may result in denial or termination of a permit or penalties as provided in the Highlands Act.

N.J.A.C. 7:38-9.1(i) states that all required information shall be submitted by an applicant and that the Department will provide a checklist for each type of application. N.J.A.C. 7:38-9.1(j) states that application material for a Highlands Applicability Determination and an HPAA can be obtained from the addresses provided in this chapter or online at the Department's Highlands website. N.J.A.C. 7:38-9.1(k) also provides contact information for those applicants who may also need to obtain information regarding water supply, NJPDES, treatment works approvals or applications for 50 or more realty improvements.

The Department is proposing to amend N.J.A.C. 7:38-9.1(k) to clarify that the application to be submitted to the Bureau of Nonpoint Pollution Control is that for septic approvals for 50 or more realty improvements.

N.J.A.C. 7:38-9.1(l), (m) and (n) require an applicant to submit the appropriate level of detail, and correct number of copies to the Department. The Department will return applications that do not satisfy these requirements.

N.J.A.C. 7:38-9.1(o) requires an applicant to keep application materials for 3 years or for the duration of a Highlands applicability determination or HPAA, if one is approved.

Finally, N.J.A.C. 7:38-9.1(p) and (q) address the submittal of a mitigation plan for wetlands and for tree planting. Both permit plan submittal either at the time of application for a HPAA, or later if so desired.

Proposed new N.J.A.C. 7:38-9.1(r) reiterates that the submission of false, inaccurate or incomplete information or the failure to provide information is a violation of the rules and the Highlands Act and subject to penalties at N.J.A.C. 7:38-13.10.

7:38-9.2 Application requirements for a Highlands applicability determination

N.J.A.C. 7:38-9.2(a) establishes the application requirements for a Highlands applicability determination. A Highlands applicability determination is comprised of three components: a determination of whether a proposed project is a major Highlands development; a determination of consistency with the appropriate Water Quality Management Plan (WQMP); and an exemption determination each of which requires submittal of different types of information. N.J.A.C. 7:38-9.2(a) provides an outline of each component and cross-references the location of the application materials specific to that component.

N.J.A.C. 7:38-9.2(b) contains the requirements for the Department to determine whether a proposed project is a major Highlands development. N.J.A.C. 7:38-9.2(b)1 through 3 describes the basic requirements such as copies of a completed application

form, the processing fee and information regarding the location of the property in question. The Department is proposing to amend N.J.A.C. 7:38-9.2(b)1 to require two copies of a completed application form and the designated information because more than one Department person may be reviewing the application. N.J.A.C. 7:38-9.2(b)3vi requires that the site be identified on a USGS map or is located using the State's geographic information system (GIS) together with State plane coordinates. Comparable requirements apply to projects that are linear in nature.

N.J.A.C. 7:38-9.2(b)4 contains the pertinent site information necessary for determining whether a project is a major Highlands development. Because the definition of major Highlands development specifies various land uses (for example, commercial development, residential development), and includes a threshold area of disturbance for impervious surface and forest, the Department requires information regarding all proposed site improvements, total area of proposed disturbance, total area of impervious surface, a delineation of all forested areas and a calculation of the amount of forest proposed for disturbance, and the date that the site plan or subdivision for the proposed development was filed since this is necessary to establish what comprised the legal lot on August 10, 2004.

N.J.A.C. 7:38-9.2(b)5 contains the notice requirements for a Highlands applicability determination. The Department is proposing that an applicant provide notice of the application to several municipal officials and groups including the clerk, environmental commission, planning board, and construction official, and the county planning board and environmental commission. The rule requires that a complete copy of the application be submitted to the municipal clerk and the Highlands Council so that interested persons can access the application in their municipality or at the Council's office in addition to the Department's offices in Trenton. All notifications are intended to inform municipal and county officials and residents that the Department is reviewing an application for a proposed development within their town and county.

N.J.A.C. 7:38-9.2(b)6, 7, 8 require the applicant to submit information regarding capital improvement projects, agriculture and horticultural purposes, and a list of other Department permits that are required to complete the proposed project (aside from a HPAA) since these are all factors in the determination of whether something is a major Highlands development. N.J.A.C. 7:38-9.2(b)9 requires an applicant to provide any administrative order, administrative consent order, judicial consent or court orders because these are relevant in the Department's consistency determination.

N.J.A.C. 7:38-9.2(c) contains the information required for the Department to determine whether or not a project is consistent with a WQMP. WQMPs identify areas within a town or region for which various types of wastewater treatment will be provided. For example, a WQMP will identify areas that will be connected to an existing sewer system, areas for which no connections will be permitted (and by default individual subsurface sewage disposal systems are required) and in some cases, areas for which new sewage treatment plants are planned. In accordance with the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., the Department cannot issue any permits or approvals unless a proposed project is consistent with the WQMP regardless of whether or not a project is a major Highlands development or exempt from the Highlands Act.

N.J.A.C. 7:38-9.2(c)1 through 3 describe project specific information the applicant must provide to enable the Department to determine the type of development (residential, commercial or industrial), the quantity of wastewater to be generated by the proposed project, and where the applicant intends to convey the wastewater.

N.J.A.C. 7:38-9.2(c)4 and 5 require information relating to drinking water. Because the Highlands Act limits the construction of new public water supplies in the Highlands preservation area, the Department will try to determine as early in the project review process as possible what source of water an applicant intends to use to service the proposed development. In addition, the Department is requesting information regarding

water demand in order to determine compliance with N.J.A.C. 7:38-2.5 (applicability for purposes of public water supply systems, water allocations and water use registrations).

N.J.A.C. 7:38-9.2(d) contains the information required for the Department to assess the exemption status of a proposed project. In some cases, an applicant is not required by the Department to obtain a written determination of exemption. For example, if an applicant is conducting one of the exempt activities at N.J.A.C. 7:38-2.3 and will not need any other permits from the Department, the applicant can proceed at his or her own risk without a letter of exemption. However, if an applicant wants or needs a written exemption determination, or requires a freshwater wetlands or stream encroachment permit to complete a development, the Department will require the applicant to first obtain a Highlands applicability determination as discussed in N.J.A.C. 7:38-2.4. The specific materials listed in N.J.A.C. 7:38-9.2(d) are required in these cases.

N.J.A.C. 7:38-9.2(d)1, requires submission of various types of readily available documentation (for example, deeds and title policies) to demonstrate ownership of the property in question. The Department is proposing to amend N.J.A.C. 7:38-9.2(d)1i and 1ii to replace the word "property" with "lot" since this more closely tracks the language of the Highlands Act.

N.J.A.C. 7:38-9.2(d)2 requires proof of ownership, and information on the proposed scope of impacts for the construction of a single family dwelling. The Department is proposing to amend N.J.A.C. 7:38-9.2(d)2 to add a requirement to provide a metes and bounds description of the area of the lot to be disturbed, and a draft conservation restriction to cover the remainder of the lot since the exemption limits total onsite disturbance and impervious coverage.

N.J.A.C. 7:38-9.2(d)3 contains the exemptions relating to receipt of various municipal approvals. Since there are four types of approvals that may qualify a project for this exemption, N.J.A.C. 7:38-9.2(d)3i requires proof from the granting municipality

that one of the types of qualifying municipal approval was obtained prior to the statutory deadline of March 29, 2004.

Exemptions based upon municipal approvals also require that at least one of several listed State environmental permits to have been obtained prior to March 29, 2004, if such permits were necessary for the conduct of the regulated activity. N.J.A.C. 7:38-9.2(d)3ii requires documentation that one of the listed State permits was obtained if it was a necessary prerequisite for project development. N.J.A.C. 7:38-9.2(d)3iii and iv require a copy of the plans, proof of filing and a letter from the municipality verifying that the plan as approved remains valid in accordance with local planning requirements while N.J.A.C. 7:38-9.2(d)3v permits submission of any other relevant information that the applicant believes will support the request for exemption.

N.J.A.C. 7:38-9.2(d)4 requires information about the scope of existing impervious surface on a site since the exemption at N.J.A.C. 7:38-2.3(a)4 provides for reconstruction and development on impervious surface and allows an increase of up to 0.25 acres of impervious surface.

N.J.A.C. 7:38-9.2(d)5 requires documentation proving that a dwelling was legally in existence prior to passage of the Highlands Act on August 10, 2004, since all additions to legally existing single family dwellings are exempt. This is one of the exemptions specified at N.J.A.C. 7:38-2.4 for which an applicability determination is not generally required.

N.J.A.C. 7:38-9.2(d)6 requires documentation demonstrating that a building meets the definition of a place of worship, school or hospital since such institutions are permitted to make improvements without having to comply with the Highlands Act.

N.J.A.C. 7:38-9.2(d)7 requires documentation showing that a property owner is conducting woodland management activities in accordance with the New Jersey

Farmland Assessment Act and is, therefore, exempt from regulation under the Department's regulations. This is another exemption specified at N.J.A.C. 7:38-2.4 for which an applicability determination is not generally required. The Department is proposing to amend N.J.A.C. 7:38-9.2(d)7i(1) to delete the reference to "public lands" to correspond with the same deletion being proposed to the exemption at N.J.A.C. 7:38-2.3(a)7. As explained above in reference to the 2.3(a) amendment, the change to the exemption will enable property owners who have forest management plans approved by the State Forester, but who do not have woodland management plans, to be covered by the exemption.

N.J.A.C. 7:38-9.2(d)8 describes information relating to trail construction with non-impervious materials. The submittal materials vary depending upon whether or not the trail is proposed for public or private land, as required by the Highlands Act.

N.J.A.C. 7:38-9.2(d)9 and 10 require information demonstrating that a State or local government unit is conducting routine maintenance on transportation or infrastructure systems, or constructing transportation safety projects or bicycle and pedestrian facilities. These exemptions require the State or local government unit to demonstrate that they are not proposing any through travel lanes. The Department is proposing to delete the specified length limitations at N.J.A.C. 7:38-9.2(d)9 and 10 because the Department will review all proposed projects and may approve any length project if adequate documentation is presented demonstrating that the project will not result in a through travel lane.

N.J.A.C. 7:38-9.2(d)11 requires proof that a public utility is proposing routine maintenance work on its lines, rights of way or other systems. The Department is proposing to amend N.J.A.C. 7:38-9.2(d)11 to require a letter from a utility if it is permitting the use of its overhead utility tower and right-of-way for the placement of cellular equipment.

N.J.A.C. 7:38-9.2(d)12 requires information about the existence of rail lines and beds in order to provide an exemption for rail line reactivation.

The exemption at N.J.A.C. 7:38-2.3(a)13 applies to infrastructure projects approved in a public referendum. A copy of the public referendum with approval is required.

N.J.A.C. 7:38-9.2(d)14 describes the proof required for applicants to demonstrate that they are operating a mining, or quarrying operation, producing ready mix concrete, bituminous concrete or recycling certain materials at a site existing on June 7, 2004, as all such operations are exempt.

Because the Highlands Act also exempts site remediation activities, N.J.A.C. 7:38-9.2(d)15 describes the proof required for applicants to establish this exemption. The Department is proposing to amend this provision to add the requirement to submit a memorandum of approval or remedial action workplan as the specific types of documentation to demonstrate compliance with the exemption provisions at N.J.A.C. 7:38-2.3(a)15. The Department is also proposing to amend N.J.A.C. 7:38-2.4 to include site remediation activities as one of the exemptions for which an applicability determination is not generally required.

All Federal military installations are exempt from regulation under the Highlands Act. N.J.A.C. 7:38-9.2(d)16 requires a copy of the plans and a signed statement documenting that the regulated activities are proposed to be conducted at a military installation.

N.J.A.C. 7:38-9.2(d)17, describes the documentation demonstrating that a proposed project is part of a municipal fair share housing plan. Such documentation will include plans of the project in question, copies of court agreements or settlements and the schedule for project completion.

N.J.A.C. 7:38-9.2(e) provides the requirements for applicants to demonstrate that a project or activity is not a major Highlands development in accordance with the definition at N.J.A.C. 7:38-1.4 because it is an agricultural or horticultural activity. As previously stated, while the Department will not require persons in the Highlands involved in agricultural or horticultural activities to seek an applicability determination, N.J.A.C. 7:38-9.2(e) lists the information that is required if a written determination is requested. The Department is proposing to delete the reference to 9.2(c) because it requests information regarding wastewater that will not be relevant to an agricultural or horticultural development or use.

Pursuant to N.J.A.C. 7:38-9.2(f), the Department reserves the right to request additional information necessary to clarify information submitted in accordance with this subchapter, or to ensure compliance with State and/or Federal law or standards.

7:38-9.3 Basic application requirements for all Highlands resource area determinations, Highlands general permits, and Highlands Preservation Area Approvals with or without waivers including modifications

N.J.A.C. 7:38-9.3 contains the application requirements for HRADs, HPAAs with or without waivers, and modifications or extensions of these documents. The Department is proposing to amend N.J.A.C. 7:38-9.3(a) to state these provisions apply to the new proposed Highlands general permits set forth at N.J.A.C. 7:38-14. N.J.A.C. 7:38-9.3(b) contains the materials required for all applications That is, all applicants are required to submit all of the materials contained in N.J.A.C. 7:38-9.3(b). In addition, applicants will have to provide the specific requirements for an HRAD, as listed at N.J.A.C. 7:38-9.4, an HPAA as listed at N.J.A.C. 7:38-9.5, or a Highlands general permit as listed at N.J.A.C. 7:38-9.8.

The required information in N.J.A.C. 7:38-9.3(b) parallels the information required at N.J.A.C. 7:38-9.2(b) for Highlands applicability determinations with some differences described below.

First, N.J.A.C. 7:38-9.3(b)2 requires unconditional written consent of the landowner for the Department to make a site inspection of the property. This is necessary in order for the Department to verify the information contained within the applications.

Second, N.J.A.C. 7:38-9.3(b)4 requires visual materials (and N.J.A.C. 7:38-9.3(b)7 requires submittal of photographs) showing impervious cover and the location and extent of all Highlands resource areas. The Department uses photographs to prepare for an onsite inspection.

N.J.A.C. 7:38-9.3(b)9 requires a depiction on a plan of all steep slopes since the Department will not be surveying slopes when it inspects a site.

N.J.A.C. 7:38-9.3(b)12 requires information regarding rare, threatened or endangered species, ecological communities and historic or archaeological resources. The applicant is required to seek preliminary information about rare, threatened or endangered species and ecological communities from the Natural Heritage Program (Heritage) and provide a letter from that Program as part of the application. This will save the applicant review time since it allows the Department to focus its onsite investigation on areas identified by the Heritage Program. If an applicant receives a letter from the Heritage Program identifying species on or near the site in question, and the applicant disagrees with the Heritage findings, N.J.A.C. 7:38-9.3(b)13 requires the applicant to submit sitespecific habitat information for the Department to evaluate the onsite conditions relevant to the species in question. The Department will also use the habitat information submitted by the applicant in its site inspection.

N.J.A.C. 7:38-9.3(b)14, and 15 require applicants to submit any relevant information that may have been part of previous application submissions to the Department, and to provide contact information for all professionals who prepared the application.

N.J.A.C. 7:38-9.3(c) is the same as N.J.A.C. 7:38-9.2(f) and permits the Department to require an applicant to submit any other relevant information necessary to review an application.

N.J.A.C. 7:38-9.3(d) states that the Department may require that construction activities be plotted directly on scaled plans so that approved activities will be distinguishable during project construction.

7:38-9.4 Additional application requirements for a Highlands resource area determination (HRAD)

N.J.A.C. 7:38-9.4 contains a listing of additional materials required for the Department to issue an HRAD. N.J.A.C. 7:38-9.4(b)1 requires the applicant to submit a completed HRAD checklist. The notice requirements at N.J.A.C. 7:38-9.4(b)2 are almost identical to the notice requirements at N.J.A.C. 7:38-9.2(b)5 with the following exception: N.J.A.C. 7:38-9.4(b)iv requires that notice be provided in the form of a letter to landowners within 200 feet of the boundary of the site. This requirement is included for an HRAD because the Department wants neighboring property owners informed of the application and pending activities and so that information provide by neighbors can be considered during the review of an application. The Department is proposing to amend N.J.A.C. 7:38-9.4(b)1iv to include the option for applicants with linear development that exceed one-half mile in length to instead provide notice to property owners within 200 feet of above ground structures so long as notice of the proposed activity is also provided in a newspaper of record for the municipality in which the

proposed activity will occur and in a newspaper with regional circulation in the appropriate region.

At N.J.A.C. 7:38-9.4(c), the Department is providing the opportunity for an applicant to obtain an HRAD for a portion of a property (also known as a "footprint of disturbance"). N.J.A.C. 7:38-9.4(c)1, 2 and 3 require a delineation of all Highlands open waters on the entire property, together with soil borings and data sheets used to identify wetlands and open waters. Although an applicant may want to focus on a particular footprint, the determination of impervious cover requires consideration of the entire parcel minus the area of Highlands open waters on the entire parcel. Consequently, in order to accurately assess total impervious cover, the Department needs to know the total area of Highlands open waters. The Department will accept a wetlands letter of interpretation (LOI) in place of the materials at N.J.A.C. 7:38-9.4(c)1, 2 and 3, if one has been done, so long as it identifies all of the Highlands open waters on the site as defined at N.J.A.C. 7:38-1.4.

N.J.A.C. 7:38-9.4(c)4 requires an applicant to describe the location of forest on a portion of a site. The Department is proposing to amend this provision to require that upland forest be clearly labeled to distinguish it from Highlands open waters that might also be forest (since forested wetlands would be classified as Highlands open waters). This is necessary because Highlands open waters and upland forests are regulated differently under the Highlands Act and this chapter. In addition, N.J.A.C. 7:38-9.4(c)5 requires submittal of the data sheets used to identify the forest if the applicant used the method at N.J.A.C. 7:38-3.9(c).

N.J.A.C. 7:38-9.4(c)6 and 7 require the submittal of information relating to steep slopes and the location of ecological communities and rare, threatened or endangered plant and animal species.

N.J.A.C. 7:38-9.4(c)8 requires submittal of the information necessary to rebut the presumption of suitable habitat on a site while N.J.A.C. 7:38-9.4(c)9 requires the submittal of information relating to historic or archaeological areas.

Finally, N.J.A.C. 7:38-9.4(c)10 requires that the applicant clearly demarcate the footprint of disturbance that is the subject of the HRAD in the field using flagging, and on the plans submitted to the Department.

N.J.A.C. 7:38-9.4(d) states that there are no additional application materials required for a line delineation HRAD on a site that is one acre in size or smaller.

N.J.A.C. 7:38-9.4(e) contains additional application requirements for a boundary verification HRAD.

7:38-9.5 Additional application requirements for an HPAA

N.J.A.C. 7:38-9.5 contains the application materials for a HPAA in addition to the basic requirements at N.J.A.C. 7:38-9.3. This discussion addresses the application materials that were not already described in the summary for N.J.A.C. 7:38-9.3.

N.J.A.C. 7:38-9.5(a)1 requires an applicant to submit a completed checklist for a HPAA. N.J.A.C. 7:38-9.5(a)2 requires submittal of the Land Use Regulation Program's LURP-1 form. N.J.A.C. 7:38-9.5(a)3 requires public notice, similar to that required for an HRAD at N.J.A.C. 7:38-9.4(b)2 except that the Department also requires notification to the County Mosquito Control agency if work is proposed in a Highlands open water pursuant to N.J.A.C. 7:38-9.5(a)3iii(5). The Department is proposing to amend N.J.A.C. 7:38-9.5(a)3iv to include the option for applicants with linear development that exceed one-half mile in length to instead provide notice to property owners within 200 feet of above ground structures so long as notice of the proposed activity is also provided in a

newspaper of record for the municipality in which the proposed activity will occur and in a newspaper with regional circulation in the appropriate region.

This additional requirement is necessary to maintain consistency with the notice requirements of the Freshwater Wetlands Protection Act regulations at N.J.A.C. 7:7A. For applicants proposing work in the flood hazard area, N.J.A.C. 7:38-9.5(a)3v requires notice to be sent to the municipal engineer, county engineer, local Soil Conservation District, and various municipal officials of towns that are downstream from the location of the proposed activity. This is necessary to remain consistent with the notice requirements of the Flood Hazard Area Control Act regulations at N.J.A.C. 7:13.

For activities proposed in a Highlands open water that is also a wetland in accordance with N.J.A.C. 7:7A, the Department is requiring a newspaper notice at N.J.A.C. 7:38-9.5(a)3vi (1) and (2). Again, these additional notice provisions are required in order to maintain compliance with N.J.A.C. 7:7A.

N.J.A.C. 7:38-9.5(a)4 requires submittal of a Highlands applicability determination. For those applicants who are not required to submit a Highlands applicability determination in accordance with N.J.A.C. 7:38-2.4, an applicant is required to submit the information specific to the proposed activity, a site plan as required at N.J.A.C. 7:38-9.2(b)3 and 4, and the information regarding wastewater treatment and water supply contained at N.J.A.C. 7:38-9.2(c). Regardless of whether or not an applicant is subject to the Highlands Act, the Department will still need to determine whether a proposed project is consistent with a WQMP.

N.J.A.C. 7:38-9.5(a)5 requires information relating to the location of Highlands resource areas on the property in question. Because obtaining an HRAD is optional, the Department provides the option of either providing the HRAD or the information that is necessary to conduct an HRAD in order to garner enough information to assess compliance with HPAA requirements. The Department is proposing to amend this

provision to delete the acronym "HRAs," since it is not used in the rules, and to require the submittal of data sheets if an applicant uses the method at N.J.A.C. 7:38-3.9(c) to identify forest on a site.

N.J.A.C. 7:38-9.5(a)6 contains the requirements for detailed information relating to the proposed project, again to assess compliance with all HPAA requirements. It includes requirements to show and calculate impervious coverage, depict steep slopes, evaluate affects to rare, threatened and endangered species and ecological communities and to provide architectural or archaeological surveys if required in accordance with N.J.A.C. 7:38-3.10(c) and (d) respectively.

N.J.A.C. 7:38-9.5(a)7 requires an applicant to provide a statement that describes how the proposed project meets each and every requirement of the Highlands regulations for a HPAA. The Department is proposing to amend this provision to clarify that an applicant is required to provide the Department with the basis for the applicant's claim that the proposed activities are in compliance with all requirements at N.J.A.C. 7:38-3 and N.J.A.C. 7:38-6.

N.J.A.C. 7:38-9.5(b), (c), and (d) require the submittal of information for those applicants who will require a water supply diversion to support a proposed project. This is the same information that would be required for a water supply diversion anywhere in the State. N.J.A.C. 7:38-9.5(e) and (f) state that applicants obtaining a water supply diversion permit will have to renew those permits at least 90 days prior to the HPAA expiration, regardless of whether they have completed the activities approved pursuant to an HPAA. The rules also state that the water supply provisions of the HPAA may remain in force until the water supply approval is renewed or revoked. This is consistent with duration of HPAAs contained in N.J.A.C. 7:38-12.3.

7:38-9.6 Additional application requirements for a Highlands Preservation Area Approval with waiver

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N.J.A.C. 7:38-9.6 contains additional requirements for applicants who are requesting a waiver in conjunction with a HPAA. N.J.A.C. 7:38-9.6(a) restates that all applicants who intend to request a waiver are required to attend a pre-application meeting prior to submitting an application.

N.J.A.C. 7:38-9.6(b) requires that an applicant submit all of the materials required for a HPAA, an alternatives analysis, and information regarding the waiver that is being sought. The applicant is also required to identify the specific preservation area standards from which a waiver is being sought and to demonstrate compliance with each of the Highlands requirements for a HPAA. The Department is proposing to insert a reference at N.J.A.C. 7:38-9.6(b)7 to clarify that the applicant is required to demonstrate compliance with each of the preservation area standards at N.J.A.C. 7:38-3. N.J.A.C. 7:38-9.6(b)8 requires a detailed explanation of how the standards at N.J.A.C. 7:38-6.2 are being satisfied. The Department is proposing to add a new N.J.A.C. 7:38-9.6(b)9 requiring the submittal of documents showing that all legal challenges, if any, have been concluded prior to submitting the application for the HPAA with waiver.

N.J.A.C. 7:38-9.6(c) lists the application requirements for a WQMP amendment for those applicants whose application was declared inconsistent when reviewed by the Department. This provision will most likely be used by those applicants qualifying for a waiver for a project that requires access to a wastewater treatment facility.

N.J.A.C. 7:38-9.6(d) lists the application requirements for new or modified water supply diversion privileges for diversions exceeding 50,000 gallons of water per day. Like the requirements for WQMP amendments, this provision will most likely be used for successful applicants for a waiver for a project that requires a new or modified water supply source.

N.J.A.C. 7:38-9.6(e) through (j) contain the application materials for each type of HPAA waiver. N.J.A.C. 7:38-9.6(e) contains requirements for applicants seeking a waiver to protect health and safety. The requirements are simply to describe the project, state why the applicant believes it protects the public's health and safety, and to describe the mitigation to be done if freshwater wetlands or State open waters will be affected by the proposed project.

N.J.A.C. 7:38-9.6(f) contains the application requirements for a waiver based upon Department designation of a site as a brownfield. N.J.A.C. 7:38-9.6(f)1 contains the requirements for sanitary landfill sites. The Department is proposing to amend N.J.A.C. 7:38-9.6(f)1 to require that the submitted plan certified by the licensed surveyor include areas legally disturbed as of August 10, 2004 and to amend the dates for legal closure of a landfill to include more sites as eligible for designation.

N.J.A.C. 7:38-9.6(f)2 contains the requirements for former or current commercial or industrial sites as described as Track 2 sites at N.J.A.C. 7:38-6.6(b)2. The Department is proposing to amend this provision to detail the documentation to be submitted to demonstrate that the clean up is complete and that no further contamination has occurred on the site. N.J.A.C. 7:38-9.6(f)3 contains the requirements for former or current commercial or industrial sites with a record of contamination that have not yet been remediated. The Department is proposing to amend N.J.A.C. 7:38-9.6(f)3 to delete the requirement that the site be listed on the State's "Known Contaminated Sites" list and, instead, to require that a preliminary assessment and site investigation be conducted to confirm the presence and extent of the contamination and area to be remediated. The Department is proposing to add a new N.J.A.C. 7:38-9.6(f)4 to provide requirements for a change in designation when requested by the Highlands Council. Because the Highlands Council is the entity responsible for designating an area for redevelopment, the Department must retain the ability to make changes to its designation if the Council deems it appropriate and if there are no significant impacts to Highlands resource areas that would result from the suggested change.

Proposed new N.J.A.C. 7:38-9.6(f)5 provides the application requirements for the expansion of a brownfield designation. This provision is necessary because N.J.A.C. 7:38-6.6(b)3 allows for a designation at a site that has not completed remediation, and in some cases may be in preliminary investigation phases. Consequently, as the remediation takes place, additional areas of contamination may be discovered or known areas may be larger than originally predicted. Therefore, the Department must retain the ability to expand the brownfield designation if the appropriate documentation is provided in accordance with N.J.A.C. 7:38-9.6(f)5.

N.J.A.C. 7:38-9.6(g) contains the general requirements for all waivers based upon a Department designated brownfield. As previously discussed, the waiver process for redevelopment has two prerequisites: the Department must designate a site as a brownfield, and the Highlands Council must designate the site for redevelopment. The application requirements in N.J.A.C. 7:38-9.6(g)1 require the submittal of the standard requirements for all HPAAs with waivers at N.J.A.C. 7:38-9.6(b) and information specific to the waiver being requested, including a copy of the Department's letter designating a site as a brownfield at N.J.A.C. 7:38-9.6(g)2, and documentation that the Highlands Council has identified the site for redevelopment at N.J.A.C. 7:38-9.6(g)3. In addition, N.J.A.C. 7:38-9.6(g)4 requires applicants to provide a stormwater management plan that accomplishes the required total suspended solids requirement in recodified N.J.A.C. 7:38-6.6(k)6. The Department is proposing to amend N.J.A.C. 7:38-9.6(g)4 to specify that the stormwater plan must comply with the Department's Stormwater Management regulations. N.J.A.C. 7:38-9.6(g)5 provides the requirement to submit a mitigation proposal when the proposed redevelopment activity would affect freshwater wetlands or State open waters. Proposed new N.J.A.C. 7:38-9.6(g)6 requires an applicant to document compliance with the requirement to remove pavement and replant, if appropriate and to provide a binding conservation restriction in accordance with N.J.A.C. 7:38-6.3.

N.J.A.C. 7:38-9.6(h) contains additional requirements based upon the specific type of brownfield for which the redevelopment waiver is being sought. N.J.A.C. 7:38-9.6(h)1 and 2 contain requirements for a redevelopment waiver based upon a landfill brownfield. The requirements vary between these two provisions depending upon when the landfill was closed, since the date dictates the type of closure document issued by the state. The Department is proposing to amend N.J.A.C. 7:38-9.6(h)1 to add the requirement to submit a remedial action workplan since this is a required component to be designated a brownfield in accordance with N.J.A.C. 7:38-6.6(k)3. In addition, the Department is proposing to delete subparagraph (h)1i and to recodify subparagraphs (h)1ii and iii as (h)1i and ii to require submittal of the appropriate documentation in order to establish the limit of the waste and legally disturbed areas described at amended N.J.A.C. 7:38-6.6(c). Finally, the Department is proposing to amend (h)2 to use terminology consistent with that used in the Solid Waste Rules, N.J.A.C. 7:26-2A.9.

Proposed N.J.A.C. 7:38-9.6(h)3 contains the application requirements for a waiver based upon a brownfield designation waiver meeting the requirements at N.J.A.C. 7:38-6.6(b)2 (Track 2). An applicant is required to demonstrate that no discharge of hazardous substances has occurred onsite after the receipt of the Department's No Further Action letter.

Recodified N.J.A.C. 7:38-9.6(h)4 addresses the application requirements for brownfield waivers for former or current commercial or industrial sites with a record of contamination, as described at N.J.A.C. 7:38-6.6(b)3. The documentation is needed to ensure that the site is undergoing or will undergo appropriate clean up before being redeveloped with this waiver.

N.J.A.C. 7:38-9.6(i) contains additional requirements for submittal of a redevelopment waiver request based upon a site comprised of 70 percent or more impervious cover. The adopted rules require a site plan that depicts the scope of the

impervious cover in relation to the proposed redevelopment project; compliance with all conditions at N.J.A.C. 7:38-6.6, and a mitigation plan for impacts to freshwater wetlands and/or State open waters. The Department is proposing to correct the codification form throughout this subsection. In addition, the Department is proposing to amend the rules to require documentation from the Highlands Council that the site did contain 70% impervious coverage on August 10, 2004 and that the Council has approved the site for redevelopment; a stormwater management plan that meets the Department's Stormwater management regulations and the submittal of a binding conservation restriction, if applicable. The Department is proposing to delete the requirement to comply with the conditions at N.J.A.C. 7:38-6.6 because it is redundant.

N.J.A.C. 7:38-9.6(j) contains the application requirements for a waiver based upon the taking of property without just compensation. The application materials for a waiver to avoid a taking should document the property owner's investments in the property as a whole at N.J.A.C. 7:38-9.6(j)1 through 3, the minimum viable and economically viable use or the property as a whole at N.J.A.C. 7:38-9.6(j)4, and the environmental impacts from the minimum economically viable use at N.J.A.C. 7:38-9.6(j)5 through 8. The Department is proposing to amend N.J.A.C. 7:38-9.6(j)5 through 8. The Department is proposing to amend N.J.A.C. 7:38-9.6(j)6 through 7 a waiver based upon an alleged taking will be processed until the conclusion of an applicant's legal challenges, if any, to the Department's decision on the application for an HPAA under the rules as strictly applied. This provision appears in abbreviated form in N.J.A.C. 7:38-6.8(b). The proposed amendments list the documentation relevant to the applicant's showing that all appeals to the HPAA decision being pursued by the applicant have concluded.

The Department is proposing new N.J.A.C. 7:38-9.6(k) to require that an applicant seeking a waiver in accordance with N.J.A.C. 7:38-6.9, to construct a 100 percent affordable housing development, provide a letter from the township attorney certifying that the proposed development is comprised of 100 percent affordable housing and is included in the municipality's Fair Share Plan.

7:38-9.7 Application requirements for modification or extension of an HPAA or HRAD

N.J.A.C. 7:38-9.7(a) provides for the modification of an HPAA. Minor modifications are described in N.J.A.C. 7:38-9.7(b) and major modifications are described in N.J.A.C. 7:38-9.7(c). Minor modifications constitute mostly administrative or record keeping changes. However, the Department will permit some small changes to a development activity if the change does not result in an increased disturbance to any Highlands resource area or an increase in impervious surface.

All other changes that would involve on-the-ground changes to a proposed development are considered major modifications in accordance with N.J.A.C. 7:38-9.7(c) and require an amended HPAA application. The Department is proposing to amend N.J.A.C. 7:38-9.7(c) to move the description of the application requirements to N.J.A.C. 7:38-9.7(f).

N.J.A.C. 7:38-9.7(d) and (e) address the requirements for applications for modifications. The request can be in the form of a letter. If the request is for something other than an administrative change, the applicant is required to provide a copy of the permit with conditions for which the modification is sought, together with a description of the change and why it meets the requirements for a minor modification. There is no fee for a minor modification.

N.J.A.C. 7:38-9.7(f) and (g) contain the requirements for applications for major modifications. The applicant is required to submit all of the basic application information, but with specific focus on the area for which the modification is requested. The Department is proposing to amend N.J.A.C. 7:38-9.7(f) to add some detail that was previously located at N.J.A.C. 7:38-9.7(c).

N.J.A.C. 7:38-9.7(h) addresses a request for the extension of an HRAD. The Department is requiring that all basic information required for HRADs be submitted as applicable to the site.

N.J.A.C. 7:38-9.8 Application requirements for Highlands general permits

Proposed new N.J.A.C. 7:38-9.8 contains additional application requirements for Highlands general permits. Applicants are required to submit all additional information listed at N.J.A.C. 7:38-9.8(a)1. Proposed N.J.A.C. 7:38-9.8(a)2 requires the submittal of information regarding whether the activity for which the general permit is being sought is regulated by another agency as well and, if so, whether a permit has been requested or obtained for the activity. Finally, proposed N.J.A.C. 7:38-9.8(a)3 requires information about contamination, if any, on the site that is the subject of the general permit application. The Department may require that sites with contamination be tested in advance of determining compliance with the requested general permit.

Subchapter 10 Fees

The Highlands Act at N.J.S.A. 13:20-33f specifically authorizes the agency to assess fees "sufficient to defray in full the costs incurred in the processing, review, and enforcement of applications for Highlands permitting reviews." Subchapter 10 contains the fees the Department charges to review applications for Highlands applicability determinations, HRADs, Highlands general permits, and HPAAs with and without waivers.

The Highlands Act requires the Department to consolidate several environmental review programs into a single permitting program. However, the review may require input from the staff of several different programs. Therefore, the fees have been structured to reflect the number of program components reviewed for a given project. For example, there is a base fee for an HPAA. If that HPAA involves a flood plain review,

applicants are required to pay the base fee, plus the fee required for the flood plain review. It is important to note that applicants with development outside the Highlands Region pay the same fees for these different program reviews.

7:38-10.1 General fee provisions

While N.J.A.C. 7:38-10.1(a) requires a fee for all applications, N.J.A.C. 7:38-10.1(e) establishes that an applicant must pay only those fees applicable to the proposed project. The type of acceptable payment appears at N.J.A.C. 7:38-10.1(b), fee refunds at N.J.A.C. 7:38-10.1(c), and fees for multiple site inspections at N.J.A.C. 7:38-10.1(d).

7:38-10.2 Fee Tables

N.J.A.C. 7:38-10.2(a) establishes a fee for a pre-application meeting. A preapplication meeting is required for those applications that will require reviews from two or more programs and for those seeking a waiver in accordance with the provisions in subchapter 6. As stated previously, the Department is requiring pre-application meetings under these circumstances to ensure that the applicant and the Department are aware at the beginning of the review process, of the full range of issues and reviews that shall be necessary in order to issue an HPAA and their sequence. An appropriate sequence saves the property owner time and money by allowing him or her to learn in advance of application whether the opposed development complies with basic standards or qualifies for a waiver. It is also possible, that in the course of a review, the scope of a project may be reduced. Because the Department anticipates spending substantial time on preapplication meetings, it charges a \$500.00 fee. No fee is proposed for Department of Transportation (DOT) pre-application meetings because the Department has an alternative process in place to recover costs associated with the review of DOT projects.

N.J.A.C. 7:38-10.2(b) establishes fees for Applicability Determinations. The fees are established at two levels, partly depending on the size and complexity of the project. Small

projects (described as those costing \$100,000 or less) are \$100.00 at N.J.A.C. 7:38-10.2(b)1 at since such projects likely involve smaller land areas and permit quick assessment of rule applicability. More costly projects are likely to involve multiple programs and specific resources protected by the Highlands Act, so the fee at N.J.A.C. 7:38-10.2(b)5 for an applicability determination is \$750.00. Municipalities are charged \$100 at N.J.A.C. 7:38-10.2(b)2 since those projects are funded by tax money and the Department does not want its fees to result in increased local taxes. N.J.A.C. 7:38-10.2(b)3 establishes a \$100.00 fee for an exemption based upon woodland or forest management plans or agriculture or horticultural activities. The Department is proposing to amend N.J.A.C. 7:38-10.2(b)3 to charge \$100.00 for any of the activities for which an applicability determination is not required in accordance with N.J.A.C. 7:38-2.4(b). It is important to note that the Department specifically advises applicants who are conducting any of the activities enumerated at N.J.A.C. 7:38-2.4(b) that an applicability determination is not required. However, if for some reason an applicant wants an applicability determination, the Department will charge \$100.00 to provide that letter. Finally, N.J.A.C. 7:38-10.2(b)4 provides that DOT is exempt from paying fees because the Department has worked out other mechanisms to recover its costs from that agency.

N.J.A.C. 7:38-10.2(c) provides the fees for obtaining an HRAD. At N.J.A.C. 7:38-10.2(c)1 the Department has established a \$500.00 plus \$50.00 per acre fee for a footprint of disturbance. The fee for a boundary delineation on a site of one acre or less is \$100.00 in accordance with N.J.A.C. 7:38-10.2(c)2. The fee for a boundary verification is \$750.00 plus \$100.00 per acre at N.J.A.C. 7:38-10.2(c)3 since the amount of effort associated with a boundary verification will depend in part upon the size of the lot.

N.J.A.C. 7:38-10.2(d) contains the base fees for the review of an HPAA which are established as a flat fee plus a per acre fee because the size of a property often reflects the time and complexity of the required review. In addition, because it is quicker and easier to review an HPAA if an HRAD exists, the base fee for projects with HRADs is lower than for those without. The fee for an HPAA with an HRAD is \$2,500 plus \$50.00 per acre, while the fee for an HPAA without an HRAD is \$3,250 plus \$100.00 per acre.

N.J.A.C. 7:38-10.2(e), (f) and (g) contain additional fees that will only apply to HPAA applications that require additional program reviews.

N.J.A.C. 7:38-10.2(e) is an additional fee for applications that require a stormwater management review in accordance with N.J.A.C. 7:8. A stormwater review typically involves a review of the stormwater facility and maintenance plans, construction details, in-depth narratives and alternative analyses, and detailed hydrologic and groundwater recharge calculations. Because the Highlands Act has a 3 percent limitation on total impervious surface on a site, the Department does not anticipate that large numbers of applicants will propose enough impervious surface to require this additional review. However, a stormwater review is required as part of a redevelopment waiver at N.J.A.C. 7:38-6.6(k)6 and 6.7(b)2. The stormwater review fees are consistent with the fees for review of stormwater management contained in the Department's stream encroachment, freshwater wetlands, and coastal permit programs in accordance with the following.

Since every project must be evaluated with regard to the use of nonstructural methods, also referred to as low-impact development, a base fee of \$2,000 is assessed for review of all major developments at N.J.A.C. 7:38-10.2(e)1. A review for the remaining three standards, groundwater reacharge, runoff quantity and water quality, is required depending on the type, size, location and level of development. A project could potentially be subject to some or all of these three standards. The Department has therefore determined that it is appropriate to establish a separate fee for the review of each of these three standards.

The fee for the review for groundwater recharge and runoff quantity standards appearing at N.J.A.C. 7:38-10.2(e)2 is proportional to the area of disturbance on a site. Projects disturbing less than 3 acres will be assessed an additional \$500.00 for the review of groundwater recharge calculations or runoff quantity calculations. Similarly, projects

disturbing between 3 acres and 10 acres will be assessed an additional \$1,000; projects disturbing between 10 acres and 100 acres will be assessed an additional \$2,000; and projects disturbing over 100 acres will be assessed an additional \$4,000. Additional fees for the review of runoff quantity calculations are established at the same level at N.J.A.C. 7:38-10.2(e)3. In many cases a review of both groundwater recharge calculations and runoff quantity calculations will be required and separate fees will be assessed for both calculations.

N.J.A.C. 7:38-10.2(e)4 establishes a fee for water quality calculations. Since the water quality standards of N.J.A.C. 7:8-5.5 must be met only for stormwater runoff from impervious surfaces, the proposed fees for the review of water quality calculations is tied to the total area of all impervious surface on a site and not the proposed net increase in impervious area.

N.J.A.C. 7:38-10.2(f) provides an additional fee for review of an application for a HPAA that includes disturbance within the areas regulated under the Flood Hazard Area Control Act rules (N.J.A.C. 7:13). In general, the fees for the flood hazard regulatory program relate to the potential impact of a particular project on the resource to be protected, and the resulting amount of time required by the Department to conduct its review. That is, when a project application includes calculations or analyses that require detailed review by the Department, the application review takes more effort and time to complete. Consequently, the fees in N.J.A.C. 7:38-10.2(f) for major and minor stream encroachment elements are designed to reflects the level of effort required to review such projects. These fees are consistent with those required for a flood hazard area review outside the Highlands Region. The Department is proposing to delete the fee listing for flood hazard area review and replace it with a cross-reference to the fees as they appear in the 90-day Construction Permit rules (N.J.A.C. 7:1C-1.5(a)4). At the time of the Highlands rule adoption on May 9, 2005, the flood hazard area fees were undergoing amendments in the 90-day Construction Permit rules. Therefore the Department included the fees directly in these rules. Since then, the 90-day Construction Permit rules have

been amended and it is now more efficient to cross-reference the 90-day rules as to stream encroachment fees.

N.J.A.C. 7:38-10.2(g) contains additional fees to be paid with applications requiring a water supply review. Because the Highlands Act prohibits the construction of any new public water system and the extension of any existing public water system to serve development in the preservation area, the Department anticipates that this fee will only be used by applicants seeking a waiver in accordance with N.J.A.C. 7:38-6. This fee structure is consistent with the Department's goal of encouraging water conservation and use of the lowest quality water for the intended purpose, including integration of alternative water sources, especially beneficial reuse water, as a means of preserving relatively higher quality waters for potable purposes. The determination of diversion source(s) and the respective percentages of the total allocation will be made by the Bureau of Water Allocation, based upon information supplied by the applicant and the technical evaluation conducted by the New Jersey Geological Survey (NJGS).

To ensure that a safe and adequate water supply is available to meet domestic, agricultural, commercial and industrial water demand, while at the same time offering natural resource and ecosystem protection, the Department is implementing a coordinated, programmatic technical review of each application for a proposed water diversion or permit modification. In addition to a source-specific hydrologic assessment, including an analysis of potential impacts to the resource, other water users, and environmentally sensitive environmental features such as stream flow, wetlands, and threatened and endangered species, the Department also assesses regional hydrologic impacts.

A water use registration is required for all water users with the capability of diverting in excess of 50,000 gallons of water per day, but who do not. The fee for an initial water use registration application review is \$400.00 and the annual fee thereafter is \$200.00.

Pursuant to the Safe Drinking Water Act rules, N.J.A.C. 7:10-1, et seq., the imposition of higher fees at N.J.A.C. 7:38-10.2(g) for the predominantly non-potable, consumptive water use category is intended to promote the use of the lowest quality water for the intended purpose, and encourage the use of reclaimed water for beneficial reuse. By conserving higher quality source water, natural resources will be better protected and increased water supplies will be available for potable uses in areas designated to support growth.

The same fee is assessed for a major modification of a water allocation review as for an initial application because the Department undertakes a technical review of the proposed modification. No fee is charged for a minor modification because a technical review is not necessary.

N.J.A.C. 7:38-10.2(g)3viii sets forth a separate category of annual fees applicable to non-purveyor allocations of which more than 50 percent is for non-potable purposes and of which more than 50 percent is a consumptive use. The fees for each primary water use category are further divided into more specific water use types, including direct surface water withdrawals, annual fees for impounded storm water runoff and skimming of surface water in excess of minimum passing flow requirements, and separate fees for unconfined and confined ground water diversions.

N.J.A.C. 7:38-10.2(g)3viii(3) provides that for Class 6C, (a non purveyor whose use is for greater than 50 percent non-potable water, of which more than 50 percent is consumptive) an additional \$2,500.00 will be assessed for each 3.1 million gallons per minute (mgm) increment in the allocation over 18.6 mgm. This is intended to discourage the use of relatively higher quality potable water for predominantly non-potable purposes, particularly in cases where such waters, based upon their origin/source type, are the least likely to be replenished or recovered. The incremental fee encourages water conservation

and the use of relatively lower quality waters as an alternative to high quality water sources. The annual fee for any single permit in Class 6C is capped at \$35,000.

N.J.A.C. 7:38-10.2(h) requires an additional fee for the review of HPAA applications that include a waiver except for a waiver based upon the protection of public health and safety where that determination is made simultaneously with the HPAA review.

At N.J.A.C. 7:38-10.2(h), the Department is proposing to amend the fee for a redevelopment waiver to separate it into two separate fees. Proposed N.J.A.C. 7:38-10.2(h)1 contains the fees for a redevelopment waiver based upon a Highlands brownfield designation. In order to qualify for this waiver, the Department must first designate a site as a Highlands brownfield. The proposed fee for that process is \$500.00. This process will involve coordinating various Programs within the Department to review the site and the contamination. After the Highlands Council designates an area for redevelopment, an applicant who has a site designated as a Highlands brownfield may qualify for a redevelopment waiver. The proposed fee for the waiver is \$250.00 and is intended to cover the cost of processing the waiver application, reviewing mitigation plans if they are required, and issuing findings concerning the waiver application.

New proposed N.J.A.C. 7:38-10.2(h)2 contains the fees for the processing of a waiver for redevelopment based upon the pre-existence of 70 percent or more impervious surface on a site and for a waiver to construct 100 percent affordable housing. These fees are higher than that proposed for a waiver based upon Highlands brownfield designation (\$500.00 instead of \$250.00) because unlike the waiver based upon brownfield designation, the Department will have no familiarity with the applications when they arrive and it will require additional time to complete the reviews.

N.J.A.C. 7:38-10.2(h)2 and 3 are recodified as (h)3 and 4.

The fee for the review of an application for a waiver for taking without just compensation at recodified N.J.A.C. 7:38-10.2(h)3 is \$2,000.00. The Department anticipates that significant staff and attorney time will be required to review the documentation applicants provide and that, therefore, this higher fee is necessary.

The fee for a Water Quality Management Plan (WQMP) amendment, at recodified N.J.A.C. 7:38-10.2(h)4 is \$1,000. The process for review and approval of a WQMP is also time consuming and, therefore, requires a higher fee.

The Department is proposing to amend N.J.A.C. 7:38-10.2(i) to insert the fees associated with the new Highlands general permits proposed in N.J.A.C. 7:38-14. There is no fee at N.J.A.C. 7:38-10.2(i)1 for a Highlands general permit 1 for habitat creation and enhancement activities. At N.J.A.C. 7:38-10.2(i)2, the Department is proposing a fee of \$500.00 for Highlands general permit 2 (N.J.A.C. 7:36-14.2, bank stabilization activities) because Highlands general permit 2 will require some engineering review.

The Department is proposing to recodify N.J.A.C. 7:38-10.2(i) and (j) as (j) and (k). N.J.A.C. 7:38-10.2(j) provides that the fee for the renewal of an HRAD is 25 percent of the original fee or \$250.00, whichever is larger. The fee covers the cost of processing and a new site inspection where necessary to document any changes in the regulated resources.

Recodified N.J.A.C. 7:38-10.2(k) provides the fees for the renewal of an HPAA. Because renewal will require review of the documentation for the original HPAA and any necessary updates, and because the original documentation was likely significant in depth and scope, the \$1,000 fee reflects the amount of staff time required to accomplish this review.

Subchapter 11 Review of Applications

7:38-11.1 Procedures for review of applications

N.J.A.C. 7:38-11.1 states that this subchapter contains procedures for the Department to review and process each type of application provided in this chapter. The Department is proposing to amend N.J.A.C. 7:38-11.1 to state that the standards for review of an HRAD and those for review of an HPAA are proposed to be separated into two separate sections.

7:38-11.2 Completeness review for Highlands applicability determinations

The Department is proposing a new N.J.A.C. 7:38-11.2 containing the review procedures for Highlands applicability determinations. The review procedures for HRADs, Highlands general permits and HPAAs are different and are contained in recodified N.J.A.C. 7:38-11.3.

Reviews of applications for Highlands applicability determinations generally include a review for administrative completeness, and a subsequent technical review. N.J.A.C. 7:38-11.2(a) through (d) address the administrative completeness review process. In general, the administrative review process consists of determining whether all of the required checklist items are present and contain the required information in the required format. N.J.A.C. 7:38-11.2(a) sets forth the time frame for the Department to review and determine whether an application is administratively and/or technically complete. An administratively complete application, as described at N.J.A.C. 7:38-11.2(a)1, is an application for which all required materials have been submitted. If any item is missing, an application shall be declared administratively incomplete in accordance with N.J.A.C. 7:38-11.2(a)2.

Proposed N.J.A.C. 7:38-11.2(b) sets out the time frame by which an applicant is required to submit the items missing from an administrative incomplete application. Proposed N.J.A.C. 7:38-11.2(b)1 provides that if the applicant fails to submit the required

information in 30 days, the Department may deem the application administratively closed and so notify the applicant. Proposed N.J.A.C. 7:38-11.2(b)2 provides that if the applicant requests in writing an extension of time to provide the required information, the Department may agree to extend the period of time for submittal. Proposed N.J.A.C. 7:38-11.2(b)3 permits an applicant to revise and resubmit an application without the need for additional notice if the application is submitted within 30 days of the notice and is sufficiently similar to the original application for which notice was given so that the public can review essentially the same material the Department is reviewing.

Proposed N.J.A.C. 7:38-11.2(b)4 states that the Department will not refund a fee if an application is declared administratively closed.

Proposed N.J.A.C. 7:38-11.2(c) describes the Department's procedures once an application is deemed administratively complete. N.J.A.C. 7:38-11.2(c)1, 2, and 3 provide that the Department will so notify the applicant, publish notice of the application in the DEP Bulletin, and begin its technical review. If there are additional items missing that are required for completion of technical review, the Department will request such items in accordance with proposed N.J.A.C. 7:38-11.2(c)3ii.

Proposed N.J.A.C. 7:38-11.2(d) provides that any additional technical information requested by the Department and provided by the applicant must also be provided to those who were notified concerning about the original application.

Proposed N.J.A.C. 7:38-11.2(e) states that the lack of response by the Department does not constitute an approval or authorization by the Department.

Recodified 7:38-11.3 Completeness review for HRADs, Highlands general permits and HPAAs

Recodified N.J.A.C. 7:38-11.3 outlines the procedures for review of HRADS, Highlands general permits and HPAAs. In general, this process includes an initial completeness review, and a subsequent technical review. N.J.A.C. 7:38-11.3(a) through (f) address the administrative completeness review process. In general, the administrative review process consists of determining whether all of the required checklist items are present and contain the required information in the required format. Specifically N.J.A.C. 7:38-11.3(a) sets forth the time frame for the Department to review and determine whether an application is administratively and/or technically complete. An administratively complete application, as described at N.J.A.C. 7:38-11.3(a)1, is an application for which all required materials have been submitted. If any item is missing, an application shall be declared administratively incomplete and will be returned in its entirety to the applicant as stated in N.J.A.C. 7:38-11.3(b). The Department is proposing to return incomplete applications to applicants because it would be an administrative burden for the Department to maintain files of incomplete applications which may remain incomplete indefinitely.

N.J.A.C. 7:38-11.3(c) sets forth requirements for the Department upon finding an application administratively complete. The Department will so notify the applicant as stated at N.J.A.C. 7:38-11.3(c)1. N.J.A.C. 7:38-11.3(c)2 provides that the Department will transmit the application to other agencies that may be involved in the review process. For example, if an HPAA impacts wetlands, it may be necessary to transmit a copy of the application to the EPA and/or the U.S. Fish and Wildlife Service in order to satisfy the State's Federal responsibilities for its wetland program. The Department will also publish notice of the application in the DEP Bulletin, as required by N.J.A.C. 7:38-11.3(c)3. Finally, at N.J.A.C. 7:38-11.3(c)4, if a document is administratively but not technically complete, the Department will request additional information from the applicant. N.J.A.C. 7:38-11.3(d) states that an applicant shall be required to submit all additional information required for technical completeness to each of the entities that were originally notified of the application.

N.J.A.C. 7:38-11.3(e) states that an application returned in its entirety because of administrative incompleteness can be resubmitted without additional notice so long as it is resubmitted within 60 days after the date the Department returned the original submittal, and provided that it is sufficiently similar to the original application submittal so that the public is reviewing the same application as the Department (see N.J.A.C. 7:38-11.3(e)1 and 2).

N.J.A.C. 7:38-11.3(f) states that, if the Department is unable to meet a deadline, the applicant cannot assume that an application has been approved. The Highlands Act does not provide any deadlines for the Department to make the findings required in order to approve or deny a HPAA. However, the Department is proposing and shall strive to meet time frames consistent with those currently in force for other land use permits.

Recodified N.J.A.C. 7:38-11.4 Public comment on an application

Recodified N.J.A.C. 7:38-11.4 contains procedures for the public to comment on an application. N.J.A.C. 7:38-11.4(a) reiterates that the Department will publish notice of each complete application in the DEP Bulletin. In addition, the Department will make copies of all applications available for public inspection during normal business hours at N.J.A.C. 7:38-11.4(b). N.J.A.C. 7:38-11.4(c), establishes a 30-day public comment period that commences the day an application is published in the DEP Bulletin. The Department will consider all written comments submitted during that time period but may in its discretion and consistent with work load consider comments that are received later, if it has not yet made a decision on the application under review. The Department is proposing to amend N.J.A.C. 7:38-11.4(c) to provide a 30-day comment period for Highlands applicability determination applications, but a 45-day comment period for HRAD and HPAA applications. Because the Department cannot complete its action until the comment period is complete, the proposed amendment will afford the public additional time to comment on permit applications but will not delay the review process that will likely take longer than 45 days. The Department is not proposing to lengthen the

comment period for Highlands applicability determinations because it is striving to process these requests in 30 days.

Recodified N.J.A.C. 7:38-11.5 Hearings on an application for an HPAA

Recodified N.J.A.C. 7:38-11.5(a) provides the public with the opportunity to request a public hearing on a specific application. The Department proposes that requests for a hearing be submitted during the 30-day period beginning the day a notice of an application is published in the DEP Bulletin. The Department is proposing to grant the request for a hearing if the Department determines that there is a significant degree of public interest in a particular application (see N.J.A.C. 7:38-11.5(b)1), or the public interest would be served by holding a hearing (N.J.A.C. 7:38-11.5(b)4). In addition, if an HPAA application involves a waiver, the Department will grant a hearing (N.J.A.C. 7:38-11.5(b)2). Finally, if EPA requests a hearing on an application, the Department will likely hold the hearing (N.J.A.C. 7:38-11.5(b)3).

N.J.A.C. 7:38-11.5(c) requires the Department to arrange a public hearing within 30 days after completion of a hearing request period, if a request for hearing has been granted. N.J.A.C. 7:38-11.5(d) states that hearings are non-adversarial and are conducted to gather information about the application in question.

N.J.A.C. 7:38-11.5(e) and (f) establish procedures for notifying the public that a hearing will be held and for proving that such notice has been provided. This will be accomplished by direct notification to certain individuals, and by publication in the newspaper of a display advertisement as described at N.J.A.C. 7:38-11.5(e)1 and 2. In order to prove that newspaper notice has been properly given, N.J.A.C. 7:38-11.5(f) requires the applicant to provide certifications of publication to the Department. The hearing shall include a court reporter provided by the applicant in accordance with N.J.A.C. 7:38-11.5(g), and the Department will maintain copies of the hearing transcript as described in N.J.A.C. 7:38-11.5(h). N.J.A.C. 7:38-11.5(i) provides that the presiding

official at the hearing will have the discretion to conduct the hearing in a manner necessary to maintain order. Finally, N.J.A.C. 7:38-11.5(j) allows additional written comments on the application to be submitted within 15 days after the hearing.

Recodified N.J.A.C. 7:38-11.6 Procedures for review of an HPAA with waiver

Recodified N.J.A.C. 7:38-11.6(a) requires applicants to demonstrate that the proposed project or activity meets all the waiver requirements listed at N.J.A.C. 7:38-6.2(a) to the maximum extent possible and satisfies the special standards which are pertinent to the type of waiver being sought: to protect public health and safety (N.J.A.C. 7:38-6.5), to allow for redevelopment in Department-designated Highlands brownfields (N.J.A.C. 7:38-6.6), to allow for redevelopment in certain previously developed areas at 70 percent impervious surface (N.J.A.C. 7:38-6.7), or for taking without just compensation (N.J.A.C. 7:38-6.8). The Department is proposing to amend N.J.A.C. 7:38-11.6(a) to add a reference to the proposed waiver for construction of 100 percent affordable housing at N.J.A.C. 7:38-6.9.

The Department will concurrently review an application for an HPAA with waiver and for a WQMP amendment. N.J.A.C. 7:38-11.6(b) states that after the Department has made a determination that a project or activity qualifies for a waiver in accordance with N.J.A.C. 7:38-11.6(a), the Department will proceed with public notification and public hearing for any WQMP amendment request which accompanied the HPAA with waiver application in accordance with the procedures at N.J.A.C. 7:38-11.6(c) through (i). The WQMP amendment procedures in N.J.A.C. 7:38-11.6, the HPAA with waiver requirements in N.J.A.C. 7:38-6.2(a), and the special standards in N.J.A.C. 7:38-6.5 through 6.8 supercede the WQMP amendment process and requirements at N.J.A.C. 7:15.

N.J.A.C. 7:38-11.6(c) requires the Department to provide a copy of its decision to proceed with public notice or denying the application for a WQMP amendment to the

applicant and any applicable designated planning agency. The only designated planning agency within the preservation area to be notified under this provision, is the Sussex County Board of Chosen Freeholders for Sussex County. The rule requires the Department to provide a public notice announcing a non-adversarial public hearing on the WQMP amendment request. The Department will publish the same notice in the New Jersey Register at least 30 days before the public hearing is scheduled to be held. The public comment period will begin when the notice is published, and will remain open until 15 days after the close of the public hearing.

N.J.A.C. 7:38-11.6(d) outlines the applicant's requirements with regard to providing public notice, requesting written statements of consent, publishing a public notice in newspapers, securing a court stenographer for the public hearing and providing copies of the hearing transcript.

Under N.J.A.C. 7:15-11.6(e)1, the Department shall provide the applicant a list of governmental entities and agencies. Within 15 days of receipt of the list, the applicant must send by certified mail (return receipt requested) a copy of the proposed WQMP amendment to each entity or agency requesting a written statement of consent to the WQMP amendment within 60 days of receipt of the request. N.J.A.C. 7:38-11.6(e)2 describes the required content of a written statement of consent. Under N.J.A.C. 7:38-11.6(e)3, the applicant is required to submit to the Department a copy of all written statements of consent received, copies of any other written responses received, and a copy of the request for consent with return receipt in cases where a party has not responded to the request.

N.J.A.C. 7:38-11.6(e)4 allows the Department to consider any written denials or failure to respond when making a decision regarding an amendment.

N.J.A.C. 7:38-11.6(f) states that any person, entity or agency may submit written comments to the Department on a proposed WQMP amendment within 15 days after the date of the public hearing.

Under N.J.A.C. 7:38-11.6(g), the Department will issue a written decision adopting the amendment as proposed in the New Jersey Register in whole or in part, with changes that would not go beyond the scope of the public notice, or denying the amendment request, stating the reason therefor and will also prepare a written summary of public comments and responses to those comments as part of this decision.

N.J.A.C. 7:38-11.6(h) requires the Department to provide written notification of its WQMP amendment decision to the applicant and any applicable designated planning agency, and to post a notice of the final decision in the New Jersey Register and the DEP Bulletin.

Upon publication of the decision in the New Jersey Register, N.J.A.C. 7:38-11.6(i) requires the Department to notify applicants whether a NJPDES permit application should be submitted to the Division of Water Quality. NJPDES permit applications cannot be approved unless the activities for which they are sought are consistent with a WQMP. Therefore, prospective NJPDES permit applicants need to wait for the Department's decision on their request for a WQMP amendment in order to determine whether or not they can apply for a NJPDES permit. If a WQMP amendment is denied, a NJPDES permit application cannot be approved.

Recodified N.J.A.C. 7:38-11.7 Final decisions

Recodified N.J.A.C. 7:38-11.7 provides the procedures for Department review of HPAA with requests for a waiver following a finding of administrative and technical completeness. N.J.A.C. 7:38-11.7(a) establishes a 180-day review period for HPAA applications. The Department is proposing to amend this provision to include a 120-day

review period for Highlands general permits. There are no time limits established for such reviews under the Highlands Act. However, the Department will strive to complete its review within the specified time frames. However, if there are circumstances that delay or prevent the Department's decision within that time, the permit application is not deemed approved nor may an applicant conduct regulated activities without an explicit Department decision approving an application.

N.J.A.C. 7:38-11.7(b) requires the Department to notify the applicant when a decision is made. N.J.A.C. 7:38-11.7(d) requires the Department to publish notice of its decision in the DEP Bulletin, and in the Register if a WQMP amendment was included, and to provide a copy of its decision to the USEPA if it reviewed the application. N.J.A.C. 7:38-11.7(c) provides that the Department may make any approval conditional upon compliance with specified conditions.

Recodified N.J.A.C. 7:38-11.8 Cancellation, withdrawal, resubmission and amendment of applications for HPAAs, Highlands general permits, HPAAs with waivers, or HRADs.

This section has been amended to allow for the refund of the fees for Highlands Applicability Determinations (HRAD) that are withdrawn because the Division of Watershed Management has established a process for HRADs that would allow refunds when appropriate.

Recodified N.J.A.C. 7:38-11.8 provides for canceling, withdrawing, resubmitting and amending the applications described in this chapter. The Department is proposing to add Highlands general permits to the title of the section since the provisions apply to Highlands general permits as well. The Department may cancel an application in accordance with N.J.A.C. 7:38-11.8(a), if an applicant fails to provide technical information necessary for the Department's review within 30-days of the Department's request. The Department will notify an applicant of its intent to cancel before so doing.

N.J.A.C. 7:38-11.8(b) provides that the application fee will not be refunded if an application is cancelled and that a new application and fee will be required if the application is cancelled and that a new application and fee will be required if the application intends to pursue the proposed activities. N.J.A.C. 7:38-11.8(c) allows an applicant to withdraw an application at any time. The application fee will not be refunded in such cases, but may be credited to another application if the application is resubmitted within one year of the withdrawal, as stated at N.J.A.C. 7:38-11.8(d)2. N.J.A.C. 7:38-11.8(d) further states that a cancelled or withdrawn application may be resubmitted. However, while a fee may be credited for a withdrawn and resubmitted application at N.J.A.C. 7:38-11.8(d)2, it will not be credited for a cancelled and resubmitted application at N.J.A.C. 7:38-11.8(d)1. N.J.A.C. 7:38-11.8(e)1 states that applicants may amend an application at any time so long as the amended information is provided to those who received a copy of the original application. If the Department determines that the amendments are substantial and in reality constitute a new application, N.J.A.C. 7:38-11.8(e)2 permits the Department to impose all original notice and publication

N.J.A.C. 7:38-11.8(g), provides that an applicant may submit a new application on a site for which another application was denied. However, the new application will be treated as a new application in all respects, including the need to submit a new fee. The Department is proposing to correct the codification and recodify N.J.A.C. 7:38-11.8(g) as N.J.A.C. 7:38-11.8(f).

Subchapter 12 Contents of Approvals

7:38-12.1 Standard conditions that apply to all orders, decisions, approvals or determinations issued pursuant to the Highlands Act and its implementing rules

N.J.A.C. 7:38-12.1(a) provides a list of 19 standard conditions applicable to all HPAAs, HPAAs with waivers, HRADs and orders issued under this chapter. The Department is proposing to amend N.J.A.C. 7:38-12.1(a) to add Highlands general

permits to the list of actions to which the standard conditions will be attached. The Department has similar conditions for many of its other land use approvals and believes it is necessary and appropriate to include them in this chapter, since this chapter incorporates the same land use program approvals. However, not all of these conditions will be relevant to every approval. N.J.A.C. 7:38-12.1(a)1 and (2) require an applicant to comply with all conditions and plans approved under this chapter and requires an applicant to reapply if regulated activities have not been completed by the time an approval expires.

N.J.A.C. 7:38-12.1(a)3 and 4 require applicants to halt or modify their activities if adverse consequences occur to the environment as a result of the approved activities, and to minimize or correct adverse impacts to the Highlands resources.

N.J.A.C. 7:38-12.1(a)5 requires an applicant to notify the Department if during the course of approved activity an historic resource and/or archaeological feature is discovered. In such case, the Department will determine what is necessary to protect the resource.

N.J.A.C. 7:38-12.1(a)6 requires proper operation and maintenance of facilities and equipment that may be part of an approval under this chapter. This applies to water supply or wastewater treatment facilities or equipment.

N.J.A.C. 7:38-12.1(a)7 requires an applicant or permittee to provide information to the Department whenever it is investigating compliance with an approval, order or decision.

N.J.A.C. 7:38-12.1(a)8 requires applicants and permittees to afford the Department entry to a facility for inspection.

N.J.A.C. 7:38-12.1(a)9 requires applicants to maintain records including applications, permit decisions, modifications or orders. This requirement also applies to record keeping required for water allocations in accordance with N.J.A.C. 7:38-3.2, or NJPDES or treatment works approvals in accordance with N.J.A.C. 7:38-2.6.

N.J.A.C. 7:38-12.1(a)10 requires the Department be notified if the applicant plans to change the permitted activity in any way, including transferal of the property for which an approved HPAA was issued at N.J.A.C. 7:38-12.1(a)10iii. There are also requirements to report noncompliance.

N.J.A.C. 7:38-12.1(a)11 requires compliance with mitigation requirements for impacts to wetlands, State open waters or trees.

N.J.A.C. 7:38-12.1(a)12 requires applicants to post State and local approvals at a work site.

N.J.A.C. 7:38-12.1(a)13 requires appropriate signatures on all submissions to the Department.

N.J.A.C. 7:38-12.1(a)14 establishes that an HPAA runs with the land and is binding upon the permittee or the permittee's successors in interest.

N.J.A.C. 7:38-12.1(a)15 provides that an approval under this chapter does not relieve an applicant from obtaining all other relevant approvals required by law.

N.J.A.C. 7:38-12.1(a)16 acknowledges that certain conditions of an HPAA may be excused when an emergency HPAA is issued but only to the extent specified in that emergency approval.

The Department is proposing to delete N.J.A.C. 7:38-12.1(a)17 that requires a signed permit acceptance form before commencing permitted activities. The Department will instead incorporate language regarding permit acceptance directly into the approved permit.

Due to the deletion of N.J.A.C. 7:38-12.1(a)17, the Department is proposing to recodify paragraphs (a)18 and 19 as (a)17 and 18.

Recodified N.J.A.C. 7:38-12.1(a)17, states that there shall be no modification, suspension or termination of a Department approval except by the Department or a court of competent jurisdiction. A permittee may request a modification to an approved HPAA but cannot proceed with modified activities without the Department's express written approval of the modification.

Recodified N.J.A.C. 7:38-12.1(a)18 provides that neither an HPAA or HRAD convey property rights.

7:38-12.2 Establishing conditions to an HPAA (with or without waiver)

N.J.A.C. 7:38-12.2(a) states that in addition to the standard conditions described above, the Department may impose project-specific conditions on a permit to guarantee compliance with the Highlands Act, the State Water Pollution Control Act and the Federal Water Pollution Control Act, and their implementing regulations.

N.J.A.C. 7:38-12.2(b) describes the contents of a HPAA. The Department is responsible for ensuring that all approvals contain the information described in N.J.A.C. 7:38-12.2(b). N.J.A.C. 7:38-12.2(b)2, 3 and 4 are borrowed from the Freshwater Wetlands Protection Act regulations at N.J.A.C. 7:7A-13.2(b)2, 3 and 4 and are included in this chapter to ensure compliance with Federal program requirements.

N.J.A.C. 7:38-12.2(b)5 requires identification of an expiration date on an approved HPAA. N.J.A.C. 7:38-12.2(b)6 requires the Department to specify if it is requiring monitoring equipment and reporting. N.J.A.C. 7:38-12.2(c) allows the Department to require a preconstruction meeting onsite. N.J.A.C. 7:38-12.2(d) notes that some of the conditions to an approval may be noted as cross-references to statutes or regulations.

7:38-12.3 Duration of Highlands Preservation Area Approvals (HPAAs)

N.J.A.C. 7:38-12.3(a) establishes a 5-year duration for an approved HPAA. The Department may allow one 5-year extension if the request is made in accordance with the requirements in subchapter 9 (application requirements), the conditions upon which the original approval was issued have not changed, and the activity remains consistent with all requirements of an HPAA. If an HPAA includes the operation of a water system or wastewater treatment system, the 10-year limitation will apply only to the construction activities approved as part of the HPAA. Upon completion of the construction activities (in no more than 10 years from approval of the HPAA), the applicant will be required to continue to apply for HPAA renewals by demonstrating compliance with the requirements for water and wastewater systems only.

7:38-12.4 Effect of an HPAA

N.J.A.C. 7:38-12.4 states that compliance with all the standards for an HPAA will satisfy several requirements of the Federal Clean Water Act. The Department makes this statement to inform applicants that because all of the components to satisfy many regulatory programs have been combined in this chapter, it is not necessary to obtain several approvals to satisfy individually the Federal requirements. Those approvals have all been considered in the context of the review for the HPAA. The Department is proposing to amend this provision to delete the "(a)" codification as such is not used in a single paragraph section.

Subchapter 13. Enforcement

Subchapter 13 contains the substance and processes the Department will use to apply and implement its authority to issue orders, prosecute violations, and resolve enforcement matters pursuant to the Highlands Act. The Department's objective in enforcing the Highlands Act is to ensure compliance, and where violations have occurred, to restore the natural resource to its undisturbed condition or function as quickly as possible.

7:38-13.1 General provisions

N.J.A.C. 7:38-13.1 states that the Department will be using throughout subchapter 13 the terms "rule and or condition" to refer collectively to any rule promulgated under the Highlands Act or any HPAA, approval, determination, authorization, waiver, order, exemption or requirement pursuant to the Highlands Act.

7:38-13.2 Enforcement powers of the Department

N.J.A.C. 7:38-13.2(a) provides the scope of the Department's enforcement powers under the Highlands Act. The Highlands Act at N.J.S.A. 13:20-35 gives the Department broad powers of enforcement, allowing the Department a range of options and authority for investigating complaints and gaining access to sites of suspected illegal activities. Specifically, the Department is authorized to prosecute violations, compel compliance, assess penalties, and resolve violations of the Highlands Act. Orders and penalties are used to compel compliance and to act as a deterrent to future violations by removing any benefit the violator may have realized from conducting illegal or unpermitted activities. Upon determination of a violation, the Department may take one or more of the following actions action in accordance with the Highlands Act at N.J.S.A. 13:20-35a(5): issue an order requiring any such person to comply, bring a civil action,

levy a civil administrative penalty, bring an action for a civil penalty, or petition the Attorney General to bring a criminal action.

N.J.A.C. 7:38-13.2(b) states that any penalty assessed pursuant to this subchapter may be collected by the Superior Court or municipal court in a summary legal proceeding (without a jury), and that the Department is authorized to seek reimbursement for costs expended in investigating or prosecuting violations. After a violator has had due administrative process and the Department has made a final penalty or award, the Superior Court shall record the final order assessing the penalty or award on the judgment docket of the court, and that judgment docket shall have the same effect as a judgment of the Superior Court. Cases may be settled prior to a court trial.

N.J.A.C. 7:38-13.2(c) states that the Department has the authority to assess penalties for each day that a violation continues. Thus, each day that the protected resource (that is, the undisturbed natural ecosystem of the Highlands preservation area), is precluded from functioning in its capacity to protect the quality and quantity of the ground or surface waters, to provide habitat for endemic plants and animals, and to otherwise accomplish the benefits that the Highlands Act seeks to protect, shall be a separate and distinct violation under the Highlands Act in accordance with N.J.S.A. 13:20-35d, and the violator shall be libel for separate, individual penalties pursuant to the provisions of the Highlands Act and this chapter. The Highlands resource is precluded from functioning in its intended capacity when an area has had an impervious surface placed; soil or bedrock is exposed, moved or cleared; or vegetation and/or trees are cleared, cut or removed unless the activities are exempt or unless a HPAA has been issued for the site prior to exposure, clear cutting or removal. Activities that occur without appropriate authorizations from the Department, or in violation of a condition to an HPAA constitute a violation of the Highlands Act and are presumed to have a negative impact on the natural resources of the Highlands. The Department may continue to assess daily penalties until a violation has been cured, the resource has been returned to its full, functional state, or the Department and the violator have executed an agreement

identifying the terms under which the violation will be resolved and the area of violation restored.

N.J.A.C. 7:38-13.2(d) states that a penalty may be assessed for as many separate rules and/or HPAA conditions as have been violated. Thus a violator may be subject to multiple penalties for each day of violation if more than one rule was violated or more than one HPAA condition was not complied with. For instance, if a person performs unpermitted regulated activities on a section of a site which is was not included in the HPAA, and concurrently violates provisions of an HPAA authorizing activities on a separate area of the site, the Department may assess a penalty pursuant to this subchapter for two separate violations for each day that the violations continue. The maximum daily penalty, regardless of the number of violations, is \$25,000.00 per day for civil administrative penalty assessments and \$10,000.00 for civil penalty assessments.

N.J.A.C. 7:38-13.2(e) allows the Department to seek multiple remedies as authorized in this subchapter. For instance, compliance with a Department order, including the payment of penalties, does not preclude the Department from pursuing a separate action to deprive the violator of any economic benefit enjoyed as a result of the violation, nor from assessing a penalty while ordering compliance on the same site.

7:38-13.3 Administrative order

N.J.A.C. 7:38-13.3 sets forth the powers and requirements of the Department in the issuance of an administrative order pursuant to this subchapter. When issuing an order, the Department is required to specify each provision of the law and/or condition of which the person is in violation, describe the facts which constitute each violation, require compliance with the provision violated, require restoration of the area of the violation, and provide notice to the person of the right to a hearing on the matters contained in the order.

7:38-13.4 Civil action

N.J.A.C. 7:38-13.4 sets forth the Department's authority and options when issuing an order for appropriate relief. Such relief, as provided by the Highlands Act at N.J.S.A. 13:20-35c, may include singly or in combination:

- 1. A temporary or permanent injunction;
- 2. Assessment against the violator for the costs of any investigation, inspection, or monitoring survey which led to the establishment of the violation, and for the reasonable costs of preparing and bringing legal action under this section;
- Assessment against the violator for any costs incurred by the State in removing, correcting, or terminating the adverse effects upon the Highlands resources resulting from any unauthorized regulated activity for which legal action under this section may have been brought;
- 4. Assessment against the violator for compensatory damages for any loss or destruction of wildlife, fish or aquatic life, and for any other actual damages to the Highlands resources caused by an unauthorized regulated activity;
- 5. A requirement that the violator restore the site of the violation to the maximum extent practicable and feasible;
- 6. Assessment against the violator for recovery of any economic benefit accruing to the violator as a result of the violation; and
- 7. Assessment against the violator of a civil penalty of up to \$10,000 per day pursuant to this subchapter.

N.J.A.C. 7:38-13.4(b) states that any penalty established pursuant to this section may be imposed and collected with costs in a summary proceeding pursuant to the Penalty Enforcement Law, N.J.S.A. 2A:58-1 et seq. The Superior Court and the municipal court shall have jurisdiction to enforce the provisions of the Penalty Enforcement Law in connection with the Highlands Act.

7:38-13.5 Civil administrative penalty assessment

N.J.A.C. 7:38-13.5 establishes civil administrative penalties as provided for in the Highlands Act at N.J.S.A. 13:20-35d.

N.J.A.C. 7:38-13.5(a) states that the Department may assess a civil administrative penalty for up to \$25,000 per violation.

N.J.A.C. 7:38-13.5(b) further describes the civil administrative penalty assessment by providing that the \$25,000 violation assessment may be assessed each day that a violation continues.

N.J.A.C. 7:38-13.5(c) restates the provisions at N.J.A.C. 7:38-13.2(d) that a penalty may be assessed for as many separate rules and/or HPAA conditions as have been violated. Thus, a violator may be subject to multiple penalties for each day a violation exists if more than one rule was violated or more than one HPAA condition was violated. However, the total penalty is limited to \$25,000 per day.

N.J.A.C. 7:38-13.5(d) states that if any requirement of the Highlands Act incorporates the provisions of any other law, regulation, permit that the Department may assess a penalty for each law, permit, or regulation violated. As previously stated, because the Highlands Act and these regulations consolidate the aspects of several environmental laws and regulations, the Department must retain the ability to enforce each of these as needed. 7:38-13.6 Civil administrative penalty procedures

N.J.A.C. 7:38-13.6(a) describes the Department's procedures for assessing a civil administrative penalty. It requires the Department to notify the violator by certified mail (return receipt requested) or by personal service. It also requires the notice to identify each portion of the rule and/or condition violated, state the facts alleged to constitute the violation, state the amount of the civil penalties to be imposed, and advise the violator of the right to request an adjudicatory hearing under N.J.A.C. 7:38-13.13.

N.J.A.C. 7:38-13.6(b) sets forth the timing for the payment of a penalty imposed in a final administrative order. The timing depends upon whether or not a case is contested and the disposition of the contested case. The violator is required to pay a civil administrative penalty immediately upon receipt of the Department's final order in a contested case, or as soon as a notice of civil administrative penalty assessment becomes a final order as described at N.J.A.C. 7:38-13.6(b)1 through 3.

7:38-13.7 Civil administrative penalty amount

N.J.A.C. 7:38-13.7(a) states that the Department will use the process set forth in N.J.A.C. 7:38-13.8 to assess a civil administrative penalty for regulated activities conducted prior to obtaining a required HPAA or authorization from the Department. All assessments for civil administrative penalties resulting from other types of violations are governed by the provisions in this section. The Department is proposing to amend N.J.A.C. 7:38-13.7(a) to clarify that this section does not apply to civil administrative penalties described at N.J.A.C. 7:38-13.10, 13.11 and 13.12 (submitting inaccurate or false information, failure to allow entry and economic benefit, respectively) because they contain their own procedures for the assessment of civil administrative penalties.

N.J.A.C. 7:38-13.7(b) describes the factors that the Department may consider to adjust a penalty that results from applying the procedures at N.J.A.C. 7:38-13.8 or 13.9. These factors include the compliance history of the violator with respect to the Highlands Act or other laws and regulations that regulate similar conduct outside the Highlands Region. The conduct of a violator is a crucial component of the penalty assessment criteria. The Department will consider the state of mind of the violator at the time of the violation; the violator's experience with or knowledge of the existence and importance of complying with land use statutes; and previous violations for the Highlands Act and/or any other statute or regulation that prohibited the same type of conduct outside the Highlands Region.

The second factor is the type, number and frequency of violations by the violator. The Department will consider whether there is a pattern of non-compliance with this violator; the nature of prior penalty assessments or violations; and whether they represent a more substantial disregard for the Highlands Act than one single violation.

The third factor is the measures taken by the violator to mitigate the effects of the current violation. The Department will consider whether the violator has, prior to or concurrent with Department notification in a notice of violation (NOV) or penalty assessment, initiated restoration or compliance activities; attempted to restore the resource upon being made aware of the violation; and how aggressive and successful remediation has been.

The fourth factor is the deterrent effect of the Department's penalty. Different violators have different levels of penalty tolerance before a penalty may become an incentive to swiftly comply and restore a violation, or be a sufficient deterrent to future violations. For instance, large scale builders may regard a penalty of \$5,000 as a cost of doing business and continue to commit future violations on this or other projects, whereas a single family homeowner may regard a \$5,000 fine as significant and quickly come into and maintain compliance.

The fifth factor adjusting a civil administrative penalty is any other relevant circumstance that might affect the Department's penalty assessment. The Department will consider any other credible circumstance that it may become aware of, on a case by case basis, to ensure its penalties that are fair, reasonable, legally defensible, consistent, and effective to compel compliance and act as an appropriate future deterrent.

7:38-13.8 Civil administrative penalty amount for failure to obtain a HPAA prior to conducting regulated activities pursuant to the Act

N.J.A.C. 7:38-13.8 identifies the Department's process to determine the amount of a civil administrative penalty assessment for regulated activities conducted without an HPAA. Such regulated activities would include placing impervious surface, exposing, moving or clearing soil or bedrock, or clearing, cutting or removing vegetation including forest without prior authorization in the form of an HPAA from the Department. This section differs from N.J.A.C. 7:38-13.9 because 13.9 contains the process to determine the amount of a civil administrative penalty assessment for all other permit-related violations. The penalty assessment processes were separated in this manner in order to fairly and consistently assess penalties commensurate with real or potential environmental or programmatic harm in a variety of situations involving violations. Violations involving the conduct of regulated activities prior to obtaining an HPAA will in most cases involve a measurable disturbance area. In many cases, the real or potential environmental impact of the violation will be related to the size of the disturbance, along with the other determining factors in N.J.A.C. 7:38-13.8. Therefore, N.J.A.C. 7:38-13.8 assigns points and assesses penalties using the points in Table A at N.J.A.C. 7:38-13.8(c), the area of a disturbance at N.J.A.C. 7:38-13.8(b)2, the conduct of the violator at N.J.A.C. 7:38-13.8(b)1, and the number of special resource areas which were affected by the violation at N.J.A.C. 7:38-13.8(b)3. Larger penalties will result from larger areas of disturbance and for greater numbers of special resource areas impacted.

As described at N.J.A.C. 7:38-13.8(b)1, the conduct of the violator involves a Department assessment of the state of mind of the violator at the time of the violation. For example, did the violator commit a knowing, deliberate, or willful infraction of the rules, or was the violation, inadvertent, unknowing and an unintentional mistake? The penalty for knowing violations of the Highlands Act is higher due to the deliberate action of the violator, the need for a greater incentive to comply with the rules, and to provide a stronger deterrent to future violations. Therefore, such violations are afforded a higher number of points. Major conduct is assessed four points. Major conduct assessments are made where the Department has determined that the violator knew or should reasonably have known about the existence of land use regulations in New Jersey with respect to the Highlands Act and any other statute or regulation due to professional association, past interaction, applications to or permits from the Department.

Moderate conduct involves violations determined to be unintentional but foreseeable acts or omissions by the violator. The moderate designation is used when the Department has determined that violators may have known about the existence of land use regulations in New Jersey with respect to the Highlands Act and any other statute or regulation that would have prohibited the same type of conduct had it occurred outside the Highlands Region. Moderate conduct is assessed two points.

Minor, or unknowing conduct, occurs when the Department has determined that neither major nor moderate conduct applies, or the Department has determined that the violator did not or should not have known of the existence of land use regulations in New Jersey and the obligation to comply with same. Minor conduct would apply to singlefamily homeowners who have had no previous contact with the Department with respect to the Highlands Act or any other statute or regulation that would have prohibited the same type of conduct outside the Highlands Region. Minor conduct is assessed one point.

N.J.A.C. 7:38-13.8(c) contains Table A: the penalty assessment based upon the number of points accrued in 13.8(b), unless adjusted pursuant to N.J.A.C. 7:38-13.7. Table A represents a balanced and fair application of those factors to allow for a consistent, reasonable and fair penalty, yet provides a sufficient incentive to compel compliance and deter future violations.

N.J.A.C. 7:38-13.8(d), provides factors to consider in reducing the penalty assessment where violators have either aggressively come into compliance, removed the violation and restored the resource to its functional state, or where the timely submission of a HPAA application results in the issuance of a HPAA without modification or need for restoration. The Department deems this appropriate since the Department's goal is maximum compliance with the Highlands Act, and the restoration of resource function as quickly as possible following discovery of a violation.

N.J.A.C. 7:38-13.8(d)1i provides a 50% reduction of the daily penalty assessment in Table A when a violator comes into compliance within 30 days of receipt of the Notice of Violation (NOV).

N.J.A.C. 7:38-13.8(d)1ii provides a 25% reduction of the daily penalty assessment in Table A for violations for which an application for an HPAA is submitted within 30 days of receipt of the NOV and an HPAA is subsequently obtained for the unauthorized regulated activity without the need of any modification of the project or restoration.

N.J.A.C. 7:38-13.8(d)2 instructs the Department to subtract the mitigating penalty component calculated pursuant to N.J.A.C. 7:38-13.8 (d)i and (d)ii, if any, from the base penalty provide in Table A to calculate the civil administrative penalty pursuant to this section.

N.J.A.C. 7:38-13.8(e) states that the total civil administrative penalty shall be the amount obtained from Table A, modified, if at all, in accordance with the adjustment factors at N.J.A.C. 7:38-13.8(d)i and (d)ii, and then multiplied by the number of days during which the violation has continued prior to compliance being attained or prior to a formal agreement with the Department requiring compliance.

7:38-13.9 Civil administrative penalties for other than failure to obtain an HPAA prior to conducting regulated activities

The Department is proposing to amend N.J.A.C. 7:38-13.9(a) to clarify that the provisions in this section do not apply to the civil penalties at N.J.A.C. 7:38-13.10 through 12. The penalties in N.J.A.C. 7:38-13.9 would primarily be used for violations of an HPAA and its conditions. Violations of HPAAs will likely include violations of the approved site plan, clearing beyond approved limits, unauthorized construction and location of structures; or a failure to record deed restrictions, keep and submit records, satisfy mitigation requirements, or to allow the Department to enter a property.

N.J.A.C. 7:38-13.9(a) establishes a matrix (Table B) with a horizontal axis on which appears the "seriousness" of a violation and a vertical axis on which appears the "conduct of a violator." The combination of seriousness and conduct results in an assessed penalty. The maximum penalty for a violation assessed at major seriousness and major conduct is \$25,000. The minimum penalty assessment is \$1,000 for a violation assessed at minor seriousness and minor conduct. To determine the amount of the civil administrative penalty assessment per day, the violation would be placed on the matrix at a point consistent with the seriousness of the violation and conduct of the violator. For example, if a violation has been determined to be of major seriousness and moderate conduct, the intersections of the seriousness axis at major and conduct matrix at moderate would produce a penalty assessment of \$15,000 per day. As another example, a violation determined to be a minor seriousness and moderate conduct would result in a daily penalty of \$5,000.

N.J.A.C. 7:38-13.9(b) defines "major," "moderate" and "minor" seriousness. N.J.A.C. 7:38-13.9(b)1 defines "major seriousness." A violation of major seriousness is one that has caused or has the potential to cause substantial harm to human health, safety, and/or the environment, and/or seriously deviates from any critical or especially significant requirement of the Act or any rule and/or condition. For example, the failure to implement any soil and sediment control requirements during construction on a site contiguous to a Category 1 water would be both a serious violation in that the failure to control the offsite erosion of soil or sediment has the potential to negatively impact that clean and environmentally sensitive waterbody and the fish and wildlife dependent upon it. The failure to comply with any and all aspects of a soil and sediment control plan would also represent a serious deviation from a regulatory standard.

N.J.A.C. 7:38-13.9(b)2 identifies moderate seriousness as any violation which has caused or has the potential to cause substantial harm to human health and/or the environment and/or partially deviates from any other requirement of the Act or any rule and/or condition. Assuming, for example, a failure to comply with a soil and sediment control plan, violation example above, if the location of the construction site was not contiguous to a freshwater wetlands, the seriousness would be considered moderate. If the violator had partially complied with the soil and sediment control plan requirements by constructing part of or some of the necessary sediment control measures, the violation would also be considered moderate.

N.J.A.C. 7:38-13.9(b)3 identifies minor seriousness as any violation not included as "major" or "moderate."

N.J.A.C. 7:38-13.9(c) describes how the conduct of a violator will be determined. N.J.A.C. 7:38-13.9(c)1 identifies major conduct as any intentional, deliberate, purposeful, knowing or willful act or omission by the violator. Violation of an approved permit, shall be construed by the Department as knowing or major conduct.

N.J.A.C. 7:38-13.9(c)2 states that moderate conduct shall include any unintentional but foreseeable act or omission by the violator.

N.J.A.C. 7:38-13.9(c)3 provides that minor conduct shall include any conduct not included at "major" or "moderate."

N.J.A.C. 7:38-13.9(d) states that the daily penalty amount will be the amount obtained from the Table B matrix.

7:38-13.10 Civil administrative penalty for submitting inaccurate or false information

N.J.A.C. 7:38-13.10(a) establishes the Department's authority to assess a civil administrative penalty against a violator who knowingly, recklessly, or negligently makes a false or inaccurate statement, representation, or certification in any application, record, or other document filed or required to be maintained under the Highlands Act.

N.J.A.C. 7:38-13.10(b) states that each day, from the day of receipt by the Department of the false or inaccurate statement, representation, or certification until the day of receipt by the Department of a written correction by the violator, shall constitute an additional, separate and distinct violation.

N.J.A.C. 7:38-13.10(c) identifies the process by which the Department will determine the amount of a civil administrative penalty assessment for the submission of the false or inaccurate statement, representation, or certification. N.J.A.C. 7:38-13.10(c)1 establishes civil administrative penalties for each knowing false statement, representation, or certification by the violator at no less than \$5,000 and not more than \$10,000 per act or omission. N.J.A.C. 7:38-13.10(c)2 addresses reckless or negligent false statements, representations, or certifications, and established the civil administrative penalty, per act or omission, as not less than \$1,000 and not more than \$2,500 per violation.

N.J.A.C. 7:38-13.10(d) allows the Department to increase or decrease the civil administrative penalty in an amount no greater than the maximum amount nor less than the minimum amount described in N.J.A.C. 7:38-13.10(c), on the basis of four factors.

The first factor at N.J.A.C. 7:38-13.10(d)1 allows for an adjustment based upon the compliance history of the violator with respect to the Highlands Act and any other statute or regulation that would have prohibited the same type of conduct had it occurred outside the Highlands Region. The second factor at N.J.A.C. 7:38-13.10(d)2 allows adjustment based on the impact of the violation on the environment or any regulatory decisions made by the Department using the errant submission. The third factor at N.J.A.C. 7:38-13.10(d)3 allows adjustment based on the nature, timing and effectiveness of any measures taken by the violator to mitigate the effects of the violation and/or to formally correct the errant submission for which the penalty is being assessed. The fourth and final factor at N.J.A.C. 7:38-13.10(d)4 is the impact (or lack thereof) of the violation upon other parties and their property.

7:38-13.11 Failure to allow entry

N.J.A.C. 7:38-13.11(a) establishes the Department's authority to assess a civil administrative penalty for those who refuse, obstruct, or impede immediate entry and inspection of any site, land, premises, area, building, facility or property.

N.J.A.C. 7:38-13.11(b) indicates that each day that a violator refuses, obstructs or impedes immediate lawful entry by a Department representative shall be an additional, separate and distinct violation.

N.J.A.C. 7:38-13.11(c) establishes two categories of refusal. The higher penalty is reserved for a refusal in instances where the violator is required to have or has obtained an HPAA or authorization. The holder of an HPAA is aware of the statutory mandate to

allow entry and the damage regulated activities can cause to the environment of the Highlands Region. Therefore, the Department has a strong interest in being able to enter and inspect those sites at will and this type of refusal will result in a civil penalty assessment of \$10,000 per violation.

The second category of refusal at N.J.A.C. 7:38-13.11(c)2, addresses all other refusals and establishes a civil administrative penalty of \$5,000 per violation.

N.J.A.C. 7:38-13.11(d) allows the Department to adjust the civil administrative penalty for refusals in an amount no greater than the maximum amount described in N.J.A.C. 7:38-13.11(c)1 nor less than the minimum amount in the range described in N.J.A.C. 7:38-13.11(c)2, on the basis of 3 factors.

The first factor at N.J.A.C. 7:38-13.11(d)1 allows an adjustment for the compliance history of the violator, as previously described.

The second factor at N.J.A.C. 7:38-13.11(d) 2 allows an adjustment based upon the impact of the Department's inability to inspect or sample on the environment, other persons or their property, or any regulatory decisions made by the Department.

The third factor at N.J.A.C. 7:38-13.11(d) 3 allows an adjustment based on the nature, timing and effectiveness of any measures taken by the violator to mitigate the effects of the violation or to allow subsequent Department entry for inspection.

7:38-13.12 Economic benefit

N.J.A.C. 7:38-13.12(a) provides the Department with the authority to increase a civil administrative penalty in order to remove the economic benefit in dollars that a violator has realized as a result of violating, or delaying compliance with, a rule and/or

order, so long as the total penalty assessed against the violator does not exceed the maximum allowable amount assessed in accordance with N.J.A.C. 7:38-13.5.

Where a violator's economic benefit was derived from more than one violation, N.J.A.C. 7:38-13.12(b) requires the Department to apportion the total economic benefit among the violations from which it was derived so as to increase each civil administrative penalty to an amount no greater than the maximum allowed at N.J.A.C. 7:38-13.5.

7:38-13.13 Appeal of an administrative order and/or notice of civil administrative penalty assessment

N.J.A.C. 7:38-13.13(a) permits a violator to request an adjudicatory hearing to contest an administrative order, and/or a notice of civil administrative penalty assessment issued under this chapter. Violators requesting an adjudicatory hearing, shall submit the information contained at (a) 1 through 6. Each item is necessary for the Department to determine whether the appeal meets the requirements in the Administrative Procedure Act for a hearing.

N.J.A.C. 7:38-13.13(b) provides the address for hearing requests.

N.J.A.C. 7:38-13.13(c) provides that hearing requests must be received by the Department within 20 calendar days after the violator receives the notice of civil administrative penalty assessment and/or the administrative order that is being contested, or the Department will deny the hearing request.

N.J.A.C. 7:38-13.13(d) states that the violator must submit all of the items required in 13(a) or the hearing request may be denied.

N.J.A.C. 7:38-13.13(e) indicates that 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 governs the conduct of adjudicatory hearings.

7:38-13.14 Settlement of an administrative penalty

N.J.A.C. 7:38-13.14(a) affords the Department the discretion to settle any civil administrative penalty assessed pursuant to this subchapter, based on an evaluation of the eight factors identified. All these factors are similar to those considered by the Department for assessing various penalties and have, therefore, been explained previously.

7:38-13.15 Notice of violations recorded on property deed

The Highlands Act at N.J.S.A. 13:20-35g allows the Department to record notices of violation on property deeds. Pursuant to N.J.A.C. 7:38-13.15, the Commissioner has the authority to order the Department to file an NOV and/or order with the clerk or registrar of deeds and mortgages in the County where a violation occurred that has not yet been remedied, so that it is attached to the deed of the property on which the violation has occurred. This would provide notice to anyone doing a property search that there is an unresolved violation on the site. The NOV and/or order will remain attached to the deed until the violation has been remedied and the Commissioner orders the notice of violation removed.

7:38-13.16 Duty to provide information

N.J.A.C. 7:38-13.16 authorizes the Department to require an applicant or permittee to provide any information the Department requires to determine compliance with any provision of the Highlands Act, an HPAA, or any rule and/or condition. This requirement is provided in the Highlands Act at N.J.S.A. 13:20-35h.

7:38-13.17 Penalty collection

The Highlands Council has the authority to direct the penalties in accordance with the Highlands Act at N.J.S.A. 13:20-35j. N.J.A.C. 7:38-13.17 provides that all penalties collected shall either be used by the Department for the acquisition of lands in the preservation area or by any development transfer bank used or established by the Council to purchase development potential in the preservation area.

7:38-13.18 Civil penalty

N.J.A.C. 7:38-13.18(a) states that a person shall be subject to a civil penalty upon order of a court if the person violates the Highlands Act or this chapter, violates an administrative order or a court order issued pursuant to the Highlands Act or this chapter, or fails to pay in full a civil administrative penalty assessed under this chapter.

N.J.A.C. 7:38-13.18(b) states that a civil penalty shall not exceed the maximum allowed for permit violations at N.J.A.C. 7:38-13.8 and 13.9.

N.J.A.C. 7:38-13.18(c) repeats the provision of the Highlands Act at N.J.S.A. 13:20-35e and states that a civil penalty may be collected, with costs, in a summary proceeding pursuant to the Penalty Enforcement Law, N.J.S.A. 2A: 58-1 <u>et seq</u>. Further, the Superior Court has jurisdiction to enforce the penalty enforcement law in conjunction with the Highlands Act and this chapter.

7:38-13.19 Criminal action

N.J.A.C. 7:38-13.19(a) states that in accordance with the Highlands Act at N.J.S.A. 13:20-35 (specifically 35f), the Department may petition the Attorney General to bring a criminal action against any person who purposely or negligently violates any provision of the Highlands Act at N.J.S.A. 13:20-32 (rules and regulations establishing environmental standards for the preservation area), an HPAA issued pursuant to the Highlands Act at N.J.S.A. 13:20-34 (review of applications for Highlands permitting

reviews; findings and approval), or any rule or regulation adopted pursuant to the Highlands Act (see N.J.A.C. 7:38-13.19(a)1). Criminal prosecutions may be brought if a person commits such an offense a second time (N.J.A.C. 7:38-13.19(a)2), or knowingly makes a false statement, representation, or certification in any application, record, or other document filed or required to be maintained under the Highlands Act (see N.J.A.C. 7:38-13.19(a)3).

SUBCHAPTER 14 ADOPTED GENERAL PERMITS

The Highlands Act at N.J.S.A. 13:20-32d authorizes the Department to"provide for the issuance of a general permit, provided that the department adopts rules and regulations which identify the activities subject to general permit review and establish criteria for the approval or disapproval of a general permit." In general, the Department issues general permits for specific types of regulated activities that, as a group, have de minimus impacts on the resource in question. Issuing a general permit for activities implies that the types of activities can be categorized and their limits defined. Finally, adopting a general permit implies that the review of the application will be quicker and easier. The Department believes that in order to issue a general permit for a certain category of activities satisfy the requirements at N.J.A.C. 7:38-6.2 (standard requirements for all HPAAs). The Department believes that the two proposed general permits are for activities that as a group satisfy the requirements at N.J.A.C. 7:38-6.2 and are, therefore, appropriate to consider for adoption.

7:38-14.1 Highlands General Permit 1 - Habitat Creation and Enhancement Activities

Proposed N.J.A.C. 7:38-14.1 establishes a general permit to conduct habitat enhancement or creation that is sponsored or substantially funded by a Federal or State agency or other entity. Proposed N.J.A.C. 7:38-14.1(a) provides that such activities include habitat creation and enhancement in Highlands open waters as necessary to

implement a plan for the restoration, creation or enhancement of the habitat and water quality functions and values of Highlands open waters. Proposed N.J.A.C. 7:38-14.1(b) contains a list of agencies and programs that promote habitat creation and enhancement activities. Applicants proposing activities in conjunction with these programs will qualify to use the proposed general permit.

Proposed N.J.A.C. 7:38-14.1(c) outlines what must be demonstrated to the Department in order to show that a proposed activity is consistent with the intent of the proposed general permit. Proposed N.J.A.C. 7:38-14.1(d) states that the sole purpose of the activities that qualify for the proposed general permit must be habitat creation and enhancement and cannot be incidental to another activity.

Proposed N.J.A.C. 7:38-14.1(e) lists the type of activities authorized with the proposed general permit. Each of the proposed activities has been used for habitat creation and enhancement projects in other elsewhere in the state. For example, altering hydrology (proposed N.J.A.C. 7:38-14.1(e)1) and regrading at proposed N.J.A.C. 7:38-14.1(d)4 are common tools used for wetland mitigation. Breaching a structure to allow water into an area (proposed N.J.A.C. 7:38-14.1(e)2) is commonly used for wetland mitigation in tidal areas. Providing nesting boxes or structures and altering vegetation (proposed N.J.A.C. 7:38-14.1(e)3 and (e)5, respectively) are habitat enhancement methods used throughout the State's fish and wildlife management areas.

Proposed N.J.A.C. 7:38-14.1(f) contains the conditions each application must meet in order to qualify for the general permit. Proposed N.J.A.C. 7:38-14.1(f)1 and 2 require that activities be conducted in such a way as to minimize impacts to and the loss of Highlands open waters and their buffers. These provisions ensure that water quality is maintained and the conditions at N.J.A.C. 7:38-6.2(a)2 and 4 are satisfied. The conditions for compliance with the general permit at proposed N.J.A.C. 7:38-14.1(f) 4 through 8, that address the protection of various specific Highlands resource areas and are necessary to ensure compliance with the conditions at N.J.A.C. 7:38-6.2(a)1, 3, 5 and 7. Proposed

N.J.A.C. 7:38-14.1(f)9 pertaining to dam removal contains requirements that are necessary to ensure compliance with other Department regulations, specifically N.J.A.C. 7:20 (Dam Safety regulations) and N.J.A.C. 7:7A-5.18 (Department's freshwater wetlands general permit for dam removal). In this way, N.J.A.C. 7:38-14.1(f)9 ensures compliance with N.J.A.C. 7:38-6.2(a)6 and 8. Finally, proposed N.J.A.C. 7:38-14.1(f)3 requires that the area of habitat created or enhanced must be protected from future development by a conservation restriction. This provision ensures that all the benefits derived from the authorized activities are protected.

Proposed N.J.A.C. 7:38-14.1(g) states that the Department shall not charge a fee for this general permit. The Department believes the activities are not only beneficial to the Highlands resource, but in many cases will be funded by grants from other agencies. The Department believes that grant funding is best used to accomplish the habitat creation or enhancement rather than reimbursing the Department for its review costs.

Proposed N.J.A.C. 7:38-14.1(h) states that if there are other proposed activities requiring a different general permit, all activities can be included in the application for the general permit 1 so long as the activities comply with their respective permit conditions.

Proposed N.J.A.C. 7:38-14.1(i) acknowledges that there may be specific activities that are part of a general permit 1 project that are also exempt or unregulated. For example, the wildlife habitat incentive program may fund a project on a farm. Because the activity is not strictly a farming activity, the activity is not exempt and would qualify for this general permit. However, the farm and all its agriculture activities remain unregulated by the Department's regulations.

7:38-14.2 Highlands General Permit 2 - Bank stabilization activities

Proposed N.J.A.C. 7:38-14.2(a) states that Highlands general permit 2 authorizes activities in Highlands open waters and/or their buffers, that is necessary to stabilize the bank of a water body in order to reduce or prevent erosion through the use of bioengineering techniques. Examples of bank stabilization activities using bioengineering are the placement of root wads, tree revetments, or vegetative geogrids along a stream bank. The Department believes it is appropriate to limit the use of the general permit to vegetative and bioengineering methods and to exclude hard structures other methods may result in more significant impacts to the stream environment. Therefore, if it appears necessary to use hard structures to stabilize stream banks, the Department will require an application for an HPAA, which requires the applicant to provide the Department with alternatives to the proposed project.

Proposed N.J.A.C. 7:38-14.2(b) reiterates that the general permit is reserved for vegetative and bioengineering bank stabilization methods.

Proposed N.J.A.C. 7:38-14.2(c) establishes length limits for bank stabilization projects depending upon the method being employed. The Department believes that limits are appropriate because larger scale stabilization activities have greater potential for unintended adverse consequences to Highlands resources. The proposed limitations are consistent with those for projects in wetlands in accordance with N.J.A.C. 7:7A-5.20. In addition, at (c)1 and 3, the Department is incorporating by reference Chapter 16 of the NRCS Engineering Field Handbook. The handbook outlines different types of bioengineering techniques, provides design data, typical details and installation instructions for bioengineering construction. he Department does provide in proposed N.J.A.C. 7:38-14.2(d) that the limits imposed for each type of stabilization method can be used in combination.

Proposed N.J.A.C. 7:38-14.2(e) contains the standards for compliance with the general permit. Again, the standards have been designed so that compliance will satisfy the requirements at N.J.A.C. 7:38-6.2(a).

Proposed N.J.A.C. 7:38-14.2(e)1, 2, 3 and 8 through 11 that require compliance with various Highlands resource area standards are necessary in order to demonstrate that the proposed general permit 2 activity complies with N.J.A.C. 7:38-6.2(a)1, 4, 5 and 7. Proposed N.J.A.C. 7:38-14.2(e)4 and 5, that limit placement of eroded materials and compliance with State soil erosion standards, are necessary to comply with N.J.A.C. 7:38-6.2(a)2 and 3. Proposed N.J.A.C. 7:38-14.2(e)7, that limits how and where stabilizing materials are placed, ensures compliance with N.J.A.C. 7:38-6.2(a)6 and 8.

Proposed N.J.A.C. 7:38-14.2(e)6 prohibits combining this general permit with other activities that do not qualify for a general permit. For example, activities under general permit 2 may be combined with habitat creation and enhancement activities under general permit 1 but cannot be combined with a linear development, for example, since there is no general permit for linear development. Proposed N.J.A.C. 7:38-14.2(e)10 requires that all vegetative materials used for bank stabilization be native and non-invasive. Finally, proposed N.J.A.C. 7:38-14.2(e)13 requires that all proposed be consistent with the goals of the Highlands Act. If the Department does not deem an activity consistent with the Highlands Act, it will not approve that activity regardless of whether the activity appears to comply with the requirements for a general permit.

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Social Impact

The rules proposed for readoption with amendments will continue the positive social impacts of the existing rules that regulate major Highlands development proposed in the preservation area by maintaining the natural resources of the Highlands Region. The Highlands Region provides drinking water to one-half of the State's population, according to the Legislature. Two hundred ninety-two (292) municipalities located in 16 counties receive some or all of their potable water from the Highlands. The stringent regulation of activities that could negatively effect this critical resource benefits all New Jersey residents.

The Department is amending N.J.A.C. 7:38-2.4 to identify additional categories of activities for which an HRAD will not be required in advance of an application for an HPAA. This amendment will save applicants who propose such activities both time and money.

The proposed amendments to septic density at N.J.A.C. 7:38-3.4 will continue to protect the quality of the water in the preservation area by requiring 88 acres of forested land or 25 acres for all other types of land per one single sewage disposal unit. Therefore, the proposed amendment provides a positive social impact by preserving the ability of a landowner to develop a parcel without water quality degradation. In addition, the proposed amendments allow for non-contiguous clustering so that property owners can accumulate enough land to place more than one sewage disposal unit on a parcel. This clustering of development provides a positive social impact by encouraging a sense of community, preserving larger parcels of land with no development, reducing the amount

of impervious surface (primarily by reducing the length of access and connecting roads) and, generally, promoting more desirable growth patterns.

The proposed amendments regarding linear development at N.J.A.C. 7:38-3.6 (Highlands open waters) and N.J.A.C. 7:38-3.8 (steep slopes) require applicants to explore alternatives to developing a parcel for which a driveway is needed. The proposed amendments will have a positive social impact because the rules give interested parties the opportunity to purchase the property for uses other than development, while assuring that the current property owner receives compensation for the land. The requirement for applicants to explore use of transfer of development rights (TDRs) also results in a positive social impact because the community involved in a TDR program determines the location of sending and receiving areas.

The Highlands Act emphasizes the value of forests and the need to preserve them as part of a strategy intended to protect the water quality and natural habitats within the Highlands Region. The Highlands Act at N.J.S.A. 13:20-3 defines the disturbance of onequarter acre or more of forest as "major Highlands development" subject to regulation. N.J.S.A. 13:20-30 authorized the Department to adopt interim standards for the protection of upland forests and N.J.S.A. 13:20-32 directed the Department to prepare regulations prohibiting development disturbing upland forests. The proposed amendment to N.J.A.C. 7:38-3.9 modifying the method of identifying forested areas will have a positive social impact by ensuring that areas containing the characteristics of a forest in the Highlands Region will be properly identified and protected under these regulations.

The proposed amendments to N.J.A.C. 7:38-6.6 modifying the type of activities that qualify an area for brownfield designation and a waiver pursuant to N.J.S.A. 13:20-33b(2) will have a positive social impact. The Highlands Act at N.J.S.A. 13:20-10b(7) recognizes the need to provide redevelopment opportunities for current or formerly contaminated areas consistent with the stringent environmental standards applicable to development in the preservation area. The proposed amendments to N.J.A.C. 7:38-6.6

will be more inclusive with regard to the types of projects that are afforded the opportunity to clean up a contaminated site and redevelop in a way that is consistent with the Regional Master Plan adopted by the Highlands Council. This provides positive social impacts including the remediation of contaminated sites and growth that is compatible with the Highlands region.

The two new general permits proposed in N.J.A.C. 7:38-14 will have a positive social impact of making it easier to conduct activities in the preservation area that will create or enhance existing wildlife habitat or stabilize stream banks, thereby improving water quality. In addition, wildlife habitat and streams provide aesthetic and recreational benefits.

The remaining proposed amendments are clarifications or administrative changes to the Department's application review process which will have a neutral to positive social impact by affording the public a better understanding of the Department's regulations and procedures. For example, the Department is proposing in Subchapter 11 a separate process for assessing Highlands applicability determinations. This amendment will have little effect on the public since it clarifies the Department's current procedures for processing these applications.

Economic Impact

The rules proposed for readoption with amendments will continue the positive economic impact of the existing rules. This analysis summarizes the land types affected by the Highlands Act, the environmental and ecological services provided by these Highlands resources, evaluates the statewide economic benefits and costs saved with the rules in place, and analyzes the impacts the rules may have on development in the Highlands preservation area.

The rules proposed for readoption with amendments affect the following public services and land areas:

- Water supply allocation;
- Drinking water and wastewater treatment;
- Impervious surfaces;
- Highlands open waters including wetlands;
- Flood hazard areas;
- Steep slopes (over 10 percent grade);
- Upland forests;
- Habitats for rare, threatened and endangered species;
- Historic and archaeological resources; and
- Areas containing unique and irreplaceable resources, that is, unique ecological communities, vernal habitats and scenic resources.

Services provided by the Highlands

In recent years, scientists and others have realized that natural ecosystems provide services of great economic significance (see e.g. Daily 1997). In fact, the natural and built environments can be regarded as parts of a single integrated system. The New Jersey Highlands Region currently provides a wide variety of environmental and ecological benefits to New Jersey residents, such as surface and groundwater purification, soil retention, floodwater impoundment, and others (see Table 1).

Table 1: Highlands Economic Services by Land Type						
Landform	Water & Air	Recreation/tourism	Agriculture	Biodiversity	Property	Resources
Forests	soil retention; air filtration	open space & parks; hiking & camping; hunting & wildlife viewing areas	soil retention & nourishment	habitat; migra- tion corridors (if areas are contiguous)	enhanced value (for near-by parcels)	timber; spec approved fo hunting
Wetlands	water & air	open space; canoeing;	retention of	habitat; migra-	enhanced	fish; species

	filtration	hunting; wildlife viewing areas	soil moisture	tion corridors (if areas are	value (for near-by	approved for hunting
		viewing areas		contiguous)	parcels)	nunning
Meadows		open space; farm	cropland &	habitat; migra-	enhanced	small game
& grass-		vacations; birding	pasture land	tion corridors	value	(approved s
lands				(if areas are	(near-by	
				contiguous)	parcels)	
Surface	Drinking	open space; boating,		stream-flow;	enhanced	approved fis
waters	water;	canoeing, fishing &		habitat; migra-	value (for	species (wit
	precipitation	swimming		tion corridors	near-by	catch limits)
	(due to evap-			(if contiguous)	parcels)	
	oration)					
Aquifers	Drinking water		soil moisture	plant water		
	(local			supply		
	communities)			& nourishment		
Flood zones	Retention of		soil moisture	temporary		
	floodwater;			habitat; migra-		
	precipitation			tion corridors		
	(evaporation)			(if contiguous)		
Barren land		open space; scenic				
		views (if elevated)				
Historic		tourist attractions &	historic status	may protect	enhanced	
sites &		recreation resources;	may protect	species located	value	
districts		local educational uses	some farms	in historic	(near-by	
				districts	parcels)	

Source: NJDEP analysis based on Daily (1997).

While all of these services are important, the Legislature characterized the preservation of the Highlands' water quality as an issue of "State level importance." According to the most recent data available to the Department, the Highlands Region provided about 34 percent of the potable water used in New Jersey in 1999 (NJGS 2004). That water is distributed both within the Highlands Region and to downstream areas in Northern New Jersey. In total, 292 municipalities in 16 counties receive some or all of their potable water from the Highlands Region. A large part of Northern New Jersey receives over half of its potable water from the Highlands. Assuming without proof that this vital service could be replaced, the cost to New Jersey taxpayers would be enormous. Estimates of the value of the water supplied by the Highlands and the cost of replacing the natural water supply and purification services provided by the Highlands Region are presented later in this analysis.

Economic Value of the Services

This section analyzes the economic value of the benefits expected from the rules proposed for readoption with amendments. In this context, avoidance of a cost that would be incurred if the rules were not readopted is equivalent to a benefit. The section is organized by the general subject matter of the rules.

Water Supply and Water Quality

The Highlands Region (HR) provides drinking water for 2.1 to 2.5 million people in New Jersey (Highlands Task Force 2004). The Highlands municipalities themselves, communities along the Passaic River, and the Greater Newark area receive between 80 and 100 percent of their potable water supply from the Highlands Region. Another large portion of Northern New Jersey receives between 20 and 60 percent of its potable water from the Highlands Region, and Bergen County's municipalities get up to 20 percent of their potable water from the Highlands Region (NJGS 2004). The Highlands Region contains the majority of New Jersey's reservoirs and accounts for 50 percent or more of the watersheds of the following water purveyors: United Water of New Jersey, North Jersey District Water Supply Commission, Passaic Valley Water Commission, New Jersey-American Water Company, and Elizabethtown Water Company (NJGS 2004).

Water supply and water quality are closely related, since water quality standards determine how much of the total natural water supply can actually be used by people, and water supply determines the level of dilution of contaminants, a key factor in water quality. Water in the Highlands is rated as being among the purest in the State, even though in recent years concentrations of some undesirable substances have increased, including nitrates, dissolved solids, sodium, and chloride (Highlands Task Force 2004). The most common sources of these contaminants all relate to development, including fertilizer runoff and sewage (nitrates), soil erosion (solids), road salting (sodium), and drinking water or wastewater treatment (chloride). In terms of organic contaminants

(which typically also reflect development pressure), 33 percent of the aquatic communities sampled under the Department's Ambient Monitoring Network (AMNET) exhibited some impairment, although only 1 percent were rated "severe" (Highlands Task Force 2004).

Despite the adverse trends just noted, the waters of the Highlands continue to be of such high quality that they help improve the quality of downstream surface waters. (The majority of the groundwater withdrawn in the Highlands is used in the Highlands.) This fact becomes especially important during drought years and in the summer, when natural stream flows (including those in the Highlands) are reduced. Even at recent in-region withdrawal rates and quality levels, water volume in the Passaic River downstream of the Highlands was insufficient to meet stream flow needs during the 2001 drought. Continued development in the Highlands at current rates would increase in-region water withdrawals, reducing the amount and quality of water available for downstream users which, in turn, would limit potential development in downstream areas.

Drinking Water Treatment

In 2003, the North Jersey District Water Supply Commission (NJDWSC) estimated that Highlands water purveyors spent \$14.3 million dollars annually on chemicals and filter replacements (the principal variable costs) for drinking water treatment, based on a flow rate of 550 million gallons per day (MGD) and a treatment cost (for these two items) of about \$26,000 per year per MGD (Highlands Task Force 2004).

Continued Highlands development at pre-Act levels would result in cost increases in excess of this basic inflation rate due to development-related impacts on water quality such as increased storm runoff from oil-coated road surfaces, groundwater infiltration by pesticides and herbicides used on grass, and increased sediment burdens from deforested steep slopes. These development related impacts would necessitate more frequent filter replacement and use of larger amounts of chemicals to treat the same annual volume of

water (NJDWSC 2004). The actual increase in treatment cost over and above the basic inflation rate noted above would depend on the rate at which development occurs.

In order to estimate the magnitude and range of future water treatment costs, NJDWSC used two detailed development scenarios created by the United States Forest Service (USFS) in its 2002 report on the New York-New Jersey Highlands (Highlands Task Force 2004). The two scenarios were termed "low-constraint" and "highconstraint" by USFS depending on the assumed degree of future regulation of otherwise developable land. The two scenarios can be compared as follows:

- Both scenarios assumed that development would be constrained on public and preserved lands, including State parks, local parks, Federal properties, and lands subject to conservation easements at the time of the study. In addition, the highconstraint scenario assumed that development would be constrained on all water supply lands.
- Both scenarios assumed that development would be constrained on wetlands, open water, and the buffers adjacent to each. However, the low constraint scenario assumed 50-foot buffers for both wetlands and open waters, while the high constraint scenario assumed 150-foot buffers for wetlands and 200-foot buffers for open waters. (In comparison, the Highlands Act increases these buffers to 300 feet within the preservation area.)
- Both scenarios assumed that development on steep slopes will be constrained; however, the low-constraint scenario defined "steep" as a slope in excess of 33 percent, while the high-constraint scenario regulated slopes in excess of 15 percent. (In comparison, the Highlands Act prohibits development on slopes in excess of 20% except for linear development for which there is no feasible alternative, and regulates development on slopes between 10 and 20%)
- Both scenarios assumed that residential development would be constrained in areas zoned for non-residential development and residential areas already built to their zoning capacity at the time of the study. (The Highlands Act regulates residential

development that meets the definition of "major highlands development" and is not exempt by the terms of the Act.)

While the USFS study related to the entire NY-NJ Highlands, the NJDWSC analysis used only the USFS results for the New Jersey portion of the Highlands. With respect to the Highlands preservation area, the limitations on development in the Highlands Act and reflected in the rules are generally more constraining in the preservation area than those assumed in the "high-constraint" scenario used by USFS and NJDWSC; the effects of this difference will be discussed below.

Based on the assumed limits just described, the USFS study found that 21.7 percent of otherwise developable land would be constrained under the "low-constraint" scenario leaving 78.3 percent of developable land actually available for development. However, 56.9 percent of otherwise developable land would be constrained under the "highconstraint" scenario, leaving 43.1 percent of the developable land actually available for development. Based on a projected population increase of 1.12 percent per year and existing household sizes, the study found that the Highlands would reach full build-out in 2035 in the low-constraint scenario and 2021 under the high-constraint scenario. At that point, the Highlands would have a population increase of 47.6 percent under the lowconstraint scenario and 26.3 percent under the high-constraint scenario.

Based on this data, the NJDWSC concluded that in the 50-year period from 2005 to 2054, annual water treatment costs in North Jersey would increase by an average of about 11.05 percent under the low-constraint scenario and about 10.435 percent under the high-constraint scenario. The difference of 0.615 percent/year is attributable to the difference in development constraints in the two scenarios.

Based on this difference in the extent of development, NJDWSC found that water treatment costs for the 50 years from 2005 to 2054 would total some \$30.3 billion under the "low-constraint" scenario and \$25.3 billion under the "high-constraint" scenario. In

short, the high constraint scenario saves Highlands residents a total of The \$5 billion in water treatment costs, or \$100 million annually for 50 years.

In reaching this result, the NJDWSC analysis used an estimate for the NJ Highlands Region's 2000 population that was about 80 percent of the actual 2000 population for the Highlands Preservation and Planning Areas (as defined in the Act) taken together and, therefore, understated the difference in impacts and water treatment costs between the two scenarios. Adjusting for this, the \$5 billion of water treatment cost savings associated with the high-constraint scenario would be \$6.25 billion, of which about 64 percent (based on population) or \$4 billion would relate to the Highlands preservation area. This equates to an \$80 million annual cost saving for the preservation area. Since the Highlands regulations proposed herein for readoption and amendment are largely more stringent than the "high-constraint" scenario used by USFS and NJDWSC, the water treatment cost savings to the preservation area from implementing these regulations would likely exceed \$4 billion dollars, total, or \$80 million a year for 50 years.

While this analysis does not address the future cost of wastewater treatment in the Highlands, those costs also are likely to increase greatly without significant constraint on development. To the extent that the Highlands rules avoid a portion of future cost increases for wastewater treatment, such cost savings are properly counted as an economic benefit attributable to the Highlands rules. Additionally, because the analysis does not address the value of other benefits attributable to land use constraints, such as protection of fish and bird habitat, sequestration of the greenhouse gas carbon dioxide in trees, and preservation of scenic landscapes, the analysis underestimates the cost savings/economic benefit to the Highlands rules.

New Jersey is not the first state to constrain development within a watershed area to protect water supply for a major metropolitan area. In the early 1990s, the USEPA ordered New York City to construct new water treatment facilities to meet EPA standards

for the City's drinking water. The City estimated the cost of complying with the order at \$6 to \$8 billion dollars. However, after analyzing the problem, the City determined that it was more cost-effective to meet the drinking water standard by limiting development in the 1.26 million-acre area of the Catskills that provides most of the City's water (see Daily and Ellison 2002). The limitations on development were achieved through mechanisms such as acquisition of land, conservation easements, stricter limits on stormwater runoff and discharge to ground or surface waters, and financial incentives for environmentally sound development projects (Daily and Ellison 2002). Such watershed management has since been recognized as "the first barrier [to pollution] in a multiple-barrier approach to source water protection." (TPL/AWWA 2001).

The cost of the New York watershed program has been estimated between \$1.5 and \$2.0 billion, or between 19 percent and 33 percent of the cost of constructing new water treatment facilities (Daily and Ellison 2002). Since the gross present value costs avoided are \$6–8 billion (see above), the <u>net</u> present value savings to the City from implementing its watershed program are between \$4.0 to \$6.5 billion, or from \$3.0 to \$4.8 million per MGD, based on a flow rate of 1,350 MGD. Put differently, the expected per-acre cost savings of the development restrictions range between \$3,170 and \$5,150 per acre.

Wetlands and Other Highlands Open Waters

The Highlands Act at N.J.S.A. 13:20-30b(1) mandates a 300 foot buffer around all Highlands open waters located in the preservation area, including streams, lakes, ponds and wetlands. Since these buffers enhance the ecological function of the waters and the life of the animals and plants dependent upon them, the buffers increase the environmental quality of these areas and the economic value associated with wetlands and open waters.

Like other environmental systems, wetlands, streams, lakes and ponds provide important services. For example, economists have identified the following goods and services provided by wetlands (the most-studied type of water-related environment):

- Marketed goods such as fish, shellfish, furs, crops and fuelwood;
- Tangible services to wetlands users such as fishing, hunting, trapping, and other recreation (e.g., canoeing and bird-watching);
- Amenity values (e.g., scenic beauty) and cultural, educational, and scientific values;
- Ecological functions and ecosystem services resulting in certain cost savings such as nutrient filtering and retention, protection from storm damage, property buffering and protection, aquifer recharge, riparian filtering, short-term floodwater storage; and
- Benefits to non-users, including existence value (the value that people derive from knowing that a particular ecosystem exists), option value (the value that people derive from knowing that they have the option to use a particular ecosystem in the future), and bequest value (the value that people assign to being able to bequeath a particular landscape to future generations).

A number of techniques exist for estimating the value of wetlands and the services they provide. Appendix A summarizes the results of a survey of 33 studies by economists at the Economic Research Service of the U.S. Department of Agriculture. Based on that analysis, the "average" wetland would have a per-acre value of almost \$34,000. Based on a New Jersey-specific study currently in process, the Department believes that the value of the average New Jersey wetland is about 60 percent of that amount or \$20,400 per acre. This yields a total annual value of \$839 million for the 41,140 acres of wetlands in the Highlands preservation area (excluding buffers),. Assuming a discount rate of 5 percent over 25 years, the present value of this annual benefit stream is \$11.8 billion.

The aggregate value of the ecosystem services provided by open water such as streams, lakes and ponds is lower than for those provided by wetlands. A New Jersey-

specific study currently in process supports a per-acre value for open water services of about \$13,700 per acre, or two-thirds of the per-acre value for wetlands services. At that level, the total annual benefits from the 17,979 acres of other open waters in the preservation area (excluding buffers) would be \$246 million. Over 25 years at a 5 percent discount rate, the present value of that benefit stream is \$3.5 billion.

Flood Hazard Areas

The Highlands Act at N.J.S.A. 13:20-30b(4) imposes a zero net fill requirement for development within flood hazard areas in the preservation area. Prior to the Act, a 20 percent net increase in fill was permitted for development within a flood plain in the preservation area. The zero net fill requirement in N.J.A.C. 7:38-3.7 means that no fill may be placed within a flood plain unless the same volume of flood storage is created elsewhere in the same watershed. The zero net fill requirement preserves existing flood storage capacity in the preservation area and is expected to have a positive economic impact by preventing or minimizing the economic damage attributable to flooding. The economic costs of floods include:

- Loss of human and animal life and outbreaks of flood-related disease;
- Damage to agricultural land and crops;
- Damage to housing and infrastructure and the cost of relocating inhabitants;
- Loss of development opportunities for currently undeveloped areas that are inundated;
- Loss of flooded lands (possibly offset in certain situations by the creation of new wetlands);
- Added water resource management costs for increased drainage and pumping in lowlying areas; and
- Temporary increases in water purification/sewage treatment costs in flooded or downstream areas.

Historically, flood loss assessment has focused on such direct economic impacts since a value can be assigned to them using conventional economic techniques. The environmental or ecological impacts of floods are rarely reported in official assessments of flood damage, although there was increasing recognition even before Hurricanes Katrina and Rita of the significance of losses that lacked a conventional market value. Flood-related environmental damage from natural factors (for example, saltwater intrusion into a freshwater ecosystem) can be exacerbated by human activities that often accompany development such as vegetation clearance; paving of steep slopes; river regulation and flood mitigation programs that fail to take account of ecosystem needs; intensive agricultural production; and over-all increases in the amount of impervious surface from development. Both individually and cumulatively, these activities exacerbate flood events and adversely affect the health of individual plant and animal species as well as entire ecosystems by facilitating the spread of industrial or agricultural pollutants, invasive organisms, excess nutrients, and sediments during a flood event. (Montz and Tobin 1997). Both the physical effects of flooding and the resulting environmental and economic damage are likely to be amplified in future floods as a result of the continued increase in atmospheric temperature observed over the least few years. To the extent that the Highlands rules preserve flood storage capacity and minimize impervious surface and inappropriate development in the preservation area, the rules are saving New Jersey residents significant flood related costs and their resulting environmental and economic damage.

As of 2002, the aggregate **annual** premium for New Jersey holders of Federal flood insurance policies was about \$110 million, and that aggregate premium represented

slightly over \$32 billion of insurance (National Flood Insurance Program 2003). Flood insurance premiums are based on the cost to replace degraded assets if a flood occurs. Replacement cost is one measure of the economic value of flood control.

Another approach to estimating flood control benefits is the **damage cost method**, which defines the value of flood control as the avoided cost of flood damage. Damage in New Jersey from flooding, measured by the total claims payments under the Flood Hazard Insurance Program, totaled close to \$588 million for the 26.75-year period from January of 1978 through September of 2004, for an annual average of \$22 million (see Table 2). However, flooding is an intermittent occurrence, and the amount paid in a given year ranges from a minimal amount in 2002 to the \$147 million paid out in 2000 for damage in 1999 from Hurricane Floyd.

Table 2: New Jersey	Flood Insurance a	nd Loss Data (\$000)			
Year Ended 9/30	NFIP Payments	Cumulative from 1/1/78			
1998	27,335	420,735			
1999	3,977	424,712			
2000	147,093	571,805			
2001	1,414	573,219			
2002	226	573,445			
2003	8,618	582,063			
2004	6,496	588,559			
Number of claims paid through 9/30/04 69,872					
Source: National Flood Insurance Program (2004)					

A third method is the **defensive/preventive expenditures technique**, which defines the benefit of flood control as the avoided cost of minimizing or eliminating the risk of flooding (for example, by adopting the proposed rule, building or strengthening levees, etc.). The most widely used flood control measures for inland areas in the U.S. are:

- Construction/establishment of dikes/levees;
- Wetland restoration/creation;
- Elevation of low-lying areas through use of fill; and
- Avoidance or removal of development (especially impervious surface) in flood plains.

The Highlands rules proposed for readoption with amendments use the last of these flood control measures. Unit cost estimates for the first three of these measures are available from a variety of sources, including earlier studies on the cost of adaptation to climate change response. Estimates from one study range from about \$72,000 to floodproof an existing building to \$6.3 million to construct a small dam (see Table 3).

Table 3: Summary of estimated	one-time costs of flood cont	crol measures
Flood Control Measure	<u>Unit</u>	<u>Cost / unit</u>
Detention structure (small dam)	No. of dams	\$ 6,291,000
Pumping plant/station	No. of plants/stations	1,860,063
Bridge replacement/removal	No. of bridges	1,660,810
Levee/floodwall	1,000 linear feet (11 ft. high)	916,590
Channel relocation/stabilization	1,000 linear feet	735,392
Closure structure/drainage outlet	No. of structures/outlets	450,222
Relocation (buy-out)	No. of transactions	244,917
Flood-proofing (incl. raising)	No. of facilities involved	72,253

Source: USACE (1997) and analyses by NJDEP.

It is difficult to estimate precisely the increase in flood control cost if development in the Highlands continued at its pre-Act rates. It is nonetheless clear that the cost increase could be substantial, and avoidance of such costs is a clear benefit of the rules.

Impervious Surfaces and Steep Slopes

Impervious surfaces interfere with the provision of potable water by preventing infiltration of precipitation to groundwater and by contaminating storm runoff with motor oil, grease, and other substances deposited on such surfaces, thereby increasing the cost of water treatment and degrading the natural environment. Impervious cover also eliminates natural surfaces that absorb rain water, and slow its travel into streams. As a result, flood levels in rivers and streams rise more quickly over time as development increases. While the Highlands Act at N.J.S.A. 13:20-33b(2) allows a waiver of permitting requirements for redevelopment of sites that were previously developed or that contain 70 percent impervious surfaces, there are provisions in the Highlands Act and its implementing rules which restrict and minimize the amount of impervious cover in the preservation area. N.J.A.C. 7:38-6.6(k) requires the removal of impervious surface not required for the redevelopment, N.J.S.A. 13:20-30b(6) prohibits impervious surfaces of greater than three percent of the land area of a lot in existence on August 10, 2004 and N.J.S.A. 13:20-28 limits specified types of development to one-quarter acre impervious cover. To the extent that these last three provisions slow the placement of impervious cover in the preservation area, they slow the increase in costs associated with treatment of water pollution, a positive economic impact.

Impervious surfaces also interfere with groundwater aquifer recharge, which in many parts of the Highlands represents the predominant water supply source. Inadequate water supply creates added costs to society in times of drought such as lost revenues or added watering costs for landscaping firms, athletic fields, and golf courses. Inadequate supply also increases the possibility of having to impose water use restrictions on the public.

Adequate groundwater supply is also essential for maintaining the baseflow of streams, which in turn is critical for the survival and health of aquatic ecosystems, including fish.

The preservation area contains 16,343 acres of land with slopes greater than 20 percent. Another 88, 980 acres have slopes between 10 percent and 20 percent. The Highlands Act at N.J.S.A. 13:20-30b(7) prohibits the development of slopes with a grade of 20 percent or more in the preservation area, aside for linear development for which there is no feasible alternative. The limits on development of slopes are designed to minimize and avoid the adverse consequences of such development such as stream flooding, property damage from material washed down from higher elevations, and deposition of suspended solids into streams that kills aquatic life and adversely affects the wildlife that feeds upon it. The existing rules on steep slopes also benefit the forests and species habitats located on such slopes. The Department is not aware of economic studies that quantify these benefits directly.

Upland Forests

The Highlands Act at N.J.S.A. 13:20-32k prohibits development that disturbs upland forests "in order to prevent oil erosion and sedimentation, protect water quality, prevent stormwater runoff, and protect threatened and endangered animal and plant species site and designated habitats." Aside from their environmental significance, forests are one of New Jersey's most economically valuable natural resources. A 2004 study by the Department of the economic benefits of the parks and forests administered by the Department's Division of Parks and Forests statewide concluded that New Jersey forests produced a total economic benefit of \$1.1 billion annually, or about \$15 billion in present value terms (over a 25 year-period at a discount rate of 5 percent), as follows:

 Benefits from *recreation/tourism*: \$589 million annually, including benefits from the direct and indirect economic activity generated by recreation and tourism expenditures;

- Benefits from *ecosystem services* (for example, watershed protection/hydrological services, wildlife/biodiversity conservation, carbon sequestration and storage, soil erosion control, and groundwater protection): a *minimum* of \$325 million per year;
- Benefits from the direct and indirect economic activity generated from the *operating* and capital expenditures for the State Parks and Forests: \$85 million per year; and
- Benefits reflected in the willingness of State residents to pay for the *existence* of the State Parks and Forests: a *minimum* of \$62 million annually.

The benefits also include support of over 24,000 jobs statewide. Other benefits identified as being of significant value, although not quantified, are positive impacts on property values, education and other public services, and partial regulation of development. Forests also provide habitat for plant and animal species which provide positive economic impact, as noted previously.

The benefit estimates cited above are for 312,844 acres of State parks and forests, representing an annual value of \$3,393 per acre. For the 257,000 acres of upland forest in the Highlands preservation area, the benefits implied by this per acre figure would be about \$872 million annually or \$12.3 billion in present value terms. Even if the forests in the Highlands produced significantly lower per-acre benefits, the Highlands rules will generate substantial economic value for the residents of New Jersey through measures protecting forests in the preservation area.

Rare, Threatened and Endangered Species Habitat

The protections afforded habitats of rare, threatened, or endangered species by the Highlands rules will have a positive economic impact such as in-state expenditures on such things as park fees, equipment, meals, lodging, and gasoline by out-of-state residents who visit New Jersey to engage in wildlife viewing (including bird-watching); job creation and other purchases for conservation activities; and the indirect economic

benefits (including jobs) created when the income from all of the foregoing direct activities is recycled through the State's economy. These activities will also generate substantial sales or income tax revenue, thereby having a positive fiscal impact for State and local governments.

In addition, many New Jersey residents derive satisfaction from the existence of the species protected through the proposed rules and would be willing to pay to preserve these species and their habitats. While this benefit is difficult to quantify, studies indicate that it is substantial on a statewide basis (see below). Also, real property located near preserved areas has been found to have a higher market value than property located at a greater distance from such areas. The total economic benefit from all of these factors is estimated in the tens or hundreds of millions of dollars annually, and in the hundreds of millions or billions of dollars on a present value basis. This amount far outweighs the estimated costs of protecting rare, threatened and endangered species and their habitats under the proposed rule.

Benefits of Species Protection

The New Jersey-New York Highlands are habitat for many rare, threatened and endangered species. US Forest Service data indicate that about 61.5 percent of the New Jersey-New York Highlands Region functions as habitat for wildlife species listed as threatened, endangered, or "of concern" by State or Federal authorities (see Table 4).

TABLE 4: NY-NJ HIGHLANDS WILDLIFE HABITAT BY CONSERVATION				
<u>Status</u>				
<u>Status</u>	Acres	<u>% of Total</u>		
Federally threatened or endangered	195,488	13.8%		
State endangered	310,263	21.9%		
State threatened	198,440	14.0%		

Species of concern	15,426	1.1%
Potential habitat	153,004	<u>10.8%</u>
Total Highlands habitat for above species	872,621	61.5%
Non-habitat portion of Highlands	546,204	<u>38.5%</u>
Total NJ/NY Highlands Region	1,418,825	100.0%
Source: New York-New Jersey Highlands Regional Study, 2002 Update.		

The same study estimates that 7.9 percent of the NJ/NY Highlands constitutes habitat for imperiled plant species and 20 percent are "important natural communities" noted for their biodiversity. (Note: the plant and animal habitats and other areas cited here overlap in varying degrees.) The Department's own data indicate that the New Jersey Highlands provide critical habitat for 30 wildlife species classified as threatened or endangered. There are 81 endangered plant species and 65 plant species of concern in the Highlands preservation area.

United States Fish and Wildlife Service survey data show that 1.9 million out-ofstate visitors watched wildlife in New Jersey in 2001, spending \$1.24 billion on travelrelated expenses (meals, lodging, etc.) and equipment (USFWS 2002). In five years, the total dollars spent grew over 43 percent from \$864 million (an average increase of 7.4 percent per year). While these numbers declined nationally, they increased in New Jersey, where wildlife watchers spent on average \$652 per person in 2001, almost 28 percent more than the national average of \$510. Overall, wildlife watching, recreational hunting and fishing contributed \$2.2 billion to the State's economy in 2001. The rules proposed for readoption with amendments will help preserve the State's appeal as an ecotourism destination and increase the economic benefits associated with that activity.

The Department has analyzed the "sales" benefits of tourism (for example, purchases of food, lodging, gasoline, etc. by non-local tourists), the resulting tax revenue benefits,

and the indirect employment benefits in both private and public sectors resulting from spending the increased tax revenues (see Appendix B). Based on this analysis, ecotourism in New Jersey can be credited (in the aggregate) with \$145 million in direct and indirect economic activity (including \$8.7 million in sales tax revenues) and the support of over 4,000 jobs. The share of these benefits attributable to endangered and threatened species in the Highlands preservation area cannot readily be determined. Nonetheless, by increasing the level of protection for the habitats of endangered and threatened species, the proposed rules will help preserve this important sector of the State's economy.

Conservation management is another important source of economic benefits for the State. Every dollar spent *directly* on conservation management generates *indirect* sales as a result, for example, as the salaries paid by conservation agencies are spent in the economy. (Activities by private parties taking advantage of conservation designations, such as ecotour guides, kayak rentals, etc., will also lead to increased economic activity.) The level of those indirect sales depends on the economic multiplier for the area in question: the average multiplier for the US is about 2.0, which means \$1.00 of indirect sales per dollar of direct sales. If all 300,000 acres (excluding buffers) of Landscape habitat ranked 3, 4 or 5 in the preservation area were to be managed for species protection at an average cost of \$16 per acre (Catania 2003), the resulting expenditure of 300,000 acres x \$16/acre x 2.0 would generate about \$9.6 million per year in total benefits from economic activity associated with conservation management. However, since some level of conservation activity would exist in the absence of the proposed rule, the likely economic benefit would be somewhat lower.

Designation of land as rare, threatened or endangered species habitat can have positive impacts on the value of nearby properties. One study, Standiford and Scott (2001), examined a rapidly urbanizing area in Southern California to evaluate the extent to which increases in protected open space would influence the market value of 544 private lands and homes. The study showed that a decrease in the distance from an

individual home to the nearest permanent open space (oak stands) of about 10 percent or about 90 feet would result in an increase of about 2.5 percent or \$7,353 in total home value and an increase of about 20.4 percent or \$29,400 in total land value. For the 544 homes as a group, the increases in aggregate value were about \$4 million for homes and \$16 million for land. While these amounts are modest, the data demonstrates that proximity to preserved open space (and, by extension, species habitat) actually **increases** overall property value.

Many studies have demonstrated benefits to society as measured by willingness to pay for the recovery and conservation of threatened and endangered species. Appendix C and Table C-1 summarize the results of a 1996 analysis of twenty-one such studies; that analysis, when extrapolated to New Jersey, found an aggregate willingness to pay for species protection amounting to tens or hundreds of million of dollars annually, or hundreds of million or billions of dollars on a present value basis. As with most such studies, the investigators in the 1996 study emphasized animal species rather than plants, reflecting the fact that "charismatic" animal species such as bald eagles (in New Jersey and elsewhere) and "totemic" animal species such as salmon (in the Pacific Northwest) have commanded most of the public attention and academic literature to date. The Highlands rules protect both plant and animal species.

Table C-1: Average Willingness to Pay (WTP) for Species Protection (2003 \$)					
Species	WTP Type	Per capita WTP-AN (\$)	Per capita WTP-LS (\$)	Total NJ WTP- AN (\$MM)	Total NJ WTP- LS (\$MM)
North. spotted owl	AN	89	1,109	273	3,399
Pacific salmon (1)	AN	80	997	245	3,055
Grizzly bear	AN	59	735	181	2,253
Whooping crane	AN	45	561	138	1,719
Sea otter	AN	37	461	113	1,413
Gray whale	AN	33	411	101	1,260
Bighorn sheep	AN	27	336	83	1,030
Bald eagle	(2)	27	331	83	1,014
Humpback whale	LS	18	221	55	677
Red-cockaded woodpecker	AN	17	212	52	650

Sea turtle	AN	17	212	52		650
Monk seal	LS	12	153	37	2	469
Atlantic salmon	AN	10	125	31		383
Squawfish	AN	10	125	31		383
Gray wolf	LS	8	100	25		306
Striped shiner	AN	7	85	21	,	260
Arctic grayling (3)	LS	2	19	6		58
WTP = willingness to	pay	AN = annual				
MM = millions		LS = lump sum				
Notes		CPI-Urban-All	Items	Interest rate	5.00%	
1 Also known as steel	head	1993	143.7	No. of years	20	
2 Avg. of AN & LS estimates		2003	183.3	NJ households	3,064,645	
3 Also known as cut-throat		Inflator, '93-'03	1.276	NJ population	8,484,431	
trout						
Source: 21 WTP studies reported in Loomis and White (1996) and calculations by NIDEP						

Source: 21 WTP studies reported in Loomis and White (1996) and calculations by NJDEP. Estimated NJ population and number of households as of 7/1/01 from US Census Bureau website.

Consumer Price Index data from US Bureau of Labor Statistics website.

The estimated present value economic benefit of species protection for New Jersey over 25 years at a discount rate of 5 percent are: travel-related spending (\$14.4 billion); sales from ecotourism (\$2.0 billion); conservation activities (\$1.0 billion); and support of an estimated 4,350 permanent jobs (see Table 5). Like the other dollar amounts in this section, these figures represent lower bounds for the estimated benefits because they do not include plant species.

TABLE 5: ESTIMATED BENEFITS OF SPECIES PROTECTION TO NEW JERSEY*					
Source of Methodology	Measure Used	Benefit/Year	PV Benefit*		
US FWS 2001	Travel-related spending	\$ 1,240 million	\$ 14,432 million		
IUCN 1998 (1995 study)	Sales from ecotourism	145 million	2,044 million		
Industrial Economics 2002	Conservation activity sales	70 million	987 million		
IUCN 1998 (1995 study)	Sales tax revenues	9 million	127 million		
IUCN 1998 (1995 study)	Jobs from ecotourism sales	4,350 jobs	n/a		
See Appendix C	WTP to preserve non-use	10's to 100's of	100's of millions		

values of E&T species m	illions of \$ to	billions of \$
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*Figures shown are taken from statewide analyses and are not limited to species protection benefits in the Highlands.

In conclusion, based on a variety of analytic methods and a number of studies, the total annual benefits to the State of conserving rare, threatened or endangered species and their habitats can be measured in the hundreds of millions of dollars. While prorating these figures would not be an accurate method for scaling these statewide results to a regional level, the preservation area does contain about 13.5 percent of the State's total inventory of habitats as identified by Landscape map rankings 3, 4 and 5 and will, therefore, generate some portion of the economic benefits described above.

Costs of Species Protection

The costs of species protection include the **direct** costs of species protection programs; the **indirect** costs would include such things as reductions (if any) in economic profits or property values resulting from the imposition of limits on development of land designated as endangered or threatened species habitat, plus the economic consequences (if any) that might flow from such reductions. A study of the impacts of the Federal Endangered Species Act suggests that private costs are greatly overestimated (Meyer 1998).

The direct costs of protecting rare, threatened or endangered species are largely the costs of managing the habitats in which such species are found. These costs vary widely depending on the type and number of species involved, the nature and extent of the related habitat, the degree of protection sought, the nature of the protective measures, and popular and political interest in the species at stake. The wide range of cost estimates makes generalization difficult. For example, Simmons (1997) found that in 1991,

Federal and state agencies spent \$12.3 million per top priority species, \$1.5 million per middle priority species, and \$29,000 per bottom priority species.

Based on these results, protection for the majority of endangered species studied did not entail significant public spending on a per species basis and, and there is no *a priori* reason to expect large incremental costs for the protection of rare, threatened or endangered species in the preservation area. This is especially likely since much of the threatened or endangered species habitat in New Jersey is already regulated as wetlands, flood plain, stream corridors, preserved open space or State forests.

Historic and Archaeological Areas

A 2004 study by the Department of the 32 historic sites that it administers directly found economic benefits from those sites of about \$150 million annually or \$2.1 billion in present value terms (based on 25 years at 5 percent). In their current condition, these sites yield the following estimated benefits:

- Direct and secondary benefits from expenditures on heritage tourism of \$133.6 million annually;
- Benefits from the public service and scientific value of the artifacts and objects themselves, estimated at a minimum of \$3.3 million annually;
- Benefits reflected in the willingness of State residents to pay to preserve the existence of State Historic Sites, conservatively estimated at a value to residents of \$8.4 million per year; and
- Benefits from the direct and secondary economic activity generated from the operating and capital expenditures for the State Historic Sites: \$4.4 million annually.

The benefits also include support of over 4,100 permanent jobs. Other recognized benefits of sizeable value (although not fully quantified at this time) include positive impacts on property values, neighborhood stabilization, and others. The quantified benefits represent an average of \$4.7 million per site per year, and the Department believes it to be likely that if estimates could be developed for the benefits not yet quantified, total benefits per site would exceed \$5 million annually per site.

Based on data from the State Historic Preservation Office, the Highlands region contains at least 99 historic districts and 434 individual historic sites that are either listed on the State Historic Register or that are eligible for listing. The region also contains four national historic landmarks and 52 archaeological sites, including Revolutionary War sites, sites from New Jersey's early industrial age, and a site with artifacts of the Lenni Lenape Indians. It would be overly simplistic to apply a statewide average to the sites in the Highlands, since every site is unique and since the 2004 study described above focused on a small number of major sites of widely recognized historical significance. The Department believes, however, that the Highlands sites are important both economically and as irreplaceable assets that represent hundreds of years of human investment and environmental capital, and provide a tangible link to our collective past.

Conservative estimates of the economic value of State Historic Sites indicate further yet-untapped economic potential:

The economic impacts of heritage tourism, which are already considerable (based on a conservative estimate of a million visitors annually), could be increased further with aggressive marketing of these sites as tourist destinations for NJ residents and nonresidents as well. NJ has the advantage of a rich, diverse and unique historical legacy coupled with a dynamic tourism sector, a favorable location, and supportive infrastructure.

- The archeological value of the sites is potentially very high given the many historic objects and archeological artifacts already discovered and the many historic and archeological sites in the Highlands that remain to be explored scientifically. The informational value of these collections and their economic worth will likely to increase over time.
- The appreciation in property values of historic sites and districts is a well-established phenomenon nationally, and the Department is seeking funding to perform a similar study in New Jersey. It is highly likely that New Jersey will fit the consistent economic patterns for historic places and districts elsewhere in the U.S.

Given the possibly large unrealized benefits that historic and archeological sites in the Highlands represent, it seems prudent on economic grounds alone to preserve those sites as provided for in the Highlands rules until the sites can be better explored and evaluated for their scientific, cultural, and economic significance. Once those sites are gone, they cannot be replaced.

Summary of Benefits

The expected benefits of the rules proposed for readoption with amendments can be summarized as follows:

- The entire Highlands preservation area would experience benefits of \$80 million annually in avoided drinking water treatment costs.
- 41,140 acres of wetlands (excluding buffers) valued at \$20,400 per acre would be preserved.
- 17,979 acres of open waters (excluding buffers) valued at \$13,700 per acre would also be protected from inappropriate development

- 26,688 acres of flood hazard areas (58,930 acres including buffers) will be protected from inappropriate development, thereby avoiding or reducing flood control and recovery costs, only the magnitude of the savings being uncertain.
- 257,065 acres of upland forests valued at almost \$3,400 per acre will also be protected from inappropriate development.
- 300,388 acres (excluding buffers) of habitat for threatened and endangered wildlife species will be protected from inappropriate development at an estimated total benefit of tens to hundreds of millions of dollars per year.
- 434 individual historic sites, four national historic landmarks and 52 archaeological sites including Revolutionary War sites would be preserved; the average statewide value of such sites has been estimated at \$6 million per site per year.
- Unquantified benefits would be realized due to the protection of areas containing unique and irreplaceable resources such as unique ecological communities, vernal habitats and scenic resources.

These figures cannot be totaled because some of the areas overlap. Note that buffers were included for certain land types, such as flood plains, where the buffers themselves most likely share all the functions of the associated resource and the same economic values applied to these areas. As noted at various points, these figures are in most cases lower bounds for the true values, since some benefits could not be estimated, e.g. avoided flood control costs, benefits of protecting plant species, etc.

As is the case with most economic analyses, this analysis of the economic impact of the Highlands rules incorporates certain assumptions into its assessments since much remains to be learned about the value of the Highlands' critical ecosystems. However, it is clear that the preservation area ecosystems provide very substantial economic value to New Jersey that in many cases is either irreplaceable or replaceable only over extremely long time periods.

Costs of the Rules Proposed for Readoption with Amendments

As documented above, very large benefits especially in the areas of water supply and water quality can reasonably be expected if the rules are readopted. The major costs that are alleged likely are a reduction in the value of privately-owned property located in the Highlands preservation area and a negative impact on the finances of municipalities located wholly or partly in the Area. This section of the economic impact analysis considers these potential costs.

Development capacity

Any analysis of the impact of the Highlands rules on residential development in the preservation area must be prefaced by the observation that the Highlands Act exempts construction and improvement of single family houses under a wide variety of circumstances; and allows the Department to approve major Highlands development (including residential development) in order to avoid taking of property without just compensation or to protect public health and safety (the third waiver for the redevelopment of previously developed property applies to commercial uses. Reconstruction or improvement of residential property is exempt under the Act). A precise measure of the increase in residential development that will occur as a result of the exemptions is not readily available. Such a number would be available only by analyzing property records in 40 to 50 affected municipalities, a study that is currently beyond the Department's resources. Similarly, the increase in residential development occasioned by the Department issuance of waivers is also unknown, since each waiver is based upon circumstances unique to the property and its owner. Nevertheless, it is fair to conclude that the availability of these exemptions and waivers will increase the amount of residential development in the preservation area over time, beyond the levels commonly perceived to be a result of the Act's restrictions on development.

The population of the preservation area, based on census block data from the 2000 Census, is 184,293; that figure has probably increased since then. Between 2000 and

2004, the State's population increased by 3.56 percent or 0.88 percent annually. However, Federal and State estimates of the Highlands population growth in the years since 2000 indicate that population there is increasing at a rate 50 percent above the State as a whole (0.88 percent x 1.5 = 1.32 percent.) At that rate, the 2004 preservation area population would be about 194,000. (Note: For analytic purposes, this estimate is sufficiently precise; a difference of a few thousand people will not materially affect the conclusions that follow.)

Based on an analysis of the residential zoning status of the preservation area as of 2000 (see Table 6), the Department has estimated the number of dwelling units that could be accommodated at full build-out of the preservation area under the 2000 Pre-Act zoning (see Table 7). Based on the State's average household size of 2.68 persons, the full build-out would accommodate about 577,000 people. This figure has led the Department to conclude that:

- Over a 20-year period, that increase represents an average annual increase of 5.6 percent, or 2.0 percent more than the entire Statewide increase from 2000 to 2004 of 3.56 percent.
- Such a population increase would have significant adverse impacts on the economic benefits currently provided by the Highlands.
- The preservation area can accommodate more reasonable population growth that stabilizes well short of the capacity at full build-out implied by this simplified build-out analysis.

Table 6: Highlands Preservation Area Zoning (2000)							
Zoning Description No. of DU Lot Size Total Acres Share of							
Residential	1	0.75	7,916	1.9%			
Residential	1	1	41,112	9.9%			
Residential	1	2	14,439	3.5%			
Residential	1	2	25,878	6.2%			
Residential	1	3	1,812	0.4%			
Residential	1	3	66,300	16.0%			

Residential	1	4	39,718	9.6%
Residential	1	5	123,012	29.6%
Residential	1	6	855	0.2%
Residential	1	10	676	0.2%
Residential	1	20	6,334	1.5%
Bedminster Twp.*	1	1-2-5	1,166	0.3%
Total single-family	_		329,218	79.2%
Residential	2	1	14,883	3.6%
Residential	3	1	3,580	0.9%
Residential	4	1	4,669	1.1%
Residential	8	1	1,989	0.5%
Total multi-family			25,122	6.0%
Total residential			354,340	85.3%
Mixed use	1	1	181	0.0%
Mixed use	2	1	214	0.1%
Mixed use	8	1	877	0.2%
Total mixed use			1,272	0.3%
All other			59,963	14.4%
GRAND TOTAL			415,575	100.0%
Regulated areas are are	as within	the Highlands	Preservation Area	*DU =
that are also within a w	etland, w	ater feature, FE	MA flood hazard	dwelling
area, or 300 ft buffer of	these; id	entified as Lan	dscape 3,4,5 or as	units
upland forest; and/or ch	naracteriz	ed by a slope >	20%.	
2000 zoning data are fr	om the H	ighlands Regio	nal Assessment Upd	ate (CRSSA
2002) and were derived	l by addir	ng new urban ar	eas defined in Lathr	op (2000) to
the 1995/97 land use ca	tegories.			
*Due to Highlands bou	ndary cha	anges, these are	as were not included	l in the
original Highlands stud	y and we	re not assigned	zoning categories in	that study.

Table 7: Simplified HPA Residential Build-Out Analysis					
Zoning Description	No. DU*	Lot Size	Total DU's	Share of Total	
Residential	1	0.75	10,554	4.9%	
Residential	1	1	41,112	19.1%	
Residential	1	2	9,626	4.5%	
Residential	1	2	12,939	6.0%	
Residential	1	3	725	0.3%	
Residential	1	3	22,100	10.3%	
Residential	1	4	9,930	4.6%	
Residential	1	5	24,602	11.4%	
Residential	1	6	142	0.1%	

Residential	1	10	68	0.0%
Residential	1	20	317	0.1%
Bedminster Twp.*	1	1-2-5	583	0.3%
Total single-family			132,698	61.6%
Residential	2	1	29,766	13.8%
Residential	3	1	10,741	5.0%
Residential	4	1	18,674	8.7%
Residential	8	1	15,916	7.4%
Total multi-family			75,097	34.9%
Total residential			207,795	96.5%
Mixed use	1	1	181	0.1%
Mixed use	2	1	429	0.2%
Mixed use	8	1	7,016	3.3%
Total mixed use			7,626	3.5%
TOTAL DU's			215,421	100.0%
Share of total			100.0%	
NJ avg. persons/house	hold (2000 Ce	insus) 2.68		* <i>DU</i> =
Total DU's x avg. hous	ehold size = p	persons 577,3	28	dwelling
Population density (per	r acre)	1.39		units

The State's population is projected to increase to 9.82 million by 2020 and to 10.25 million by 2025 (NJDOL 2004). This population increase will be accompanied by a continuing demand for housing. If the Highlands rules did not exist, a portion of that demand for housing would be satisfied in the preservation area. However, if the proposed rules are readopted with amendments it is logical that the demand would be met outside the preservation area. The Planning Area contains about 175,000 undeveloped acres which are not classified as environmentally sensitive. It is reasonable to expect that at least some of the development displaced from the preservation area would occur in the planning area.

Impact on Property Values

This portion of the economic impact analysis considers the impact of the Highlands rules on preservation area property values. The argument is often made that restrictions on development reduce the value of real estate, since part of that value is the capitalized

net present worth of future development opportunities. However, several points undermine this argument:

- Based on a survey conducted as part of the 2002 Update of the Highlands Regional Study, 84 percent of the forestland in the New Jersey-New York Highlands is privately owned, and nearly 90 percent of the owners live on or near their forestland (USDA 2002). Moreover, the "overwhelming majority" of those owners mentioned aesthetics, enjoyment, or increased property value as the primary reason for owning forestland; timber harvesting was not the primary reason for ownership. In other words, the survey data suggest that forestland (which represents over 60 percent of the preservation area) has not been purchased primarily for speculative purposes but for use and enjoyment in its natural state, although real estate investing is certainly one of the motives for a significant number of landowners.
- Insofar as land value is important, there is a substantial body of evidence indicating that locations proximate to preserved open space, scenic areas, and areas with clean water, experience increases in both land value and housing prices. There is, therefore, a good chance that property owners in the Highlands Region as a whole and in the preservation area in particular would realize **gains** in private wealth under the proposed rules.

There is a substantial body of independent peer-reviewed research which supports the conclusion that proximity to open space (i.e., undeveloped land) and in particular, legally preserved open space, <u>increases</u> the value of privately-owned property rather than reduces it.

The research in question uses a technique called "hedonic price analysis" to estimate the value that people assign to open space and other environmental "amenities" (e.g., scenic views). The approach applies statistical techniques to information on actual real

estate transactions (usually sales of privately-owned homes) to isolate the value that homebuyers assign to the environmental features. For example, if two otherwise identical homes differ only in their proximity to an area of legally protected open space, and if the home closer to the open space commands a higher price in an arm's length sale, then economists will attribute the difference in price to the value which home-buyers assign to being closer to the open space. Since few, if any, houses are identical in all respects save this one, a large sample of home sales must be analyzed using suitable statistical techniques to correct for the many other differences among homes. While hedonic price analysis is complex, it is an accepted economic technique; more detailed presentations of the methodology can be found in Freeman (2003) and other sources.

Many of the early studies using this approach focused on how much more people have paid for homes located in areas with better air quality, greater distances from landfills, etc. The studies considered to be relevant here are mainly studies performed from 2000 to 2003 in the United States that focus on proximity to open space; studies that emphasize greenbelts and golf courses are not included. All of the studies considered here have been published in peer-reviewed journals and were, therefore, conducted mainly by independent, university-based investigators. The research findings relevant to the present analysis can be summarized as follows (see Table 8 for further details):

- In general, the closer a home is to open space, the higher its sale price. The increase in price is usually stronger for open space which is legally protected via public ownership, a conservation easement, or some other enforceable mechanism, as compared to open space which is potentially developable.
- Close proximity to preserved agricultural land has been shown to increase home prices by as much as 2.60 percent, while proximity to developable agricultural land may actually reduce a home's sale price (see Table 8 for supporting studies). The

impact is location-specific, and in some cases there may be no effect on price, either positive or negative.

- A similar positive effect on home prices has been found for proximity to preserved forest land, with a similar negative effect on closeness to developable forest land (see Table 8). The increase in prices approaches 7 percent in some studies. As with farmland, there may be no impact at all in some locations.
- Water bodies appear to be the only environmental feature whose proximity has a
 consistently positive effect on home prices, ranging from a few hundred dollars in
 some studies to thousands of dollars in others (Table 8). Proximity to ocean beaches
 (not relevant to the Highlands) has an even stronger positive effect.
- Proximity to wetlands also has a positive impact on homes prices of as much as 2.80 percent, although zero or negative impacts were obtained in some cases (Table 8).
- Finally, proximity to natural areas and designated wildlife habitat also increases a home's value in some cases (Table 8), although the effects are much smaller in absolute value and probably cannot be separated from the underlying increase in value resulting from proximity to the underlying land type, e.g. forest, wetland, etc.

TABLE 8 Selected Studies of the Effect on Home Prices of Proximity to Open Space

STUDY	R EAL ESTATE MARKET	TYPE OF OPEN SPACE	PROXIMITY MEASURE	PRICE EFFECT	% AVG. PRICE
OPEN SPACE-GENERAL					
Riddel (2001)	Boulder CO 1981-1995	Open space-public	15,000 acres purchased	n/a	+ 3.75%
Irwin (2002)	4 MD co. 1995-99	Open space-preserved- pvt	within 300 ft.	+ \$3,307	+ 1.87%
Irwin (2002)	4 MD co. 1995-99	Open space-public	within 300 ft.	+ \$994	+0.57%
Acharya and Bennett (2001)	New Haven CT 1995-97	Open space-general	add 1% OS in < 1-mi.	+ \$75	+0.06%
Smith et al. (2000)	Wake Co. NC 1995-98	Open space-public	move 650 ft. closer	- \$553	- 0.33%
AGRICULTURAL LAND					
Irwin (2002)	4 MD co. 1995-99	Agricpreserved-pvt.	within 300 ft.	+ \$4,523	+ 2.60%
Irwin (2002)	4 MD co. 1995-99	Agricpreserved-public	within 300 ft.	+ \$2,038	+ 1.17%
Geoghegan et al. (2003)	4 MD co. 1993-1996	Agricpreserved-pvt.	+1% OS <1-mi / <300 ft	\$0/+\$1,306	0% / +0.71%
Geoghegan et al. (2003)	4 MD co. 1993-1996	Agricdevelopable-pvt.	+1% OS <1-mi / <300 ft	\$0/-\$768	0%/-0.51%
FORESTED LAND					
Thorsnes (2002)	Grand Rapids MI 1970-2000	Forest-preserved	directly adjacent	+ \$5,800 + \$8,400	+ 2.90% + 6.80%
Geoghegan et al. (2003)	4 MD co. 1993-1996	Forest-preserved-pvt.	+1% OS <1-mi / <300 ft	\$0 / +\$1,306	0% / +0.71%
Geoghegan et al. (2003)	4 MD co. 1993-1996	Forest-developable-pvt.	+1% OS <1-mi / <300 ft	\$0 / - \$768	0%/-0.51%
Irwin (2002)	4 MD co. 1995-99	Forest-general	within 300 ft.	- \$1,424	- 0.82%
WATER FEATURES					
Mahan et al. (2000)	Portland OR 1992-94	Lake-general	1,000 ft. closer	+ \$1,644	+ 1.34%
Mahan et al. (2000)	Portland OR 1992-94	Stream-general	1,000 ft. closer	+ \$259	+0.21%
WETLANDS					
Doss and Taff (1996)	Suburban St. Paul MN	Wetland-scrub-shrub	move 650 ft. closer	+ \$2,900	+2.80%
Doss and Taff (1996)	Suburban St. Paul MN	Wetland-emergent	move 650 ft. closer	+ \$2,720	+ 2.60%
Doss and Taff (1996)	Suburban St. Paul MN	Wetland-open-water	move 650 ft. closer	+ \$1,980	+ 1.90%
Mahan et al. (2000)	Portland OR 1992-94	Wetland-general	1,000 ft. closer	+ \$436	+ 0.36%
Mahan et al. (2000)	Portland OR 1992-94	Wetland-general	move 650 ft. closer	+ \$286	+ 0.23%

Mahan et al. (2000)	Portland OR 1992-94	Wetland-general	wetland 1 acre larger	+ \$24	+0.02%
Doss and Taff (1996)	Suburban St. Paul MN	Wetland-forested	move 650 ft. closer	- \$960	- 0.91%

STUDY	REAL ESTATE MARKET	TYPE OF OPEN SPACE	PROXIMITY MEASURE	PRICE EFFECT	% AVG. PRICE
OPEN SPACE-OTHER					
Lutzenhiser & Netusil (2000)	Portland OR 1990-92	Natural area	within 1,500 ft.	+ \$10,648	+ 16.10%
Shultz and King (2001)	Tucson AZ 1990	Wildlife habitat-Class II	move 650 ft. closer	+ \$429	+ 0.37%
Shultz and King (2001)	Tucson AZ 1990	Natural area-large	move 650 ft. closer	+ \$81	+0.07%
Shultz and King (2001)	Tucson AZ 1990	Wildlife habitat-Class I	move 650 ft. closer	- \$130	- 0.11%
PARKS					
Lutzenhiser & Netusil (2000)	Portland OR 1990-92	Park-specialty	within 1,500 ft.	+ \$5,657	+ 8.50%
Lutzenhiser & Netusil (2000)	Portland OR 1990-92	Park-urban	within 1,500 ft.	+ \$1,214	+ 1.80%
Geoghegan et al. (2003)	4 MD co. 1993-1996	Park-public	+1% OS <1-mi / <300 ft	\$0/+\$1,306	0% / +0.71%
Anderson and West (2003)	MinnSt. Paul MN 1997	Park-special	move 650 ft. closer	\$0 / +\$600	0% / +0.58%
Anderson and West (2003)	MinnSt. Paul MN 1997	Park-developed	move 650 ft. closer	\$0 / +\$458	0% / +0.44%
Shultz and King (2001)	Tucson AZ 1990	Park-regional/district	650 ft. closer	- \$98	- 0.09%
Shultz and King (2001)	Tucson AZ 1990	Park-undeveloped	move 650 ft. closer	- \$206	- 0.18%
Shultz and King (2001)	Tucson AZ 1990	Park-neighborhood	move 650 ft. closer	- \$568	- 0.49%

Proximity to parks has a variable effect on home prices, with some studies showing strong price increases and some showing price decreases, regardless of the type of park (see Table 8). In the latter case, the price paid for a home was found to decrease as the distance to the nearest park decreased. Apparently parks are not unambiguously positive features for homebuyers in the United States, perhaps due to concerns about traffic, privacy, noise, crime, etc.

It should be emphasized that within each of the above categories, it is the legally protected status of the open space that appears to be critical to enhanced property values. That is, proximity to a legally protected forest, wetland, farmland, etc. increases a home's value more than proximity to a developable forest, wetland, farmland, etc., and in fact closeness to developable open space can reduce the selling price.

By protecting a substantial amount of the Highlands from development, the rules will preserve or increase the value of homes located near such land. To the extent that the rules limit construction of homes in the preservation area (bearing in mind the flexibility waivers and exemptions lend to the Act's limits to residential construction), the rules will increase home prices and land values in the preservation area and elsewhere by channeling home building into less restricted areas. While the benefits appear to generally fall in the range from zero (no effect at all in value) to about a 3 percent increase in value, the economic impact of the Highlands rules on housing and land values can fairly be characterized as generally positive.

Other relevant evidence comes from the prices paid in actual real estate transactions in the Highlands. While data on property sales in general is not readily available outside commercial databases, data on certain open space transactions is available to the Department. For the period 1999-2003, the Green Acres Program acquired approximately 22,400 acres of open space in municipalities located in the Highlands Region, the largest portion of which was located wholly or partially in the

preservation area. Based on the prices paid by the Program for the individual acquisitions, the following average per acre prices were:

Wholly in preservation area (PA)	\$ 1,885
In Highlands Region; partially in PA	\$ 3,379
In Highlands Region; wholly outside PA	\$ 5,516

This information suggests that prices per acre outside the preservation area were higher than those inside, and the further outside the site, the higher the price. Therefore, this data does not provide evidence for a large run-up in land values within the preservation area that allegedly would be "taken away" by the Highlands rules. To the contrary, the data support the argument that proximity to areas of natural beauty and other environmental amenities has a positive influence on property value.

The Department recognizes that Green Acres transactions may not be fully representative of the *absolute* level of real estate prices for the market as a whole. However, the Department believes that the above information does shed light on the *relative* prices for somewhat comparable transactions inside and outside the preservation area and is, therefore, relevant in assessing the possible effect of the Highlands rules on land value.

Impact on Property Taxes

Highlands Region municipalities need not shoulder all the direct costs of bringing zoning plans, development regulations and ordinances into compliance with the Highlands Act and the regional Master Plan, or of implementing a development rights transfer program. N.J.S.A. 13:20-18 affords municipalities and counties in the Highlands Region state aid, planning and technical assistance, grants, and aid for smart growth projects. Municipalities that experience an indirect adverse impact from operation of the Act may obtain financial assistance from the "Highlands Protection Fund" created by

N.J.S.A. 13:20-19 to meet these needs, stabilize property taxes and render other forms of financial assistance to municipalities. Notably, the Act does not allocate relief on the basis of any formula, thereby implying that that the degree of assistance required will be unpredictable and, in some cases, even insignificant. As explained above, there is no basis to presume that Highlands Act's limits on development will have a negative economic impact on Highlands residents or their municipal governments.

It is often asserted that because local governments in New Jersey (including municipalities, counties, and school districts) derive most of their revenue from real property taxes, development is beneficial to local governments. The reasoning underlying the theory is that adding to the stock of taxable property in a community allows local government to spread the tax burden more widely, permitting tax rates to be stabilized or reduced for any given local public expenditure level.

However, such a one-sided focus on tax revenues ignores the substantial costs of development to society, even apart from the loss or reduction in the quantity or quality of the services provided by a natural area in its undeveloped or less-developed state. Those costs include the need for more schools and increased municipal services including hospital, police and fire services, etc. For the preservation area specifically, the societal cost of development would include:

- The cost of highway infrastructure. The Highlands Region and the preservation area are currently served by only two major east-west interstate highways, Routes 80 and 78. There are no north-south roads in the Highlands with the carrying capacity of these interstates. If the Highlands Region continues to develop, there would be increasing pressure for additional highways at an increasingly greater construction and maintenance cost.
- The cost of water supply. Currently only 24,421 acres or 5.9 percent of the preservation area lies within water purveyor service boundaries according to the

Department's 1998 GIS data. Even if that figure has increased, it is clear that most of the preservation area is not served by a water purveyor and would need to rely on private wells. Drilling and maintaining such wells, testing and treating well water or, in the alternative, extending water purveyor service would all entail significant investment and on-going maintenance cost.

The cost of sewer service. According to NJDEP data, only 12.3 percent of the preservation area lies within an approved sewer service area (SSA) (see Table 9). In terms of population density, an additional 10.6 percent appears potentially able to meet generally accepted cost-effectiveness criteria for connection to sewer systems. Merely realizing that potential would require a major economic expenditure and would leave 77.1 percent of the preservation area without sewer service but with increased infiltration of contaminants to groundwater.

Table 9: Highlands Preservation Area by Infrastructure Status					
Water Supply Status	<u>1995/1997</u>	<u>2000</u>	<u>% of 2000</u>		
Outside Water Purveyor Service Boundary*	391,154	391,154	94.1		
Within Water Purveyor Service Boundary*	<u>24,421</u>	<u>24,421</u>	<u>5.9</u>		
	415,575	415,575	100.0		
* Water purveyor boundaries are based on a 1998 GI	S data layer; gpd	l = gallons per	day.		
Sewer System Status	<u>1995/1997</u>	<u>2000</u>	<u>% of 2000</u>		
Sewer lines in-ground, regulated area	3,733	5,740	1.4		
Sewer lines in-ground, unregulated area	4,431	4,922	<u>1.2</u>		
Approved for > 20,000 gpd and in-ground	8,164	10,662	2.6		
Approved for > 20,000 gpd but not in-ground*	24,044	<u>21,546</u>	<u>5.2</u>		
SSA approved for $> 20,000$ gpd	32,208	32,208	7.8		
SSA approved for 2,000 - 20,000 gpd**	<u>19,104</u>	<u>19,104</u>	<u>4.6</u>		
SSA approved for $> 2,000$ gpd	51,312	51,312	12.3		
Not approved; potential for sewers>2,000 gpd***	<u>36,826</u>	43,870	<u>10.6</u>		
Total approved + potential SSA>2,000 gpd	88,138	95,182	22.9%		
Not approved & no current potential>2,000 gpd	327,437	320,393	<u>77.1%</u>		
Total Highlands Preservation Area	415,575	415,575	100.0%		

SSA=sewer service area. For systems<20,000 gpd, "sewer" = systems discharging to ground water.

*Mostly undeveloped areas. **Mostly areas discharging to groundwater. ***See Appendix D for criteria used in estimating the size of this category.

It is apparent that substantial additional development of the preservation area would require major economic investment and would greatly increase pressure on the preservation area's natural and human-built systems. It is reasonable to conclude that the costs to society and to state and local taxpayers occasioned by increased development could very well offset or exceed whatever direct benefits development might bring to the affected regions and communities.

Other Potential Impacts

A number of other benefits are often asserted to accompany low-density residential development. To the extent that those benefits would be foregone under the Highlands rules, they would represent the cost of the rules. Recently, some of the nation's leading experts on the costs and benefits of different development patterns examined a number of these asserted benefits of low-density development and arrived at the following conclusions (see Burchell et al. 2005):

Housing-specific benefits

- lower land and housing costs: partly offset by increased commuting costs; increases loss of natural capital (i.e., clean water, air, natural habitat)
- lower density: preference for lower density may reflect negative impact of sprawl on urban areas (drain on resources needed to maintain attractiveness of such areas); increases loss of natural capital
- larger average lot sizes: difficult to quantify value; increases loss of natural capital
- larger homes and bigger rooms: actual extent of occurrence is not clear.

Community-related benefits

- Increased consumer choice in terms of taxes and local public services: difficult to quantify value; permits suburbs to adopt exclusionary zoning which aggravates concentration of poor and racial minorities in urban areas.
- Greater citizen participation and influence due to smaller local government units: same as increased consumer choice; reduces ability to influence decisions with regional impacts, inefficient duplication of municipal services, loss of potential savings from economies of scale.
- More homogeneous communities (desired by some): results from exclusionary policies that directly promote lack of diversity and *de facto* segregation by income and race.
- Better public schools and lower crime rates: these tend to result from exclusionary policies that indirectly ensure a higher average socio-economic status among residents of such areas; creates drain on urban areas.

Infrastructure-related benefits

- Reduced commuting times and less intense traffic congestion: studies are equivocal as to whether this actually occurs; any advantage that may exist is being eroded by sprawl-induced increase in automobile usage.
- Lower transportation costs due to higher cost of public transit compared to private vehicle use: cost/mile may be lower (although highways are also expensive), but miles traveled are higher, so overall cost may not differ much; ignores environmental costs of automobile use, e.g. air pollution, green-house gas emissions, dependence on expensive imported oil, etc.
- Reduced consumption of society's resources from use of leapfrog development instead of in-fill development or redevelopment, e.g. of brownfields: actual

extent of occurrence is not clear; effect (if any) depends on many factors for which there is little if any good data, hence impossible to quantify claimed savings; negative impacts on urban areas; increases loss of natural capital

Conclusions

Based on the foregoing analysis, the Department believes that the rules proposed for readoption with amendments will continue the net positive economic impacts of the existing Highlands regulatory program. The availability of permit waivers, statutory exemptions, funds for State and private acquisition of property, and municipal assistance from the Highlands Protection Fund and other sources will have a significant, positive economic impact upon taxpayers in the Highlands Region. The environmental resource protection standards established under the rules will prevent the destruction or deterioration of irreplaceable natural capital of enormous value that provides high-value services to the State on a long-term basis; will save billions of dollars in future avoided costs related to water treatment and other infrastructure improvement; will create significant numbers of jobs associated with the identification, protection and enjoyment of natural resources; will permit a reasonable level of development to proceed in the preservation area, including redevelopment of contaminated sites; and will likely yield a general increase the value of property in the preservation area by preserving nearby high quality natural resources.

Appendix A: Valuation of Wetlands Ecosystem Services

In 1998 economists at the Economic Research Service of the US Department of Agriculture published a summary analysis of 33 studies of the value of various ecosystem services provided by wetlands (USDA 1998). Since some of the studies evaluated more than one wetlands service, the total number of data points exceeded 33. Where a particular value appeared to be an extreme outlier, it was eliminated.

The values in the USDA study were expressed in 1992 dollars. Inflating these figures to 2004 dollars using the All-Items Urban Consumer Price Index published by the US Department of Labor, the aggregate value of the wetlands services reviewed would be almost \$479,000 per acre on average (see Table A-1). This represents a one-time (i.e., capitalized) valuation, not an annual amount. At a discount rate of 5 percent over a 25-year period, for example, the annual worth of this capitalized benefit estimate would be almost \$34,000 on average.

Table A-1: Economic Value of Ecosystem Services of Wetlands					
	Valuation	No. of		Median value	
Ecosystem Service	Technique	Studies	1992 \$/acre	1992 \$/acre	
"Ecological" functions:					
Water supply/aquifer recharge	Replacement cost	2	169,121	137,247	
Nutrient filtering/retention	Replacement cost	2	59,983	51,874	
Short-term floodwater storage	Damage cost	2	35,075	35,075	
Water quality/riparian filtering	Willingness to pay	2	3,965	3,965	
Protection from storm damage	Damages avoided	2 3	46	46	
Various functions*	Replacement cost	3	<u>9</u>	<u>6</u>	
Subtotal		n/a	268,197	n/a	
<u>Other goods and services:</u> Fish/wildlife habitat—non-	Willingness to pay	12	83,159	32,903	
users	winnighess to pay	12	05,159	52,905	
Fish/wildlife habitat—users*	Various methods	5	1,545	623	
Hunting	Various methods	11	1,019	1,031	
Marketed goods— fish/shellfish*	Market value of product	7	733	n/d	
Recreational fishing*	Willingness to pay	5	405	n/d	
Amenity/cultural/scenic value*	Housing value & WTP	3	326	448	
Other recreation*	Willingness to pay	6	239	<u>244</u>	
Total	6 17	n/a	355,622	n/a	
Change in Urban All-Item CPI	1992-2004		34.64%		
Mean present value	2004 dollars/acre		478,809		

n/a = not applicable n/d = not determinable after outliers are removed * = high and low outliers eliminated

Source: R Heimlich et al. (1998)

Appendix B: Estimation of New Jersey Ecotourism Benefits

A. Sales benefits

1.	Estimated non-state percent of protected ar	rea use ¹ 32 percent
2	Annual recreation visitor days ²	1 060 333

Ζ.	Annual recreation visitor days	1,009,555
3.	Average daily expenditure ³	\$212
4.	Direct sales (1)x(2)x(3)	\$72,543,551
5.	Indirect and induced sales multiplier ⁴	2.0
6.	Sales benefits from tourism	\$145,086,902

B. TAX REVENUE BENEFITS

1.	Sales benefits (A.6)	\$145,086,902
2.	Retail sales tax (state)	6.0 percent
3.	Sales tax revenue from tourism	\$8,705,214

C. Job benefits from tourism sales

1.	Sales benefits (A.6) in million dollars	145
2.	Multiplier for jobs created per million dollars ⁵	30
3.	New jobs from tourism sales	4,350

Note: The Department has not estimated the income tax revenues from the additional jobs and the impact from spending those revenues. The above analysis is based on a method reported in IUCN (1998).

¹ Based on wildlife-related visitor data for NJ from the 1991, 1996, and 2001 surveys of the U.S. Fish and Wildlife Service (USFWS 2002). The percentage equals non-resident participants divided by total participants in wildlife watching in NJ. The USFWS assumes that economic activity related to NJ residents is already reflected in state economic data.

² Also from USFWS survey data.

³ Averaged from USFWS survey data.

⁴ Usually between 1.2 and 2.8 in the U.S., varying with the complexity of the local economy. More isolated areas tend to have lower multipliers because a larger portion of the spending occurs outside the area (Industrial Economics 2002).

⁵ This factor varies by industry, ranging from 10 to 50 jobs per million dollars of sales in the U.S. tourism industry.

Appendix C: Willingness to Pay for Species Protection

Twenty-one studies of the public's willingness to pay (WTP) to protect endangered and threatened species were analyzed in a 1996 meta-analysis by Loomis and White (1996). The meta-analysis reported its results in 1993 dollars; NJDEP inflated these amounts to 2003 dollars using the Urban All Items Consumer Price Index as reported by the US Bureau of Labor Statistics.

Some of the studies reported a single lump sum payment amount, while others reported an annual payment figure (see Table C-1). For studies reporting only an annual WTP, a lump sum equivalent was calculated by present valuing the annual amount over 20 years using a 5 percent discount rate; for studies reporting only a lump sum WTP, an annual equivalent was calculated by amortizing the lump sum over the same number of

years at the same interest rate. (Interest rates as low as 3 percent and time frames of 30 years or more are often used in evaluating the long-term impacts of government actions from a societal perspective, and 5 percent and 20 years are conservative by comparison in that they result in substantially lower estimates of present value benefits.)

While the species evaluated in these studies differ from those found in New Jersey, the Department believes that the results are indicative of those that would be found if similar studies were performed in the State. In that regard, the studies summarized above all found an annual per capita WTP of less than \$100 (in 2003 dollars). However, a 2000 study (Eubanks et al.) conducted for the Department showed that residents were willing to pay over \$200 per year to improve protection for shorebirds on Delaware Bay. Because of New Jersey's high per capita income, the WTP for species protection could be *higher* in the State than elsewhere.

All of the studies summarized in the 1996 meta-analysis by Loomis and White reported a per capita willingness to pay, whether on an annual or a lump sum basis. In theory then, such results could be extrapolated to an entire state simply by multiplying the species-specific results by the State's estimated population (8.484 million for New Jersey as of July 1, 2001). The Department believes that such a procedure might overstate the actual WTP of the State's residents, and therefore estimates of statewide willingness to pay are perhaps better derived using the much smaller number of households in the State.

On that basis, the benefits to society from protecting a single species (as measured by willingness to pay for such protection) amount to hundreds of millions or even billions of dollars in present value terms; even the less "popular" species evoke a WTP that translates into hundreds of millions of dollars in present value benefits to society (see Table C-1). Moreover, the estimates provided above are highly conservative for a number of reasons:

- The decreasing supply of endangered and threatened species and habitats in the densely populated northeastern United States can be expected to lead to increased value for New Jersey's share of these natural assets due to basic laws of supply and demand. In economic terms, as the supply of such species and habitats decreases, the marginal value of the remaining species and their habitats will increase at any given level of demand. This increase in value will be strengthened if and as disposable income and demand for outdoor recreation in the region continue to increase, as many expect.
- With proper habitat conservation efforts, the annual benefits of species protection should last much longer than 20 years and possibly indefinitely, resulting in higher estimated present value benefits regardless of the interest rate. For example, an increase from 20 to 30 years (holding the interest rate constant) would increase estimated present value benefits by 23 percent.
- The 5 percent discount rate used in the analysis is much higher than the 3 percent rate often used by economists in evaluating government actions with long-term societal impacts, and use of a lower rate would substantially increase the estimated present value benefits regardless of the time horizon. For example, use of 3 percent rather than 5 percent (holding the number of years constant) would increase estimated present value benefits by 19 percent.
- Use of *both* a 30-year time horizon *and* a 3 percent discount rate would increase estimated present value benefits by 57 percent since each of these changes amplifies the effects of the other.

It should be noted that the estimates discussed above are expressed on a speciesspecific basis. While totals for a number of species could also be given, the Department believes it to be unlikely that the public's WTP for each of a number of species considered alone can simply be added to arrive at a meaningful aggregate amount.

Nonetheless, it seems likely that the public's aggregate willingness to pay to protect multiple species is undoubtedly larger than the amount it would be willing to pay to protect a *single* species.

Appendix D: Criteria Used to Identify Areas with Potential for Sewer Service

In estimating the portion of the Highlands preservation area not in an approved sewer service area but with sufficient population density to meet conventional criteria for sewer system cost-effectiveness, the Department used the following three sewer "indicators".

1. Residential areas with population density > 1 house per 2 acres in the NJDEP 1995/97 Land Use / Land Cover GIS layer

Residential (High Density Or Multiple Dwelling) – 1/8 To 1/5 Acre Lots1110			
Residential (Single Unit, Medium Density) $->1/8$ To $\frac{1}{2}$ Acre Lots	1120		
Residential (Single Unit, Low Density) – >1/2 To 1 Acre Lots	1130		
Residential (Rural, Single Unit) – >1 To 2 Acre Lots	1140		
Mixed Residential – Mixture Of 1110, 1120 And 1130	1150*		

*J.R. Anderson et al., 1976.

2. Residential areas estimated to have increased in density to 1 house per 2 acres in the 2000 Census:

To identify these areas, 2000 Census data were used to determine areas of residential development with lot sizes of 2 acres or less by dividing the area of each polygon by the number of housing units counted within each census block polygon to get average lot size.

3. The following non-residential land use categories from the NJDEP 1995/97 Land Use / Land Cover GIS layer were identified as potential sewer areas because in the Department's experience these land use categories are more often than not served by sewers when located within centralized sewer service areas:

Commercial & Services	1200
Military Installations	1211
Industrial	1300
Industrial & Commercial Complexes	1500
Mixed Urban Or Built-Up	1600

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Federal Standards Analysis

Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq. (as amended by 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 Federal Standards Analysis.

The Highlands Act delineates a contiguous area in the northwest of the State of New Jersey as the "Highlands Region" based on common physical and geographic features. It further divides the Region into two parts: the preservation and planning areas. The Highlands Act mandates that the Department's rules provide enhanced environmental standards for development in the preservation area to protect its important water, ecological and cultural resources. By inference, the planning area is deemed to have fewer critical resources and may be more suitable for development.

The enhanced standards in the preservation area apply to all aspects of potential development. They include strict limitations on obtaining new sources of potable water and constructing new wastewater facilities, and preclude development in areas containing statutorily-identified, environmentally sensitive features. Further, the Highlands rules require a comprehensive analysis of the environmental impact of all project components.

A comprehensive regional approach to regulation is not common in Federal environmental regulation. The Federal Environmental Protection Agency (EPA) establishes one set of standards nationwide and then requires individual states to establish their own, comparable standards. States often retain the ability to devise more stringent or regional standards if appropriate. There is no requirement to apply all Federal standards to a single site in a comprehensive manner. That is, certain aspects of a proposed development may comply with a standard and be approved while other aspects may not comply and may be denied. There are no comprehensive Federal standards that apply specifically to the Highlands Region like the State rules proposed for readoption herein. Therefore, there is no basis for comparison between these rules in their entirety and any one specific Federal regulation. However, some of the individual standards comprising a Highlands Preservation Area Approval do have comparable Federal regulations.

Comparison of Individual Components of the Highlands Regulations to Federal Regulations

The Federal Clean Water Act (33 U.S.C. §1251 et seq.) provides the fundamental requirements for protection of the nation's surface and ground water resources, including wetlands. It establishes standards for safe drinking water, classification of surface and ground water, discharges to surface and ground water and, in Section 404 of the Act, an extensive program for the regulation of discharge of dredge and fill material to waters of the United States, including wetlands.

The Department's Highlands Preservation Area Approval (HPAA) review is comprised of several components that may or may not have comparable Federal standards.

Water Supply

There are no comparable Federal standards for water supply.

Safe Drinking Water

The Highlands rules require compliance with the State's safe drinking water standards. The Safe Drinking Water Act (Federal SDWA) was enacted in 1974, and amended in 1986 and 1996 (42 U.S.C. § 300f et seq.). The EPA promulgated regulations for twenty-three drinking water contaminants at 40 CFR §141 in 1975. The Federal SDWA regulations were amended in the late 1980's and 1990's such that there are now more than 90 regulated microbiological, chemical and radiological parameters.

In response to the passage of the Federal SDWA, the State SDWA was passed in 1977 and the Department's Safe Drinking Water regulations were adopted in 1979. The Department adopts and incorporates by reference all National Primary Drinking Water Regulations, 40 CFR §141, as amended and supplemented, including all siting requirements, filtration and disinfecting requirements, maximum contaminant levels, monitoring and analytical requirements, reporting requirements, public notification requirements, and record keeping requirements as the New Jersey primary drinking water regulations applicable to all public water systems. Therefore, the Highlands rules proposed for readoption with amendments are no more stringent than the Federal regulations with respect to safe drinking water standards.

Septic Density

The Federal Clean Water Act (CWA), 33 U.S.C. §1251 et seq., as amended by the Water Quality Act of 1987 (PL 100-4), requires the establishment of water quality standards for all surface waters of the United States. The Water Quality Act of 1987 amended the CWA to require the adoption of criteria for toxic pollutants identified as causing or contributing to an impairment of a waterbody's designated use(s). Individual states are given the primary responsibility for developing and adopting surface water quality standards (SWQS) applicable to their waters. The Department's SWQS provide a higher level of protection for waterways designated as "Category One (C1)." A waterway

can be designated C1 in New Jersey because of its exceptional ecological, water supply or recreational significance or because it is an exceptional shellfish or fisheries resource. In addition, Federal regulations implementing the CWA at 40 CFR §131.12 requires states to develop and adopt antidegradation policies and implementation procedures to ensure that the level of water quality needed to protect existing uses is maintained, and that water quality better than necessary to protect existing uses is maintained and protected.

The Highlands Act identified the waters of the Highlands preservation area as deserving of the highest level of water quality protection. The Highlands Act at N.J.S.A. 13:20-30b(2) requires that any new or expanded point source discharge shall not degrade existing water quality, while N.J.S.A. 13:20- 30b(5) mandates that the Department apply Category One SWQS antidegradation policies to Highlands open waters. The Highlands rules for septic density have been specifically formulated to assure that these antidegradation standards are achieved. Limiting septic density is consistent with Federal requirements since there are no specific Federal standards of this type available for comparison.

Impervious Surface limitations

There are no current, analogous Federal requirements for stormwater management planning. However, there are several Federal programs concerning stormwater runoff and nonpoint source pollution control. The Federal Clean Water Act (33 U.S.C. §1251 et seq.) requires permits under Section 402 of that Act for certain stormwater discharges. The Department's requirements to obtain such permits are set forth in the New Jersey Pollutant Discharge Elimination System Rules, N.J.A.C. 7:14A. Since impervious surface generally increases non-point source pollution, limiting the amount of impervious surface reduces the potential for non-point source pollution. Therefore, the imposition of impervious surface limits in the Highlands is consistent with Federal requirements.

Highlands open waters

The definition of "Highlands open waters" in N.J.S.A. 13:20-3 and N.J.A.C. 7:38-1.4 is broader than the definition of "waters of the United States" contained in the Federal Act (and Section 404 regulations, 40 CFR §230.10(b)3)). For example, Federal regulations in some cases exclude artificial features while the Highlands rules include all water features in the preservation area except swimming pools.

N.J.A.C. 7:38-3.6 requires a 300-foot buffer adjacent to all Highlands open waters. Further, only linear development, a narrow class of activities, is permitted within a Highlands open water or its buffer. In comparison, the Federal Act directs states to identify and designate its waters for various levels of protection, as previously described, but does not specify the measures to be taken to achieve the desired level of protection. Therefore, the imposition of a buffer and the strict limitation on activities within the waters and buffer in the Highlands rules is consistent with Federal requirements, even though there is no comparable Federal regulation available for comparison.

Pursuant to the Highlands Act, "Highlands open waters" include wetlands. As previously mentioned, the Federal regulations contain extensive standards and regulation for the deposition of dredge and fill material into wetlands (Army Corps of Engineers regulations for the implementation of Section 404, 40 CFR §230.10(b)3). The Army Corps regulations do not require buffers adjacent to wetlands and permit, with limits, many activities in addition to linear development. For linear development activities, the Army Corps regulations limit the length of a crossing if the activity is to be permitted pursuant to a simplified permit process (Nationwide permits #14 for minor road crossings and NWP#7 for utility lines). Those who wish to exceed the limits of a Nationwide permit are required to obtain an Individual permit. The Individual permit application process requires an alternatives analysis demonstrating that there is no practicable

alternative to the size and scope of the proposed activity. If a project is approved, mitigation must be provided.

The Highlands rules at N.J.A.C. 7:38-3.6(b) require an alternatives analysis for all linear development but do not explicitly limit the length of the disturbance. However, regardless of the length, mitigation is required for all disturbances pursuant to N.J.A.C. 7:38-3.6(c). Consequently, the Highlands rules treat all proposed linear developments through Highlands open waters and their buffers like Federal Individual 404 Permit applications.

The Department is proposing general permits to permit two activities suitable for the Highlands preservation area, habitat creation or enhancement activities and bank stabilization. The Army Corps' Nationwide permit #27 allows stream and wetland restoration activities similar to the activities being proposed as part of the Department's general permit for habitat creation and enhancement. Therefore, the Department's proposed general permit is consistent with and no more stringent than the comparable Nationwide permit.

Nationwide permit 13 allows bank stabilization activities. The Department's proposed general permit is different from the Nationwide permit because the Department's permit requires the use of bioengineering methods for bank stabilization and does not authorize stabilization that involves hard structures such as gabions or rip-rap. The Department believes that these limitations are appropriate in the preservation area since they promote water quality by encouraging reestablishment of vegetation on stream banks—something that hard structures do not do. Some may view the bioengineering requirement as more stringent than the Nationwide permit because it reduces the types of bank stabilization methods available under the Department's general permit. . However, the Department believes that the bioengineering requirement is necessary for the general permit to satisfy the standards and conditions in the Highlands Act.

Floodplain standards

The Department's authority for regulating development within flood hazard areas and riparian corridors comes solely from State statutes, specifically N.J.S.A. 58:16A-50 et seq., 58:10A-1 et seq. and 13:1D-1 et seq. N.J.A.C. 7:38-3.7 establishes a zero net fill requirement in the preservation area pursuant to N.J.S.A. 13:20-30b(4) and is not promulgated under the authority of, or in order to implement, comply with, or participate in any program established under Federal law.

Steep slopes

There are no comparable Federal standards that apply to steep slopes.

Upland forested area

There are no comparable Federal standards that apply to upland forested area

Rare, threatened and endangered plants and animals

Section 9 of the Endangered Species Act (ESA) of 1973 (16 U.S.C.§ Chapter 35) prohibits the "incidental take" of Federally listed plant and animal species. "Federally-listed species" are those that are endangered or threatened in the wild, nationwide and are listed at 50 CFR §17.11 (animals) and §17.12 (plants). The Federal definition of "incidental take" is "takings that result from, but are not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or applicant." 50 CFR §17.3. The Federal definition of "take" is to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect any threatened or endangered species." 16 U.S.C. §1531 et seq. In addition, "harm" may include significant habitat modification where it actually kills or

injures a listed species through impairment of essential behavior (for example, eliminating sites for nesting or reproduction). 50 CFR §17.3.

The Highlands rules protect rare, threatened and endangered plants and animal species and their habitats, in accordance with N.J.S.A. 13:20-2, 30b(8) and 32j. The Department uses the State's lists of threatened and endangered species that include not only the Federally-listed species, but also species whose prospects for survival are in jeopardy in New Jersey but not necessarily nationwide. State-listed animal species are found in N.J.A.C. 7:25-4 (Endangered, Nongame and Exotic Wildlife), promulgated pursuant to the Endangered and Nongame Species Conservation Act, N.J.S.A. 23:2A-1 et seq. State-listed plant species are found in N.J.A.C. 7:5C-5.1 promulgated pursuant to the Endangered Species, the rules proposed for readoption with amendment apply to the habitats of more species in New Jersey than the Federal regulations do. The Endangered and Nongame Species Conservation Act and the sections of the Highlands Water Protection and Planning Act cited above give the Department all of the same authority.

The Highlands rules also protect rare species. "Rare species" means plant species of concern listed pursuant to N.J.A.C. 7:5C-3.1, and wildlife species that are not endangered or threatened wildlife species but are considered by the Department to be imperiled or rare. Wildlife is classified in New Jersey as "S1" (critically imperiled in New Jersey because of extreme rarity), "S2" (imperiled in New Jersey because of rarity), "S3" (rare in New Jersey), "G1" (critically imperiled globally), "G2" (imperiled globally because of rarity) or "G3" (globally very rare and local throughout its range or found locally in a restricted range). The Department's rules proposed for readoption with amendments will not authorize issuance of an HPAA for an activity that would likely jeopardize a rare, threatened or endangered plant or animal species.

Therefore, the Highlands rules are more stringent than the Federal standards for endangered and threatened species because they provide protection to a larger number of

species than do the Federal regulations. However, these heightened standards are required pursuant to the Highlands Act.

Historic Resources

The National Historic Preservation Act, 16 U.S.C. § 470, established the National Register of Historic Places. The implementing Federal regulations for the National Register are codified at 36 CFR §60. As is the case with the New Jersey Register of Historic Places established pursuant to N.J.S.A. 13:1B-15.128, the National Register provides a permanent record of properties which are determined to have significant historical, architectural, archaeological, engineering or cultural value.

The procedures for registration of properties in the New Jersey Register are integrated with those of the National Program. The New Jersey and National Registers both use the same nomination criteria, nomination forms, state administrative agency (Historic Preservation Office), and State Review Board. Moreover, the New Jersey requirement for the submission of application information and accompanying documentation parallels those of the National Register.

Additionally, to assess a project's impact upon cultural resources, the Federal agency or its delegate must identify those properties that are potentially eligible for listing in the National Register of Historic Places. Architectural or archaeological surveys may be required by the Federal Register in order to determine whether a property is eligible for inclusion. Therefore, by including properties that are potentially eligible for listing in the National Register of Historic Places, the Federal Program encompasses a larger universe of historic resources than does the State Program.

The Department has determined that the Highlands rules regarding preservation of historic resources at N.J.A.C. 7:38-3.10 do not contain any standards or requirements that exceed the standards or requirements imposed by Federal law.

Unique and Irreplaceable Resources and Existing Scenic Attributes

The Highlands Act directs the Department to protect "unique and irreplaceable" resources but does not define the term. The Department has defined the term in N.J.A.C. 7:38-3.12 to include important ecological communities, vernal habitats and public scenic landscape attributes. There are no comparable Federal standards that apply to ecological communities, vernal habitats or scenic attributes.

Environmental Impact

The rules proposed for readoption with amendments will continue the positive environmental impacts of the existing rules because each provision is intended to implement the protection afforded the preservation area by the Legislature in the Highlands Act.

The Legislature declared in N.J.S.A. 13:20-2 that the Highlands Region is an essential source of drinking water for about one-half of the State's population; that it contains exceptional natural resources including clean air, contiguous forest lands, wetlands, pristine watersheds, and habitat for fauna and flora; that it includes many sites of historic significance; and that it provides abundant recreational opportunities. The Legislature delineated a specific portion of the Highlands Region known as the "preservation area" as subject to enhanced environmental protection.

Subchapter 1 (General Information) outlines the different Department regulatory programs that are consolidated into the Highlands permit program pursuant to N.J.S.A. 13:20-30. The consolidation of the programs identified in N.J.A.C. 7:38-1.3 will have a positive environmental impact because it provides a comprehensive review of activities proposed in the preservation area. This consolidation will prevent an applicant from receiving approval for a project under one permit program only to find that the project is

unbuildable under a different permit program. The Highlands rules ensure that there will be one review of a proposed development that considers all potential environmental impacts and results in one overall decision.

Subchapter 2 (Jurisdiction, Applicability and Exemptions) will have a neutral environmental impact because it establishes the scope of the regulations and many of the administrative procedures the Department will use to determine whether the Act applies to the proposed development. The proposed amendment to N.J.A.C. 7:38-2.4 allowing additional categories of applicants to skip the Highlands applicability determination process will have neutral environmental impact since it concerns an administrative process and does not affect the substantive requirements for an exemption or the scope of activities subject to the Act.

Subchapter 3 (Preservation Area Standards) contains the specific criteria for protecting the resources of the Highlands preservation area. N.J.A.C. 7:38-3.2 addresses the protection of water supply and N.J.A.C. 7:38-3.3 addresses public community water systems. N.J.A.C. 7:38-3.4 establishes criteria for the number of individual subsurface disposal systems or equivalent disposal unit permitted within certain land areas. These rules will have a positive environmental impact. The proposed amendments continue the stringent protection to water quality afforded by the previous limit of one disposal unit per 88 acres of forestland and one disposal unit per 25 acres of all other land. As discussed in greater detail in the summary, this standard is necessary to maintain existing water quality in the preservation area. The proposed amendment acknowledges that if an applicant has a sufficient area containing both forest land and other land, water quality will not be degraded if the Department includes both types of land in its calculation of the number of permissible disposal units. Therefore, the rules will continue to have a positive environmental impact on water quality in the Highlands preservation area.

N.J.A.C. 7:38-3.5 limits placement of impervious coverage in the preservation area because impervious coverage increases stormwater runoff and non-point source

pollution, and prevents filtration of water back into aquifers, negatively impacting water quality and quantity. The proposed amendment that limits the aggregation of impervious surface to the same HUC 14 will have a positive environmental impact because it assures that the benefit from aggregation (the deed restriction of parcels of land against all development) occurs in the same watershed impacted by the development. Consequently, readoption of the regulation to limit impervious coverage will continue to have a positive environmental impact on water quality and quantity in the Highlands preservation area.

The standards for the protection of Highlands open waters at N.J.A.C. 7:38-3.6 will have a positive environmental impact. The Highlands Act at N.J.S.A. 13:20-30b(1) requires a 300-foot buffer adjacent to all Highlands open waters and precludes all but linear development for which there is no feasible alternative, from encroaching in these areas. "Highlands open waters" is defined at N.J.S.A. 13:20-3 to include all surface water features including wetlands and with the exception of swimming pools. Highlands open waters are a major component of the water resources the Legislature sought to protect in the Highlands Act. The statutorily mandated 300-foot buffer provides water quality protection by giving pollutant-laden surface water 300-feet over which to run before entering a water body. Pollutants may attach to vegetation, be absorbed by vegetation or bound in the soil in the buffer. Buffers retain flood waters, stop sediment from reaching waterways, provide travel corridors for wildlife and keep water temperatures lower (and therefore more oxygen-rich) for fish and other aquatic life. By limiting encroachments in the buffer to linear development for which there is no alternative location, the Department is protecting the integrity of both the buffer and the water. The proposed amendment ensures that only those who can find no alternative use for their land, including selling it or developing elsewhere, will be permitted to encroach upon this critically sensitive area.

The statutorily mandated requirement for 0% net fill for major Highlands developments within a flood plain at N.J.A.C. 7:38-3.7 will have a positive environmental impact. One of the important functions of a flood plain is to provide water

storage to alleviate potential flooding from large rain events. Flooding can destroy natural landscape as well as man-made systems. The flood plain also assists in removal of pollution from surface waters before they discharge to a stream or are absorbed back into the ground. Development in a flood plain reduces the space available for water storage unless additional storage is created to replace that which is lost. The rules proposed for readoption require all flood storage lost on a site due to proposed development be replaced on the same site or, if impossible, in the same flood plain and HUC 14. This will assure that the replacement storage will be close enough in the watershed to replace the protective functions destroyed by the development.

N.J.A.C. 7:38-3.8, containing the standards for the protection of slopes 10% and greater, provides a positive environmental impact. The Highlands Act at N.J.S.A. 13:20-32j requires the Department to establish steep slope standards since these areas are also important protections for water quality. Disturbance on steep slopes increases the amount and speed of stormwater runoff and can cause soil erosion and sedimentation of streams. Runoff carries sediments that can destroy aquatic life and impede the ability of streams and wetlands to retain water. Soil erosion is a function of soil type, slope and vegetative cover (Smith, Chris. 2005. Natural Resources Conservation Service. Personal communication). Because applicants who seek to develop steep slopes must, by necessity, remove most or all vegetated growth from a site for proposed development, the proposed regulations place strict limits on development where steep slopes contain forest. Tree roots help to hold soils in place and reduce erosion and sedimentation. Trees also reduce runoff by taking up substantial amounts of water. The proposed amendment ensures that only those who can find no alternative use for their land, including selling it or developing elsewhere, will be permitted to remove vegetation in this critically sensitive area in order to accommodate linear development.

N.J.A.C. 7:38-3.9 provides the standards that protect upland forest. Forests protect water quality by binding the soil, taking in water and binding contaminants that may be contained in the water and reducing the temperature in waterbodies they shade.

Colder water holds more oxygen for use by aquatic life. Trees also protect air quality by taking in carbon dioxide and releasing oxygen.

Forest also provides habitat for many species of rare, threatened and endangered plants and animals. One of the factors contributing to the loss of species is forest fragmentation. Some species require extensive contiguous forest to survive (for example, the Barred Owl). Encroachment into forest by roads or other development can result in permanent displacement of such species, and introduce invasive species that may reduce the ecological value of the habitat for plant and animal species.

Therefore, the rules proposed for readoption with amendment will continue the positive environmental impacts of the existing rules. The proposed amendments to the forest identification methodology in N.J.A.C. 7:38-3.9 will also have a positive environmental impact by ensuring that all forest land in the preservation area is identified and regulated.

N.J.A.C. 7:38-3.10 provides the standards for protection of historic and archaeological areas. The rules, proposed for readoption with minor amendments to correct terminology, have a neutral or slightly positive environmental impact. The protection of historic structures will have no environmental impact since historic manmade structures do not usually provide environmental benefit except incidentally (for example, protection of a historic mill and mill pond may result in the incidental protection of an aquatic habitat). Since archaeological sites are often associated with surface water bodies, protection of such sites may also provide incidental positive environmental impacts.

N.J.A.C. 7:38-3.11 contains the standards for the protection of rare, threatened and endangered plant and animal species. Readoption of the rules will continue the positive environmental impacts associated with the protection of rare, threatened and endangered plant and animal species. The Highlands Region provides habitat for plant

and animal species that generally do not thrive elsewhere in the State. By prohibiting the encroachment that adversely affects rare, threatened or endangered plant and animal species, these regulations will have a positive environmental impact.

N.J.A.C. 7:38-3.12 contains the standards for the protection of unique or irreplaceable land types and existing scenic resources. The rules will continue the positive environmental impacts of the interim rules by protecting ecological communities unique to the Highlands Region and in some cases of global significance, and vernal habitats.

The current rules designate parks, forests, wildlife management areas and natural areas as "scenic resources." The Department's proposed inclusion of Federal public lands in this protected category will provide a positive environmental impact.

Subchapters 4 (Highlands Resource Area Determinations) and Subchapter 5 (Rare, Threatened and Endangered Species Habitat Evaluations) will continue the positive environmental impacts of the adopted rules by allowing an applicant to learn about the Highlands resources present on a specific site before designing a project and applying for an HPAA, thereby saving the applicant time and money.

Subchapter 6 (Highlands Preservation Area Approval) will have a neutral to positive environmental impact. The first sections of subchapter 6 provide general information about the need to obtain an HPAA and therefore have no environmental impact. The waiver provisions contained in N.J.A.C. 7:38-6.6 and 6.7 allow the Department to waive the enhanced standards of the Highlands Act and permit development of brownfields or areas containing 70% impervious cover. Applicants seeking brownfields designation must provide extensive documentation showing the area was previously contaminated and legally disturbed. Environmental impacts to the region as a whole are minimized since the redevelopment permitted under these rules will be occurring in areas already impacted by development. While these rules permit waiver of

the enhanced Highlands development standards for projects on previously disturbed property, N.J.S.A. 13:20-33b(3) provides that a waiver may not be issued unless the Department determines that the proposed project meets standard conditions for HPAAs in N.J.S.A. 13:20-34 "to the maximum extent possible." The Department also requires that stormwater management practices be implemented at all redevelopment sites. For example, N.J.A.C. 7:38-6.6(h)6 requires the removal of impervious surface not used in a redevelopment project. While N.J.A.C. 7:38-6.8 allows waivers for projects so as to avoid taking of property without just compensation, the applicant may be able to recoup the value through the sale of development rights through a transfer of development rights (TDR) program or by selling the property. In the event these avenues are not fruitful, the Department further requires that applicants explore alternatives to all projects as part of a waiver application. Finally, the Department has established several other waiver-specific limitations to ensure that the impacts resulting from the issuance of a waiver are neutral at worst.

Subchapter 7 (Emergency Permits) will have a positive environmental impact if the proposed activity for which an emergency permit is sought is intended to alleviate an imminent threat to the environment. Under other circumstances, the impact of these regulations should be environmentally neutral since an applicant for an emergency permit will be required to establish that the proposed work complies with the standards for major Highlands development.

Subchapters 8 (Pre-application Procedures), Subchapter 9 (Application Contents), Subchapter 10 (Fees), Subchapter 11 (Review of Applications) and Subchapter 12 (Content of Approvals) will continue the neutral to positive environmental impacts of the interim rules. Most of the rules and the amendments address the administrative steps for applicants to demonstrate compliance with the Highlands Act and have a neutral environmental impact. To the extent that the specified rules promote compliance with the enhanced permit standards in the preservation area, the rules will have a positive environmental impact.

Subchapter 13 (Enforcement) will continue the positive environmental impacts of the adopted rules by providing the mechanisms for the Department to enforce the Highlands Act and the terms and conditions of permits and orders issued by the Department and/or the courts. This subchapter also establishes that the Department may impose fines to recoup the cost of repairing environmental damage, recapture economic benefit to violators, and deter future violations.

Proposed Subchapter 14 (Adopted General Permits) creates two general permits, one for habitat creation and enhancement activities and another for bank stabilization. Both will have a positive environmental impact. The Department has determined that the activities permitted here comply with the conditions of the Highlands Act and rules because they promote water quality, provide enhancement of habitats for fish and wildlife and comply overall with the goals of the Highlands Act.

Jobs Impact

The rules proposed for readoption with amendments are expected to have a small but positive net impact on employment in New Jersey. The increased protection afforded under the existing rules to forests and wetlands in general, to critical habitat areas within forests and wetlands in particular, and to historic areas will help maintain and strengthen the attractiveness of such areas for a variety of recreational activities, including ecotourism (animal, plant and bird watching), fishing, hiking, camping, and similar activities. The increase in conservation management activities in the preservation area will generate expenditures and employment to the extent that the increase is funded from sources outside New Jersey. All of these activities require staff to operate and maintain the facilities and sites involved. To the extent that recreational sites in the preservation area are given greater protection from pollution, development, and other adverse impacts relating to growth, they can be expected to attract increased numbers of visitors, leading to modest increases in employment opportunities in recreational occupations. In addition

to this direct employment stimulus to the recreation sector, purchases of meals, fuel, equipment, and lodging by visitors to the Highlands add dollars to the local economy. As the recipient spends the dollars from those purchases, indirect employment opportunities are also likely to be created, although the number of new jobs is likely to be modest in the immediate future. The multiplier for jobs created per million dollars of sales range from 10 to 50 in the U.S. tourism sector in which New Jersey is a significant player (IUCN 1998). Thus, anywhere from 100 to 500 jobs could be created for a \$10 million increase in spending.

The proposed rules on water quality and water supply will help moderate increases in water treatment costs payable by individuals, municipalities, and businesses in the Highlands and areas downstream of Highlands waters. The savings realized will, in all likelihood, be spent in other ways creating a positive impact on employment directly and indirectly. By moderating future increases in the cost of potable water used by business, the proposed rules will help maintain or enhance the competitiveness of New Jersey businesses relative to businesses in areas with higher costs for potable water, and keep existing businesses in New Jersey. However, the precise impact of these cost savings on the regional job market is difficult to estimate. As a result of conservation measures in the preservation area some businesses will likely experience increased business, requiring hiring of additional personnel. Such businesses may include private ecological consulting groups, architects, landscape designers, botanists, biologists, nurseries, suppliers of conservation protection materials (for example, fences), and builders, as conservation management may require new infrastructure.

Since these rules slow the rate of new development in the preservation area, construction jobs may move to other parts of the State that are subject to less restrictive environmental regulation. To the extent that fewer water treatment plants are constructed over time as a result of these rules, the jobs related to this construction will be reduced as well. However, brownfield remediation and redevelopment activities may result in additional jobs being created. The extent to which these affect New Jersey is difficult to

estimate and depends in part on the proportion of such jobs held by New Jersey residents, which is not known.

Finally, in terms of increased job opportunities in certain professional and recreational markets, and positive impacts on water quality and supply, the proposed rules will help preserve New Jersey's stature as an attractive business environment, thereby helping to preserve jobs in the State.

Agriculture Industry Impact

The Highlands Act states that the Department regulates only "major Highlands development." The definition of "major Highlands development" in N.J.S.A. 13:20-3 and N.J.A.C. 7:38-1.4 specifically excludes agricultural and horticultural uses and development. Consequently, these regulations will have no impact on agriculture or horticulture use or development in New Jersey. These regulations will, however, have an indirect positive impact on the agriculture industry by reducing the amount of land taken out of agricultural/horticultural use. The effect of the readopted rules upon land once it is taken out of agricultural/horticultural use is discussed in the Economic Impact Statement.

Regulatory Flexibility Analysis

In accordance with the New Jersey Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq., the Department has determined that some of those builders and property owners that may be affected by the rules proposed for readoption with amendments are "small businesses" as defined by the Regulatory Flexibility Act. The Highlands Act as implemented by these rules applies to all activities in the preservation area that meet the definition of a "major Highlands development." The definition includes all nonresidential "development." Therefore, if a small business will be conducting an activity that meets the definition of non residential "development," or engages in a nondevelopment activity that would result in the ultimate disturbance of one-quarter acre or

more of forested area or in a cumulative increase in impervious surface by one-quarter acre or more, it will be regulated under this chapter. The Department does not have an estimate of the number of small businesses that own property or will conduct activities that will be affected by these rules proposed for readoption with amendments.

The Department has determined that the readoption with amendments will not in general impose additional reporting or recordkeeping requirements on small businesses. Rather, the rules regulate based on environmental impacts and will have the same impact on a small business as on any other person seeking to undertake a major Highlands development in the preservation area. The same is true for compliance requirements. The cost of complying with the rules proposed for readoption with amendments will be the same for small businesses as for any other individual or business proposing to conduct a regulated activity in the Highlands preservation area. In order to comply with these rules, the small businesses with properties upon which a major Highlands development is proposed would have to comply with the Highlands rules. In so doing, small businesses may need the services of environmental and engineering professionals. If the small business hires a professional to prepare an HRAD, the costs would be approximately \$1,500 per day for two people conducting onsite fieldwork. The number of days required to complete the work depends upon the size of the site and the number of resources encountered that must be assessed onsite. If a small business hires a consultant to apply for an HPAA, the costs would range from \$5,000 to \$7,000 but again could be higher in the same circumstances described above. These are the same costs that would accrue to any individual or business seeking to conduct a major Highlands development in the preservation area.

The proposed readoption with amendments does contain one provision that may be beneficial to small businesses. At N.J.A.C. 7:38-2.4(a), the Department allows any person to stipulate that an activity is regulated by the Highlands Act so that a Highlands applicability determination is not required. While any applicant may make this stipulation, a small businesses may find it particularly advantageous since the Highlands Act clearly regulates non-residential development, one of the determinations for which an

applicability determination is often sought. Therefore, this provision may save a small business time and money when complying with the Highlands Act.

These regulations protect the critical resources of the Highlands Region, which are important to citizens both in and outside the Highlands. The Highlands Act is explicit regarding both the environmental standards and the extent of exemptions applicable to anyone proposing to conduct a regulated activity in the Highlands preservation area. Consequently, the nature of the application that a small business as well as any other applicant will submit in order to determine compliance with the Act must necessarily address all potential impacts to Highlands resources and therefore no lesser requirements for small businesses are provided in these rules.

Smart Growth Impact

Executive Order No. 4 (2002) requires State agencies that adopt, amend or repeal any rule to describe 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).

As the Legislature stated in N.J.S.A. 13:20-2, the New Jersey Highlands Region is designated as a Special Resource Area in the State Plan. This designation is used to identify a particular area that has unique and important resources that merit protection through the planning process. The Legislature divided the Highlands Region into two areas, a planning area and preservation area. The Legislature determined that the preservation area contains the core area necessary for the protection of forestland, water quality, and habitats for fauna and flora and lacks the necessary infrastructure to support major development (see water purveyors and sewer infrastructure discussions in the Economic Impact assessment).

The rules proposed to be readopted with amendments discourage development that is incompatible with the continued high quality of the Highlands water and its

surrounding habitat, both of which are vital to the health and well-being of the present and future citizens of the State. As a result, development is steered to less environmentally sensitive areas of the State better suited to accommodate it. For these reasons, the rules proposed for readoption with amendments comport with the goals of smart growth and implementation of the State Plan described in Executive Order No.4.

Reference:

Smith, Chris. 2005. U.S. Department of Agriculture, Natural Resources Conservation

Service (NRCS). Personal Communication.

<u>Full text</u> of the rules proposed for readoption may be found in the New Jersey Administrative Code at N.J.A.C. 7:38.

Full text of the proposed amendments follows (additions shown in boldface <u>thus;</u> deletions shown in brackets [thus]):

CHAPTER 38 HIGHLANDS WATER PROTECTION AND PLANNING ACT RULES

SUBCHAPTER 1. GENERAL INFORMATION

7:38- 1.1 Scope and authority

(a) This chapter is authorized by <u>the Highlands Water Protection and Planning Act</u>. [N.J.S.A. 13:20-32] <u>N.J.A.C. 13:20-1 et seq</u>. (Highlands Act), and statutory authorities <u>referenced therein</u> and establishes the environmental standards and procedures by which the Department shall review any application pursuant to the Highlands [Water Protection and Planning] Act, [N.J.S.A. 13:20-1 et seq. (Highlands Act)] for major Highlands development proposed in the [Preservation Area] <u>preservation area</u> of the Highlands

[region] Region, for a waiver from any requirement for a Highlands Preservation Area Approval, [and] any resource or applicability determination or exemption from the Act, and any permit or plan reviewed by the Department in the Highlands Region. In addition, the Department anticipates that the Highlands Regional Master Plan (RMP) adopted pursuant to N.J.S.A. 13:20-8 by the Highlands Water Protection and Planning Council (Highlands Council), established pursuant to N.J.S.A. 13:20-4, will include a land use capability map and a comprehensive statement of policies for planning and managing the development and use of land in the [Preservation Area] preservation area. [, which] For the preservation area, the land use capability map and policies shall be based upon, comply with, and implement the environmental standards in this chapter and the resource assessment prepared pursuant to N.J.S.A. 13:20-11. The Department anticipates that the Regional Master Plan will address the components necessary to protect the natural, scenic, and other Highlands resources, including but not limited to, forests, wetlands, stream corridors, steep slopes, and critical habitat for fauna and flora. [Pending completion of the Regional Master Plan, the Department shall not approve a Water Quality Management Plan amendment for a project proposed in the Planning area without first obtaining a recommendation from the Highlands Council.]

(b) Information regarding standards for agricultural or horticultural development in the Highlands [Preservation Area] <u>preservation area</u> can be obtained by contacting the New Jersey Department of Agriculture, Division of Agricultural and Natural Resources, John Fitch Plaza, PO Box 330, Trenton, NJ 08625-0330.

(c)-(f) (No change.)

(g) For all decisions in or affecting the planning area or the preservation area, the Department shall give great consideration and weight to the RMP, to be incorporated by reference in (l) below, when adopted by the Highlands Council, and shall apply this in accordance with (h), (i), (j) and (k) below.

(h) For the planning area, when consistent with its statutory and regulatory authority, the Department shall not issue any approval, authorization or permit that the Department determines, in consultation with the Highlands Council, to be incompatible with the resource protection goals in the RMP to be incorporated by reference in (l) below, when adopted by the Highlands Council.

(i) In its review of permits or approvals under this chapter in the preservation area, the Department shall apply the standards of this chapter and those in the RMP, to be incorporated by reference in (1) below, when adopted by the Highlands Council. Where the Department, in consultation with the Highlands Council, determines there is an inconsistency in the standards, the Department shall apply the Regional Master Plan standards insofar as they are:

1. Consistent with the purposes of the Highlands Act to sustain and maintain the overall ecological values of the ecosystem of the Highlands Region with special reference to surface and ground water quality and supply; contiguous forests and woodlands; endangered and threatened animals, plants, and biotic communities; ecological factors relating to the protection and enhancement of agricultural or horticultural production or activity; air quality; and other appropriate considerations affecting the ecological integrity of the Highlands Region; and

2.Based on, comply with, and implement the environmental standards set forth in N.J.S.A. 13:20-32.

(j) For both the planning area and preservation areas, the Department shall give great consideration and weight to the RMP, to be incorporated by reference in (k) below, in making permit decisions that:

1. Provide relief from strict compliance with the standards of the applicable permit programs, such as making a determination of public benefit or hardship waiver from certain Departmental permits; or

2. Provide relief through the issuance of an HPPA with waiver under this chapter.

(k) For both the planning area and preservation areas, the Department shall review the Highlands Council regional master plan and consider amending the appropriate areawide Water Quality Management Plans to maintain consistency with the regional master plan. The Department shall approve a Water Quality Management Plan amendment only after receiving from the Highlands Council a determination of consistency with the Regional Master Plan to be incorporated by reference in (1) below, when adopted by the Highlands Council. Pending completion of the Regional Master Plan, the Department shall not approve a Water Quality Management Plan amendment for a project proposed in the planning area or preservation area without first obtaining a recommendation from the Highlands Council.

(1) The Regional Master Plan shall mean the standards established in the Regional master Plan adopted by the Highlands Council pursuant to N.J.S.A. 13:20-8, including all goals, requirements, provisions, and any municipal master plans and development regulations or county master plans and associated regulations that have been formally approved by the Highlands Council pursuant to the Highlands Act. The Regional Master Plan shall be incorporated by reference into this chapter, when adopted by the Highlands Council pursuant to N.J.S.A. 13:20-8, provided the Department does not determine such incorporation is inconsistent with the purposes of this chapter. The incorporation by reference shall include all amendments to the Regional Master Plan subsequently adopted by the Highlands Council. The Regional Master Plan will be available on the Highlands Council's website at www.highlands.state.nj.us or may be reviewed at the Department or at the Highlands Council at the addresses at N.J.A.C. 7:38-1.2.

7:38-1.2 Forms and information

(a) Forms or other information related to the Highlands permitting review program may be obtained as follows:

1.-3. (No change.)

4. Information and forms relating to Water Allocation and Safe Drinking water

may be found on the Division of Water Supply web page at

www.nj.gov/dep/watersupply or obtained from the Bureau of Water Allocation or

[Safe Drinking Water] <u>Bureau of Water Systems and Wells</u> at:

Division of Water Supply

New Jersey Department of Environmental Protection

P.O. Box 426

Trenton, New Jersey 08625-0426

Phone: Bureau of [Safe Drinking] Water Systems and Wells (609) [292-

5550] <u>292-2957</u>

Phone: Bureau of Water Allocation (609)-292-2957

5.-6. (No change.)

7:38 - 1.3 Other Statutes and Regulations

(a)–(c) (No change.)

(d) This chapter should be liberally construed to conform with the State's obligation to stringently safeguard the State's public trust resources and "should be guided, in heart,

mind, and spirit, by an abiding and generously given commitment to protecting the incomparable water resources and natural beauty of the New Jersey Highlands so as to preserve them intact, in trust, forever for the pleasure, enjoyment, and use of future generations while also providing every conceivable opportunity for appropriate economic growth and development to advance the quality of life of the residents of the region and the entire State." N.J.S.A. 13:20-2

7:38-1.4 Definitions

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

•••

["Application for development" means the application form and all accompanying documents required for approval of a subdivision plat, site plan, planned development, conditional use, zoning variance, or direction of the issuance of a permit pursuant to the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq. or 40:27-1 et seq., for any use, development, or construction.]

"Aquatic ecosystem" means waters of the Highlands [region] <u>Region</u>, including wetlands, which serve as habitat for interrelated and interacting communities and populations of plants and animals.

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"Capital improvement" <u>or "capital project</u>" means any facility for the provision of public services with a life expectancy of three or more years, owned and operated by or on behalf of the State or a political subdivision thereof.

["Closed" means the termination of all operations at the landfill and initiation of closure activities pursuant to the Solid Waste Rules, specifically at N.J.A.C. 7:26-2A.9.]

"Hazardous substance" means petroleum, petroleum products, pesticides, solvents and other substances as set forth in N.J.A.C. 7:1E-1.7.

"Highlands Preservation Area Approval" or "HPAA" means a permit to engage in a regulated activity in the Highlands preservation area issued pursuant to the Highlands Act and these regulations, including an HPAA that contains a waiver pursuant to N.J.S.A. 13:20-33b. <u>"Highlands Preservation Area Approval" includes Highlands general permits issued pursuant to N.J.S.A. 13:20-33d and promulgated at N.J.A.C. 7:38-12. "HPAA," when used in these rules, includes Highlands general permits unless explicitly excluded.</u>

•••

"HUC 14" [means the hydrologic unit code system developed by the United States Geological Service for delineating and identifying drainage areas. The system starts with the largest possible drainage areas and progressively smaller subdivisions of the drainage area are delineated and numbered in a nested fashion. A drainage area with a hydrologic unit code (HUC) designation with 14 numbers, or HUC 14, is one of several sub watersheds of a larger watershed with 11 numbers, or a HUC 11.] <u>means an area within</u> which water drains to a particular receiving surface-water body, which is identified by a <u>fourteen-digit number, or "hydrologic unit code." The HUC codes were developed by the</u> <u>U.S. Geological Survey. In New Jersey, a HUC14 correlates to a subwatershed.</u> There are 921 HUC 14 [sub watersheds] <u>subwatersheds</u> in New Jersey that range in size from

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0.1 to 42 square miles. <u>The boundaries of HUC 14 subwatersheds in New Jersey are</u> <u>available from the Department's Geographic Information Systems (GIS) downloads web</u> page, <u>http://www.nj.gov/dep/gis/download.htm</u>.

•••

"No further action letter" means, in accordance with the [Industrial Site Recovery Act rules, N.J.A.C. 7:26B, or the Department Oversight of the Remediation of Contaminated Sites rules, N.J.A.C. 7:26C, Technical Requirements for Site Remediation, N.J.A.C. <u>7:26E</u>, a written determination by the Department that, based upon an evaluation of the historical use of the [industrial establishment] site, or of an area of concern or areas of concern at that site, as applicable, and any other investigation or action the Department deems necessary, there are no discharged [hazardous substances or hazardous wastes] contaminants present at the [industrial establishment] site, at the [or] area(s) of concern, or any other [property] site to which [discharged hazardous substances or hazardous wastes] a discharge originating at the [industrial establishment have] has migrated, or that any discharged [hazardous substances or hazardous wastes] contaminants present at the [industrial establishment] site or that have migrated from the [industrial establishment] site have been remediated in accordance with applicable remediation regulations. The Department may issue a "no further action letter" if [hazardous substances or hazardous wastes] contaminants remain on the [industrial establishment or any other property] site with appropriate engineering and institutional controls.

"Non-contiguous" means a lot or lots that do not meet the definition of "contiguous" set forth elsewhere in this section.

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"Preliminary assessment" or "PA" means the first phase in the process of identifying areas of concern pursuant to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E-3.

"Preservation [Area] <u>area</u>" means that portion of the Highlands Region so designated by N.J.S.A. 13:20-7b.

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"Public utility" means the same as that term is defined in N.J.S.A. 48:2-13. <u>That is, the</u> <u>term "public utility" shall include every individual, copartnership, association,</u> <u>corporation or joint stock company, their lessees, trustees or receivers appointed by any</u> <u>court whatsoever, their successors, heirs or assigns, that now or hereafter may own,</u> <u>operate, manage or control within this State any railroad, street railway, traction railway,</u> <u>autobus, charter bus operation, special bus operation, canal, express, subway, pipeline,</u> <u>gas, electricity distribution, water, oil, sewer, solid waste collection, solid waste disposal,</u> <u>telephone or telegraph system, plant or equipment for public use, under privileges granted</u> or hereafter to be granted by this State or by any political subdivision thereof.

•••

"Regional master plan" means the <u>standards established in the Highlands</u> regional master plan or any revision thereof adopted by the Highlands Council pursuant to N.J.S.A. 13:20-8 <u>including all goals</u>, requirements, provisions, and any municipal master plans and <u>development regulations or county master plans and associated regulations that are</u> <u>formally approved by the Highlands Council pursuant to the Highlands Act.</u>

"Regulated activity" means [any] <u>an</u> activity[, including Major]<u>that is a major</u> Highlands [Development]<u>development</u>, <u>and</u> that is regulated in any manner pursuant to the Highlands Act and/or this chapter.

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"Site investigation" or "SI" means the collection and evaluation of data adequate to determine whether or not discharged contaminants exist at a site or have migrated or are migrating from the site at levels in excess of the applicable remediation standards. A site investigation shall be developed based upon the information collected pursuant to the preliminary assessment. Site investigations are governed by the Department's Technical Requirements for Site Remediation, N.J.A.C. 7:26E-3.

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["State Development and Redevelopment Plan" means the State Development and Redevelopment Plan adopted pursuant to N.J.S.A. 52:18A-196 et seq.]

• • •

["State Soil Conservation Committee" means the State Soil Conservation Committee in the Department of Agriculture established pursuant to N.J.S.A. 4:24-3.]

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7:38-1.5 Requests for adjudicatory hearings

(a) Subject to the limitations of (e) below, a person may request an adjudicatory hearing to contest any of the following decisions under this chapter:

1.–2. (No change.)

3. A Highlands Preservation Area Approval; [and]

- 4. A Highlands Preservation Area Approval with waiver (including when applicable, brownfield designation)[.] ; and
- 5. <u>A Highlands general permit authorization.</u>
- (b) (No change.)
- (c) A request for an adjudicatory hearing shall:
 - 1. Be in writing on a hearing request form available from the Department and shall set forth:

i.-iii. (No change.)

iv. The Department file number or project number on the [Notice]notice or decision;

v.-vii. (No change.)

- 2. Be submitted to the Department [at the following address]as follows:
 - i. Submit the original request to:

Office of Legal Affairs Attention: Adjudicatory Hearing Requests Department of Environmental Protection P.O. Box 402 Trenton, New Jersey 08625-0402.

ii. Submit a copy of the request to: Land Use Regulation Program

Attention: Director Department of Environmental Protection P.O. Box 439 Trenton, NJ 08625-0439.

(d)-(l) (No change.)

SUBCHAPTER 2. JURISDICTION, APPLICABILITY AND EXEMPTIONS

7:38-2.1 Jurisdiction

(a) This chapter applies geographically to the preservation area of the Highlands Region and to the planning area as provided in N.J.A.C. 7:38-1.1. As set forth in the Highlands Act at N.J.S.A. 13:20-7a, the Highlands [region] <u>Region</u> consists of all that area within the boundaries of the following municipalities:

1.-7. (No change.)

(b) As set forth in the Highlands Act at N.J.S.A. 13:20-7b, the [Preservation Area] <u>preservation area</u> in the Highlands Region consists of that area within the boundaries described in N.J.S.A. 13:20-7b(1).

(c) (No change.)

(d) The planning area shall consist of all that area of the Highlands [region] <u>Region</u> not within the preservation area.

7:38-2.2 "Major Highlands development" regulated by the Department

(a) No person shall commence work on a major Highlands development in the preservation area without first receiving a Highlands Applicability Determination pursuant to N.J.A.C. 7:38-2.4 and/or a Highlands Preservation Area Approval (HPAA) pursuant to N.J.A.C. 7:38-6. The following activities in the preservation area constitute major Highlands development unless excluded pursuant to N.J.A.C. 7:38-2.3:

1.-2. (No change.)

3. Any residential development that results in <u>the ultimate</u> disturbance of one or more acres of land or a cumulative increase in impervious surface by one-quarter acre or more[. As to lots created after August 10, 2004, calculation of these limits shall include disturbance and impervious cover already existing on the lot of which the lot containing the proposed development was a part as of August 10, 2004];

- 4. Any activity that is not a development but that results in the <u>ultimate</u> disturbance of one-quarter acre or more of forest or that results in a cumulative increase in impervious surface by one-quarter acre or more, except as provided in (b) below[. As to lots created after August 10, 2004, calculation of these limits shall include disturbance and impervious surface already existing on the lot of which the lot containing the proposed development was a part as of August 10, 2004]; or
- 5. Any capital or other project of a State entity or local government unit that requires one of the permits, approvals, or authorizations listed in (a)2 above or that results in the <u>ultimate</u> disturbance of one or more acres of land or a cumulative increase in impervious surface by one-quarter acre or more. [As to lots created after August 10, 2004, calculation of these limits shall include

disturbance and impervious surface already existing on the lot of which the lot containing the proposed development was a part as of August 10, 2004.]

(b) For lots created by subdivision after August 10, 2004, ultimate disturbance and cumulative increase in impervious surface shall be calculated as follows:

 Ultimate disturbance means the total of existing and proposed disturbance on the created lot(s) and all existing disturbance on the remainder lot. For a residential development under (a)3 above where the existing disturbance equals one acre or more, in order to reduce the ultimate disturbance below one acre the applicant may cease all disturbance in a given area, remove all impervious surface and permanently deed restrict that area so that there will be no continuing or future disturbance.
 Cumulative increase in impervious surface means all impervious

<u>surface placed on the newly created lot(s) and all impervious surface placed on the remainder lot after August 10, 2004.</u>

[(b)] (c) Agricultural or horticultural <u>uses and</u> development in the preservation area [is]<u>are</u> not regulated as major Highlands development under this chapter.

(d)-(f) (No change.)

7:38-2.3 Exemptions

(a) The following projects or activities are exempt from the requirements of this chapter, but are required to comply with all other Federal, state and local requirements that may apply to the proposed project. For the purposes of this section, a single family dwelling shall include those group homes, community residences, and other alternative living

arrangements that are specifically authorized to be given equivalent treatment as a single family dwelling under the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq. and that are using or proposing to use a new individual subsurface disposal system or aggregate of equivalent disposal units where the sanitary wastewater design flow is 2,000 gallons per day or less:

1. Construction of a single-family dwelling, for an individual's own use or the use of an immediate family member, on [an] <u>a</u> lot owned by the individual on August 10, 2004 or on a lot for which an individual has, on or before May 17, 2004, entered into a binding contract of sale to purchase that lot;

2. Construction of a single-family dwelling on $[an] \underline{a}$ lot in existence on August 10, 2004, provided that construction does not result in the ultimate disturbance of more than one acre or a cumulative increase in impervious surface by one-quarter acre or more;

3. (No change.)

4. Reconstruction for any reason of any building or structure within 125 percent of the footprint of the lawfully existing impervious surfaces on the site <u>on August</u> <u>10, 2004</u>, provided that the reconstruction or development does not increase the lawfully existing impervious surface by one-quarter acre or more. This exemption shall not apply to the reconstruction of any agricultural or horticultural building or structure for a non-agricultural or non-horticultural use;

5. Any improvement to a [legally] <u>lawfully</u> existing single-family dwelling in existence on August 10, 2004, including but not limited to an addition, garage, shed, driveway, porch, deck, patio, swimming pool, or septic system as long as the improvement maintains the use as a single-family dwelling as defined by code or ordinance in the

municipality in which the dwelling is located and does not permit use of the structure as a multiple unit dwelling.

i. For the purposes of this exemption, ["legally existing"] <u>"lawfully existing"</u> means that the dwelling was constructed or impervious surface placed in accordance with all applicable state and Federal environmental land use and water permits and valid municipal approvals, including building permits, septic system approval, limitations on lot coverage and, where applicable, certificates of occupancy;

6. Any improvement, for non-residential purposes, to a place of worship owned by a nonprofit entity, society or association, <u>or association</u> organized primarily for religious purposes, or a public or private school, or a hospital, in existence on August 10, 2004, including but not limited to new structures, an addition to an existing building or structure, a site improvement, or a sanitary facility;

7. Any activity conducted in accordance with an approved woodland management plan issued pursuant to the Farmland Assessment Act, N.J.S.A. 54:4-23.3, or [for public lands,] the normal harvesting of forest products in accordance with a forest management plan approved by the State Forester;

8.-10. (No change.)

11. The routine maintenance and operations, rehabilitation, preservation, reconstruction, repair, or upgrade of public utility lines, rights-of-way, or systems, by a public utility, provided that the activity is consistent with the goals and purposes of the Highlands Act;

i. For the purposes of this exemption, installation of cellular equipment on a legally existing overhead utility tower and the construction of the attendant 10-foot by 20-foot pad, when located within the four footings of such tower within a

Right-of-way owned or controlled by a public utility, constructed with the consent of the public utility is consistent with the goals and purposes of the Highlands Act and this exemption;

12.-15. (No change.)

16. Any activities on lands of a Federal military installation existing on August 10, 2004 that lie within the Highlands [region] <u>Region</u>; and

17. (No change.)

(b) (No change.)

7:38-2.4 Highlands Applicability determination

(a) Any person proposing to undertake an activity that constitutes a major Highlands development shall either clearly stipulate that the proposed activity is subject to the Highlands Act in an application to the Department for an HPAA, or obtain a Highlands Applicability and Water Quality Management Plan Consistency Determination (Highlands Applicability Determination) from the Department [to determine if the proposed activity is:]. The Highlands Applicability Determination answers the following questions:

- 1. [A] <u>Is the proposed development or activity a major Highlands</u> development pursuant to N.J.A.C. 7:38-2.2[;]?
- [Consistent with the applicable areawide Water Quality Management Plan; and]<u>Is the proposed development or activity a major Highlands</u> <u>development that is exempt from the Highlands Act, pursuant to N.J.A.C.</u> <u>7:38-2.3?</u>

3. [Exempt from the Highlands Act, pursuant to N.J.A.C. 7:38-2.3.] <u>Regardless of the answer to (a)1 or 2 above, is the proposed development</u> <u>or activity consistent with the applicable areawide Water Quality</u> Management Plan?

(b) Any [project]<u>person proposing to undertake any activity</u> in the preservation area that requires any environmental land use or water permit from the Department other than, as provided at (c) below, [an]<u>a</u> NJPDES permit or TWA, [requires a]<u>shall obtain an</u> Highlands Applicability Determination [except for]<u>unless the activity is one of the following</u>:

- 1. The following improvements to a [legally]<u>lawfully</u> existing single family dwelling in existence on August 10, 2004, provided that the lot upon which the home is situated has not been further subdivided:
 - i. Driveway, garage or shed;
 - ii. An addition for residential purposes attached to the home;
 - iii. Deck, patio or porch;
 - iv. Swimming pool; or
 - v. Septic system;
- 2. Routine maintenance <u>and operations</u>, [rehabilitation,] <u>preservation</u>, [reconstruction and] <u>or</u> repair of transportation [or infrastructure] systems by a State entity or local government unit provided such activity is confined to the existing footprint of development, and [does not increase the conveyance capacity, for example, by increasing the pipe size of the system] <u>does not create new travel lanes or increase the</u> <u>length of an existing travel lane by more than 2,640 feet, not including tapers;</u>

3. <u>Rehabilitation or reconstruction of transportation systems by a State entity or local</u> government unit provided such activity:

i. Does not result in a cumulative increase in impervious surface by 0.5 acres or more;
ii. Does not involve the ultimate disturbance of 1 or more acres of land; and
iii. Does not create new travel lanes or increase the length of an existing travel lane by more than 2,640 feet, not including tapers.

4. Routine maintenance and operations, rehabilitation, preservation, reconstruction and repair of infrastructure systems by a State entity or local government unit provided such activity is confined to the existing footprint of development, and does not increase the conveyance capacity, for example, by increasing the pipe size of a sewer or water system.

[3]<u>5.</u> The construction of transportation safety projects and bicycle and pedestrian facilities by a State entity or local government unit provided the [construction] <u>activity</u> does not:

- i. Create a new travel lane or increase the length of an existing travel lane by more than 2,640 linear feet, not including tapers;
- ii. Result in a cumulative increase in impervious surface of one acre or more; or
- iii. Involve the ultimate disturbance of two or more acres of land;

[4.] <u>6.</u> Any activity that is part of an agricultural or horticultural development or agricultural or horticultural use; [or]

[5.] <u>7.</u> Any activity conducted by a landowner in accordance with an approved woodland management plan issued pursuant to the Farmland Assessment Act, N.J.S.A. 54:4-23.3, or

[for public lands,] the normal harvesting of forest products in accordance with a forest management plan approved by the State Forester[.] :

8. The remediation of any contaminated site pursuant to N.J.S.A. 58:10B-1 et seq. conducted in accordance with a memorandum of agreement or remedial action workplan, provided no residential, commercial, or industrial development is undertaken concurrently with, or subsequent to, the remediation. Any concurrent or subsequent development at the site is subject to the requirements of this chapter for a Highlands applicability determination and HPAA as applicable;

9. The addition of telecommunications equipment or antennas to a telecommunication facility existing on August 10, 2004, provided the equipment is located within the existing fenced compound or on lawfully existing impervious surface so that it does not increase impervious surface; or

10. Installation of cellular equipment on a legally existing overhead utility tower and the construction of the attendant 10-foot by 20-foot pad, when located within the four footings of such tower within a right-of-way owned or controlled by a public utility, constructed with the consent of the public utility;

(c) Following submission under N.J.A.C. 7:14A of an application for a TWA[,] <u>or</u> an individual NJPDES permit, or a request for authorization (RFA) under a general NJPDES permit, for an activity in the Highlands preservation area, the Department will notify the applicant whether the activity that is the subject of the application or RFA is a major Highlands development that requires a Highlands Applicability Determination under this section.

(d) Nothing in (b) or (c) above shall exempt any person from the obligation to obtain a formal consistency determination from the Department [pursuant to] <u>if required by</u> the Water Quality Management Planning Rules at N.J.A.C. 7:15-3.

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

7:38-2.5 Applicability for purposes of public water supply systems, water allocations and water use registrations

(a) Pursuant to N.J.S.A. 58:12A-4.1, within the [Preservation Area] <u>preservation area</u>, the construction of any new public water system and the extension of any existing public water system to serve development in the preservation area is prohibited except to serve development that:

- 1. (No change.)
- 2. Receives a HPAA with waiver pursuant to N.J.A.C. 7:38-6.

(b) Pursuant to N.J.S.A. 58:1A-5.1, this chapter applies to:

1. (No change.)

[2. Any person intending to divert or proposing projects which will result in diversion of more than 50,000 gallons of water per day, for any purpose;]

[3.] <u>2.</u> Any person holding a water use registration <u>as of March 29, 2004 for a</u> <u>diversion within the preservation area who diverts water in an amount</u> that exceeds the monthly or annual limits established by the Department in that water use registration<u>under N.J.A.C. 7:38-3.2(i)2;</u> and

[4.] <u>3.</u> Any person having the capability to divert more than 50,000 gallons of water per day <u>in the preservation area</u> but who does not currently do so. The

requirements to which such persons are subject are set forth at N.J.A.C. 7:38-3.2(i).

(c) (No change.)

7:38-2.6 Applicability for purposes of wastewater discharges and treatment systems

(a) Pursuant to N.J.S.A. 58:11A-7.1, within the preservation area, designated sewer service areas for which wastewater collection systems have not been installed as of August 10, 2004, were revoked effective August 10, 2004, and any associated treatment works approvals in the impacted areas expired on August 10, 2004 except for sewer service areas and any associated treatment works approvals necessary to serve:

1. (No change.)

2. Major Highlands development that is approved in accordance with [N.J.A.C.7:38-6.4] an HPAA with a waiver in accordance with N.J.A.C. 7:38-6.

(b) Except as provided in (d) below, any application for an individual <u>NJPDES</u> permit, request for authorization under a general <u>NJPDES</u> permit, or application for treatment works approval under N.J.A.C. 7:14A for an activity in the preservation area shall be submitted to the Division of Water Quality at the address in N.J.A.C. 7:38-1.2(a)3. If the Department determines the proposed activity for which the application is submitted constitutes major Highlands development, the activity will require a Highlands Applicability Determination that the activity is exempt from the Highlands Act and consistent with the WQMP, exempt from the Highlands Act and not addressed under a WQMP, or has received an HPAA prior to the application being declared administratively complete for review under N.J.A.C. 7:14A.

(c) For [an activity] <u>a major Highlands development</u> not exempt from this chapter, the permits, authorizations, approvals and certifications listed below shall not be approved unless an HPAA is first obtained in accordance with N.J.A.C. 7:38-6. For applications and forms, please contact the Division of Water Quality at the address in N.J.A.C. 7:38-1.2(a)3:

1.-3. (No change.)

(d) Except for projects to be constructed by the New Jersey Department of Transportation (NJDOT), a request for authorization under NJPDES Permit No. NJ0088323 (category 5G3 "construction activity" stormwater general permit) shall be submitted directly to the appropriate Soil Conservation District, from which applications may also be obtained. Except as provided at N.J.A.C. 7:38-2.4(b), <u>such</u> a request for authorization shall not be considered complete for review under N.J.A.C. 7:14A unless accompanied by a HPAA or a Highlands Applicability Determination that the proposed activity is exempt from the Highlands Act and consistent with a WQMP, or exempt from the Highlands Act and not addressed by a WQMP.

SUBCHAPTER 3 PRESERVATION AREA STANDARDS

7:38-3.1 Scope and applicability

(a) (No change.)

(b) An applicant is subject to the standards in this subchapter if any of the environmental resources described in this subchapter existed on a lot on August 10, 2004. If a resource appears on photographs from the Department's 2002 aerial overflight of the State, the Department shall assume the resource existed on the lot on August 10, 2004. An applicant may rebut this presumption by providing the Department credible proof that the resource was lawfully [removed from the lot] <u>disturbed</u> before August 10, 2004.

7:38-3.2 Standards for water supply diversion sources

(a) Any person applying for a new or modified water supply allocation [permit] or <u>an</u> <u>increased diversion under an existing</u> water use registration <u>as established under (i) below</u> where at least one of the diversion sources is located within the preservation area shall obtain an HPAA including compliance with the standards and requirements in the Water Supply Allocation <u>Permit</u> Rules, N.J.A.C. 7:19.

(b) The Department shall not approve as part of an HPAA any new or increased diversion <u>within the preservation area</u> resulting in a total permitted diversion of greater than 50,000 gallons of water per day unless:

1.-2. (No change.)

3. Depletive use within the sub-drainage basin is minimized. For the purposes of this section, sub-drainage area is defined as the HUC 14;

4.-5. (No change.)

(c) Any water allocation approved as part of an HPAA <u>for a diversion located within the</u> <u>preservation area</u> that impacts or has the potential to impact any Highlands open water that is a surface water body, shall include a passing flow for the affected portion of the surface water body. In establishing the passing flow, the Department shall take into account the needs of existing downstream users holding a valid water allocation permit or HPAA, aquatic and water-dependent ecological requirements, use and classification of the water body, natural seasonal flow regimes of the affected water body, and impacts to the safe yield of existing water supply systems.

1. (No change.)

(d) [The Department shall not approve as part of an HPAA any water allocation for a new public water system to serve development in the preservation area or the expansion of an existing public water system to serve development in the preservation area unless the system or expansion is necessary to serve a project that:

1. Is exempt from the Highlands Act pursuant to N.J.A.C. 7:38-2.3 and is consistent with the applicable areawide Water Quality Management Plan;

2. Receives an HPAA; or

3. Receives an emergency HPAA pursuant to N.J.A.C. 7:38-7 and subsequently receives an HPAA in accordance with N.J.A.C. 7:38-6.

(e)] The Department shall not approve as part of an HPAA [a new or modified water allocation for a development located in the preservation area unless the development:

- 1. Is exempt from the Highlands Act pursuant to N.J.A.C. 7:38-2.3, and is consistent with the applicable areawide Water Quality Management Plan; or
- Receives an HPAA with waiver in accordance with N.J.A.C. 7:38-6 and incorporates water conservation measures in accordance with N.J.A.C. 7:38-3.2(h)2 below] any new or increased diversion within the preservation area unless water conservation measures are implemented to the maximum extent practicable. Such measures include those identified at (g)2 below.

[(f)] (e) The Department shall not approve as part of an HPAA any new or increased diversion that results in a diversion of greater than 50,000 gallons of water per day for a non-potable use that is greater than 50 percent consumptive unless the applicant submits documentation that the diversion will not result in a net increase in this type of use within the sub-drainage area. [For the purposes of this section, the sub-drainage area is defined

as the Hydrologic Unit Code 14 (HUC 14).] The Department shall approve a diversion for this type of use provided:

- 1. (No change.)
- Water allocated in accordance with a water supply allocation to a water purveyor or other potable user shall not be used to serve new activities in the [Preservation] <u>preservation</u> area that are greater than 50 percent non-potable and greater than 50 percent consumptive.

[(g)] (f) In accordance with N.J.S.A. 13:20-32d, the Department may revoke an existing unused water supply allocation approval for non-potable purposes if it determines that the permittee is not implementing demand reduction measures to the maximum extent practicable.

[(h)](g) In accordance with N.J.S.A. 13:20-32d, and pursuant to [(i)] (h) below, the Department may reduce an approved water allocation to eliminate any unused portion as follows:

1.-2. (No change.)

[(i)] (h) Before reducing an allocation pursuant to [(h)] (g) above, the Department shall:

1.-3. (No change.)

[(j)] (i) Any person in the preservation area who has the capability to divert more than 50,000 gallons of water per day (1.55 million gallons of water per month), <u>but who does</u> not currently do so, shall submit a water use registration to the Department in accordance with these rules and N.J.A.C. 7:19 to the address listed at N.J.A.C. 7:38-1.2. The

"capability to divert more than 50,000 gallons of water per day" means the ability to divert more than 35 gallons of water per minute from a single source or a combination of sources, at least one of which is located all or partly within the preservation area.

1. [A Water Use Registration shall be issued under this subchapter only for a project or activity that is subject to the Highlands Act and that is consistent with the applicable areawide WQMP.

2.]. Any holder of a valid Water Use Registration <u>issued under N.J.A.C. 7:19 for</u> <u>diversion sources</u> in the preservation area, who was in compliance with the Water Use Registration for the period between March 29, 1999 and March 29, 2004, and whose allocation limit was established at less than 100,000 gallons per day (3.1 million gallon per month), may continue to divert water at the current diversion level under the valid Water Use Registration.

i. (No change.)

[3.] <u>2.</u> The Department will modify existing Water Use Registrations <u>for diversion</u> <u>sources</u> in the preservation area to include as conditions the current source locations and the allowable diversion amount, based on the current diversion level. If <u>after the effective date of such modification</u> a registration holder exceeds the diversion amount or changes source locations [beyond those] <u>and such change</u> <u>would not</u> qualify[ing for purposes of] <u>as</u> a minor permit modification under N.J.A.C. 7:19-1.5(a), an HPAA will be required.

7:38-3.3 Public community water systems

(a) Construction of a new public community water system or extension of an existing public community water system to serve development in the preservation area is

prohibited [within the preservation area] unless the Department determines that the development to be served:

1. Is [in the preservation area,] exempt from the Highlands Act pursuant to N.J.A.C. 7:38-2.3 and consistent with the applicable areawide WQMP;

2. [Is in the preservation area and qualifies] <u>Qualifies</u> for an emergency HPAA pursuant to N.J.A.C. 7:38-7; <u>or</u>

3. [Is in the preservation area and qualifies] <u>Qualifies</u> for an HPAA <u>with waiver in</u> accordance with N.J.A.C. 7:38-6 [; or

4. Is located outside of the preservation area].

(b) (No change.)

7:38-3.4. NJPDES Permitted discharges and [Wastewater treatment] wastewater facilities

(a) Any new <u>discharge to</u> surface water or ground water [discharge] that would require [the issuance of a] <u>an individual or general</u> NJPDES permit [in accordance with N.J.A.C. 7:38-2.6(d)] and any extension of a sewer line that requires a Treatment Works Approval is prohibited within the preservation area unless the development in the preservation area that needs the permit or approval:

- Is exempt from the Highlands Act pursuant to N.J.A.C. 7:38-2.3, and is consistent with the applicable areawide Water Quality Management <u>Plan;</u> [or]
- 2. Receives an HPAA in accordance with N.J.A.C. 7:38-6; or

3. Is not a major Highlands development.

(b) A new individual subsurface disposal system <u>or aggregate of equivalent disposal units</u> <u>where the sanitary wastewater design flow is [that discharges less than] 2,000 gallons per</u> day <u>or less</u> is permitted within the preservation area as [follows:] <u>set forth at (b)1 through</u> <u>4 below. Forest under this subsection shall be identified and calculated in accordance</u> <u>with N.J.A.C. 7:38-3.9. For the purposes of this subsection, "equivalent disposal unit"</u> <u>means: for residential development, one system serving one single-family home sized in</u> <u>accordance with the Standards for Individual Subsurface Sewage Disposal Systems,</u> <u>Volume of sanitary sewage, at N.J.A.C. 7:9A-7.4; or for non-residential development or</u> <u>residential development comprising structures other than single family homes, 500</u> <u>gallons of wastewater per day generated for the development type, as determined in</u> <u>accordance with N.J.A.C. 7:9A-7.4:</u>

1. On a lot that contains <u>all</u> forest [on more than 50 percent of its area], the <u>applicant proposes no more than one individual subsurface disposal system or</u> equivalent disposal unit for each 88 acres of the lot; [:

- i. For a single-family home, the applicant proposes no more than one septic system for each 88 acres of land; or
- ii. For non-residential development or residential development comprised of structures other than single-family homes, the applicant proposes to discharge no more than 500 gallons of wastewater for each 88 acres of land. Wastewater flow shall be calculated in accordance with the Standards for Individual Subsurface Sewage Disposal Systems, volume of sanitary sewage at N.J.A.C. 7:9A-7.4;]

2. On a lot that <u>does not</u> contain[s] forest [on less than 50 percent of its area], <u>the applicant proposes no more than one individual subsurface disposal</u> <u>system or equivalent disposal unit for each 25 acres of the lot;</u> [:

iii. For a single-family home, the applicant proposes no more than one septic system for each 25 acres of land; or

ii. For non-residential development or residential development comprised of structures other than single-family homes, the applicant proposes to discharge no more than 500 gallons of wastewater for each 25 acres of land. Wastewater flow shall be calculated in accordance with the Standards for Individual Subsurface Sewage Disposal systems, volume of sanitary sewage at N.J.A.C. 7:9A-7.4;]

3. (No change.)

4. For a lot containing both forest and nonforest areas, the total number of allowable individual subsurface disposal systems or equivalent disposal units permitted on the lot shall be determined by calculating the number of acres of the lot that are forest (as determined in accordance with the method at N.J.A.C. 7:38-3.9) and dividing that number by 88; calculating the remaining number of acres of the lot that are not forest and dividing that number by 25; and then summing the results. If the sum results in a fraction, the number shall be rounded down to the nearest whole number in order to determine the number of permitted individual subsurface disposal systems or equivalent disposal units.

> 5. For purposes of this section, non-contiguous lots in existence as of August 10, 2004 may be aggregated such that the number of individual subsurface disposal systems or equivalent disposal units that would be permitted under this section on one or more of the aggregated lots is transferred to one or more of the aggregated lots provided:

i. The proposed development on the lot or lots to receive the transferred individual subsurface disposal systems or equivalent disposal units complies with all Federal, State and local laws;

ii. The proposed development on the lot or lots to receive the transferred individual subsurface disposal systems or equivalent disposal units does not require a waiver of any requirement of this chapter;

iii. The proposed development on the lot or lots to receive the transferred individual subsurface disposal systems or equivalent disposal units is constructed in accordance with the Highlands Act and this chapter;

iv. The lots to be aggregated under this paragraph are all located in the preservation area and within the same HUC 14; and

v. The lot or lots from which the individual subsurface disposal systems or equivalent disposal units are to be transferred are permanently deed restricted from future disturbance.

(c) In addition to the requirements at (b) above, individual subsurface sewage disposal systems <u>or equivalent disposal units</u> shall satisfy the Standards for Individual Subsurface Sewage Disposal Systems, N.J.A.C. 7:9A, without extraordinary measures, including

replacement of disposal field soil with permeable material or mounding of a disposal field to achieve the required depth to groundwater or confining layer.

7:38-3.5 Impervious surfaces

- (a) The Department shall not issue an HPAA if a proposed development or activity will result in impervious surface of greater than three percent of the land area of a lot. As to lots created by subdivision after August 10, 2004, calculation of this limit shall include <u>all</u> impervious surface [currently] existing on the <u>entire land area of the</u> lot [of] which [the lot containing the proposed development was a part as of] <u>existed on</u> August 10, 2004. For example, if a lot in existence as of August 10, 2004 currently has two percent impervious surface within its August 10, 2004 boundary, only one percent additional impervious surface is placed in accordance with the Highlands Act and this chapter and any other applicable Federal, state and local law. <u>Thus, if that lot is further subdivided, the newly created lot(s) could only receive an HPAA for a cumulative total of additional impervious surface equal to one percent of the area of the original lot that existed on August 10, 2004.</u>
 - 1. (No change.)

2. [Non-contiguous] For purposes of this subsection, non-contiguous lots in existence as of August 10, 2004, that contain less than three percent impervious surface may be [permanently deed restricted from placement of any additional impervious surface and the unused percentage of impervious surface transferred onto another lot, if] aggregated such that the percentage of impervious surface that would have otherwise been permitted under this subsection on one or more of the aggregated lots is transferred to one or more of the aggregated lots, provided:

<u>i.</u> [the] <u>The</u> proposed development [for such] <u>on the</u> lot <u>or lots to which the</u> <u>percentage impervious surface is transferred</u> complies with all Federal, State and local law;
<u>ii.</u> [the] <u>The</u> proposed development <u>on the lot or lots to which the</u> <u>percentage impervious surface is transferred</u> does not require a waiver of any requirement of this chapter;
<u>iii.</u>[the] <u>The</u> septic density standards of this chapter <u>as set forth at N.J.A.C.</u> <u>7:38-3.4(b)</u> are met; [and]
<u>iv.</u>[the new impervious surface will be placed on the lot accordance with the Highlands Act and this chapter.] <u>The non-contiguous lots to be</u> aggregated under this paragraph are all located in the Highlands

Preservation Area and within the same HUC 14; and

v. The lot or lots from which the percentage impervious surface is

transferred are permanently deed-restricted from additional disturbance.

(b)-(c) (No change.)

[(d) Impervious surface associated with development that is exempt from the Highlands Act shall meet the requirements set forth in N.J.A.C. 7:38-2.3.]

[(e)](d) Where impervious surface on a lot in existence as of August 10, 2004 exceeds three percent of the area of the lot, all [legally] <u>lawfully</u> existing impervious surface may remain but no additional impervious surface shall be permitted.

7:38-3.6 Highlands open waters

(a) (No change.)

(b) All new major Highlands development is prohibited within a Highlands open water and its adjacent 300-foot buffer except for linear development, which shall be permitted

provided that there is no feasible alternative for the linear development outside the Highlands open water or Highlands open water buffer.

1. In order to demonstrate "no feasible alternative for linear development" the applicant shall demonstrate:

i. (No change.)

ii. The proposed linear development is the only point of access for roadways or utilities to an otherwise developable lot; and

iii. Shared driveways are used to the maximum extent possible to access multiple lots, especially in areas containing steep slopes, Highlands open water or Highlands open water buffers[.];

2. For a driveway, the applicant shall, in addition to (b)1 above, demonstrate that:

i. The applicant has made a good faith effort to transfer development rights for the lot pursuant to N.J.S.A. 13:20-13, and has not obtained a commitment from the Highlands Council or a receiving zone municipality to purchase said development rights;

ii. The lot has been offered for sale at an amount no greater than the specific fair market value to all property owners within 200 feet of the lot, to the land conservancies, environmental organizations, the Highlands Council and all other government agencies on a list provided by the Department, by letter sent by certified mail, return receipt requested, with a copy to the Highlands Council, using the form provided by the Department, disclosing the location on the lot of all Highlands resource areas as defined in N.J.A.C. 7:38-1.4 and stating that an

application to develop the lot has been filed and enclosing a copy of a fair market value appraisal, performed by a State-licensed appraiser based on the minimum beneficial economically viable use of the property allowable under local law; and

iii. No reasonable offer for the lot has been received; and

iv. Documentation for (b)2i through iii above shall include:

(1) A copy of each letter that the applicant sent under this paragraph;

(2) A copy of all responses received. Each response shall be submitted to the Department within 15 days after the applicant's receipt of the response;

(3) A list of the names and addresses of all owners of real property within 200 feet of the lot, as certified by the municipality, including owners of easements as shown on the tax duplicate;

(4) Receipts indicating the letters were sent by certified mail;

(5) A copy of the fair market value appraisal required under (b)2ii above; and

(6) A copy of a written response or a resolution from the Highlands Council demonstrating that it has considered and rejected the offer.

[2.] <u>3.</u> An alternative shall not be excluded from consideration under this subsection merely because it includes or requires an area not owned by the applicant which could reasonably be obtained, utilized, expanded, or managed in order to fulfill the basic purpose of the proposed linear development.

4. After consideration of the information required in (b)1 through 3 above, the Department shall not issue an HPAA under this section if an applicant has refused a fair market value offer to purchase the property for which the driveway linear development is sought or if the Department finds that there is an alternative to the proposed linear development.

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

7:38-3.8 Steep slopes

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

(c) Linear development as defined at N.J.A.C. 7:38-1.4 shall be permitted on a slope with a grade of 20 percent or greater provided that there is no feasible alternative for the linear development outside the steep slope. In order to demonstrate "no feasible alternative for linear development," the applicant shall demonstrate:

1.-2. (No change.)

3. Shared driveways are used to the maximum extent possible to access multiple lots, especially in areas containing steep slopes, Highlands open water or Highlands open water buffers; [and]

4. For a driveway, the applicant shall, in addition, demonstrate that:

i. The applicant has made a good faith effort to transfer development rights for the lot pursuant to N.J.S.A. 13:20-13, and has not obtained a commitment from the Highlands Council or a receiving zone municipality to purchase said development rights;

ii. The lot has been offered for sale at an amount no greater than the specific fair market value to all property owners within 200 feet of the lot, to the land conservancies, environmental organizations, the Highlands Council and all other government agencies on a list provided by the Department, by letter sent by certified mail, return receipt requested, with a copy to the Highlands Council, using the form provided by the Department, disclosing the location on the lot of all Highlands resource areas as defined in N.J.A.C. 7:38-1.4 and stating that an application to develop the lot has been filed and enclosing a copy of a fair market value appraisal, performed by a State-licensed appraiser based on the minimum beneficial economically viable use of the property allowable under local law; and

iii. No reasonable offer for the lot has been received; and

iv. Documentation for (c)4i through iii above shall include:

(1) A copy of each letter that the applicant sent under this paragraph;

(2) A copy of all responses received. Each response shall be submitted to the Department within 15 days after the applicant's receipt of the response;

(3) A list of the names and addresses of all owners of real property within 200 feet of the lot, as certified by the municipality, including owners of easements as shown on the tax duplicate;

(4) Receipts indicating the letters were sent by certified mail;

(5) A copy of the fair market value appraisal required under (c)4ii above; and

(6) A copy of a written response or a resolution from the Highlands Council demonstrating that it has considered and rejected the offer.

[4.] <u>5.</u> An alternative shall not be excluded from consideration under this provision merely because it includes or requires an area not owned by the applicant which could reasonably be obtained, utilized, expanded, or managed in order to fulfill the basic purpose of the proposed linear development[.] <u>and</u>

6. After consideration of the information required in (c)1 through 5 above, the Department shall not issue an HPAA under this section if an applicant has refused a fair market value offer to purchase the property for which the driveway linear development is sought, or if the Department finds that there is an alternative to the proposed linear development.

(d) For a steep slope with a grade greater than 10 percent but less than 20 percent:

- 1. (No change.)
- 2. If the steep slope is not a forest and the appropriate Soil Survey for the onsite soil series and percent slope states that the soil capability class of the soil is III or higher or <u>the soil capability class and subclass are</u> IIe or IIs, linear development shall be permitted provided that there is no feasible alternative for the linear development outside the steep slope; or
- 3. If the steep slope is not a forest and the appropriate Soil Survey for the onsite soil series and percent slope states that the soil capability class is I or <u>the soil capability class and subclass is IIw</u>, <u>major Highlands</u> development shall be permitted provided:

- i. The proposed [activity] <u>development</u> meets all other standards in this chapter; and
- ii. (No change.)

7:38-3.9 Upland forested areas

(a) (No change.)

(b) [A forest area shall be determined in accordance with the following method:] <u>The</u> <u>applicant shall identify on a site plan submitted to the Department all forest in existence</u> <u>on the lot as of August 10, 2004 as well as those forest areas that have subsequently been</u> <u>developed</u>. A forest area shall be determined in accordance with the following method:

- The limit of the forest shall be identified using aerial photographs obtained from the Department, free of charge, at www.state.nj.us/dep/gis/; and
- 2. If the aerial photograph contains areas of sporadic coverage that have not been identified as forest by the applicant, the applicant shall lay a one-half acre grid system over the photograph. A standard 142 foot square grid block provided by the Department at its website shall be used. Any grid block containing 33 percent or greater forest cover, shall be considered as forest for the purposes of this chapter, unless the applicant demonstrates otherwise using the procedure established in (c) below.

(c) If the Department identifies forest areas on a lot that have not been so identified by

the applicant, the Department shall require an applicant to measure the trees and determine density of the trees on the lot using the following method:

1. Select two 25-foot by 25-foot plots in every acre of the site suspected of being a forest.

i. (No change.)

[ii. If any half-acre of the site has less than one tree per 100 square feet, no plots need be selected on that half-acre.]

[iii.] <u>ii.</u> If the tree size and density are very uniform over some or all of the site, one plot may be selected in the area of uniformity. <u>However, the point total from the one plot shall be doubled to</u> <u>determine the total point value for the sampled acre under (c)5</u> <u>below.</u>

2. (No change.)

3. Score each tree as follows:

Diameter of treePointsOne to three inches2[Two to four inches] \geq Three to seven inches [1] 4>[four] Seven to 12 inches[2] 6>12 inches[4] 8

4. Add together the scores for all of the trees in [the] each plot.

5. If the total score for [a] <u>both</u> plots is equal to or greater than 16, the [plot] <u>sampled acre</u> is regulated as a forest under this chapter. For example, if [a] <u>the two</u> 25-foot by 25-foot plots contain[s] <u>a total of</u> three trees which are [three] <u>two</u> inches in diameter, [three] <u>two</u> trees which are six inches in diameter, and [three] <u>one</u> tree[s] which [are] <u>is</u> 15 inches in diameter, the score for the [plot] <u>sampled area</u> would be: [(3x1) + (3x2) + (3x4) = 21] (3x2) + (2x4) + (1x8) = 22, and the [plot] <u>sampled acre</u> is considered a forest.

6. If a [plot] <u>sampled acre</u> is a forest, the Department shall assume that a half-acre of ground surrounding all sides of the [plot] <u>sampled acre</u> is also forest except for the surrounding areas that are sampled by the applicant and score under 16. In that case, a sufficient number of plots in the surrounding area shall be sampled by the applicant to delineate the forest portion of the surrounding area.

7. For a newly planted or regenerating forest, an area shall be considered forest if there are 408 seedlings or saplings per sampled acre, that is, the total number of seedlings or saplings in the two sample plots is 12 or more. For the purposes of this section, a tree will be considered a seedling or sapling if it is has a caliper (diameter) of less than one-inch.

8. Orchards, Christmas tree farms and nurseries are not considered forest under this section. As agricultural or horticultural uses, they are not regulated under this chapter. See N.J.A.C. 7:38-2.2(b).

[(c)] (d) The limit of the forest shall be the outermost edge of the canopy of the forest area identified in [(b)] (a) through (c) above.

[(d)_The Department shall not require an applicant to apply the method described at (b) above if the applicant identifies as forest, on a site plan submitted to the Department, all forest in existence on the lot as of August 10, 2004 as well as those forest areas that have subsequently developed. The Department shall require an applicant to apply the method described in (b) above if the Department identifies forest areas on a lot that have not been so identified by the applicant.

(e) In addition to upland forest identified in accordance with (b) and (d) above, the Department will identify as upland forest area any other area so identified by the Highlands Council, using an alternate method of identification, after notice and public comment and after consultation with the State Forester and submitted to the Department for consideration, provided the documentation and public record developed by the Council is sufficient for the Department to conclude that the area(s) are upland forest in accordance with this chapter.]

[(f)] (e) The Department shall not issue an HPAA for an activity that would result in disturbance to an upland forest located on a slope greater than 10 percent, except for linear development which meets the criteria in N.J.A.C. 7:38-3.6(b)1 and 2 [above].

[(g)] (f) The Department shall issue an HPAA for an activity that would result in disturbance to an upland forest if:

- 1. (No change.)
- 2. There is no alternative that:
 - Would have less adverse impact on the upland forest or could be located outside the upland forest. [For example, to] <u>To</u> minimize impact, disturbance [should] <u>shall</u> be located outside the drip line of a tree canopy and at least 100 feet away from

all trees of four inches or greater dbh; shall not result in a significant increase in the amount of forest edge; and shall avoid mature specimens; and

- ii. (No change.)
- 3. The disturbance to the upland forested area is limited to:
 - i. Twenty feet directly next to a lawfully constructed structure <u>or</u> <u>the perimeter of a septic disposal bed;</u> or
 - ii. (No change.)

4. The total acreage of upland forested area to be removed or damaged as a result of an activity approved under an HPAA is mitigated in accordance with [(h)] (g) below.

[(h)] (g) Mitigation for upland forested areas [may include one or more of the following:] shall comply with all other standards of this chapter and replace upland forest with forest of equal ecological value and function. The Department will require mitigation in accordance with the following hierarchy:

- 1. Planting trees onsite;
- If planting trees onsite is not feasible, [Planting] planting trees offsite in the preservation or planning area, provided that the mitigation site is in the same HUC 14 as the site where upland forest was removed or damaged by the activity approved under the HPAA;

3. <u>If (g)1 and 2 are not feasible</u>, [Planting] <u>planting</u> trees offsite in the [planning] <u>preservation</u> area; or

4. <u>If (g)1 through 3 are not feasible, [Paying] paying into a fund dedicated to</u> the purchase of upland forested areas in the Highlands Region.

[(i)] (h) In order to be considered successful, an 85 percent survival rate of the planted trees shall be demonstrated at the end of three years. Tree planting as described in [(h)] (g)1, 2 and 3 above shall be conducted in accordance with the following:

1.-6. (No change.)

7. Newly planted trees shall be monitored by the applicant for a period of two years in accordance with the following:

i. (No change.)

ii. If a tree has lost more than 50 percent of its canopy at the end of two years, it shall be replaced with another tree as large as the first tree when planted; [and]

iii. (No change.)

8. The boundaries of the tree cluster shall be clearly marked with permanent, visible markers such as concrete blocks or posts, metal stakes, or other easily seen, permanent, immovable markers; [and]

9. The tree cluster shall be protected from any future development by a recorded conservation restriction [.] <u>; and</u>

10. An annual post-planting monitoring report shall be submitted to theDepartment each year for a period of three years following the planting.The monitoring report shall include:

i. A brief description of the tree planting that was approved, when it was completed, and the types of maintenance activities that have been conducted:

<u>ii. A statement whether the mitigation has successfully achieved</u> <u>the required survival rate and if not, the remedial actions that will be taken</u> <u>to accomplish the survival rate; and</u>

iii. For the final report, an analysis of the mitigation, and whether it has successfully achieved the required 85 percent survival rate. If it has not, the Department will require additional planting and additional years of monitoring until the 85 percent survival rate is achieved.

(i) If the applicant is proposing mitigation in accordance with (g)4 above, the applicant shall specify the total area for which mitigation is required, the number and size of trees that would be required using the TRF in (h) above, and an estimate of the cost to purchase and plant trees at the required TRF, including a cost quotation from a tree farm or nursery.

7:38-3.10 Historic and archaeological areas

(a) (No change.)

(b) An HPAA application for a proposed regulated activity as described at (b)1 through 4 below shall include an intensive-level architectural survey completed by an architectural historian whose qualifications meet the Secretary of the Interior's

Professional Qualifications Standards and related guidance as part of the larger Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation as referenced at 36 CFR 61, incorporated herein by reference:

1.-3. (No change.)

4. A proposed regulated activity on a site where citizens, local units of government, historic preservation organizations, or others have indicated the possible presence of historic or archaeological [features] <u>properties</u>.

(c) An HPAA application for a proposed regulated activity as described at (c) 1 through 5 below shall contain a Phase I (identification of resources) archaeological survey completed by an archaeologist whose qualifications meet the Secretary of the Interior's Professional Qualifications Standards and related guidance as part of the larger Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation as referenced in 36 CFR 61, incorporated herein by reference:

 A proposed regulated activity within or adjacent to a site containing known historic or archaeological properties, based upon information contained within the HPAA application or as identified on copies of <u>historic</u> property maps on file at the Department's Historic Preservation Office or the New Jersey State Museum;

^{2.-4. (}No change.)

5. A proposed regulated activity or site about which citizens, local units of government, historic preservation organizations, or others entities have indicated the possible presence of archaeological [areas] <u>properties or sites</u> within or adjacent to the regulated activity or its site.

(d) If an archaeological [area] <u>property or site</u> is identified in the Phase I archaeological survey under (c) above, a Phase II (evaluation of resource eligibility) archaeological survey shall be submitted as part of the application for an HPAA.

(e) (No change.)

(f) A proposed regulated activity shall be deemed to not have an impact to an historic [area] <u>property</u> if the Department determines the regulated activity [and the site upon which the regulated activity is proposed] conforms with the Secretary of the Interior's Standards for the Treatment of Historic Properties, 36 CFR 68 et seq., incorporated herein by reference. The Standards are available at <u>www.state.nj.us/dep/hpo</u> or <u>www.nps.gov</u>.

(g) A proposed regulated activity shall be deemed to not have an impact to an archaeological area identified in a Phase II survey under (d) above if the Department determines:

1. (No change.)

2. The proposed regulated activity involves ground excavation or disturbance but will not physically disturb or intrude upon archaeological deposits [present on the site, as identified on the archaeological survey] <u>on or eligible for inclusion in the New Jersey or National Register of Historic Places</u>.

(h) If the Department determines that a proposed regulated activity will have an impact on historic or archaeological [areas] <u>properties</u>, the Department shall not issue an HPAA unless the applicant demonstrates that the proposed regulated activity would result in minimal practicable degradation of the historic or archaeological [area] <u>property</u>. In order to demonstrate minimal practicable degradation, the applicant shall explore the following alternatives:

1. For an historic [feature] property:

i.-ii. (No change.)

iii. Transfer of development rights, if such program has been instituted by the municipality in which the historic [feature] <u>property</u> is located; and

iv. Any other mechanism that would preserve the historic [feature] <u>property</u> while accommodating the proposed regulated activity;

2. For an archaeological [feature] property or site:

i.-iii. (No change.)

iv. Any other mechanism that would preserve the archaeological [area] <u>property</u> while accommodating the proposed regulated activity.

(i) To support the demonstration required under (h) above, the following information shall be prepared by a historic preservation professional whose qualifications meet the applicable Secretary of the Interior's Professional Qualification Standards, 48 C.F.R. 44716, and submitted to the Department as part of the application for a HPAA:

1. (No change.)

2. Identification of the historic [area] <u>property</u> and its character-defining features and/or identification of the archaeological [area] <u>property</u> and its significance;

3. A comprehensive description of the historic [feature's] <u>property's</u> condition, including:

i.-ii. (No change.)

4. (No change.)

5. If engineering concerns such as structural stability or load bearing capacity are a factor in an applicant's request to affect historic or archaeological [areas] <u>properties</u>, the applicant shall include engineering reports, prepared by a New Jersey licensed engineer with demonstrated experience working with similar historic resources;

6. For proposed regulated activities involving roads, culverts, and historic bridges that may affect historic and archaeological [features] <u>properties</u>, the applicant shall submit the following data, as applicable:

i.-vii. (No change.)

7. If the poor physical condition of a historic building makes rehabilitation too expensive or technically impracticable, the applicant shall submit an evaluation of conditions and costs documented by an architect or engineer whose qualifications meet the Secretary of the Interior's Professional Qualification Standards and related guidance as part of the larger Secretary of the Interior's

Standards and Guidelines for Archaeology and Historic Preservation as referenced in 36 CFR 61, incorporated herein by reference. The applicant shall include the following information, as applicable:

i. (No change.)

ii. If economic factors related to the protection of historic [areas]<u>properties</u> affect an aspect of the regulated activity or its whole design, adetailed and documented breakdown of the costs involved;

iii-iv. (No change.)

8.- 12. (No change.)

(j) (No change.)

(k) If the Department finds that the regulated activity will have an impact on a historic or archaeological [area] <u>property</u> but the proposed regulated activity is designed and implemented to achieve the minimum practicable degradation, the Department shall condition the HPAA upon the applicant providing mitigation in accordance with the provisions at (i)9 above adequate to compensate for the project's impact.

(1) If the Department finds that a proposed regulated activity will result in more than the minimum practicable degradation or impact to a historic or archaeological [area] <u>property</u>, the HPAA application shall be denied. Demolition of a historic building or archaeological [feature] <u>property</u> solely to increase the available percentage of developable area on a lot constitutes more than minimum practicable degradation.

7:38-3.12 Unique or irreplaceable land types and existing public scenic attributes

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

(c) "Existing <u>public</u> scenic attributes" are any <u>Federal</u>, State, county or municipal parks, forests, wildlife management areas and natural areas, any areas acquired for recreation and conservation purposes with Green Acres funding, program or a non-profit conservation organization, any lands preserved as open space by a non-profit conservation organization and other areas as identified by the Highlands Council.

(d) (No change.)

SUBCHAPTER 4 HIGHLANDS RESOURCE AREA DETERMINATIONS

7:38-4.1 Highlands Resource Area Determinations

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

(d) Each HRAD issued by the Department will address the presence, absence, or location, as specified in (c) above, of Highlands resource areas as follows:

Highlands open waters and the applicable buffers, as described at N.J.A.C.
 7:38-3.6;

i. (No change.)

ii. Highlands open waters that are freshwater wetlands shall be identified and delineated as set forth at N.J.A.C. 7:7A-2;
iii. Highlands open waters that are forest shall be identified and used in the forest calculation required in N.J.A.C. 7:38-3.4.

2.-7. (No change.)

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[(f)] (e) The Department shall not issue an HRAD if it determines that the information in the application is inaccurate. In such a case, the applicant may provide corrected information upon the Department's request or may apply directly for a HPAA and provide complete and correct information regarding Highlands resource areas as a part of that application.

[(g)] (f) Each applicant shall submit a survey of Highlands open water boundaries on the site either as part of the HRAD application, or if the applicant prefers, after the Department inspects the site and approves the delineation as marked on the site with flags or other markers. If the Department requires adjustments to the delineated Highlands open waters boundary after the survey is submitted, the applicant shall re-survey the delineated boundary after the adjustments are made. An HRAD will carry a notation referring to the approved and surveyed boundary line. The Department shall waive the survey requirement if an entire site is covered by Highlands open waters and/or their buffers.

[(h)] (g) If an HRAD is sought only for a footprint of disturbance, the applicant shall provide a survey of the boundaries of the footprint of disturbance covered by the HRAD, in addition to the survey required at [(g)] (f) above.

7:38-4.3 Effect, duration, and extension of an HRAD

(a) The person to whom an HRAD is issued is entitled to rely on the determinations contained therein for a period of five years from the date of issuance of the HRAD unless extended in accordance with (b) and (c) below. <u>Until such time as an HPAA is obtained for a project on the site for which the HRAD was issued, [An] an HRAD may be revoked if the Department determines that the HRAD or any portion of it was based on inaccurate or incomplete information [as of the date the HRAD was issued]. In this case, the Department shall issue the HRAD holder written notice revoking the</u>

HRAD, or any inaccurate portion, for specified reasons. An HRAD applicant may request that the Department, at the applicant's expense, inspect the site for which the HRAD was issued and issue a new HRAD reflecting the actual conditions on the site. The new HRAD shall supersede the earlier HRAD for that site and shall expire five years from the date it is issued.

(b)-(d) (No change.)

SUBCHAPTER 6 HIGHLANDS PRESERVATION AREA APPROVAL

7:38-6.1 General provisions

- (a) No person shall undertake any regulated activity [, including major Highlands development,] without first obtaining a Highlands Preservation Area Approval from the Department pursuant to this subchapter.
- (b) To be authorized under an HPAA, a person shall demonstrate that the proposed regulated activity will comply with the following requirements:

1.-2. (No change.)

3. In cases where a New Jersey Pollutant Discharge Elimination System (NJPDES) permit or treatment works approval (TWA) is required, the NJPDES and/or TWA rules, N.J.A.C. 7:14A, applied to Highlands open waters in accordance with the antidegradation provisions of the Surface Water Quality Standards at N.J.A.C. [7:14B] <u>7:9B</u> and the Stormwater Management rules at N.J.A.C. 7:8 applicable to Category One waters.

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

7:38-6.4 Waivers

(a) As provided in the Highlands Act at N.J.S.A.13:20-33b, <u>or in accordance with the Fair Housing Act</u>, N.J.S.A.52:27D-301 et seq., the Department may, in its discretion, waive any provision contained in this chapter on an individual, case-by-case basis:

- 1. To protect public health and safety;
- For redevelopment in certain previously developed areas in the preservation area identified by the Council pursuant to N.J.S.A. 13:20-9b or N.J.S.A. 13:20-11 (a)(6)(h); [or]
- 3. To avoid the taking of property without just compensation[.]; or

4. To permit the construction of a 100 percent affordable housing development as defined by the Council on Affordable Housing pursuant to N.J.A.C. 5:93-5.5 and N.J.A.C. 5:94-4.6.

(b)-(g) (No change.)

(h) The Department shall determine whether a proposed activity is eligible for a waiver for the construction of 100 percent affordable housing in accordance with the standards set forth in N.J.A.C. 7:38-6.9.

[(h)] (i) In cases where the Department determines to approve a waiver in accordance with this chapter, the approval will include specific conditions to restrict any activities that might otherwise occur as a result of the waiver. These conditions include but are not limited to deed restrictions, resolutions from a municipal utilities authority restricting sewage flows, physical limitations on sewer lines and/or pump stations and other

mechanisms necessary to preclude secondary impacts that may otherwise result from the approved activities.

7:38-6.6 Waiver for redevelopment in certain previously developed areas in the Highlands [Preservation Area] <u>preservation area</u>: Department-designated Highlands Brownfields

(a) In accordance with N.J.S.A. 13:20-33b(2), the Department may, on a case by case

basis, waive any of the provisions for a HPAA if such waiver is necessary for redevelopment of certain previously developed areas in the Preservation [Area] <u>area</u> identified by the Council pursuant to N.J.S.A. 13:20-9b and N.J.S.A. 13:20-11a(6)(h). A waiver under this section shall apply only to Department-designated Highlands brownfield sites [if and when the site is]designated pursuant to (b) below, and identified as an area appropriate for redevelopment by the Council. For the purposes of this section only, "site" means a parcel designated by a block and lot, or several contiguous parcels if owned or controlled by the applicant so long as all parcels meet the criteria in (b) below.

(b) For the purposes of this section, a site that meets the criteria in one of the following three [tracks] <u>Tracks</u> is eligible for designation by the Department as a Highlands brownfield, provided that the contamination [on site] <u>onsite</u> is not the result of a current or previous agricultural use:

- 1. Track One: A sanitary landfill facility;
- 2. Track Two: A former or current commercial or industrial site for which:

i. Prior to the issuance of a No Further Action (NFA) letter, a remedial action report was completed confirming the presence of contamination onsite, and documenting the current or previous use as a commercial or industrial site; <u>ii. [the]</u>The Department has issued [a No Further Action] <u>an NFA</u> letter <u>for the</u> entire site for which the brownfield designation is sought as of July 1, 1993, or

later, [describing the extent of remediation conducted]pursuant to N.J.A.C. 7:26C-2.6; [or]and

iii. No discharge of a contaminant has occurred on the site since the date of the NFA letter. Sites where a discharge of a contaminant has occurred on the site since the Department issued the NFA letter must apply for designation through Track Three; or

3. Track Three: A former or current commercial or industrial site [that is listed on the Department's list of "Known Contaminated Sites" in New Jersey]with suspected or confirmed contamination onsite for which the Department has not issued a NFA letter.

(c) [The Department shall designate as a Highlands brownfield the limit of the waste located on a Track One site.] For a Track One site, the Department may designate as a Highlands brownfield:

1. The limit of the waste; or

2. Areas legally disturbed as of August 10, 2004.

(d) [The Department shall designate as a Highlands brownfield only that portion of a Track Two site on which remediation has been completed pursuant to a no further action letter, or areas of previous disturbance as of August 10, 2004.] For a Track Two site, the Department may designate as a Highlands brownfield only that portion of a site that meets one or both of the following:

1. Areas on which remediation has been approved by the Department and for which the Department has issued a NFA letter; or

2. Areas legally disturbed as of August 10, 2004.

(e) For a Track Three site for which only a Preliminary Assessment and Site Investigation have been completed confirming the suspected existence of

<u>contamination onsite, [The]the</u> Department [shall]<u>may</u> designate as a Highlands brownfield <u>only</u> that portion of [a Track Three] <u>the</u> site [that meets the definition of contaminated site, but shall limit the area so designated to the extent of soil contamination, or to areas] [previously,] legally disturbed as of August 10, 2004 [and any area disturbed as a requirement of the remediation process pursuant to a remedial action workplan].

(f) For a Track Three site for which remedial activity, in addition to a Preliminary Assessment and Site Investigation confirming the existence of contamination onsite has occurred, the Department may designate as a Highlands brownfield only that portion of a site that meets one or more of the following:

1. Areas for which a Department-approved delineation of soil contamination has been completed, pursuant to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E;

2. Areas legally disturbed as of August 10, 2004; or

3. Areas disturbed for remediation activities, (but not new residential, commercial or industrial development), in accordance with a Department approved Remedial Action Workplan, pursuant to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E-6.

(g) The Department shall not include a Highlands open water in a Highlands brownfield designation.

[(f)](h) A person seeking the designation of a site as a Highlands brownfield shall submit to the Department documentation that the site meets the criteria for the applicable track at (b) above, using the appropriate Department application form, accompanied by the fee set forth at N.J.A.C. 7:38-10.

[(g)](i) The Department may modify a Highlands brownfield designation to include an area identified by the Council after notice and public comment and submittal to the Department for consideration, provided the documentation and public record developed by the Council is sufficient for the Department to conclude that such modification will not result in a significant impact to any Highlands resource area.

(j) The Department may expand the area included in a Highlands brownfield designation at any time based upon new information obtained during remediation that was not available during the designation process.

[(h)](k) Once the Department designates a site as a Highlands brownfield, and the Council has identified all or part of the brownfield as appropriate for redevelopment in accordance with N.J.S.A. 13:20-9b and N.J.S.A. 13:20-11a(6)(h), an applicant shall be eligible for a HPAA with a waiver [if,] for redevelopment under this section <u>if</u> the applicant demonstrates that:

1.-2. (No change.)

3. For a Track One Highlands brownfield:

i. [Any landfill closed before January 1, 1982, has an oversight document pursuant to the Department Oversight of the Remediation of Contaminated Sites Rules, N.J.A.C 7:26C, and a closure plan/remedial action workplan pursuant to the Solid Waste rules, N.J.A.C 7:26-2A.9, and the Technical Requirements for Site Remediation, N.J.A.C. 7:26E-6, that specifically details the proposed development to which the redevelopment waiver application pertains; or] <u>As of May 9, 2005, the applicant is or was</u> remediating or closing, or has completed remediation or closure of <u>a</u> landfill that ceased operation before January 1, 1982 in accordance with:

(1) A Closure Plan approved by the Department, and issued pursuant to the Solid Waste rules, N.J.A.C 7:26-2A.9; and

(2) A Remedial Action Workplan approved by the Department, and issued pursuant to the Technical Requirements for Site Remediation, N.J.A.C. <u>7:26E-6; or</u>

ii. The applicant is currently implementing an approved Closure and Post-Closure Care Plan, or has completed an approved Closure and Post-Closure Care Plan, for [Any]a landfill [closed]that ceased operation on January 1, 1982, or later, [has a closure approval,]pursuant to the Solid Waste Rules, N.J.A.C 7:26-2A.9[, that specifically details the proposed development to which the redevelopment waiver application pertains, or if the Closure Approval has not yet been obtained, that the applicant has applied or is applying to obtain such approval];

4. For a Track Two Highlands brownfield, the applicant demonstrates that no discharge of a contaminant has occurred on the site since the NFA letter was issued by the Department;

[4.]<u>5.</u>For a Track Three Highlands brownfield, the applicant has obtained an [oversight document,] <u>Oversight Document</u> pursuant to the Department Oversight of the Remediation of Contaminated Sites rules, N.J.A.C. 7:26C, or the Industrial Site Recovery Act rules, N.J.A.C. 7:26B, as applicable[, containing a binding agreement to conduct all remediation necessary to obtain a no further action letter, pursuant to N.J.A.C. 7:26C-2.6];

[5.]<u>6.</u> The proposed redevelopment satisfies the requirements in (c), (d), [or] (e) $\underline{\text{or}}$ (f) above as applicable, and:

i.-ii. (No change.)

[6.]<u>7.</u> The proposed redevelopment includes, wherever feasible the removal of impervious surfaces not used for the redevelopment project and the planting of indigenous vegetation that is beneficial for the protection of water quality, and the recording of a binding conservation restriction preserving the newly revegetated area, from future development; and

[7.]<u>8.</u> The proposed redevelopment includes mitigation in accordance with N.J.A.C. 7:7A for any activity proposed within a Highlands open water that is also a freshwater wetland or State open water, as defined in the Freshwater Wetlands Protection Act rules, N.J.A.C. 7:7A-1.4.

[(i)](1) Any waiver approved in accordance with this section shall be conditioned upon the receipt of [a no further action] <u>an NFA</u> letter, or equivalent approval for sanitary <u>landfills issued by</u> [from]the Department with respect to the area of the site designated as a Highlands [Brownfield] <u>brownfield</u> and identified by the Council as appropriate for redevelopment.

7:38-6.7 Waivers for redevelopment in certain previously developed areas in the Highlands [Preservation Area] <u>preservation area</u>: 70 percent impervious surface

(a) (No change.)

(b) An applicant shall be eligible for an HPAA with a waiver for redevelopment under this section, if the applicant demonstrates that:

1. (No change.)

The proposed redevelopment meets the requirements in N.J.A.C. 7:38-6.6[(h) 5,] (k) 6 [and], 7 and 8.

7:38-6.8 Waiver to avoid the taking of property without just compensation

(a) (No change.)

(b) A waiver under this section shall apply only after the Department determines that the proposed development does not meet all the requirements in this chapter as strictly applied, all the applicant's administrative and legal challenges to that determination as set forth in (b)1 below have concluded, and the HPAA applicant meets the requirements in (g) below.

1. An applicant may challenge any Department HPAA decision under the rules as strictly applied if the applicant disputes the Department's findings of facts or application of the rules to those facts. Following an administrative hearing, the Commissioner shall issue a Final Decision approving or denying a HPAA under the rules as strictly applied. The applicant may appeal a Final Decision which denies the HPAA or approves it with conditions to the Appellate Division of Superior Court. If a court finds that the applicant is not entitled to an HPAA under the rules as strictly applied, the Department shall review and decide the applicant's request for a waiver to avoid a taking of property. The applicant may challenge the Department's final agency action on the waiver application after any hearing in the OAL.

(c)-(f) (No change.)

(g) An applicant for an HPAA may request that the Department waive a requirement of this chapter under (a) above only after the Department has rendered a decision on an HPAA application under the rules as strictly applied, all legal challenges to the decision

that the applicant chooses to bring have concluded pursuant to (b)1, above, and the applicant satisfactorily demonstrates the following to the Department:

1.-2. (No change.)

3. The property has been offered for sale at [or below] <u>an amount no greater than</u> the specific fair market value to all property owners within 200 feet of the property as a whole, to the land conservancies, environmental organizations, and the Highlands Council and all other government agencies on a list provided by the Department, by letter sent by certified mail, return receipt requested, using the form provided by the Department, disclosing the location of all Highlands resource areas on the property and stating that an application for a waiver of the requirements of this chapter to permit development on the property has been filed and enclosing a copy of a fair market value appraisal, that was performed by a State-licensed appraiser and that assumed that the minimum beneficial economically viable use of the property is allowable under local law; and

4. That no reasonable offer based upon the minimum beneficial, economically viable use for the property has been received;

- i. Documentation for (g) 3 and 4 above shall include the following:
 - (1)-(3) (No change.)
 - (4) Receipts indicating the letters were sent by certified mail; and

(5) A copy of the fair market value appraisal required under (g)3 above[; and].

[(6) A written response or a resolution from the Highlands Council demonstrating that it has considered and rejected the offer.]

(h)-(k) (No change.)

7:38-6.9 Waiver for the construction of a 100 percent affordable housing development

(a) In order to afford Bloomsbury, Califon or Glen Gardner Boros in Hunterdon County, and Ringwood Boro and West Milford Township in Passaic County reasonable opportunity to include housing for low and moderate income households in their Fair Share plans as required by the Mount Laurel Doctrine (67 N.J. 151(1975), the Fair Housing Act (N.J.S.A. 52:27D-301 et seq.), and Council on Affordable Housing (COAH) regulations (N.J.A.C. 5:91-1 et seq.), the Department may, in its discretion, waive any provision contained in this chapter on an individual case by case basis to permit the construction of housing in these towns that is exclusively comprised of low and moderate income dwelling units, as defined by COAH pursuant to N.J.A.C. 5:93-5.5 and N.J.A.C. 5:94-4.6.

(b) To be eligible for this waiver, an applicant shall demonstrate that the project meets the criteria in (a) above, and that there is no other practicable means to meet the municipality's affordable housing requirements sa calculated pursuant to COAH regulations and that the proposed project:

1. Has no practicable alternative that:

i. Would have less or no adverse impact on all Highlands resource areas on the site for which the HPAA is sought; and

ii. Would not have other significant adverse environmental consequences, that is, will not merely substitute other significant environmental consequences for those attendant on the original proposal;

- Is designed to comply with the preservation area standards contained at N.J.A.C.
 <u>7:38-3 to the maximum extent feasible while still addressing the affordable housing need; and</u>
- 3. <u>Has been designed to meet the requirements at N.J.A.C. 7:38-6.2 to the maximum extent possible.</u>
- (c) In addition to meeting the requirements at (a) and (b) above, an applicant who proposes a regulated activity within a Highlands open water that is also a freshwater wetland or State open water, as defined in the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A-1.4, shall provide mitigation in accordance with N.J.A.C. <u>7:7A.</u>

SUBCHAPTER 7. EMERGENCY PERMITS

7:38 - 7.1 Emergency permits

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

(d) Any emergency HPAA the Department issues shall include, to the greatest extent practicable under the emergency:

1.-2. (No change.)

 A complete analysis of compliance with each of the standards contained in N.J.A.C. 7:38-3 and N.J.A.C. 7:38-6.2;

3.-4. (No change.)

(e)-(l) (No change.)

N.J.A.C. 7:38-7.2 Obtaining an emergency permit

(a) A person applying for an emergency HPAA shall provide the following information to the Department:

1.-11. (No change.)

12. When available, "as-built" drawings, showing all activities conducted under the emergency permit, including all excavation, grading, structures, and other regulated activities and a complete analysis of compliance with each of the standards contained in N.J.A.C. 7:38-3 and N.J.A.C. 7:38-6.2;

13.-14. (No change.)

(b)-(c) (No change.)

SUBCHAPTER 8 PRE-APPLICATION PROCEDURES

7:38-8.1 Procedure for determining when a pre-application meeting is required

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

(d) An applicant shall request a pre-application conference in writing to the Land Use Regulation Program at the address listed at N.J.A.C. 7:38-1.2(a)2, and shall include:

1.-5. (No change.)

6. The completed Highlands Applicability determination application and a copy of the Highlands Applicability determination letter <u>issued</u> pursuant to N.J.A.C. 7:38-2.4, or in cases where the applicant stipulates under N.J.A.C. 7:38-2.4(a) that the proposed activity is subject to the Highlands Act, adequate information for the Department to determine the applicability of the Highlands Act and WQMP consistency as provided on the Department's HPAA pre-application meeting checklist;

7.-8. (No change.)

9. [A copy of a rare, threatened and endangered plant and animal species listing obtained from the Natural Heritage Program pursuant to N.J.A.C. 7:38-4.1(d)3ii.] <u>A fee in accordance with N.J.A.C. 7:38-10.2(a).</u>

(e) The Department encourages the applicant to obtain an HRAD and a Natural Heritage Program letter listing of rare, threatened and endangered animal species and rare or endangered plant species <u>pursuant to N.J.A.C. 7:38-4.1(d)3ii</u> on or near the site prior to the pre-application conference.

(f) (No change.)

SUBCHAPTER 9 APPLICATION CONTENTS

7:38-9.1 Basic application information

(a) This subchapter describes the application contents for:

1.-3. (No change.)

4. An HPAA with waiver; [and]

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5. A minor modification, major modification, or extension of an HPAA[.]; and <u>6. A Highlands general permit.</u>

(b)-(j) (No change.)

(k) Application checklists and application forms for an HRAD, Highlands Applicability Determination (with or without waiver), HPAA, or a modification or extension to an HPAA can be downloaded and/or printed from the Land Use Regulation Program website at <u>www.nj.gov/dep/landuse</u> or they can be obtained by contacting the Department at the address in N.J.A.C. 7:38-1.2(a)2. Application forms for new or modified water supply diversion projects pursuant to the Safe Drinking Water Act, N.J.S.A. 58:12A-1 et seq., if applicable to an HPAA (with and without waiver), or a modification or extension of same can be obtained from the Bureau of Water Allocation at the address in N.J.A.C. 7:38-1.2(a)4. Application forms for NJPDES permits, treatment works approvals or septic approvals for 50 or more realty improvements can be obtained from the Division of Water Quality in the address at N.J.A.C. 7:38-1.2(a)3 or at <u>www.state.nj.us/dep/dwq</u>. Applications for <u>septic approvals for 50</u> or more realty improvements should be directed to the Bureau of Nonpoint Pollution Control.

(l)-(q) (No change.)

(r) The knowing and willful submission of false, inaccurate, or incomplete information, or the failure to provide information regarding the presence or absence of Highlands resource areas as identified at N.J.A.C. 7:38-3.4 through 3.10, or as otherwise required in any application, record, or other document required to be filed or maintained under the Act, or that is in any way pertinent to determining the site's current or future compliance with the requirements of this Chapter or other land use regulations, is a violation of the Highlands Act. Failure to accurately and completely provide all such information may subject the applicant, its consultants, engineers, surveyors, or agents, to penalties under N.J.A.C. 7:38-13.10 and the Highlands Act. 7:38-9.2 Application requirements for a Highlands Applicability Determination

(a) (No change.)

(b) In order for the Department to determine whether a proposed activity is a major Highlands development subject to regulation under the Highlands Act, an applicant shall provide the following:

1. [A] <u>Two</u> completed [copy] <u>copies</u> of the Highlands Applicability Determination application form, <u>and all associated attachments as required and</u> <u>described in (b)3 through 9 and (c) through (f),</u> completed in accordance with the directions on the form;

2.-9. (No change.)

(c) (No change.)

(d) In addition to providing all the information required at (b) and (c) above, the following information shall be provided if an applicant is seeking a letter of exemption from the requirements of the Highlands Act:

1. For the construction of a single family dwelling pursuant to N.J.A.C. 7:38-2.3(a)1:

i. A copy of a deed, closing or settlement statement, title policy, tax
record, mortgage statement or any other official document showing that
the [property] <u>lot</u> was legally owned by the applicant on or before August
10, 2004 and indicating the lot, block, municipality and county in which
the [property] <u>lot</u> is located, along with any street address;

ii. If the applicant does not own the [property] <u>lot</u>, a copy of the binding contract of sale executed by the seller and the applicant on or before May 17, 2004 for the [property] <u>lot</u> on which the house is to be constructed;

iii.-iv. (No change.)

2. For the construction of a single family dwelling for use by a person other than the property owner or immediate family member pursuant to N.J.A.C. 7:38-2.3(a)2:

i. (No change.)

ii. A site plan certified by a licensed New Jersey Professional Engineer showing all existing and proposed development, including all structures, grading, clearing, impervious surface and disturbance; [and]

iii. The calculations supporting the claim that impervious surfaces and areas of disturbance are within the limits necessary for this exemption; and

iv. A metes and bounds description of the area of the lot to be disturbed, limited to less than one acre and a draft conservation restriction to cover the balance of the lot.

3.-6. (No change.)

7. For any activity conducted by a landowner in accordance with an approved woodland management plan, or [for public lands,] the normal harvesting of forest products in accordance with a forest management plan approved by the State Forester pursuant to N.J.A.C. 7:38-2.3(a)7:

i. For a private landowner with an approved woodlot management plan:

(1) A copy of the applicant's tax bill showing that the site has farmland assessment tax status under the New Jersey Farmland Assessment Act, N.J.S.A. 54:4-23.1 et seq., if applicable;

(2)-(4) (No change.)

ii. For [public lands with] a forest management plan approved by the State Forester:

(1)-(3) (No change.)

8. (No change.)

9. For the routine maintenance and operations, rehabilitation, preservation, reconstruction, or repair of transportation or infrastructure systems by a State entity or local government unit, provided that the activity is consistent with the goals and purposes of the Highlands Act, and does not result in the construction of any new through-capacity travel lanes [of 2,640 feet or more not including tapers] pursuant to N.J.A.C. 7:38-2.3(a)9:

i.-iii. (No change.)

10. For the construction of transportation safety projects and bicycle and pedestrian facilities by a State entity or local government unit, provided that the activity does not result in the construction of any new through-capacity travel lanes of [2,400 feet or more, not including tapers] pursuant to N.J.A.C. 7:38-2.3(a)10:

i-iii. (No change.)

11. For routine maintenance and operations, rehabilitation, preservation, reconstruction, repair, or upgrade of public utility lines, rights-of-way, or systems, by a public utility, provided that the activity is consistent with the goals and purposes of the Highlands Act pursuant to N.J.A.C. 7:38-2.3(a)11:

i. (No change.)

ii. A written description of the work to be conducted, the purpose of the activity and how that purpose is consistent with the goals and purposes of the Highlands Act; and

iii. The identity of the public utility that is sponsoring the proposed activities; <u>or, for the placement of cellular equipment on a legally existing</u> overhead utility tower and the construction of the attendant 10- foot by 20foot pad, when located within the four footings of such tower, a letter from the public utility that owns or controls the right-of-way giving permission to place the cellular equipment on the utility tower and to place the attendant pad within the footings.

12.-14. (No change.)

15. For the remediation of any contaminated site pursuant to N.J.S.A. 58:10B-1 et seq. pursuant to N.J.A.C. 7:38-2.3(a)15:

i.-ii. (No change.)

iii. A copy of a letter, application, order, <u>memorandum of approval or</u> <u>remedial action workplan approved by the Department, or any other</u> documentation demonstrating that the remediation activities are required in accordance with N.J.S.A. 58:10B-1 et seq.; and iv. (No change.)

16.-17. (No change.)

(e) In addition to the information required at (b) [and (c)] above, the following information shall be provided by applicants requesting a Highlands Applicability Determination for a project or activity believed to be agricultural or horticultural and unregulated by the Department pursuant to N.J.A.C. 7:38-2.2(b):

1.-2. (No change.)

(a) (No change.)

7:38-9.3 Basic application requirements for all Highlands Resource Area Determinations, <u>Highlands general permits</u> and Highlands Preservation Area Approvals with or without waivers including modifications and extensions

(a) This section describes information required for every application listed in N.J.A.C.
7:38-9.1(a)2 through [5] <u>6</u>. Additional information required for each specific application is set forth below at N.J.A.C. 7:38-9.4 through [9.7] <u>9.8</u>.

(b) Every application listed at N.J.A.C. 7:38-9.1(a)2[-5] <u>through 6</u> shall require the following:

1.-16.(No change.)

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

7:38-9.4 Additional application requirements for a Highlands Resource Area Determination (HRAD)

(a) (No change.)

(b) All HRAD applications under N.J.A.C. 7:38-4 shall require the following:

1. (No change.)

2. Proof that the public notice requirements below have been met. To prove that a document has been sent to a person, the applicant shall submit either the white postal receipt bearing the recipient's name, address, the date material was sent by certified mail and the cost to the sender, or the green certified mail return receipt card. If a project is located in more than one municipality or county, the notice requirements below must be met for each municipality and county in which the site is located. The applicant shall submit the following to the Department:

i.-iii. (No change.)

iv. Proof that neighboring landowners within 200 feet of the boundary of the site have been notified. The application shall also submit a certified list of all landowners within 200 feet of the boundaries of the site, that is less than 90 days old and obtained from the municipality. <u>If the proposed project is a linear</u> <u>development, as defined at N.J.A.C. 7:38-1.4</u>, which is greater than one-half <u>mile long, an applicant may satisfy this requirement to notify neighboring</u> <u>landowners by sending a notice complying to all owners of land within 200</u> <u>feet of any proposed above surface structure (not including conveyance lines</u> <u>suspended above the ground or small utility support structures such as</u> <u>telephone poles) related to the linear facility, such as an access road, power</u>

substation, grade separated interchange or similar structure and publishing a display advertisement. The advertisement shall be:

(1) At least four column inches in size;

(2) Published in the newspaper of record for each municipality in which the site is located; and

(3) Published in a newspaper with regional circulation in the region in which the site is located.

(c) In addition to the information required in (b) above, an application for a footprint of disturbance HRAD for a portion of a site, under N.J.A.C. 7:38-4.1(c)1 shall require a site plan that depicts the location of and that separately labels the following:

1.-3. (No change.)

4. The general location of all upland forest areas on the portion of the property which is the subject of the application. The general area shall be clearly marked in the field[;] together with the outer perimeter of the sample plots used to define the forest areas, if such sampling plots were used. Forest areas that do not overlap with Highlands open waters must be clearly labeled as upland forest;

5.-10. (No change.)

(d)-(e) (No change.)

7:38-9.5 Additional application requirements for a Highlands Preservation Area Approval (HPAA)

(a) In addition to the basic information required for all applications under N.J.A.C. 7:38-9.3, to be deemed administratively complete, an application for a

Highlands Preservation Area Approval (HPAA) shall include all of the following:

1.-2. (No change.)

3. Proof that the public notice requirements below have been met. To prove that a document has been sent to a person, the applicant shall submit either the white postal receipt bearing the recipient's name, address, the date material was sent by certified mail and the cost to the sender, or the green certified mail return receipt card. If a project is located in more than one municipality or county, the notice requirements below must be met for each municipality and county in which the site is located:

i.-iii. (No change.)

iv. Proof that neighboring landowners within 200 feet of the boundary of the site have been notified. The application shall also submit a certified list of all landowners within 200 feet of the boundaries of the site, that is less than 90 days old and obtained from the municipality. If the proposed project is a linear development, as defined at N.J.A.C. 7:38-1.4, which is greater than one-half mile long, an applicant may satisfy this requirement to notify neighboring landowners by sending a notice complying to all owners of land within 200 feet of any proposed above surface structure (not including conveyance lines suspended above the ground or small utility support structures such as telephone poles) related to the linear facility, such as an access road, power substation, grade separated interchange or similar structure and publishing a display advertisement. The advertisement shall be:

(1) At least four column inches in size;

(2) Published in the newspaper of record for each municipality in which the site is located; and

(3) Published in a newspaper with regional circulation in the region in which the site is located.

v.-vi. (No change.)

4. (No change.)

5. The following information on the location of Highlands resource areas [(HRAs)] on the site:

i. (No change.)

ii. If no HRAD has been issued, and the site is larger than one acre, the applicant shall submit all of the information required for an application for a boundary verification HRAD. The delineation of Highlands open waters with 300-foot buffers, forests, slopes between 10 and 20 percent and those greater than or equal to 20 percent required by the HRAD application checklist shall be drawn onto the site plan required in N.J.A.C. 7:38-9.4(a). A formal boundary report is not required. However, the application must include the data sheets and supporting information used to record the information on soils and vegetation which formed the basis for the boundary determination. In addition, if the method at N.J.A.C. 7:38-3.9(c) was used to identify forest, all data sheets shall be provided;

(1) If the applicant has a currently valid approvedFreshwater Wetlands letter of interpretation (LOI), issued

by the Department for the site under N.J.A.C. 7:7A-3, this may be submitted instead of an HRAD so long as the applicant also provides information regarding any additional [HRAs] <u>Highlands resource areas</u> not previously identified in the LOI;

(2) (No change.)

6. (No change.)

7. A compliance statement and the basis for the findings describing how the proposed project meets all standards set forth at N.J.A.C. 7:38-3 and [the conditions at] N.J.A.C. 7:38-6.

(b)-(f) (No change.)

7:38-9.6 Additional application requirements for a Highlands Preservation Area Approval with waiver

(a) (No change.)

(b) An administratively complete application for an HPAA with waiver <u>shall</u> [contains] <u>contain</u>:

1. (No change.)

2. An [alternatives] analysis describing all alternatives to the proposed project which would reduce each impact of the project as listed in N.J.A.C. 7:38-6.2(a) and the reasons the applicant did not adopt that alternative;

3.-6. (No change.)

7. An [detailed explaining] <u>explanation</u> how the proposed activity satisfies each of the remaining HPAA standards <u>at N.J.A.C. 7:38-3;</u> [and]

8. A detailed explanation why the proposed activity satisfies the standards at N.J.A.C. 7:38-6.2(a)[.] ; and

9. Documents showing the conclusion of an applicant's legal challenges, if any, to the Department's decision on the application for an HPAA under the rules as strictly applied, including:

i. The Department decision on the HPAA application made in accordance with the rules as strictly applied;

ii. The Commissioner's Final Decision granting or denying the HPAA application following the applicant's administrative challenge to the Department's findings of fact and/or application of the rules; and

iii. All court orders, consent orders, and decisions concerning the Commissioner's Final Decision including, but not limited to, orders summarily dismissing the appeal.

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

(f) In order to obtain Department-designation of a brownfield[,] in accordance with N.J.A.C. 7:38-6.6, all applicants shall provide an HRAD obtained in accordance with the requirements at N.J.A.C. 7:38-9.4. In addition, the following information is required:

1. For a designation in accordance with N.J.A.C. 7:38-6.6(b)1:

i. A site plan certified by a licensed New Jersey Professional Land Surveyor showing the limit of the waste and buffers, as required by the Solid Waste Management Act, N.J.A.C. 13:1E-1, and areas legally disturbed as of August 10, 2004;

ii. [Proof] <u>Documentation</u> that the site meets the definition of sanitary landfill facilities as defined at N.J.A.C. 13:1E-1 in accordance with the following:

(1) For landfills [closed] <u>that ceased operation</u> on [January 1, 1982] <u>May</u>
<u>6, 1970</u> or later, a copy of a registration or permit issued by the Department; or

(2) For landfills [closed] <u>that ceased operation</u> prior to [January 1, 1982]<u>May 6, 1970[,]</u> that were not issued a permit by the Department:

(A)-(B) (No change.)

(3) For landfills lacking the above documentation, [a site investigation report] <u>an</u> <u>investigation report</u> prepared by a licensed professional engineer [that documents] <u>documenting</u> the presence of the landfill through the performance of test pits;

1. For a designation in accordance with N.J.A.C. 7:38-6.6(b)2:

i. A copy of a No Further Action (NFA) letter for the entire site issued by the Department;

ii. A summary of the remedial action report completed prior to the issuance of the NFA letter that confirms the presence of contamination onsite and documents the current or previous use as a commercial or industrial site;

iii. Certification that no discharge of a hazardous substance has occurred onsite since the date of the NFA letter pursuant to the Department Oversight of the Remediation of Contaminated Sites rule, N.J.A.C. 7:26C-1.2;

[i.]<u>iv.</u> A site plan certified by a licensed New Jersey Professional Land Surveyor showing [the extent of the site described in the No Further Action letter, and all areas of previous disturbance] <u>areas legally disturbed as of August 10, 2004, and areas disturbed</u> <u>due to remediation activities;</u>

[ii. A copy of a No Further Action letter issued on July 1, 1993 or later, pursuant to N.J.A.C. 7:26C-2.6; and

iii. Documentation regarding the historical use as a commercial or industrial site]; or

3. For a designation in accordance with N.J.A.C. 7:38-6.6(b)3:

<u>i.</u> A Preliminary Assessment and Site Investigation (PA/SI) confirming the presence of contamination on the site and documenting the current or previous use as a commercial or industrial site, or certification from the applicant of their intent to conduct a PA/SI, and a proposed schedule and SI workplan;

[i.]<u>ii.</u> A site plan certified by a licensed New Jersey Professional Land Surveyor showing [the extent of soil contamination and areas of previous disturbance;]:

(1) Areas legally disturbed as of August 10, 2004;

(2) The extent of confirmed soil contamination known at the time of application; and

(3) Areas disturbed due to remediation activities;

[ii. Proof of listing on the Known Contaminated Sites in New Jersey list in accordance with the following:

(1) Program Interest Identification (PIID) number; or

(2) A clearly marked copy of the site's listing on the Known Contaminated Sites in New Jersey list.]

4. For a change in designation in accordance with N.J.A.C. 7:38-6.6(i), the applicant shall provide:

<u>i. Documentation that the Highlands Council has provided notice and the</u> <u>opportunity for public comment on the proposed change in designation;</u> <u>and</u>

<u>ii. A document and/or copy of the public record where the Highlands</u>
 <u>Council considered the impacts of the proposed change on each Highlands</u>
 <u>resource area and made the determination that the proposed modification</u>
 would not result in a significant impact to any Highlands resource area.

5. For expansion of a Highlands brownfield designation in accordance with N.J.A.C. 7:38 6.6(j):

i. Documentation from the Department confirming designation of the site as a Highlands brownfield and the boundaries of the designated site; and

ii. Documentation obtained during the remediation process confirming contamination in areas of the site not known during the designation process and verified by the Department in accordance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E.

(g) In order to obtain a waiver for redevelopment based upon a Department-designated brownfield, in accordance with N.J.A.C. 7:38-6.6, all applicants shall provide:

1. The requirements listed in N.J.A.C. 7:38-9.6(b);

2. [A copy of the Department's letter designating] Documentation from the Department confirming designation of the site as a <u>Highlands</u> brownfield;

3. [Proof] <u>Documentation</u> from the Highlands Council that the site has been designated for redevelopment;

4. [Compliance with the requirements at N.J.A.C. 7:38-6.6(h)5] <u>A stormwater</u> <u>management plan in accordance with N.J.A.C. 7:8 that satisfies the requirements</u> <u>at N.J.A.C. 7:38-6.6(k)6;</u> [and]

5. A mitigation proposal that complies with N.J.A.C. 7:7A-15, to offset the impacts of the project on freshwater wetlands and/or State open waters if they comprise any or all of the Highlands open water on the site to be affected by the proposal[.] <u>; and</u>

6. Compliance with the requirements at N.J.A.C. 7:38-6.6(k)7, if applicable, and a binding conservation restriction that satisfies the requirements at N.J.A.C. 7:38-6.3.

(h) In addition to the requirements at N.J.A.C. 7:38-9.6(g), the following information is required to obtain a waiver for redevelopment based upon a Department-designated brownfield:

1. For a waiver based upon a designation in accordance with N.J.A.C. 7:38-6.6(b)1 for a landfill [closed]<u>that ceased operation</u> prior to January 1, 1982:

[i. An Oversight Document, pursuant to "Department Oversight of the Remediation of Contaminated Sites Rule,", N.J.A.C 7:26C; and]

[ii.] <u>i.</u> [A Closure Plan/Remedial Action Workplan, as] <u>A Closure Plan</u>
approved by the Department, pursuant to the Solid Waste Rules, N.J.A.C
7:26-2A.9[, specifically detailing the proposed development]; and

[iii.] ii. A Remedial Action Workplan approved by the Department, pursuant to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E-6;

 For a waiver based upon a designation in accordance with N.J.A.C. 7:38-6.6(b)1 for a landfill [closed]<u>that ceased operation</u> on January 1, 1982 or later, [Closure Approval]<u>a Closure and Post-Closure Plan approved by the</u> <u>Department</u>, pursuant to the Solid Waste Rules, N.J.A.C 7:26-2A.9[, specifically detailing the proposed development];

3. For a waiver based upon designation in accordance with N.J.A.C. 7:38-6.6(b)2, certification that no discharge of a hazardous substance has occurred on the site since the date of the NFA letter, pursuant to the Department Oversight of the Remediation of

Contaminated Sites rule, N.J.A.C. 7:26C-1.2;

[3.]<u>4.</u> For a waiver based upon a designation in accordance with N.J.A.C. 7:38-6.6(b)3, a valid Oversight Document[,] pursuant to <u>the</u> Department Oversight of the Remediation of Contaminated Sites [Rule,] <u>rule</u>, N.J.A.C. 7:26C, or the Industrial Sites Recovery Act [Rules] <u>rules</u>, N.J.A.C. 7:26B, as applicable, agreeing to conduct all remediation necessary to obtain a [No Further Action] <u>NFA</u> letter[,] pursuant to N.J.A.C. 7:26C-2.6[, in order to achieve a Departmentapproved remedy protective of public health and the environment].

(i) In addition to the requirements listed in (b) above, an applicant for a waiver of a requirement for an HPAA to permit redevelopment of a site comprised of 70 percent or more impervious surfaces, in accordance with N.J.A.C. 7:38-6.7, shall provide the following information:

[i.] <u>1.</u> A site plan certified by a licensed New Jersey Professional Land Surveyor depicting the scope of the impervious cover in relation to the proposed project;

[ii. Compliance with the requirements at N.J.A.C. 7:38-6.6(h); and]

2. Documentation from the Highlands Council confirming that the site contained 70 percent impervious coverage on August 10, 2004;

3. Documentation from the Highlands Council that the site has been designated for redevelopment;

4. A stormwater management plan in accordance with N.J.A.C. 7:8 that satisfies the requirements at N.J.A.C. 7:38-6.6(k)6;

[iii.] <u>5.</u> A mitigation proposal that complies with N.J.A.C. 7:7A-15, to offset the impacts of the project on freshwater wetlands and/or State open waters if they comprise any or all of the Highlands open water on the site to be affected by the proposal[.] ; and

<u>6. Compliance with the requirements at N.J.A.C. 7:38-6.6(k)7, if applicable, and a binding conservation restriction that satisfies the requirements at N.J.A.C. 7:38-6.3.</u>

(j) In addition to the requirements listed in (b) above, an applicant for a waiver of a requirement for an HPAA to avoid taking of property without just compensation, in accordance with N.J.A.C. 7:38-6.8, shall provide the following information:

1.-8. (No change.)

9. Documents showing [that all administrative] <u>the conclusion of any</u> appeals of the Department's [decision on the] HPAA [application] <u>decision under the rules as</u> <u>strictly applied[</u>, if any, have concluded,] including:

i. [A] <u>The</u> Department decision on the HPAA application made in accordance with the rules as strictly applied; [and]

 ii. [In the event of an appeal, the] <u>The</u> Commissioner's [final decision]
 <u>Final Decision</u> granting or denying the HPAA application[.] <u>following an</u> <u>administrative challenge to the Department finding of facts or application</u> <u>of the rules; and</u>

iii. All court orders and decisions concerning the Commissioner's Final Decision including, but not limited to, orders summarily dismissing the appeal.

(k) In addition to the requirements listed in (b) above, an applicant for a waiver of a requirement for an HPAA to construct a 100 percent affordable housing development, in accordance with N.J.A.C. 7:38-6.9, shall provide a letter from the township attorney certifying that the proposed development is comprised of 100 percent affordable housing and is included in the municipality's Fair Share Plan.

7:38-9.7 Application requirements for modification or extension of an HPAA or HRAD

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

(c) Any change not listed at (b) above shall constitute a major modification. [To obtain approval for a major modification, an applicant shall meet the same substantive and procedural requirements that would apply to an application for a new HPAA, except that the application need only address the portions of the HPAA affected by the proposed modification. Portions of the HPAA that are not affected by the proposed modification are not subject to public notice, public hearing, Department review, or other procedures that would apply to an application for a new HPAA.]

(d)-(e) (No change.)

(f) An application for a major modification shall [require] <u>meet</u> the same <u>substantive and</u> <u>procedural requirements [information]</u> as an application for a new HPAA, except that the application need only address the portions of the existing approval affected by the proposed modification. Portions of the existing approval that are not affected by the proposed modification are not subject to public notice, public hearing, <u>Department</u> <u>review</u> or other procedures that would apply to a new application.

(g)-(h) (No change.)

7:38-9.8 Application requirements for Highlands general permits

(a) In addition to the basic information required for all applications under N.J.A.C. 7:38-9.3 above, a person applying for a Highlands General Permit (GP) in accordance with N.J.A.C. 7:38-14 shall provide:

- 1. <u>Any specific information required in the general permit if not already provided in accordance with N.J.A.C. 7:38-9.3 above;</u>
- Information regarding whether other approvals are required for the activities by Federal, interstate, State and local agencies for the activity, whether any such approvals or denials have been received, and whether the proposed activities are consistent with the rules, plans or policies of other Federal, interstate, State and local agencies; and
- 3. <u>A statement whether a site is known or suspected to be contaminated with</u> <u>hazardous substances, and if the Department requests it, a laboratory analysis of</u> <u>representative samples of the soil or sediment on the site.</u>

SUBCHAPTER 10 FEES

7:38-10.1 General fee provisions

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

(c) An application fee is refundable if the Department returns the application as administratively incomplete under N.J.A.C. 7:38-11.2 <u>or N.J.A.C. 7:38-11.3</u>. An application fee is not refundable once the application has been declared administratively complete.

(d)-(e) (No change.)

7:38-10.2 Fee tables

(a) (No change.)

- (b) The application fee for Highlands Applicability Determinations (including exemptions) shall be:
 - 1.-2. (No change.)
 - 3. \$100.00 for applicants seeking a determination [based upon receipt of a woodland or forest management plan, or an agricultural or horticultural activity in accordance with N.J.A.C. 7:38-2.3(a)7 and 2.2(b), respectively] <u>for any of the activities contained at N.J.A.C. 7:38-2.4(b);</u>

4.-5. (No change.)

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

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(f) In addition to the fee in (d) above, the fee for a Highlands Preservation Area Approval that includes disturbance within the areas regulated under the Flood Hazard Area Control Act rules (N.J.A.C. 7:13) shall be <u>calculated in accordance with the stream encroachment</u> <u>fee table at N.J.A.C. 7:1C-1.5(a)4.</u> [:

1. For major stream encroachment elements, \$4,000 each which includes the following:

i Bridges and culverts;

ii. Retaining walls more than four feet high and 100 feet long;

iii. Detention basins located within the flood plain;

iv. Channel improvements and relocations (unless within 300 feet of a new bridge or culvert, in which case the fee paid for the bridge or culvert also includes the review of the channel modifications);

v. Establishment of stream encroachment lines based on hydrologic and hydraulic calculations. Each 1,000 feet of stream, or segment thereof, is a major element; and

vi. Review of net-fill calculations (unless associated with a perpendicular stream crossing, in which case the fee paid for the bridge or culvert also includes the review of net-fill calculations).

2. In addition, the following projects are always major stream encroachment permits, regardless of any other project element. If such a project already has a major element, then no additional fee is required beyond the sum of the various

elements. However, if no major element is present, then a major fee will be applied in addition to any minor elements for the following projects:

i. Any commercial development where the applicant owns or controls more than one acre within the floodplain; and

ii. Any residential subdivision of more than 10 acres, regardless of the area within the floodplain.

3. Minor Stream Encroachment Reviews elements are \$1,000 each and include the following:

i. Storm water outfall structures;

ii. Utility crossing;

iii. Footbridges;

iv. Bridge deck replacements;

v. Use of, or reference to, a New Jersey Flood Hazard Area delineation (for stream encroachment lines, net-fill or hydraulic calculations, floor elevations, etc.);

vi. Pond dredging;

vii. Stream cleanings (unless they are submitted under the provisions of the Stream Cleaning Act, in which case there is no review fee);

viii. Stream bank stabilization projects at grade;

ix. Stream channel modifications less than 100 in length, and stream bank reestablishment or protection projects, (if the department agrees that no review of hydrologic or hydraulic calculations is necessary);

x. Retaining walls no more than four feet high and less than 100 feet long;

xi. The construction of one single-family house (even if net-fill calculations are necessary);

xii. Minor grading or other work within the flood plain that meets the netfill limitations by inspection (if the department agrees that no review of net-fill calculations is necessary); and

xiii. Replacements or extensions of existing bridges or culverts (if the department agrees that no review of hydrologic or hydraulic calculations is necessary).]

(g) In addition to the fee at (d) above, the fee for [a Highlands Preservation Area Approval] <u>an HPAA</u> that includes a water supply review shall be:

1.-3. (No change.)

(h) In addition to the fee at (d) above, the fee for a [Highlands preservation area approval] <u>HPAA</u> that includes a waiver in accordance with N.J.A.C. 7:38-6 shall be:

[For a brownfield designation in accordance with N.J.A.C. 7:38- 6.6,
 \$250.00 plus \$50.00 per acre;] For a waiver in accordance with N.J.A.C. 7:38-6.6:

- i. For a brownfield designation, \$500.00;
- ii. For a waiver for redevelopment, \$250.00;

2. For a waiver in accordance with N.J.A.C. 7:37-6.7 and 6.9, \$500.00;

[2.] <u>3.</u> For a review of taking without just compensation in accordance with N.J.A.C. 7:38-6.8, \$2,000; and

[3.] <u>4.</u> For a Water Quality Management Plan amendment, \$1,000.

(i) The application fee for Highlands general permits shall be as follows:

1. No fee for Highlands general permit 1 at N.J.A.C. 738-14.1;

2. \$500 for Highlands general permit 2 at N.J.A.C. 7:38-14.2.

[(i)] (j)To renew an HRAD, the fee shall be 25 percent of the original fee or \$250.00 whichever is larger.

[(j)] (k) To renew an HPAA, the fee shall be \$1,000.

SUBCHAPTER 11 REVIEW OF APPLICATIONS

7:38-11.1 Procedure for review of applications

This subchapter contains the procedures by which the Department will process and review each application described in this chapter. For the standards applicable to substantive review of a Highlands Applicability Determination, [HRAD and HPAA,] see N.J.A.C. 7:38-11.2. For the standards applicable to substantive review of an HRAD,

<u>Highlands general permit and HPAA see N.J.A.C. 7:38-11.3.</u> For the standards applicable to substantive review of an HPAA with waiver, see N.J.A.C. 7:38-6.

7:38-11.2 Completeness review of Highlands Applicability Determinations

(a) Within 20 working days after the day of receipt of an application, the Department shall review the application as follows:

- 1. <u>If all items required by the application checklist and/or application form</u> <u>are provided, the Department shall declare the application administratively</u> <u>complete.</u>
- 2. If an item submitted to the Department is obviously deficient, the item shall be deemed missing from the application and the Department shall declare the application administratively incomplete.

(b) If the application is not administratively complete, the Department shall return a copy of the application to the applicant with a list of the missing and deficient items. If the applicant does not submit the listed information within 30 days of the date of request or obtain an extension pursuant to (b)2 below, the Department shall deem the application administratively closed and shall so notify the applicant in writing.

1. If the application is resubmitted within 30 days of the date the Department returns the deficient application, the original application fee will be credited toward the resubmitted application. If the applicant does not resubmit an application, the applicant has 30 days to request a fee refund upon request. If the Department does not receive a resubmitted application or a request for a fee refund within the 30 days, the Department shall deem the application administratively closed, and so notify the applicant in writing.

2. If, within 30 days of a Department return of a deficient application, the applicant submits a letter providing good cause for an extension, the Department shall extend the deadline for submission of the information an additional 15 days or as it deems appropriate.

3. The applicant may submit the revised application without repeating the public notice requirements of N.J.A.C. 7:38-9.2(b)5 if the revised application is:

i. Submitted within 30 days after the date the Department returned the original submittal; and

ii. Sufficiently similar to the original submittal that the original public notice provides reasonable notice of the nature and extent of the new submittal to potential interested parties.

(c) If the application is deemed administratively complete, the Department shall:

1. So notify the applicant in writing;

2. Publish notice of the application in the DEP Bulletin; and

3. Review the application for technical completeness:

i. If each application item is adequate to allow the Department to determine if the proposed project complies with this chapter, the Department shall declare the application technically complete.

ii. If the application is not technically complete, the Department shall request any additional information necessary for technical completeness.

(d) If the Department requests additional information under (c)3(ii) above, the applicant shall provide copies of the additional information to the persons who received a copy of the initial application under N.J.A.C. 9.2(b)5 (public notice requirements for Highlands Applicability Determinations).

(e) If a person submits an application and does not receive a response from the Department within the deadlines imposed in this subchapter, the application shall not be deemed approved.

[7:38-11.2] <u>7:38-11.3</u> Completeness review for [Highlands Applicability Determinations,] HRADs, <u>Highlands general permits</u> and HPAAs

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

(c) If the application is administratively complete, the Department shall:

1. (No change.)

2. Transmit a copy of the application to other agencies if required under this chapter. For example, an application involving a Highlands open water that is also a freshwater wetland or State open water may need to be transmitted to EPA for comment under N.J.A.C. 7:7A-12.2, or an application involving a federally-listed threatened or endangered species may be transmitted to the U.S. Fish and Wildlife Service for comment;

3.-4. (No change.)

(d)-(f) (No change.)

[7:38-11.3] 7:38-11.4 Public comment on an application

(a) The Department shall publish notice in the DEP Bulletin of each administratively complete application in accordance with [N.J.A.C. 7:38-11.2(c)3] N.J.A.C. 7:38-11.2(c)2 and 11.3(c)3. This notice shall constitute notice of the application to all interested persons except those who must be notified by the applicant under N.J.A.C. 7:38-9.2(b)5, 9.4(b)2, or 9.5(a).

(b) (No change.)

(c) The public shall have 30 days to comment on an application <u>for a Highlands</u> <u>applicability determination and 45 days to comment on all HRAD or HPAA application</u> after the Department publishes notice of the application in the DEP Bulletin under (a) above. The Department shall consider all written public comments submitted within this time. The Department may, in its discretion, consider comments submitted after this date if a decision has not yet been made on an application.

[7:38-11.4] 7:38-11.5 Hearings on an application for an HPAA

(a) Within 30 days after a notice of an application for [a Highlands Preservation Area Approval] <u>an HPAA</u> is published in the DEP Bulletin, interested persons may request in writing that the Department hold a public hearing on the application. Requests shall state the nature of the issues proposed to be raised at the hearing.

(b)-(j) (No change.)

[7:38-11.5] 7:38-11.6 Procedures for review of an HPAA with waiver

(a) The applicant shall demonstrate to the Department that the proposed project or activity meets the requirements for all waivers at N.J.A.C. 7:38-6.4(e) and complies with the special standards applicable to the waiver being sought: N.J.A.C. 7:38-6.5 (health

and safety), 6.6 (brownfields redevelopment), 6.7 (70 percent impervious surface redevelopment) [or] <u>,</u> 6.8 (taking without just compensation) <u>or 6.9 (construction of 100 percent affordable housing</u>.

(b)- (i) (No change.)

[7:38-11.6] <u>7:38-11.7</u> Final decisions

(a) The Department shall approve or deny an application <u>for a Highlands general permit</u> <u>within 120 days, or for an HPAA or HPAA with waiver within 180 days of receipt of a</u> complete application, or for good cause, within such additional period of time as the Department shall notify the applicant in writing is required to complete its review under this chapter. However, if an application requires coordination with U.S. Environmental Protection Agency (USEPA) in accordance with N.J.A.C. 7:7A-12.2, a WQMP amendment, or a Safe Drinking Water, NJPDES or treatment works review the HPAA will not be approved until all requirements have been satisfied. If an applicant does not receive a response from the Department within this time, the application shall not be deemed approved.

(b)-(c) (No change.)

(d) Decisions by the Department shall be published in the DEP Bulletin. A copy of every HPAA or HPAA with waiver that requires USEPA review under [N.J.A.C. 7:38-11.2] <u>N.J.A.C. 7:38-11.3</u> shall be transmitted to USEPA. Decisions by the Department on approval or denial of a WQMP amendment shall be published in the New Jersey Register and the DEP Bulletin.

[7:38-11.7] <u>7:38-11.8</u> Cancellation, withdrawal, resubmission and amendment of applications for HPAAs, <u>Highlands general permits</u>, HPAAs with waiver, HRADs or Highlands Applicability Determinations

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

(c) An applicant may withdraw an application at any time in the application review process. For all applications other than a Highlands Applicability Determination, [If] if an application is withdrawn, the application fee will not be refunded. However, if the requirements of (e)2 below are met, the fee may be credited toward a future application.

(d)-(e) (No change.)

[(g)] <u>f.</u> If the Department denies an application, the applicant may resubmit an application for a revised project on the same site. The Department will treat this submission as a new application requiring a fee in accordance with N.J.A.C. 7:38-10.

SUBCHAPTER 12 CONTENTS OF APPROVALS

7:38-12.1 Standard conditions that apply to all orders, decisions, approvals or determinations issued pursuant to the Highlands Act and its implementing regulations

(a) The following standard conditions apply to all HPAAs, <u>Highlands general permits</u>, HPAAs with waiver, HRADs and orders issued under this chapter:

1.-16. (No change.)

[17. No permittee shall commence any regulated activity including construction pursuant to an HPAA until the permittee provides the Department a written statement accepting unconditionally all the terms and conditions of the HPAA. A permit acceptance form is provided by the Department in each application checklist. If a permittee begins any activity regulated under the HPAA prior to providing the Department a written acceptance, the permittee shall be deemed to

have accepted all terms and conditions of the HPAA as of the date the first regulated activity began;]

[18.] <u>17.</u> Permit actions: No HPAA, determination or HRAD shall be modified, suspended, or terminated except by action of the Department or a court of competent jurisdiction. A permittee's submission to the Department of a request to modify an HPAA or of a notice of anticipated noncompliance does not alter any condition of an HPAA or HRAD. In such cases, the permittee is responsible for taking those actions necessary to ensure continued compliance with an existing HPAA or HRAD while the Department evaluates the permittee's submissions; and

[19.] <u>18.</u> Property rights: An HPAA or HRAD does not convey any property right of any sort.

N.J.A.C. 7:38-12.4 Effect of an HPAA

[(a)] Compliance with all standards for an HPAA with or without a waiver during its term constitutes compliance, for enforcement purposes, with sections 301, 307, and 403 of the Federal Act, with the Highlands Act, and with this chapter. However, an HPAA may be modified, terminated and reissued, suspended, or terminated during its term for cause as set forth in this chapter.

SUBCHAPTER 13 ENFORCEMENT

7:38-13.7 Civil administrative penalty amount

(a) To determine the civil administrative penalty for regulated activities conducted prior to the issuance of a Highlands Preservation Area Approval, the Department shall use the procedures in N.J.A.C. 7:38-13.8. To determine the civil administrative penalty

for all other violations of the Act, <u>except for those described at N.J.A.C. 7:38-13.10</u> <u>through 12</u>, the Department shall use the procedures identified in this section.

(b) (No change.)

7:38-13.9 Civil administrative penalties for other than failure to obtain an HPAA prior to conducting regulated activities

(a) The Department will assess a daily civil administrative penalty for violations described in this section other than those violations addressed in N.J.A.C. 7:38-13.8 <u>and except for those described at N.J.A.C. 7:38-13.10 through 12</u> on the basis of the seriousness of the violation and the conduct of the violator pursuant to Table B below, unless adjusted pursuant to N.J.A.C. 7:38-13.7 or this section.

Table B

SERIOUSNESS

MAJOR MODERATE MINOR

CONDUCT	MAJOR	\$25,000	\$15,000	\$10,000
	MODERATE	\$15,000	\$7,500	\$5,000
	MINOR	\$10,000	\$5,000	\$1,000

(b)-(d) (No change.)

7:38-13.17 Penalty collection

All penalties collected pursuant to this section shall either be used, as determined by the Council, by the Department for the acquisition of lands in the preservation area or by any development transfer bank used or established by the Council to purchase development potential in the [Preservation Area] preservation area.

SUBCHAPTER 14 ADOPTED GENERAL PERMITS

7-38-14.1 Highlands General Permit 1 - Habitat Creation and Enhancement Activities

(a) Highlands general permit 1 authorizes habitat creation and enhancement activities in Highlands open waters, which is sponsored or substantially funded by a Federal or State agency or other entity described in (b) below and that are necessary to implement a plan for the restoration, creation or enhancement of the habitat and water quality functions and values of Highlands open waters. For the purposes of this general permit, a "sponsor" shall be an active participant in or substantial financial contributor to the activities, and shall approve the activities in writing.

(b) Highlands general permit 1 authorizes any of the following:

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

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

3. A project plan created by the U.S. Department of Agriculture's Natural Resources Conservation Service under the Wetlands Reserve program, the

Conservation Reserve program, the Conservation Reserve Enhancement program, the wildlife habitat incentive program (WHIP), or a similar program, and approved by the local Soil Conservation District;

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

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

6. A habitat creation or enhancement plan carried out by the New Jerey Water Supply Authority;

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

8. A habitat creation or enhancement plan carried out by a charitable conservancy, as defined at N.J.A.C. 7:7A-15.1, provided that the plan is part of a program listed at 2 through 5 above.

(c) To be eligible for authorization under Highlands general permit 1, an applicant shall demonstrate that the proposed project:

1. Is part of a comprehensive plan for the restoration, creation or enhancement of the habitat and water quality functions and values of Highlands open waters and their buffers;

2. Is sponsored or partially funded by an appropriate entity in accordance with (b) above;

3. Is consistent with the goals of the Highlands Act;

4. Will improve the values and functions of the ecosystem; and

5. Will have a reasonable likelihood of success.

(d) Highlands general permit 1 does not authorize an activity unless the sole purpose of the activity is habitat creation or enhancement. For example, general permit 1 does not authorize construction of a detention basin in wetlands for stormwater management, even if the detention basin or the project of which the basin is a part will also result in habitat creation or enhancement. Similarly, Highlands general permit 1 does not authorize a flood control project that may also result in creation or enhancement of some wildlife habitat.

(e)Habitat creation and enhancement activities that are authorized by Highlands general permit 1 include, but are not limited, to the following:

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

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

3. Placing habitat improvement structures such as:

i. Nesting islands;

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

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

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

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

(f) Activities under Highlands general permit 1 shall meet the following requirements:

1. The activities shall disturb the minimum amount of Highlands open waters and buffers necessary to successfully implement the project plan and shall result in an improvement to aquatic habitat or buffer quality above existing conditions. The removal of a dam to relocate or alter the character of a Highlands open water is permitted so long as there are net gains in habitat functions and values;

2. <u>The activities shall not decrease the total combined area of Highlands open waters</u> and/or buffers on a site. However, the Department may approve such a decrease if the Department determines that the activities causing the decrease are sufficiently environmentally beneficial to outweigh the negative environmental effects of the decrease. In addition, the Department may approve conversion of different types of Highlands open waters such as wetlands to open water areas or buffer, conversion of open water areas to wetlands or buffers, or the conversion of buffers to freshwater

wetlands or open water area, if the Department determines that such conversion is environmentally beneficial;

3. The area of habitat enhancement or creation shall be protected from any future development by a recorded conservation restriction;

4. The activities shall not disturb upland forested areas as described at N.J.A.C. 7:38-3.9;

5. The activities shall not reduce the stability of any steep slopes as described in N.J.A.C. 7:38-3.8;

6. The activities shall meet all of the applicable standards at N.J.A.C. 7:38-3.7;

7. The activities shall not disturb or degrade unique or irreplaceable land types, historical or archeological areas, and existing public scenic attributes as set forth in N.J.A.C. 7:38-3.12;

8. The activities shall not result in the likelihood of the destruction or adverse modification of rare, threatened or endangered animal or plant species habitat; and

9. If the activities involve the removal of a dam:

i. The activities shall be conducted in accordance with a permit issued pursuant to N.J.A.C. 7:20 by the Department's Dam Safety Section in the Division of Engineering and Construction;

ii. If a dam is removed and the dam owner also owns or controls any of the property containing the lake bottom, the Department may require the owner to

execute and record a conservation restriction covering the lake bottom area. The conservation restriction shall prohibit any development or regulated activity for five years from the date the dam is removed, in order to allow the stream corridor and associated wetlands in the lake bottom area to revert to their natural state. The conservation restriction shall include the land covered by the lake bottom, and all associated wetlands, as they exist at the time the dam is removed. When the conservation restriction expires, the Department's jurisdiction under this chapter shall be based on existing conditions on the site;

(g) There is no fee for an application for authorization under Highlands general permit 1.

(h) If a project complies with Highlands general permit 1 and also includes an activity covered under another Highlands general permit, the entire project shall be authorized through Highlands general permit 1 and shall not require authorization under the other general permit, provided that each activity covered by another general permit complies with that general permit's requirements and limits. For example, if a habitat creation project includes bank stabilization activities, and meets all requirements of Highlands general permit 2, the Department may authorize the project under Highlands general permit 1 alone.

(i) If an activity is exempt under this chapter pursuant to N.J.A.C. 7:38-2.3, it shall not require authorization under Highlands general permit 1 solely by virtue of being conducted as part of a program included in (b) above. For example, if a farmer proposes a habitat enhancement project that is eligible for authorization under Highlands general permit 1, but some of the proposed activities meet the definition of agricultural or horticultural use and are thereby not considered major Highlands development, those activities do not lose their exempt status merely by virtue of being part of a project authorized under Highlands general permit 1.

7-38-14.2 Highlands General Permit 2 - Bank Stabilization

(a) Highlands general permit 2 authorizes activities in Highlands open waters and/or their buffers that are necessary to stabilize the bank of a water body in order to reduce or prevent erosion through the use of bioengineering techniques. Examples of bank stabilization activities using bioengineering are the placement of root wads, tree revetments, or vegetative geogrids along a stream bank. Highlands general permit 2 does not authorize stabilization that involves hard structures such as gabions or rip-rap, the channelization of a stream, construction of an entirely new stream channel or the stabilization of the bottom of the stream. Projects involving these activities require an HPAA.

(b) The applicant shall use vegetative or bioengineering stabilization methods.

(c) The total cumulative length of water body bank affected by bank stabilization activities under Highlands general permit 2 shall meet the applicable length limit below. These limits apply to the total linear footage of stream bank affected, regardless of which side of the stream it is on, or whether the activities are contiguous. For example, a bank stabilization using only soil bioengineering could disturb one bank of a stream for a distance of 300 feet, or both banks for 150 feet. The applicable length limits are as follows:

1. For the following bank stabilization activities, no more than 300 feet of stream bank:

i. Soil bioengineering systems for stream bank stabilization set forth at, and performed in accordance with, 650.1601(d)(2) in Chapter 16 of the NRCS Engineering Field Handbook, published December 1996 as amended and supplemented. The document can be obtained at www.info.usda.gov/CED/ftp/CED/EFH-Ch16.pdf. For the purposes of this chapter, rip-rap joint plantings do not qualify as soil bioengineering; and

ii. Soil bioengineering systems not included in (c)2i above but approved by the Department in writing, which are appropriate to the site and which provide environmental benefits similar to those provided by the measures in (c)2i above. Examples of such measures are the placement of coconut fiber rolls or sand filled textile containers parallel to the shoreline of a stream bank;

2. For bank stabilization activities that involve bioengineering in association with a Watershed Restoration plan approved by the Department's Division of Watershed Management, the length limit shall be no more than 500 feet of stream bank. A list of approved plans is available from the Division of Watershed Management; or

3. There is no length limit for vegetative planting measures for stream bank stabilization set forth at, and performed in accordance with, 650.1601(d)(1) in Chapter 16 of the NRCS Engineering Field Handbook, published December 1996 and as amended and supplemented.

(d) The bank stabilization activities described in (c) above may be combined. For example, a bank stabilization project might involve 100 feet authorized under (c)1 or 2 above, and 400 feet of vegetative planting measures authorized under (c)3 above.

(e) Activities under a Highlands general permit 2 shall meet the following requirements:

1. The activities shall not result in the likelihood of the destruction or adverse modification of rare, threatened or endangered animal or plant species habitat;

2. Activities shall not impair surface water flow into or out of any wetland area;

3. If Highlands open waters or buffer must be disturbed to provide access to stabilization activities, the area disturbed shall be the minimum necessary, and shall be no wider than 20 feet at any point;

4. The Department shall allow replacement of previously eroded material as part of the bank stabilization only if the applicant demonstrates that such replacement would be environmentally beneficial;

5. Activities shall comply with the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90;

6. The activity shall be a single and complete project, not associated with any other regulated activity that does not qualify for a general permit. For example, the bank stabilization activity cannot be conducted at the same location as a linear development;

7. The amount of stabilization material placed shall be the minimum necessary to prevent erosion, and shall not exceed 150 cubic yards of fill below the top of bank or high water mark, unless a larger amount is required in order to comply with the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90;

8. The activities shall not result in the permanent loss of any upland forested areas as described at N.J.A.C. 7:38-3.9;

9. The activities shall not reduce the stability of any steep slopes as described in N.J.A.C. 7:38-3.8;

10. The activities shall meet with all of the applicable standards at N.J.A.C. 7:38-3.7;

11. The activities shall not disturb or degrade unique or irreplaceable land types, historical or archeological areas, and existing public scenic attributes as set forth in N.J.A.C. 7:38-3.12;

12. All vegetation planted as a part of stabilization activities shall be native, noninvasive plant species; and

13. All proposed activities shall be consistent with the goals of the Highlands Act.