

Policy Consideration: **Significant Natural Area Protection Requirements**
Status: **For Consideration by the Highlands Council at**
September 14, 2006 Work session
Date: **September 11, 2006**

I. STAFF POLICY RECOMMENDATIONS

- 1) **Significant Natural Areas** will be included in the Regional Master Plan (RMP) to protect a site or area, typically with unusual or exemplary plant communities (such as the presence of rare or endangered plant species) that constitutes an outstanding example of that particular natural community type (such as bog, forest or geological feature). An inventory of Significant Natural Areas shall be established and maintained, and their protection areas shall be incorporated into the Land Use Capability Map.

Rationale: Significant Natural Areas include unique or exceptional examples of natural communities that possess significant biodiversity value whose regional significance are in need of protection. The Highlands Act includes specific goals to protect the natural, scenic, and other resources of the Highlands Region, including but not limited to contiguous forests, wetlands, vegetated stream corridors, steep slopes, and critical habitat for fauna and flora. Sections 10. Section 11 of the Highlands Act requires a Resource Assessment of Highlands resources in order to maintaining the overall ecological values of the Highlands Region. The accurate delineation of Significant Natural Areas is important to protect exceptional natural communities. Protection areas of these sites include adjoining lands which were deemed needed to ensure their continued protection.

- 2) The following standards shall be incorporated into the **Regional Protection Zone** of the Land Use Capability Map (LUCM) in furtherance of the goals and requirements of the Highlands Act to protect and enhance Highlands resources, as follows:
 - Include all areas identified as a **Significant Natural Areas** to the maximum extent practicable.

Rationale: The Highlands Act requires the development of Land Use Capability Map and minimum standards based upon the Resource Assessment and Smart Growth Component. Sections 11.a.(1) , 11.a.(6) and 12. An assessment of the extent of Significant Natural Areas facilitates an understanding of its regional significance to ensure that the level of protection afforded is adequate and appropriate. The results are used as one input to the Land Use Capability Map. Applicable Resource Protection and Smart Design standards can then be assigned to the extent they are appropriate and necessary to maintain ecological value.

- 3) The following **Resource Protection Standards** are recommended for the RMP in furtherance of the goals and requirements of the Highlands Act to protect and enhance **Significant Natural Areas**, including:
 - Prohibit land development and alteration within an area determined to be a Significant Natural Area that is incompatible with the resource protection and management requirements.

- Require inclusion of Significant Natural Areas within municipal zoning and land use ordinances.
- Establish minimum requirements for incorporation of Significant Natural Areas within municipal and County Open Space Plans.

Rationale: The RMP Standards support the necessity to determine the amount and type of human development and activity the Highlands Region can sustain while still maintaining the ecological value of the Highlands Region. Section 11.a.(1)(a). The Highlands Act requires the development of Land Use Capability Map and minimum standards based upon the Resource Assessment and Smart Growth Component. Sections 11.a.(1) , 11.a.(6) and 12.

- 4) The following **Smart Design Standards** are recommended for the RMP in furtherance of the goals and requirements of the Highlands Act to encourage appropriate conservation based design throughout the region, including:

- Require Natural Area Protection and Management Plan to be developed for any site or portion thereof that is a designated Significant Natural Area as a mandatory requirement for any site plan application.

Rationale: The RMP Standards support the necessity to determine the amount and type of human development and activity the Highlands Region can sustain while still maintaining the ecological value of the Highlands Region. Section 11.a.(1)(a). The Highlands Act requires the development of Land Use Capability Map and minimum standards based upon the Resource Assessment and Smart Growth Component. Sections 11.a.(1) , 11.a.(6) and 12.

- 5) The following **Pre-Conformance Strategies** are recommended in furtherance of the goals and requirements of the Highlands Act to ensure successful implementation of the RMP prior to the conformance period, including:

- Develop technical guidelines for the identification and delineation of Significant Natural Areas including procedures for nomination and inclusion of additional sites in Municipal Master Plans with the prior review and approval of the Highlands Council.
- Develop technical guidelines and procedures for development of municipal Natural Areas Protection and Management Plans, Open Space Plans and for development and implementation of Low Impact Development Best Management Practices.
- Establish minimum requirements and guidelines allowing for adjustments and revisions to Significant Natural Area boundaries.

Rationale: RMP Implementation Strategies support the necessity to determine what activities, data and programs will be required of both the Highlands Council and municipal and county stakeholders during the Plan Conformance process as well as what initiatives will require longer term planning goals. Sections 11.a.(3), 14 and 15. The RMP is a “living document” and will continue to be refined and developed in support of regional planning goals. In order to facilitate regional planning goals it is imperative that the RMP have State, County, and local support from all levels of government and the support of the stakeholders of the Highlands Region.

6) The following **Conformance Strategies** are recommended in furtherance of the goals and requirements of the Highlands Act to ensure successful implementation of the RMP during the conformance period, including:

- Require that municipal conformance approval include Significant Natural Area inventory, protection standards and approval guidelines in conformance with the RMP.
- Require inclusion of Natural Area Protection Element into Municipal and/or County conformance documents, Master Plans, Zoning and Land Use Ordinances, as appropriate.
- Require inclusion of Significant Natural Areas into Municipal and County Open Space Plans.

Rationale: RMP Implementation Strategies support the necessity to determine what activities, data and programs will be required of both the Council and municipal and county stakeholders during the Plan Conformance process as well as what initiatives will require longer term planning goals. Sections 11.a.(3), 14 and 15. The RMP is a “living document” and will continue to be refined and developed in support of regional planning goals. In order to facilitate regional planning goals it is imperative that the RMP have State, County, and local support from all levels of government and the support of the stakeholders of the Highlands Region.

7) The following **5-year Resource Protection and Planning Goals** are recommended in furtherance of the goals and requirements of the Highlands Act to ensure continued refinement and development of the RMP, including:

- Maintain an inventory of Significant Natural Areas within the Highlands region and develop appropriate management and stewardship strategies.

Rationale: The Highlands Act requires the Highlands Council to periodically revise and update the RMP at least once every six years. Section 8.a. RMP Implementation Strategies support the necessity to determine what activities, data and programs will be required of both the Council and municipal and county stakeholders during the Plan Conformance process as well as what initiatives will require longer term planning goals. The RMP is a “living document” and will continue to be refined and developed in support of regional planning goals. In order to facilitate regional planning goals it is imperative that the RMP have State, County, and local support from all levels of government and the support of the stakeholders of the Highlands Region. Sections 11.a.(3), 14 and 15.

8) The following **Coordination and Consistency Considerations** are recommended to promote active participation in the implementation of the RMP among state and federal agencies:

- Develop a coordinated regulatory review program with the NJDEP to ensure consistency of permit actions, open space acquisition priorities and public lands management strategies consistent with the resource protection goals of the RMP.

Rationale: RMP Implementation Strategies support the necessity to determine what local, State, and federal programs and policies may best be coordinated to promote the goals, purposes, policies, and provisions of the RMP. Sections 11.a.(4). The RMP is a “living document” and will continue to be refined and developed in support of regional planning goals. In order to facilitate regional planning goals it is imperative that the RMP have State, County, and local support from all levels of government and the support of the stakeholders of the Highlands Region.

- 9) The following **Local Participation Considerations** are recommended to promote the understanding and support for the RMP resource protection goals at the local level:
- Develop educational program for municipal officials on methods to identify and protect Significant Natural Areas.

Rationale: RMP Implementation Strategies support the necessity to provide for the maximum feasible local government and public input into the Highlands Council's operations. Section 11.a.(3). The RMP is a “living document” and will continue to be refined and developed in support of regional planning goals. In order to facilitate regional planning goals it is imperative that the RMP have State, County, and local support from all levels of government and the support of the stakeholders of the Highlands Region.

II. REQUIREMENTS OF THE HIGHLANDS ACT AND RMP GOALS RELATED TO SIGNIFICANT NATURAL AREA PROTECTION REQUIREMENTS:

Goals of the Highlands Act:

In accordance with Section 10 of the Highlands Act, the overarching goal of the Regional Master Plan “with respect to the entire Highlands Region shall be to protect and enhance the significant values of the resources thereof in a manner which is consistent with the purposes and provisions of this act.” Section 10.a.

The Highlands Act establishes specific goals relating to protection of significant natural areas. Those goals with respect to the Preservation Area shall be to:

- protect, restore, and enhance the quality and quantity of surface and ground waters. Section 10.b.(1).
- preserve extensive and, to the maximum extent possible, contiguous areas of land in its natural state, thereby ensuring the continuation of a Highlands environment which contains the unique and significant natural, scenic, and other resources representative of the Highlands Region. Section 10.b.(2).
- protect the natural, scenic, and other resources of the Highlands Region, including but not limited to contiguous forests, wetlands, vegetated stream corridors, steep slopes, and critical habitat for fauna and flora. Section 10.b.(3).

In addition, the goals with relating to protection of riparian areas with respect to the Planning Area shall be to:

- protect, restore, and enhance the quality and quantity of surface and ground waters. Section 10.c.(1).
- preserve to the maximum extent possible any environmentally sensitive lands and other lands needed for recreation and conservation purposes. Section 10.c.(2).
- protect and maintain the essential character of the Highlands environment. Section 10.c.(3).

Requirements of the Highlands Act:

Resource Assessment

The Highlands Act includes specific requirements relating to protection of significant natural areas requiring the development of a Resource Assessment for the Highlands Region which “(a) determines the amount and type of human development and activity which the ecosystem of the Highlands Region can sustain while still maintaining the overall ecological values thereof, 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.**” Section 11.a.(1)(a)(emphasis added).

Smart Growth Component

The Highlands Act also includes specific requirements relating to protection of significant natural areas requiring the development of a Smart Growth component that includes “an assessment, based upon the resource assessment prepared pursuant to paragraph (1) of subsection a. of this section, of opportunities for appropriate development, redevelopment, and economic growth, and a transfer of development rights program In preparing this component, the council shall:

- (a) prepare a **land use capability map**;
- (b) identify **existing developed areas** capable of sustaining redevelopment activities and investment;
- (c) identify **undeveloped areas** in the planning area, which are **not significantly constrained by environmental limitations** such as steep slopes, wetlands, or dense forests, are not prime agricultural areas, and are located near or adjacent to existing development and infrastructure, that could be developed;
- (g) identify **special critical environmental areas and other critical natural resource lands** where development should be limited. Section 11.a.(6)(emphasis added).

Preservation Area Assessment

For the Preservation Area, Section 12 of the Highlands Act requires “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, which shall be based upon, comply with, and implement the **environmental standards**” adopted by NJDEP and the **Resource Assessment prepared the Highlands Council** under Section 11. Section 12.(emphasis added).

Section 12 specifically requires implementation “that will ensure the continued, uniform, and consistent protection of the Highlands Region in accordance with the goals, purposes, policies, and provisions of this act, and shall include:

- a. a preservation zone element that **identifies zones within the preservation area where development shall not occur** in order to protect water resources and environmentally sensitive lands and which shall be permanently preserved through use of a variety of tools, including but not limited to land acquisition and the transfer of development rights; and
- b. minimum standards governing municipal and county master planning, development regulations, and other regulations concerning the development and use of land in the preservation area, including, but not limited to, standards for minimum lot sizes and stream setbacks, construction on steep slopes, maximum appropriate population densities, and **regulated or prohibited uses** for specific portions of the preservation area. Section 12.(emphasis added).

In addition, Section 36 of the Highlands Act requires that NJDEP's permitting review approval without a waiver may be issued only upon a finding that the proposed major Highlands development:

(1) would have a de minimis impact on water resources and would not cause or contribute to a significant degradation of surface or ground waters. In making this determination, the commissioner shall consider the extent of any impacts on water resources resulting from the proposed major Highlands development, including, but not limited to, the regenerative capacity of aquifers or other surface or ground water supplies, increases in stormwater generated, increases in impervious surface, increases in stormwater pollutant loading, changes in land use, and changes in vegetative cover;

(2) would cause **minimal feasible interference with the natural functioning of animal, plant, and other natural resources** at the site and within the surrounding area, and **minimal feasible individual and cumulative adverse impacts to the environment** both onsite and offsite of the major Highlands development;

(3) will result in minimum feasible alteration or impairment of the aquatic ecosystem including existing contour, vegetation, fish and wildlife resources, and aquatic circulation of a freshwater wetland;

(4) **will not jeopardize the continued existence of species** listed pursuant to "The Endangered and Nongame Species Conservation Act," P.L.1973, c. 309 (C.23:2A-1 et seq.) or the "Endangered Plant Species List Act," P.L.1989, c. 56 (C.13:1B-15.151 et seq.), or which appear on the federal endangered or threatened species list, and **will not result in the likelihood of the destruction or adverse modification of habitat for any rare, threatened, or endangered species of animal or plant;**

(5) is located or constructed so as to neither endanger human life or property nor otherwise impair the public health, safety, and welfare;

(6) would result in **minimal practicable degradation of unique or irreplaceable land types**, historical or archeological areas, and existing public scenic attributes at the site and within the surrounding area; and

(7) meets all other applicable department standards, rules, and regulations and State laws." Section 36 (emphasis added)

Preservation Area Requirements

The NJDEP's rules at 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. This rule implements the Highlands Act's protection requirements in the Preservation Area pursuant to Section 36.a(6) to ensure "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.” The ecological communities that NJDEP 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.

The NJDEP’s rules at N.J.A.C. 7:5A (Natural Areas System Rules) detailed procedures for classification and designation of natural areas, development of management plans, allowable uses and practices, procedures for conducting research and scientific activities, and revising boundaries. This rule implements the Highlands Act’s protection requirements in the Preservation Area pursuant to Section 36.a(6) to ensure “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.”

The NJDEP’s rules at N.J.A.C. 7:38-3.11 prohibits development or activity if it will jeopardize the continued existence of species listed pursuant to "The Endangered and Nongame Species Conservation Act," P.L.1973, c. 309 (C.23:2A-1 et seq.) or the "Endangered Plant Species List Act," P.L.1989, c. 56 (C.13:1B-15.151 et seq.), or which appear on the federal endangered or threatened species list, and will not result in the likelihood of the destruction or adverse modification of habitat for any rare, threatened, or endangered species of animal or plant. This rule implements the species protection requirements in the Preservation Area pursuant to Section 36.a(4).

The NJDEP’s rules at N.J.A.C. 7:38-3.6 requires a 300-foot buffer adjacent to Highlands open waters in which no disturbance is permitted with the exception of 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. See N.J.A.C. 7:38-3.6(b). This rule implements the 300 foot requirement in the Preservation Area pursuant to Section 34.a.

Local Participation Component

A component to provide for the maximum feasible local government and public input into the council’s operations, which shall include a framework for developing policies for the planning area in conjunction with those local government units in the planning area who choose to conform to the regional master plan. Section 11.a.(3).

Coordination and Consistency Component

A coordination and consistency component which details the ways in which local, State, and federal programs and policies may best be coordinated to promote the goals, purposes, policies, and provisions of the regional master plan, and which details how land, water, and structures managed by governmental or nongovernmental entities in the public interest within the Highlands Region may be integrated into the regional master plan. Section 11.a.(4).

III. TECHNICAL BASIS AND JUSTIFICATION FOR STAFF RECOMMENDATIONS

In furtherance of the requirements and goals of the Highlands Act as summarized above, the Significant Natural Area Protection Requirements of Ecosystem Management element of the RMP are intended to protect the natural resources of the Highlands Region, including but not limited to critical habitat for fauna and flora.

The NJDEP Office of Natural Lands Management (ONLM) has identified 95 critically important natural areas (Natural Heritage Priority Sites) in the Highlands Region that are important to conserve New Jersey's biological diversity, utilizing the NJ Natural Heritage Database. The database provides detailed information on rare species and natural communities. The Natural Heritage Priority Sites identify the best habitats for rare plant and animal species and natural communities.

The Significant Natural Area Protection Requirements of the RMP includes identification of those Natural Heritage Priority Sites that occur within the Highlands Region. Those sites are the basis for delineation of the Region's Significant Natural Areas.

Protection requirements for Significant Natural Areas shall integrate NJDEP rules at N.J.A.C. 7:38-3.12, which provide that a regulated activity would result in "minimal practicable degradation of unique or irreplaceable land types, including ecological communities that are identified in the Natural Heritage Database. Such unique communities cannot be replaced and NJDEP believes that these are the types of areas intended for protection under the provisions of the Highlands Act."

Protection requirements for Significant Natural Areas shall integrate NJDEP rules which do not authorize a Highlands Preservation Area Approval if development or activity will jeopardize the continued existence of a 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 (N.J.A.C. 7:38-3.11).

Protection requirements for Significant Natural Area shall integrate general provisions of the Natural Areas Act (N.J.A.C. 7:5A). The Natural Areas Act created a system for the natural features of the state, setting aside certain ecologically significant areas using a stricter set of rules than those governing other state-owned lands. Applicable statutes include:

- lands may not be sold, leased or exchanged, and they may not be altered in any way without the approval of the DEP,
- Although boundary revisions are possible, only legislation may remove an area from the System,
- When an area becomes part of the System, a comprehensive management plan shall be drafted and adopted to ensure the continued protection of the ecosystems and species found within the area.

The purpose of this element is to recommend protection requirements of the Highlands Significant Natural Areas for inclusion in the RMP and Land Use Capability Map based on the following actions in furtherance of the requirements and goals of the Act:

- identify Significant Natural Areas and provide the framework for incorporation of these sites into the RMP and Land Use Capability Map.
- identify appropriate land use planning and management strategies that can help preserve these sites.

These approaches are based on the best available science and the results of the Resource Assessment performed in support of the RMP, and reinforced through the scientific literature and existing state or federal regulatory programs, where applicable. In addition, as required by Section 12 of the

Highlands Act for the Preservation Area, these approaches are based upon, comply with, and implement the environmental standards adopted by NJDEP and the Resource Assessment performed by the Highlands Council. This requirement of the Highlands Act authorizes the Highlands Council to integrate results of these two elements of the Act into a unified approach for the protection of Highlands resources.

IV. GLOSSARY

This section defines the terms that are used to develop the approach and methods that informed the proposed policy actions for this RMP element. Topic specific glossaries will contribute to the general RMP glossary of terms.

Endangered Species - Endangered species are species included on the list of endangered species that the Department promulgates pursuant to the Endangered and Nongame Species Conservation Act, N.J.S.A. 23:2A-13 et seq., and the Endangered Plant Species List Act, N.J.S.A. 13:1B-15.151 et seq., and any species or subspecies of wildlife appearing on any Federal endangered species list or any species or subspecies of plant designated as listed, proposed, or under review by the Federal government pursuant to the Endangered Species Act of 1973, 16 U.S.C. §§ 1531 et seq. *N.J.A.C. 7:38-1.4*.

Low Impact Development (LID) Best Management Practices – Low Impact Development is an environmentally sensitive approach to storm water management that emphasizes conservation and the use of existing natural site features integrated with distributed, small scale storm water controls to more closely mimic natural hydrologic patterns in residential, commercial and industrial settings. LID best management practices involve comprehensive land planning and engineering design to maintain and enhance the hydrologic regime of urban lands and development within watersheds. LID standards and best management practices are supported by the New Jersey Stormwater Management Rules, *N.J.A.C. 7:8* and the “New Jersey Stormwater Best Management Practices Manual” developed by the New Jersey Department of Environmental Protection, in coordination with the New Jersey Department of Agriculture, the New Jersey Department of Community Affairs, the New Jersey Department of Transportation, municipal engineers, county engineers, consulting firms, contractors, and environmental organizations.

Natural Area Protection and Management Plan - A planning document developed at a site level that includes protection requirements and stewardship goals for a specific Natural Area.

Rare Species – Those species that are not endangered or threatened wildlife species and considered by the Department to be species of special concern as determined by a panel of experts or that are ranked 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) in the Natural Heritage Database, and Plant Species of Concern listed pursuant to N.J.A.C. 7:5C-3.1. "Species of special concern" means wildlife species that warrant special attention because of evidence of population decline or inherent vulnerability to environmental deterioration or habitat modification that would result in the species becoming threatened if conditions surrounding the species begin or continue to deteriorate. The term includes species for which there is little knowledge of current population status in the State. *N.J.A.C. 7:38-1.4*.

Significant Natural Area – An area within the Highlands that includes unique or exceptional examples of natural communities or geological formations including habitat that possess significant biodiversity value whose regional significance is in need of protection.

Threatened species - An indigenous nongame wildlife species of New Jersey designated pursuant to the Endangered and Nongame Species Conservation Act, N.J.S.A. 23:2A-13 et seq., and its implementing rules, N.J.A.C. 7:25- 4.17, as most recently amended. *N.J.A.C. 7:38-1.4.*