



Draft Highlands Element for Hunterdon County Growth Management Plan

Prepared by the State of New Jersey Highlands Water Protection and
Planning Council in Support of the Highlands Regional Master Plan and
Modified by the Hunterdon County Planning Board

December 2009

HIGHLANDS ELEMENT
DRAFT GROWTH MANAGEMENT
PLAN SUPPLEMENT
COUNTY OF HUNTERDON, NEW JERSEY

**DRAFT FOR SUBMISSION TO THE NEW JERSEY HIGHLANDS
WATER PROTECTION AND PLANNING COUNCIL TOWARD
ACHIEVING PLAN CONFORMANCE WITH THE HIGHLANDS
REGIONAL MASTER PLAN**

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The Hunterdon County Planning Board presented, discussed, and accepted public comment on this draft Growth Management Plan supplement at the duly-noticed public meeting of November 13, 2009. Copies of the document were made available for review by the public at least 20 days prior to that meeting, and adequate notice of the meeting advising that the Highlands Element was on the agenda for discussion and public

comment, was provided. This document is based on a model Highlands Element prepared and provided to all Highlands counties by the New Jersey Highlands Water Protection and Planning Council.

This element is being adopted by the Hunterdon County Planning Board because the Highlands Act requires that counties seeking Plan Conformance with the Highlands Regional Master Plan adopt revisions to county master plans to bring them into alignment with the Highlands Regional Master Plan. This Highlands Element sets forth the policies that shall guide the future land use and development for lands located within the Hunterdon County Highlands Region Preservation Area as delineated in the Highlands Water Protection and Planning Act. It addresses development review functions of the Planning Board regarding land and facility management under the jurisdiction of the County Planning Board. Modifications required to tailor it for application to Hunterdon County were provided on behalf of the Hunterdon County Planning Board by the individual indicated below. By this signature, the undersigned does not affirm the goals, policies, objectives or recommendations and factual information included in or referenced in this document. The source of all goals, policies, objectives, recommendations and factual information included in or referenced in this document is the NJ Highlands Council unless otherwise indicated.

Modified BY:

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INTRODUCTION

The County of Hunterdon is located partially within the New Jersey Highlands Region. It is one of seven counties protected by and subject to the provisions of the Highlands Water Protection and Planning Act (“Highlands Act,” N.J.S.A. 13:20-1 et seq.). The Highlands Act was enacted by the State Legislature on August 10, 2004 for the purpose of protecting, enhancing and restoring Highlands natural resources, in particular water resources, which provide drinking water to over 5 million New Jersey residents. The Highlands Act created the Highlands Water Protection and Planning Council (the “Highlands Council”) and charged it with crafting a comprehensive master plan for the Highlands Region.

The Highlands Regional Master Plan (RMP) was adopted by the Highlands Council on July 17, 2008, and became effective on September 8, 2008. As the product of a long-term, participatory, and region-wide planning effort, the RMP is representative of the collective response of the wider community to the Legislature’s call for a Highlands comprehensive master plan. Hunterdon County places value in the regional planning process that was undertaken to fully develop the RMP and acknowledges its role in furthering the vision that it represents.

The Highlands Region encompasses some 1,343 square miles in the northwest part of New Jersey, encompassing 88 municipalities and portions of seven counties. The Highlands Act designates about half of the Highlands Region as Preservation Area (415,000 acres) and the other half as Planning Area (445,000 acres). The Act requires that county and municipal jurisdictions having lands in the Preservation Area conform to the Highlands RMP with respect to that area, while for lands located in the Planning Area, conformance is voluntary.

Hunterdon County is located partially in the Preservation Area and partially in the Planning Area. The county is required to align its land use planning program with the provisions of the RMP with respect to that portion of the county located within the Preservation Area. For purposes of this document, these lands shall henceforth be referred to as the “Hunterdon County Highlands Area.” This supplement to the Hunterdon County Growth Management Plan designated the “Highlands Element,” represents a first step toward achieving Plan Conformance with the Highlands RMP.

The Highlands Element sets forth the policies that shall guide the future land use and development of the Hunterdon County Highlands Area. It provides the rationale and the framework for the review and approval of land use and development activities over which the County Planning Board has jurisdiction in a manner and location that is consistent with the protection of Highlands resources and with the Highlands RMP.

The County of Hunterdon is required to adopt a Highlands Element for the Highlands Preservation Area to conform its Growth Management Plan to the Highlands Regional Master Plan pursuant to the Highlands Act. It provides the framework for the further amendments to the County Land Development Standards, as pertains to the Preservation Area of the Highlands which is also a requirement of conformance pursuant to the Highlands Act. With regard to specific regulatory requirements, these shall apply to all land use and development activities over which the County Planning Board has jurisdiction (including subdivisions of land and site plans for land along county roads). Specific uses, activities and development projects are listed as

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exemptions in the Highlands Act (N.J.S.A. 13:20-28). Land use activities, improvements and development projects that are exempt from the Highlands Act shall remain subject to all other applicable provisions of the underlying Growth Management Plan, its accompanying elements, and Development Regulations.

The Highlands Element amends or creates in limited form (where not already existing), each of the components of the Growth Management Plan, as provided in the sections that follow. The Highlands Element is intended to apply in conjunction with the language of the existing Hunterdon County Growth Management Plan. In the event of conflicts between the two, the Highlands Element shall supersede regarding that portion of the county located within the Preservation Area, unless the existing Growth Management Plan provisions are more restrictive.

POLICIES & GOALS

The Hunterdon County Highlands Area is located in the northern quadrant of the county. It consists of approximately 64,925 acres of land (see Exhibit A, Hunterdon County Highlands Area) all of which lies within the Highlands Preservation Area.

The Hunterdon Environmental Resource Inventory (ERI) (prepared by the Highlands Council and reviewed by the Hunterdon County Planning Department, and dated October 23, 2009) provides detailed information concerning the physical features, natural resources and specific characteristics of the county Highlands Preservation Area. The county ERI includes all of the information available through the Highlands RMP and supporting technical documents, which document the natural and cultural resources in the New Jersey Highlands Region Preservation Area, as defined by the Highlands Regional Master Plan..

The following goals have been delineated by the Highlands Act and the Highlands RMP for application in the Highlands Preservation Area and are incorporated into the Hunterdon County Growth Management Plan for that area of the County designated as Preservation Area:

A. PRESERVATION AREA GOALS

1. To protect, restore, and enhance the quality and quantity of surface and ground waters;
2. To preserve extensive and, to the maximum extent possible, contiguous areas of land in its natural state, thereby ensuring retention of the unique and significant natural, scenic, and other resources representative of the Hunterdon County Highlands Area;
3. To protect the natural, scenic, and other resources of the Hunterdon County Highlands Area, including but not limited to contiguous forests, wetlands, vegetated stream corridors, steep slopes, and critical habitat for fauna and flora;
4. To preserve farmland, historic sites, and other historic resources;
5. To preserve outdoor recreation opportunities on publicly owned land;
6. To promote conservation of water resources;
7. To promote Brownfield remediation and redevelopment, where applicable;
8. To promote compatible agricultural, horticultural, recreational, and cultural uses and opportunities within the framework of protecting the environment of the Hunterdon County Highlands Area; and
9. To limit to the maximum extent possible construction or development which is incompatible with preservation of this unique area.

B. LAND USE PLANNING AND MANAGEMENT

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The afore-listed goals for the use and development of lands located within the Hunterdon County Highlands Area are consistent with and intended to apply equally and in conjunction with the purposes and requirements of the Highlands Act and the Highlands RMP. Nothing in the body of the Highlands Element shall be construed to imply that the provisions of the County Planning Act (N.J.S.A. 40:27-1 et seq.) are not also applicable to Hunterdon County in exercising its authority to engage in land use planning, management and regulation pertinent to the Highlands Area.

The County Planning Act requires the county planning board to make and adopt “a master plan for the physical development of the county” (N.J.S.A. 40:27-2). The county planning board also reviews and approves subdivisions of land and site plans for land along county roads, and for lands affecting county drainage facilities (N.J.S.A. 40:27-6.2 and 6.6).

C. RELATIONSHIP BETWEEN THE HIGHLANDS ACT AND THE COUNTY PLANNING ACT

The County Planning Act gives New Jersey county governments, limited authority to regulate land use and development within their borders. The Highlands Act requires the County to conform its master plan and associated development regulations to the Highlands Regional Master Plan and augments that authority to require counties to incorporate the goals, policies, objectives and programs of the Highlands RMP, as pertains to the Highlands Preservation Area, into county master plans and development review standards.

As a result of the passage of the Highlands Act, the future of land use planning has significantly changed for both municipalities and counties in the Highlands Preservation Area. The Highlands Act creates a system in which a regional plan is designed to be implemented primarily through local government units. The net effect is that the statutory authority of local government units in the Highlands Region, inclusive of that provided under the County Planning Act and the MLUL, is not preempted by the Highlands Act, but rather is supplemented.

The criteria for approval of development applications under the county regulations that will in part, effectuate this Highlands Element will incorporate aspects of the County Planning Act and the Highlands Act.

LAND USE PLAN

A. HIGHLANDS ZONES AND SUB-ZONES

The Highlands RMP identifies a number of Highlands Zones and Sub-Zones which are incorporated into the Hunterdon County Growth Management Plan for the Preservation Area of the Highlands Area. The Hunterdon County Highlands Area includes the Highlands Zones and Sub-Zones from the Highlands Regional Master Plan listed and described below. These Zones are configured as depicted in Exhibit A (“Hunterdon County Highlands Area”) and are herewith incorporated as required under the Highlands Act into the Land Use Plan as an overlay to the existing county Land Use Plan for those areas designated as Preservation Area by the Highlands Water Protection and Planning Act. The Highlands Council delineation of Highlands Zones finds basis in the underlying natural resources, the extent of existing development and supporting infrastructure, and the potential to support new development or redevelopment. Highlands Zones are intended to ensure that the density and intensity of future development and/or redevelopment do not exceed the capacity of the land, natural resources and existing infrastructure to support it. Where development applications filed with the County Planning Board are subject to municipal review and approval in a municipality for which the Highlands Council has approved Plan Conformance, the County Planning Board will rely upon the municipal decision. Where development applications to the County Planning Board are subject to municipal review and approval in a municipality for which the Highlands Council has not approved Plan Conformance, the County Planning Board will rely solely upon review by the Highlands Council for those issues not related to the county roads, drainage and any other review responsibility reserved for the County by the County Planning Act, C40:27-1et.seq. as amended.

The Highlands RMP has identified three primary overlay zones (the Protection Zone, the Conservation Zone, and the Existing Community Zone) and four sub-zones (the Wildlife Management Sub-Zone, the Conservation Zone–Environmentally Constrained Sub-Zone, the Existing Community Zone–Environmentally Constrained Sub-Zone, and the Lake Community Sub-Zone) each with its own purpose, application and development criteria.

1. **Protection Zone.** The Protection Zone consists of the highest quality natural resource value lands that are essential to maintaining water quality, water quantity and sensitive ecological resources and processes. Land acquisition is a high priority for lands in the Protection Zone and development activities will be extremely limited. Any development will be subject to stringent limitations on consumptive and depletive water use, degradation of water quality, and impacts to environmentally sensitive lands and natural resources.
 - a. **Wildlife Management Sub-Zone.** The Wildlife Management Sub-Zone consists of areas managed by the United States Fish and Wildlife Service as part of the National Wildlife Refuge System, and lands within the Wildlife Management Area System administered by the NJDEP Division of Fish & Wildlife’s Bureau of Land Management. These areas are part of a network of lands and waters for conservation, management, and where appropriate, restoration of fish, wildlife and plant resources and their habitats and permit compatible wildlife-dependent recreational uses.
2. **Conservation Zone.** The Conservation Zone consists of areas with significant agricultural lands interspersed with associated woodlands and environmental features that

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should be preserved when possible. The Conservation Zone is intended primarily for agricultural use and development, including ancillary and supporting uses and activities. Non-agricultural development activities will be limited in area and intensity due to infrastructure constraints and resource protection goals. Where non-agricultural development does occur it must be designed to ensure compatibility with agricultural uses.

- a. **Conservation Zone–Environmentally Constrained Sub-Zone.** The Conservation Zone–Environmentally Constrained Sub-Zone consists of significant environmental features within the Conservation Zone that should be preserved and protected from non-agricultural development. Development activities will be limited and subject to stringent limitations on consumptive and depletive water use, degradation of water quality, and impacts to environmentally sensitive lands.
3. **Existing Community Zone.** The Existing Community Zone consists of areas of concentrated development representing existing communities. These areas tend to have limited environmental constraints due to previous development patterns, and may have existing infrastructure that can support additional development and/or redevelopment. Where served by adequate supporting infrastructure, lands within the Existing Community Zone may be suited to higher densities and intensities of development (see Section C, below) than other Zones.
 - a. **Existing Community Zone–Environmentally Constrained Sub-Zone.** The Existing Community Zone–Environmentally Constrained Sub-Zone consists of significant contiguous critical habitat, steep slopes and forested lands within the Existing Community Zone that should be protected from further fragmentation. They serve as regional habitat “stepping stones” to larger contiguous critical habitat and forested areas. As such, they are not appropriate for significant development, and are best served by land preservation and protection. Development is subject to stringent limitations on consumptive and depletive water use, degradation of water quality, and impacts to environmentally sensitive lands.
 - b. **Lake Community Sub-Zone.** The Lake Community Sub-Zone consists of patterns of community development that are within the Existing Community Zone within 1,000 feet of lakes. Lakes are defined to include those 10 acres or greater in size with lake management areas consisting of lands within the first 1,000 feet (or less, depending on the protection focus) from the lake shoreline. The purpose for the sub-zone is to protect and enhance water quality, resource features, shoreline recreation, scenic quality, and community character. This zone incorporates unique regulatory requirements to prevent degradation of water quality, harm to lake ecosystems, and watershed pollution, while promoting natural aesthetic values within the Existing Community Zone.

The intents and purposes listed above for the Highlands Zones and Sub-Zones shall guide land use and development in the Highlands Preservation Area of the county. Land use and development is subject to compliance with: a) all resource constraints (discussed at length in the Conservation Plan Element); b) all applicable provisions of both the NJDEP Highlands Water

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Protection and Planning Act Rules (N.J.A.C. 7:38) and the New Jersey Department of Agriculture (NJDA) Agricultural Development in the Highlands Rules (N.J.A.C. 2:92); and c) the density and intensity requirements set forth in the section that follows, responsibility for which will primarily lie with the municipalities (see Section B, Density and Intensity of Development).

B. DENSITY AND INTENSITY OF DEVELOPMENT

The Highlands RMP limits physical potential for development and redevelopment within the county in each Highlands Zone and Sub-Zone of the Hunterdon County Highlands Area based on existing natural features, resource protection priorities, and the capacity of the land and available infrastructure to support it.

Until such time as full funding for such analysis is provided by the Highlands Council and this analysis can be completed, county applications for development meeting the thresholds of disturbance and impervious cover as defined in the Highland Act within the Highlands Area will require reviews for consistency by the Highlands Council on a project-by-project basis. The major criteria used by the Highlands Council for assessing the proposed density or intensity of development for the Preservation Area include the following:

1. **Base Maps/Data.** Base data regarding water availability and wastewater treatment capacity appear in the technical information provided in the Conservation Plan Element, which includes associated mapping identified as Exhibits Q, U and V. These include, respectively, the Hunterdon County Highlands Area: Net Water Availability Map, Public Community Water Systems Map, and Highlands Domestic Sewerage Facilities Map. All are herewith adopted and incorporated as a component of the Highlands Element.
2. **Water Availability.** As provided under Conservation Plan Element Section G, Water Resources Availability.
3. **Public Water Supply and Wastewater Utilities.** Where properties are served by existing water and wastewater utility infrastructure having sufficient available capacity, the density and intensity for development or expansion of areas shall be consistent with current county practices.
4. **Public Water Supply Utilities – Key Provisions.** New, expanded or extended public water systems are prohibited unless approved through a Highlands Applicability Determination or a Highlands Preservation Area Approval with waiver pursuant to N.J.A.C. 7:38.
5. **Wastewater Utilities – Key Provisions.** New, expanded or extended wastewater collection and treatment systems and community on-site treatment facilities are prohibited unless approved through a Highlands Applicability Determination or a Highlands Preservation Area Approval with waiver pursuant to N.J.A.C. 7:38.
6. **Septic Systems – Key Provisions.** Development proposals involving the installation of one or more new individual subsurface disposal systems (or aggregate of equivalent disposal units as provided at N.J.A.C. 7:38) shall meet NJDEP septic system density requirements as set forth at N.J.A.C. 7:38. These allowances shall apply in all cases of

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non-exempt development, whether or not development proposals constitute Major Highlands Developments.

CONSERVATION PLAN

The basis for the Conservation Plan Element is the Hunterdon County Highlands Preservation Area Environmental Resource Inventory (ERI), which is herewith adopted and incorporated as an integral component of the Growth Management Plan. The ERI identifies, categorizes and delineates the natural resources and resource areas as defined in the Highlands RMP existing in the Hunterdon County Highlands Area. The ERI depicts both Preservation Area and Planning Area resources to provide a regional appreciation for Highlands Resources, but for purposes of this Conservation Plan, only the Preservation Area portion is directly applicable.

The Highlands RMP identifies and defines the resources listed below and includes policies and objectives to guide their regulation and management. Hunterdon County will include these resources, associated goals, policies and objectives in review of preservation Area development applications, as required by the Highlands Act, in addition to other non-Highlands land development standards. In the event of conflicts between existing Hunterdon County goals, policies and objectives and/or land development standards and Highlands Preservation Area goals, policies or objectives and standards, the goals, policies, objectives and standards identified for the Preservation Area shall supersede in the Preservation Area, unless the existing County Growth Management Plan provisions are more restrictive. Where development applications to the County Planning Board are subject to municipal review and approval in a municipality for which the Highlands Council has approved Plan Conformance, the County Planning Board will rely upon the municipal decision and the review by the Highlands Council. Where development applications to the County Planning Board are subject to municipal review and approval in a municipality for which the Highlands Council has not approved Plan Conformance, the County Planning Board will, in its development review process, rely upon the review by the Highlands Council pertaining to these issues in the Preservation Area.

A. FOREST RESOURCES

As defined by the Highlands RMP, Highlands Area Forest Resource delineations appear in the ERI maps duplicated herein at Exhibit D, "Forest Resource Area," Exhibit E, "Total Forest Area," and Exhibit F, "Forest Subwatersheds."

Pursuant to the Highlands RMP and the requirements of the Highlands Act, the below-listed goals and objectives will guide the regulation and management of the Hunterdon County Highlands Preservation Area Forest Resources.

1. To protect and preserve extensive and, to the maximum extent possible, contiguous forests.
2. To limit development in the Forest Resource Area.
3. Where development is permitted in the Forest Resource Area, to avoid deforestation and require submission of and compliance with a Forest Mitigation Plan.

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4. To prohibit clear-cutting in the Forest Resource Area or within any portion of the Total Forest Area except in accordance with a Forest Management Plan approved by the State Forester.
5. To require compliance with the NJDEP Preservation Area Rules (N.J.A.C. 7:38) regarding forest protection in the case of all “major developments,” as defined therein.
6. To ensure that site-specific forest resources are identified through project review and that those to remain are protected both during the construction of an approved development project and by conservation easement post-construction.
7. To permit forestry activities within a Forest Resource Area or within the forested lands within a High Integrity Forest Subwatershed only in compliance with an approved Forest Management Plan.
8. To maintain forest cover in the natural and built environment of the Hunterdon County Highlands Preservation Area to the maximum extent possible.

B. HIGHLANDS OPEN WATERS AND RIPARIAN AREAS

As defined by the Highlands RMP, Highlands Open Waters and Riparian Areas within the Highlands Preservation Area appear in ERI mappings duplicated herein at Exhibit G, “Highlands Open Waters” and Exhibit H, “Highlands Riparian Areas.” Closely related and also duplicated herein, are Exhibit I, “Watershed Value,” and Exhibit J, “Riparian Integrity.” This Plan incorporates the descriptions, definitions, delineations and values regarding Highlands Open Waters and Riparian Areas as discussed in the ERI for the Highlands Preservation Area.

Pursuant to the Highlands RMP and the requirements of the Highlands Act, the below-listed goals and objectives will guide the regulation and management of Highlands Open Waters and Riparian Areas in the Hunterdon County Highlands Preservation Area.

1. To protect, restore and enhance Highlands Open Waters and Riparian Areas.
2. To require protective buffers adjacent to Highlands Open Waters of sufficient width and composition to protect the integrity of the water resource from impairment due to proximate land uses and development activities. Minimum standards for such buffers should be consistent with those of the NJDEP and the RMP.
3. To limit disturbances within established Highlands Open Waters buffer areas to previously disturbed areas, only, with jurisdiction over any waivers from this restriction left to the Highlands Council or the NJDEP, as applicable. Approval of buffer disturbances in previously disturbed areas should occur only where an applicant can satisfactorily demonstrate that: a) the encroachment cannot be avoided, b) the disturbance is the minimum feasible, and c) any adverse impacts will be mitigated to result in no net loss of functional value (in accordance with the functional value assessment approach discussed in the ERI).

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4. To seek opportunities to restore the functional value of Highlands Open Waters buffers where existing development or land uses have reduced or impaired their quality.
5. To seek opportunities to enhance Highlands Open Waters buffers by improving functional values while ensuring no net loss (see ERI functional value assessment approach).
6. To prohibit modifications to Riparian Areas in the Protection Zone except where a waiver is approved by the NJDEP or the Highlands Council.
7. To limit disturbance of existing natural vegetation or increases in impervious area within High and Moderate Integrity Riparian Areas in all other Zones and Sub-Zones to the minimum feasible in areas beyond Highlands Open Waters buffer requirements; protect the water quality of adjacent Highlands Open Waters; and maintain or restore habitat value of the Riparian Area.
8. To restrict modifications to Riparian Areas in Existing Community and Conservation Zones, other than those addressed by Objective 7, above, that would alter or be detrimental to the water quality and habitat value of a Riparian Area.
9. To require use of Low Impact Development Best Management Practices (see Section K) for development activity proposed within a Riparian Area to minimize both alteration of natural vegetation and increase in impervious area and to provide for mitigation through restoration of impaired Riparian Areas in the same HUC14 subwatershed.

C. STEEP SLOPES

As defined by the Highlands RMP, Steep slopes within the Highlands Area appear in the ERI mapping duplicated herein at Exhibit K, "Steep Slope Protection Areas." This Plan incorporates the descriptions, definitions, delineations and values regarding steep slopes as discussed in the ERI.

Pursuant to the Highlands RMP and the requirements of the Highlands Act, the below-listed goals and objectives will guide the regulation and management of the Hunterdon County Highlands Preservation Area Steep Slope Protection Areas.

1. To encourage the update and improvement of maps and delineations of Steep Slope Protection Areas as better information becomes available (i.e., through enhanced mapping anticipated to be made available from the Highlands Council) and as new areas are identified through project reviews pertaining to individual sites and properties.
2. Land disturbance within all Steep Slope Protection Areas should incorporate Low Impact Development (see Section K) techniques to minimize the extent of such disturbance and the potential negative impacts resulting from it.
3. Land disturbance within areas of Severely and Moderately Constrained Slopes should be prohibited altogether, with exceptions only for linear development meeting the requirements of NJDEP Preservation Area Rules (at N.J.A.C. 7:38-3.8(c)1-4).

D. CRITICAL HABITAT

As defined by the Highlands RMP, Critical Habitat within the Highlands Area appears in the ERI mappings duplicated herein at Exhibit L, “Critical Wildlife Habitat,” Exhibit M, “Significant Natural Areas,” and Exhibit N, “Vernal Pools.” This Plan incorporates the descriptions, definitions, delineations and values regarding Critical Habitat as discussed in the ERI.

Pursuant to the Highlands RMP and the requirements of the Highlands Act, the below-listed goals and objectives will guide the regulation and management of the Hunterdon County Highlands Preservation Area Critical Habitat.

1. To prohibit the direct impact of new human development or expansion or increased intensity of existing development within Critical Habitat.
2. To promote the restoration and enhancement of impaired lands in Critical Habitat.
3. To ensure that Critical Habitat is protected according to the standards and criteria outlined in any applicable Habitat Conservation and Management Plan.
 - a. Prohibit direct impacts from new development or expansion or increased intensity of existing development that will jeopardize the continued existence of, or result in the likelihood of the destruction or adverse modification of Critical Habitat, except as permitted through the issuance of a waiver from the Highlands Council or the NJDEP.
 - b. Prohibit indirect impacts from activity that is off-site, adjacent to, or within Critical Habitat that will jeopardize the continued existence of, or result in the likelihood of the destruction or adverse modification of Critical Habitat, except as permitted through the issuance of a waiver from the Highlands Council or the NJDEP.
 - c. Prohibit modification of a vernal pools protection buffer, except as permitted through the issuance of a waiver from the Highlands Council or the NJDEP.
 - d. Prohibit modifications to the delineation of Critical Wildlife Habitat and Significant Natural Areas, except as permitted through the issuance of a waiver from the Highlands Council or the NJDEP.

E. CARBONATE ROCK

Carbonate Rock Areas within the Highlands Area appear in the ERI mapping duplicated herein at Exhibit O, “Carbonate Rock Areas.” This Plan recognizes and incorporates the descriptions, definitions, delineations, and issues of concern regarding carbonate rock areas as discussed in the ERI.

Pursuant to the Highlands RMP and the requirements of the Highlands Act, the below-listed goals and objectives will guide the regulation and management of the Hunterdon County Highlands Preservation Area Carbonate Rock Areas.

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1. To encourage the update and improvement of maps and delineations of Carbonate Rock Areas as better information becomes available (i.e., through enhanced mapping technologies) and as new areas are identified through project reviews pertaining to individual sites and properties.
2. To carefully examine land development applications for potential impacts to Carbonate Rock Areas, whether by direct disturbance or by indirect means such as introduction of additional stormwater runoff.
 - a. To require documentation that may be necessary to locate and determine the extent of affected carbonate rock features during the course of project design and development reviews.
 - b. To ensure that potential carbonate-rock-related hazards to public health or safety, to existing structures (including public infrastructure), and to ground or surface water quality are avoided, minimized or otherwise addressed by incorporation of appropriate measures and design features into project plans prior to approval of such development proposals. Preference should be given to nonstructural approaches, where feasible, including but not limited to avoiding carbonate rock features altogether, and ensuring that existing conditions relating to them (where satisfactory) are not modified.
3. To ensure that issues and concerns related to carbonate rock are similarly evaluated and addressed in the planning, design, construction and maintenance of public infrastructure projects.
4. To prohibit, from Carbonate Rock Areas and from lands identified as draining into such areas, the construction or installation of new uses, structures or facilities that present an unacceptable risk of discharge, including but not limited to: solid waste landfills, hazardous waste storage and disposal facilities, hazardous materials storage and handling facilities, and underground storage tanks.

F. LAKE MANAGEMENT

Lake Management Areas within the Highlands Area appear in the ERI mapping duplicated herein at Exhibit P, "Lake Management Area." This Plan incorporates the descriptions, definitions, delineations and issues of concern regarding lake management as discussed in the ERI. Definitions include those pertinent to four lake management tiers: the Shoreland Protection Tier, the Water Quality Management Tier, the Scenic Resources Tier, and the Lake Watershed Tier.

Pursuant to the Highlands RMP and the requirements of the Highlands Act, the below-listed goals and objectives will guide the regulation and management of the Hunterdon County Highlands Preservation Lake Management Area.

1. To prevent degradation of lake water quality, protect lake ecosystems, and promote lake area aesthetic values in the Lake Community Sub-Zone.

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2. To protect lake water quality and associated ecosystems for all lakes from the impacts of present and future development. Applicable management strategies should address direct and proximate potential impacts from such activities as shoreline modification and development, dredging and pollutant discharges including those from septic systems, cesspools and other forms of wastewater management.
 - a. Ensure that land use and development activities in the Shoreland Protection Tier(s) do not damage on-shore and near-shore ecological resources and cause direct pollutant loadings to lake waters.
 - b. Ensure that land use and development activities in the Water Quality Management Tier(s) do not contribute continuous pollutant loadings to lake waters.
3. To protect the character of the Hunterdon County Highlands Lake Management Area(s).
 - a. Ensure that development is compatible with shoreline uses and activities and occurs at a scale and intensity appropriate to the Lake Management Area(s).
 - b. Protect the visual and scenic resources in the Scenic Resources Tier(s) through such means as vegetative screening, limits on tree removal, shore line building/disturbance setbacks, and building height limitations.
4. To maximize opportunities for public access to lakes and lake areas (excluding those under private ownership/management) for appropriate passive and active recreational uses that do not degrade lake environments.
5. To maintain lakes or restore (if applicable) lake beds and downstream areas when lakes are drained. Damages to lake bed and downstream stream habitat, for example, should be prevented, mitigated or restored as needed following the breach or removal of a dam. Achieving this goal will require dedicated sources of funding from public and private sources, as applicable.

G. WATER RESOURCES AVAILABILITY

Highlands Area water availability is represented by the ERI mapping duplicated herein at Exhibit Q, "Net Water Availability." This Plan incorporates the descriptions, definitions, analyses and issues of concern regarding water availability as discussed in the ERI. Based on the Low Flow Margin analytical method described in the ERI Hunterdon County lies within 31 HUC14 subwatersheds having positive net water availability, and 19 HUC14 subwatersheds determined to be in deficit.

Pursuant to the Highlands RMP and the requirements of the Highlands Act, the below-listed goals and objectives will guide the regulation and management of Hunterdon County Highlands Preservation Area water availability.

1. To protect, restore (if applicable) and enhance the availability of surface and ground water in the Hunterdon County Highlands Preservation Area.

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2. To ensure that increasing water demands do not exceed or contribute to the exceedance of Net Water Availability or exacerbate existing deficits of subwatersheds.
3. To limit consumptive and depletive water uses within the water availability in each HUC14 subwatershed.
4. To encourage agricultural and horticultural enterprises located in Conservation Zone watersheds to minimize consumptive water uses through efficiency measures.
5. To require and incorporate the use of water conservation, recycling and reuse methods (where appropriate) and devices for any redevelopment or development activity, including renovations to existing buildings, to minimize consumptive water use. This should include mandatory collection and use of stormwater to serve non-agricultural irrigation needs and to the extent feasible, other non-potable purposes.
6. To ensure that proposed public water supply and wastewater service areas, and new or increased water allocations and transfers will not cause or contribute to a Net Water Availability deficit, and where feasible will instead help to mitigate any existing deficit.
7. To ensure efficient and effective use of water availability, reduction and elimination of water deficits and mitigation of new consumptive or depletive use in any Current Deficit Areas or subwatersheds that could become deficit areas based on projected development and water uses.

H. PRIME GROUND WATER RECHARGE AREAS

Prime Ground Water Recharge Areas within the Highlands Area appear in the ERI mapping duplicated herein at Exhibit R, “Prime Ground Water Recharge Areas.” This Plan recognizes and incorporates the descriptions, definitions and delineations for Prime Ground Water Recharge Areas (PGWRAs) as discussed in the ERI.

Pursuant to the Highlands RMP and the requirements of the Highlands Act, the below-listed goals and objectives will guide the regulation and management of the Hunterdon County Highlands Preservation Area Prime Ground Water Recharge Areas.

1. To protect, enhance and restore the quantity and quality of Prime Ground Water Recharge Areas.
2. To require use of Low Impact Development (see Section K) and other Best Management Practices to maximize natural ground water recharge and minimize the need for engineered recharge methods.
3. To restrict land use and development activities that reduce natural ground water recharge volumes in PGWRAs or that may contribute to or result in degradation of ground water quality, whether directly or indirectly.
4. To avoid disturbance of lands identified as PGWRAs to the maximum extent feasible, and to minimize such disturbance where it cannot be avoided. Where disturbances do

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occur in PGWRAs, to require mitigation measures to enhance pre-construction recharge volumes.

5. To prohibit land uses and activities that pose significant risk of ground water contamination from locations delineated as PGWRAs. Such uses (and any structures devoted or related thereto) should include at minimum, those designated as Major or Minor Potential Contaminant Sources (PCS) by the Highlands Council (see Appendices A, B, and C).
6. To identify and implement opportunities for the restoration or enhancement of recharge in PGWRAs and other lands through such means as the retrofit or rehabilitation of stormwater recharge facilities, land management improvements, and reforestation.
7. To achieve a net improvement in ground water volume and quality through enhanced infiltration, pretreatment and other available means.

I. WATER QUALITY

This Plan incorporates the descriptions, definitions and summary data regarding water quality by HUC14 subwatershed, as discussed in the ERI. In addition, it incorporates as Exhibit S, "HUC 14 subwatersheds on NJDEP Impaired Waters List," as duplicated from the ERI.]

Pursuant to the Highlands RMP and the requirements of the Highlands Act, the below-listed goals and objectives apply to the management and regulation of water quality in the Hunterdon County Highlands Preservation Area.

1. To protect, restore and enhance water quality in the Highlands Preservation Area.
2. To remedy the pollutant sources associated with existing or historic land uses in conjunction with redevelopment opportunities.
3. To ensure that land use and development is permitted only in such locations, at such densities, and in such manner as to ensure sustainable use of the Hunterdon County Highlands Preservation Area water resources and continued protection and management of critical lands for water quality purposes.
4. To promote land use and development within the county in support of sustainable use of the Hunterdon County Highlands Preservation Area water resources and continued protection and management of critical lands for water quality purposes.
5. To ensure that the county portion of any Areawide Water Quality Management Plan or a county Wastewater Management Plan will not directly or indirectly support development or activities that would be in violation of any adopted Total Maximum Daily Load (TMDL) limits established by NJDEP.
6. To require use of applicable Low Impact Development (see Section K) and Best Management Practices to protect the quality of ground and surface waters.

J. WELLHEAD PROTECTION

Wellhead Protection Areas within the Highlands Area appear in the ERI mapping duplicated herein at Exhibit T, “Wellhead Protection Areas.” This Plan incorporates the descriptions, definitions and delineations for Wellhead Protection Areas (WHPAs) as discussed in the ERI. Highlands Area WHPAs are delineated for community water supply wells based upon time of travel, reflecting the time required for ground water to flow into the well. WHPAs are composed of three tiers based upon a 2-year (Tier 1), 5-year (Tier 2), and 12-year (Tier 3) time of travel. Each tier includes the area of each smaller tier within it.

Pursuant to the Highlands RMP and the requirements of the Highlands Act, the below-listed goals and objectives will guide the regulation and management of the Hunterdon County Highlands Preservation Area Wellhead Protection Areas.

1. To identify and ensure proper management of existing county land uses within Wellhead Protection Areas that have a significant potential for contributing pollutants of concern to ground water.
2. To protect and enhance ground water and water supply resources within Wellhead Protection Areas consistent with the source water assessments for each water supply source.
3. To prohibit land uses and activities that pose significant risk of ground water contamination from locations delineated as Tier 1 Wellhead Protection Areas. Such uses (and any structures devoted or related thereto) should include at minimum, those designated by the Highlands Council as Major or Minor Potential Contaminant Source (PCS) or as potential sources of pathogenic contaminants (see Appendices A, B and C).
4. To prohibit land uses and activities that pose significant risk of ground water contamination from locations delineated as Tier 2 Wellhead Protection Areas. Such uses (and any structures devoted or related thereto) should include at minimum, those designated as Major or Minor PCS by the Highlands Council (see Appendices A, B and C).
5. To require that land uses and activities that pose significant risk of ground water contamination in locations delineated as Tier 3 Wellhead Protection Areas, incorporate ongoing management of toxic chemical sources and prohibition of non-permitted discharges, so that the potential for ground water contamination is minimized and the opportunity for discharge discovery and control is maximized. Such uses (and any structures devoted or related thereto) should include at minimum, those designated as Major or Minor PCS by the Highlands Council (see Appendices A, B and C).
6. To ensure that stormwater management plans pertinent to both development applications and county-wide planning, address wellhead protection requirements.
7. To encourage stormwater reuse for non-agricultural irrigation and other non-potable water purposes to minimize the volume of stormwater discharges (other than from clean sources) within a Tier 1 or Tier 2 Wellhead Protection Area.

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8. To restrict development activities that pose threats to the water quality of public water system wells.
9. To ensure that development activities and existing land use activities implement best management practices to protect the quality of ground water within Wellhead Protection Areas.
10. To ensure that the uses, structures or activities permitted within utility service areas, as proposed within the county portion of the Areawide Water Quality Management Plan (if applicable) or the county Wastewater Management Plan (if applicable), will not adversely affect any Wellhead Protection Area.

K. LOW IMPACT DEVELOPMENT

Low Impact Development (LID) encompasses a broad array of development and management techniques that can minimize or mitigate the potential adverse impacts of land use and development on the natural environment. LID is used in stormwater management, resource management, “green” building, and sustainable site design. In stormwater management for example, LID techniques can be employed to capture rainfall, filter it through existing vegetation, and maximize its absorption by on-site soils in order to recharge ground water supplies. In site design, LID would incorporate strategies to reduce site disturbance, limit impervious coverage, and integrate existing natural features affecting the site and its immediate surroundings into the proposed layout and design.

To accomplish such aims, specific LID standards should be developed by the Highlands Council and where practical incorporated into Hunterdon County Land Development Standards and the Highlands Council LID practices include, but are not limited to the following:

1. Stormwater management LID standards that preserve or mimic the natural hydrologic features and characteristics of the land.
 - a. Use of stormwater management features that maintain, restore and enhance the pre-existing natural drainage patterns of the site.
 - b. Limitations on impervious coverage allowances to maximize stormwater infiltration and reduce runoff.
 - c. Requirements for site-specific hydrologic studies which identify the velocity, volume and pattern of water flow into, through and flowing from a parcel proposed for development.
 - d. Requirements that stormwater management systems employ a “design with nature” approach by use of grass channels, dry swales, wet swales (vegetated channels designed to retain water or marshy conditions that support wetland vegetation), infiltration basins, bio-swales and water gardens, constructed wetlands, green roofs, and other low impact approaches to attenuate and control stormwater and provide multiple environmental benefits.

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2. LID practices that minimize land disturbance during construction activities.
 - a. Requirements for site-specific analysis of environmental features and constraints as an integral component of site design.
 - b. Limitations on site disturbance, soil compaction, clearing and grading to the minimum necessary to allow for permissible development.
 - c. Provisions to minimize soil erosion and airborne dust during construction and to protect streams and other water bodies from silt and sedimentation.
3. LID best management practices where any development application proposes disturbance of a Highlands Area resource, including but not limited to Steep Slope Protection Areas, Forest Areas, Critical Habitat Areas, Highlands Open Waters and Riparian Areas, Prime Ground Water Recharge Areas, and Agricultural Resource Areas.
 - a. Highlands Area resources should be identified as a first step in site planning.
 - b. To the maximum extent practicable Highlands Area resources should be avoided or their disturbance minimized through site design.
 - c. The quality and value of Highlands Area resources located on development sites should be maintained by use of LID strategies that minimize the impacts of development to the maximum extent possible.
4. LID practices in design of sites, buildings, structures and roadways. Development and redevelopment projects should follow a prescribed conservation design planning process that considers existing site features and site context; maximizes opportunities for open space and connections to open space systems; and incorporates LID practices in all aspects of stormwater management, site layout and resource protection. In addition to the previously listed items (1-3, above) these include but are not limited to the following:
 - a. Use of water conservation measures in site layout and structures, including but not limited to such practices as water efficient landscaping (including use of native and drought-tolerant non-invasive plant species), rain collection systems, use of gray water, and water-efficient landscape irrigation.
 - b. Use of low maintenance landscaping that encourages retention and planting of native vegetation and minimizes lawn areas and use of fertilizers and pesticides.
 - c. Use of pervious paving materials and minimization of impervious surfaces.
 - d. Use of micro-climate conditions to maximize solar gain for winter heating and minimize solar gain during high temperature summer conditions.
 - e. Re-use and recycling of building materials.
 - f. Inclusion of energy-efficient features in site layouts and buildings.

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- g. Roadway design standards (subject to Residential Site Improvement Standards limitations) that incorporate LID techniques to address stormwater management, limit impervious coverage, ensure planting of native and drought-resistant vegetation, and integrate other “green street” design initiatives.

LAND PRESERVATION AND LAND STEWARDSHIP PLAN

The existing Growth Management Plan has an Open Space and Recreation Plan Element providing information on existing open space preservation and recreational opportunities in the county. This Plan supplements the existing Element, as applicable to the Highlands Preservation Area, to include the additional information and goals and objectives listed below.

A mapped inventory of Preserved Lands in the Hunterdon County Highlands Area, current through August, 2009, appears at Exhibit AA, "Preserved Lands" (duplicated from the ERI). This Plan in addition incorporates (from the ERI) Exhibit BB, "Highlands Conservation Priority Areas," Exhibit CC, "Highlands Special Environmental Zone," and Exhibit GG, "Highlands Agricultural Priority Area." This Plan incorporates the definitions, derivations and delineations used to develop these maps, as provided in the ERI.

Preserved Lands in the Hunterdon County Highlands Preservation Area include lands under ownership by the municipality, the county, the State, and non-profit land trusts. In addition, Preserved Lands includes dedicated easements (such as Conservation Easements) to the extent these are currently known and identified (i.e., by deed description) for mapping purposes. The County Planning Board will address the need for a more complete inventory of all such easements after Basic Plan Conformance has been attained, with the assistance of the Highlands Council and updated municipal inventories, provided this effort is fully funded by the Highlands Council. In total for the Hunterdon County Highlands Preservation Area, the maps indicate 13,265.4 acres of Preserved Lands.

Highlands Conservation Priority Area lands are those designated by the Highlands RMP as high priority for preservation due to exceptional water and ecological resource value. The priority order derives from the Highlands Council Resource Assessment methodology, which identifies and ranks Highlands lands based on a combination of indicators, including but not limited to: watershed conditions, Highlands Open Waters, riparian areas, prime ground water recharge areas, forests, critical habitat and steep slopes.

Lands within the Highlands Special Environmental Zone are those having the highest priority ranking of the Highlands Council for preservation based on the Highlands Council Resource Assessment and for which development is expressly prohibited. Preservation of these lands is vital to:

- a) protecting Highlands Area water resources and environmentally sensitive lands;
- b) protecting water supply reservoirs and other critical water features;
- c) creating large contiguous areas of environmentally sensitive lands;
- d) creating habitat corridors; and
- e) connecting existing preserved open space.

The Highlands Agricultural Priority Area consists of those lands determined by the Highlands Council, in coordination with the NJDA and the State Agriculture Development Committee (SADC), to have the highest agricultural resource values based on an agricultural resource assessment.

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The following are goals and objectives for the preserved lands within the Hunterdon County Highlands Preservation Area:

1. To consider Highlands Council prioritization criteria in addition to existing Hunterdon County criteria, in making determinations regarding non-agricultural Land Preservation (whether by fee simple or easement dedication). Highlands priorities are ordered as follows:
 - a. Lands within the Highlands Special Environmental Zone;
 - b. Lands within Highlands Conservation Priority Areas; and
 - c. Lands within Highlands Resource Areas generally, including but not limited to forested portions of Forest Resource Areas, Critical Habitat Areas, and Riparian Areas, particularly any portion of a Resource Area designated as “High Integrity” or “High Resource Value.”
2. To maintain a current Recreation and Open Space Inventory (ROSI) where required by the NJDEP Green Acres Program for lands or facilities under County jurisdiction.
3. To seek ways to establish and fund local land acquisition for preservation and stewardship programs or to expand existing open space and stewardship programs.
4. To identify lands subject to stewardship programs within this Land Preservation and Land Stewardship Plan and to provide that information to the Highlands Council subject to full funding availability.
5. To encourage implementation of Riparian Area restoration practices on Preserved Lands that give priority to ecological and watershed protection measures.
6. To encourage municipalities to consider the use of TDR to guide growth and development away from ecologically sensitive and agriculturally important lands and towards lands which have the capacity to support additional human development without compromising the ecological integrity of the Highlands Area.
7. To encourage municipalities to consider the use of TDR to maximize the preservation of Preservation Area properties outside of the Existing Community Zone or a Highlands Redevelopment Area, with emphasis on properties with the highest Conservation Priority scores and Agricultural Priority scores.
8. To identify opportunities for outdoor recreation, including a variety of active and passive recreation options, in such locations and in such manner as to ensure environmental resource protections, while addressing the needs of the local population for physical activity, social interaction, connection with nature and the natural environment, and enjoyment of the outdoors.

AGRICULTURE RETENTION/FARMLAND PRESERVATION PLAN

The existing Growth Management Plan has an Agriculture Retention/Farmland Preservation Plan Element providing detailed information on existing and proposed farmland preservation priorities in the community. This Plan supplements the existing Element, as applicable to the Highlands Area, to include the additional information and goals and objectives listed below.

A mapped inventory of Preserved Farmland in the Hunterdon County Highlands Area, current through August, 2009, appears at Exhibit DD, “Preserved Farms, SADC Easements, All Agricultural Uses” (duplicated from the ERI). In addition, this Plan incorporates Exhibit EE, “Important Farmland Soils” (also duplicated from the ERI), Exhibit FF, “Agricultural Resource Area,” and Exhibit GG, “Highlands Agricultural Priority Area.” This Plan recognizes and incorporates the definitions, derivations and delineations used to develop these maps, as provided in the ERI and in all background technical data which derive from: the NJDA, the SADC, the NJDEP, the Natural Resources Conservation Service (NRCS), the Highlands RMP and the Highlands Council *Sustainable Agriculture Technical Report*.

Preserved Farmland includes farms that are preserved through the SADC Farmland Preservation Program, farms that have final approval from the SADC, and farms under the SADC eight-year easement program. *All Agricultural Uses* includes lands currently serving farming or other agricultural purposes, whether permanently deed restricted or not. The map of *Important Farmland Soils* provides a delineation of the four farmland soil classifications as prepared by the United States Department of Agriculture (USDA), NRCS, Soil Survey Geographic Database for farmland soil quality, including:

- a) Prime Farmland Soils - Soils having the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops. It has the soil quality, growing season and moisture supply needed to produce high yields of crops when treated and managed according to acceptable farming methods. Prime farmland soils are not excessively erodible or saturated with water for a long period of time, and they either do not flood frequently or are protected from flooding.
- b) Soils of Statewide Importance – Soils that produce high yields of crops when treated and managed according to acceptable farming methods. This soil may support yields as high as Prime farmland if conditions are favorable.
- c) Unique Farmland Soils - Soils used for special crops (such as cranberries in the New Jersey Pinelands). Unique soils are determined on a statewide basis by the State Soil Conservation Committee.
- d) Locally Important Farmland Soils - Soils designated and ranked by the County Agriculture Development Board. Farmland of Locally Important soils includes those soils that are not Prime or of Statewide Importance and are used for the production of high value food, fiber or horticultural crops.

The Agricultural Resource Area consists of those areas of most concentrated and contiguous agricultural uses in the Highlands Area, using Important Farmland Soils as a critical factor in the

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delineation. Highlands Agricultural Priority Areas, lastly, are those determined by the Highlands Council, in coordination with the NJDA and SADC, based on an agricultural resource assessment, to have the highest agricultural resource values.

The overriding policy of this Plan is to ensure the long-term sustainability of agricultural resources and the viability of agriculture as an industry in the Highlands Area. Achieving this aim requires maintenance of a healthy agricultural environment with a sufficient agricultural land base. Pursuant to the Highlands RMP and the requirements of the Highlands Act, the below-listed goals and objectives are applicable to the Hunterdon County Agricultural Resource Area.

1. To promote farmland preservation and the limiting of non-agricultural uses within the Agricultural Resource Areas.
2. To consider Highlands Council prioritization criteria in addition to existing Hunterdon County criteria, in making determinations regarding land preservation for agriculture (whether by fee simple, easement dedication, transfer of development rights, or other agricultural land conservation techniques). Highlands priorities are ordered as follows:
 - a. Farmland designated as Agricultural Priority Area, as defined in the Agriculture Retention/Farmland Preservation Plan Element and delineated in Exhibit GG; and
 - b. Farmland located within an Agricultural Resource Area, as defined in the Agriculture Retention/Farmland Preservation Plan Element and delineated in Exhibit FF.
3. To promote the limiting of non-agricultural uses within the Agricultural Resource Area, to the extent feasible, to those designed to support the preservation of farmland, avoid conflicts with agriculture, maintain and enhance the sustainability and continued viability of the agricultural industry, protect Important Farmland Soils, and meet the resource management and protection requirements of the Conservation Plan Element.
4. To promote and coordinate with municipalities regarding the use of conservation design parameters, such as cluster development, where preservation of agricultural lands within the Agricultural Resource Area are not feasible.
5. To promote family and farm labor housing in the Agricultural Resource Area as appropriate, to support the viability of permitted agricultural operations, subject to compliance with the resource management and protection requirements of the remainder of the Highlands Element.
6. To promote the Right to Farm Act, in coordination with the CADB and the SADC, and to incorporate land use regulations and policies that are consistent with and further its intents and purposes.
7. To protect and enhance surface and ground water quality and natural resources within the ARA by promoting the use of Best Management Practices including the use of USDA NRCS and Farm Service Agency cost-share programs.

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8. To promote and coordinate with municipalities regarding the use of TDR to guide growth and development away from ecologically sensitive and agriculturally important lands and towards lands which have the capacity to support additional human development without compromising the ecological integrity of the Highlands Area.
9. To promote and coordinate with municipalities regarding the use of TDR to maximize the preservation of Preservation Area properties outside of the Existing Community Zone or a Highlands Redevelopment Area, with emphasis on properties with the highest Conservation Priority scores and Agricultural Priority scores.

To promote the long-term viability of the local agricultural industry by promoting the utilization of existing county, State and federal agriculture related programs and encouraging the development of programs where appropriate, in support of direct marketing, organic farming, niche markets, agri-tourism initiatives such as farmers' markets and roadside stands (located on or off the site of an active farm), ancillary business opportunities, community supported agriculture, and other such projects, programs or activities.

RELATIONSHIP OF GROWTH MANAGEMENT PLAN TO STATE PLAN

By adoption of this Highlands Element, the Hunterdon County Growth Management Plan is brought into alignment with the Highlands RMP with respect to the Preservation Area.

The Highlands Act provides that any portion of a county located in the Highlands Preservation Area is exempt from the State Planning Commission (SPC) Plan Endorsement process. It provides further that once the RMP has attained Plan Endorsement from the SPC for the Planning Area, Highlands Council approval of Plan Conformance with respect to lands in the Planning Area shall be deemed the equivalent of Plan Endorsement.

By conforming the county Growth Management Plan with the Highlands RMP, consistency with the State Development and Redevelopment Plan (SDRP) is achieved for the Hunterdon County Highlands Preservation Area. The Highlands Element furthers SDRP goals, policies and objectives in many ways, not least of which are the following:

1. Seeking to protect, preserve, restore and enhance the natural resources of the Highlands Area;
2. Encouraging the use of smart growth principles in locations of the Area deemed appropriate for development and redevelopment;
3. Protecting historic, cultural and aesthetic resources;
4. Encouraging a sustainable local economy;
5. Protecting agricultural resources, supporting local agricultural businesses, and promoting sustainable agricultural practices;
6. Preserving open space and providing for an array of active and passive recreational opportunities; and
7. Ensuring a viable and well-integrated transportation network that incorporates and encourages multi-modal options and efficiency of land use.

ACRONYMS

CADB	County Agriculture Development Board
ERI	Environmental Resourced Inventory
HAD	Highlands Applicability Determination
HPAA	Highlands Preservation Area Approval
HUC	Hydrologic Unit Code
LID	Low Impact Development
MLUL	Municipal Land Use Law (of the State of New Jersey)
NJDA	New Jersey Department of Agriculture
NJAC	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
NJSA	New Jersey Statutes Annotated
NPS	Nonpoint Source
NRCS	Natural Resources Conservation Service
PCS	Potential Contaminant Source
PGWRA	Prime Ground Water Recharge Area
RMP	Regional Master Plan (of the New Jersey Highlands Water Protection and Planning Council)
ROSI	Recreation and Open Space Inventory
SADC	State Agriculture Development Committee
SCD	Soil Conservation District
SDRP	State Development and Redevelopment Plan
SHPO	State Historic Preservation Office
SPC	State Planning Commission
TDR	Transfer of Development Rights
TMDL	Total Maximum Daily Load
USDA	United States Department of Agriculture
WHPA	Wellhead Protection Area

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EXHIBITS

- A.** Hunterdon County Highlands Area (see Hunterdon County ERI Figure 1)
- B.** Highlands Contaminated Sites Inventory – Tier 1 Sites (see Hunterdon County ERI Figure 30)
- C.** Highlands Contaminated Sites Inventory – Tier 2 Sites (see Hunterdon County ERI Figure 30)
- D.** Forest Resource Area (see Hunterdon County ERI Figure 4)
- E.** Total Forest Area (see Hunterdon County ERI Figure 5)
- F.** Forest Subwatersheds (see Hunterdon County ERI Figure 6)
- G.** Highlands Open Waters (see Hunterdon County ERI Figure 7)
- H.** Highlands Riparian Areas (see Hunterdon County ERI Figure 8)
- I.** Watershed Value (see Hunterdon County ERI Figure 9)
- J.** Riparian Integrity (see Hunterdon County ERI Figure 10)
- K.** Steep Slope Protection Areas (see Hunterdon County ERI Figure 11)
- L.** Critical Wildlife Habitat (see Hunterdon County ERI Figure 12)
- M.** Significant Natural Areas (see Hunterdon County ERI Figure 13)
- N.** Vernal Pools (see Hunterdon County ERI Figure 14)
- O.** Carbonate Rock Areas (see Hunterdon County ERI Figure 18)
- P.** Lake Management Area (see Hunterdon County ERI Figure 19)
- Q.** Net Water Availability (see Hunterdon County ERI Figure 20)
- R.** Prime Ground Water Recharge Areas (see Hunterdon County ERI Figure 21)
- S.** HUC 14s on NJDEP Impaired Waters List (see Hunterdon County ERI Figure 22)
- T.** Wellhead Protection Areas (see Hunterdon County ERI Figure 23)
- U.** Public Community Water Systems Map (see Hunterdon County ERI Figure 31)
- V.** Highlands Domestic Sewerage Facilities Map (see Hunterdon County ERI Figure 32)
- W.** (Reserved)
- X.** (Reserved)
- Y.** (Reserved)
- Z.** Preserved Lands (see Hunterdon County ERI Figure 15)
- AA.** Highlands Conservation Priority Areas (see Hunterdon County ERI Figure 16)
- BB.** Highlands Special Environmental Zone (see Hunterdon County ERI Figure 17)
- CC.** Preserved Farms, SADC Easements, All Agricultural Uses (see Hunterdon County ERI Figure 26)
- DD.** Important Farmland Soils (see Hunterdon County ERI Figure 27)
- EE.** Agricultural Resource Area (see Hunterdon County ERI Figure 24)
- FF.** Agricultural Priority Area (see Hunterdon County ERI Figure 25)

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- GG.** Historic, Cultural, and Archaeological Resource Inventory (see Hunterdon County ERI Figure 28)
- HH.** Baseline Scenic Resources Inventory (see Hunterdon County ERI Figure 29)

APPENDIX A MAJOR POTENTIAL CONTAMINANT SOURCES

Land uses and activities determined by the Highlands Council (based on New Jersey Safe Drinking Water Act regulations and NJDEP regulations) to be Major Potential Contaminant Sources include the following:

1. Permanent storage or disposal of hazardous wastes, industrial or municipal sludge or radioactive materials, including solid waste landfills.
2. Collection and transfer facilities for hazardous wastes, solid wastes that contain hazardous materials, and radioactive materials.
3. Any use or activity requiring the underground storage of a hazardous substance or waste in excess of an aggregate total of 50 gallons.
4. Underground fuel and chemical storage and oil tanks regulated by NJDEP under provisions of the Underground Storage of Hazardous Substances Act (N.J.S.A. 58:10A-21 et seq.).
5. Above-ground storage facility for a hazardous substance or waste with a cumulative capacity greater than 2,000 gallons.
6. Any industrial treatment facility lagoon.
7. Any facility with a SIC Code number included under the New Jersey Safe Drinking Water Act Regulations at N.J.A.C 7:10A-1.14, Table II(N)A, with a toxicity number of II or greater. (See Appendix C.)
8. Automotive service center (repair & maintenance).
9. Landfill.
10. Dry cleaning processing facility.
11. Road salt storage facility.
12. Cemetery.
13. Highway maintenance yard.
14. Truck, bus, locomotive maintenance yard.
15. Site for storage and maintenance of heavy construction equipment and materials.
16. Site for storage and maintenance of equipment and materials for landscaping.
17. Livestock operation containing 300 or more Animal Units (AU) [1 AU= 1000 pounds of live animal weight] as defined by the NJ Department of Agriculture in its Criteria and Standards for Animal Waste Management, at NJAC 2:91.

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18. Quarrying and/or mining facility.
19. Asphalt and/or concrete manufacturing facility.
20. Junkyard/auto recycling and scrap metal facility.
21. Residential or agricultural motor fuel in NJDEP exempted underground storage tanks (i.e., under 1,000 gallons).

APPENDIX B MINOR POTENTIAL CONTAMINANT SOURCES

Land uses and activities determined by the Highlands Council (based on New Jersey Safe Drinking Water Act regulations and NJDEP regulations) to be Minor Potential Contaminant Sources include the following:

1. Underground storage of hazardous substance or waste of less than 50 gallons.
2. Underground heating oil storage tank with a capacity of less than 2,000 gallons.
3. Sewage treatment facility regulated by a NJPDES permit granted under NJAC 7:14A.
4. Sanitary sewer system, including sewer line, manhole, or pump station.
5. Industrial waste line.
6. Septic leaching field.
7. Facility requiring a ground water discharge permit issued by the NJDEP pursuant to N.J.A.C 7:14A et seq.
8. Stormwater retention-recharge basin.
9. Dry well.
10. Storm water conveyance line.
11. Waste oil collection, storage and recycling facility.
12. Agricultural chemical bulk storage and mixing or loading facility including crop dusting facilities.
13. Above-ground storage of hazardous substance or waste in quantities of less than 2,000 gallons.
14. Livestock operation containing 8 or more Animal Units (AU) [1 AU= 1000 pounds of live animal weight] or those receiving 142 or more tons of animal waste per year as defined by the NJ Department of Agriculture pursuant to its Criteria and Standards for Animal Waste Management, at NJAC 2:91.
15. Other PCS's of similar nature that are not listed in (1) through (14) above or in the definition of Major PCS.

APPENDIX C MAJOR POTENTIAL POLLUTANT SOURCES

**Facilities with Toxicity Ratings of II or Greater
N.J.A.C. 7:10A-1.14(c)4, Table II(N)A**

<i>SIC Code for Industrial Facility*</i>	<i>Description of Industrial Facility which includes activities that may release hazardous substances</i>	<i>Toxicity Rating</i>
Any SIC Code	All ground water remediation of toxic substances, including priority pollutants	V
Any SIC Code	Contaminated storm water runoff from any type of facility listed below	
0721	Crop dusting and spraying	IV
10xx	Metal mining	V
12xx	Coal mining	III
1475	Phosphate rock mining	IV
22xx	Textile mills with finishing operations (dyeing, coating, etc.)	V
2491	Wood preserving	VI
2493	Reconstituted wood products	II
25xx	Furniture & fixtures with metal finishing	V
261x, 262x, 263x	Pulp, paper, and paperboard mills	V
27xx	Printing & publishing	II
2812	Inorganic chemicals, alkalies & chlorine	V
2813	Industrial gases	II
2816	Inorganic pigments	IV
2819	Industrial inorganic chemicals	IV
282x	Plastic materials & synthetic resins	V
283x	Drugs	V
284x	Soaps, detergents, etc.	III
285x	Paints, etc.	IV
2861	Gum & wood chemicals	III
2865, 2869	Industrial organic chemicals	VI
2879	Pesticides & agricultural chemicals	VI
289x, except 2891	Miscellaneous chemical products	IV
2891	Adhesives & sealants	V
29xx	Petroleum refining	V
30xx	Rubber & plastic products	IV
3111	Leather tanning & finishing	IV
331x, except 3313	Steel mills	VI
3313	Electrometallurgical products, except steel	III
332x	Iron & steel foundries	V
333x	Primary smelting, nonferrous metals	VI
334x	Secondary smelting, nonferrous metals	V
335x	Rolling, drawing, extruding, nonferrous metals	V
336x	Nonferrous foundries	V
339x	Miscellaneous primary metals products	V

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<i>SIC Code for Industrial Facility*</i>	<i>Description of Industrial Facility which includes activities that may release hazardous substances</i>	<i>Toxicity Rating</i>
341x, 342x, 343x, 344x, 345x, 346x, except 3431 & 3463	Fabricated metal products, with metal finishing	V
3431	Enameled sanitary ware, cast iron basis	VI
3463	Nonferrous forgings	V
347x	Plating & coating	V
348x	Ordinance, with metal finishing	V
348x	Ordinance, explosive load, assembly, packing	IV
349x, except 3497	Miscellaneous fabricated metal products, with metal finishing	V
3497	Metal foil & leaf	V
35xx	Industrial/commercial machinery & equipment, with metal finishing	V
36xx	Electronic equipment, with metal finishing or porcelain enameling	V
3624	Carbon & graphite products	V
3671	Cathode ray tubes	V
3672	Printed circuit boards	V
3674	Semiconductors	VI
3679	Electronic crystals only	III
3691, 3692	Batteries	IV
37xx, except 3731	Transportation equipment, with metal finishing	V
3731	Ship building	IV
38xx	Measuring, analyzing & controlling instruments, with metal finishing	V
3844, 3845	Measuring, analyzing & controlling instruments, with electron tube manufacture	V
3861	Photographic related chemicals	V
39xx	Miscellaneous manufacturing industries, with metal finishing	V
4231	Trucking terminals	III
4493	Marinas	III
4499	Water transportation services	III
46xx	Pipelines, except natural gas	V
4911, 4931	Electric services	IV
4941	Water supply	IV
4953	Solid waste facilities	IV
4953	Hazardous waste treatment facilities	VI
5052	Coal & other minerals & ores	V
5093	Scrap & waste materials	VI
5169	Chemicals & allied products	VI
5171	Petroleum bulk stations & terminals	V
5191	Farm supplies	IV
7211, 7215, 7216 & 7217	Laundries, dry-cleaning & carpet/upholstery cleaning	II

<i>SIC Code for Industrial Facility*</i>	<i>Description of Industrial Facility which includes activities that may release hazardous substances</i>	<i>Toxicity Rating</i>
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7213, 7218	Linen supply & industrial launderers	IV
7342	Disinfecting & pest control services	VI
7389	Solvents recovery services only	VI
7542	Car & truck washes	II
7699	Repair shops, with metal finishing	V
8062	General medical & surgical hospitals	VI
8069	Specialty hospitals	VI
8071	Medical laboratories	VI
8731	Commercial research organizations	IV
8733	Non-commercial research organizations	IV

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