

CHAPTER IV GOALS, POLICIES, AND OBJECTIVES

PART 1. NATURAL RESOURCES

Subpart 1 Highlands Forest Resources

Introduction

The Highlands Region contains some of the most important forests in the state. These forests are vitally important to every element of the Highlands Region, including the natural and the built environment. Forests provide essential ecosystem functions, including surface water filtration, which is important to protecting essential drinking water supplies for the Highlands Region and for the state as a whole. Forests serve as habitat for plants and animals and are critically important to the maintenance of biodiversity in one of the most populous states in the nation. In addition, when managed for sustainable use, forests can be as source of renewable wood products. Forests are a defining visible and functional feature of the Highlands and constitute a majority of critical habitat in the Region.

The Regional Master Plan acknowledges activities exempted through an approved woodland management plan and the normal harvesting of forest materials in accordance with a Forest Management Plan approved by the State Forester under N.J.S.A. 13:20-30(7). Beyond exempt forestry activities, the Highlands Act mandates that the Regional Master Plan provide for the protection of the Region's forests.

GOAL 1.1.1 PROTECTION OF LARGE AREAS OF CONTIGUOUS FORESTED LANDS OF THE HIGHLANDS REGION TO THE MAXIMUM EXTENT POSSIBLE.

Policy 1.1.1.1 To meet the goal for the Preservation Area to preserve the Region's contiguous forested lands.

Policy 1.1.1.2 To limit human development in the Forest Resource Area in order to protect and enhance forest resources, critical habitat and the quantity and quality of water resources in the Preservation Area.

Objective 1.1.1.2.1 Density mapping of the Region's contiguous forested lands as the Forest Resource Area.

Objective 1.1.1.2.2 Implementation of regulations through conformance which limit permissible uses within the Forest Resource Area to maintenance of pre-existing uses and restoration of impaired forest areas, where relief from strict adherence to

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these standards shall be permitted only upon approval of a forest mitigation plan.

Objective 1.1.1.2.3 To prohibit the deforestation of lands within the Forest Resource Area of the Preservation Area for human development except where authorized as an exemption by Section 30 of the Highlands Act.

Objective 1.1.1.2.4 To prohibit the expansion of public infrastructure into the Forest Resource Area.

Policy 1.1.1.3. To promote the priority use of available funding to acquire forested lands within the Forest Resource Area..

Policy 1.1.1.4. To assign land within the Forest Resource Area, a high priority for fee simple and easement and for the use of Highlands Transferable Development Rights.

Policy 1.1.1.5. To prohibit forest clear-cutting within the Forest Resource Area except in accordance with a Forest Management Plan approved by the State Forester.

GOAL 1.1.2. PROTECTION AND ENHANCEMENT OF FORESTS IN THE HIGHLANDS REGION

Policy 1.1.2.1. To establish and implement resource management programs to encourage sustainable forest management, restoration, and stewardship practices on public and private lands in the Forest Resource Areas within the Protection Zone and the Conservation Zone in the Planning Area.

Objective 1.1.2.1.1. Implementation of resource management programs to encourage sustainable forest management, restoration, and stewardship practices on public and private lands including ecological and watershed protection measures.

Objective 1.1.2.1.2. Implementation of programs which encourage owners and operators of farmland with woodlots to obtain approved Forest Management Plans that conform to the protection standards of this Plan.

Objective 1.1.2.1.3. Implementation of programs which encourage the inclusion of appropriate wildlife and invasive species management techniques in Forest Management Plans adopted by any federal, state, county or municipal government entity.

Objective 1.1.2.1.4. Implementation of programs which encourage the application of agro-forestry practices and techniques within cultivated farmland located within both the Agriculture Resource Area and Forest Resource Area.

Policy 1.1.2.2. To limit human development of forests to very low impact residential development in the Protection Zone and the Conservation Zone in the Planning Area.

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- Objective 1.1.2.2.1. Implementation of regulations which limit permissible uses within forested lands in Moderate Integrity Forest Subwatersheds to maintenance of pre-existing uses and permit minimal removal of woody vegetation from forested lands, subject to an approved Forest Management Plan or development that utilizes low impact development best management practices.*
- Objective 1.1.2.2.2. Implementation of regulations which allow for redevelopment of previously developed areas and for other compatible uses that minimize losses to forested lands within Low Integrity Forest Subwatersheds in accordance with an approved Forest Management Plan or low impact development best management practices.*
- Policy 1.1.2.3. To limit deforestation in the Forest Resource Area and forested lands within High Integrity Forest Subwatersheds within the Planned Community Zone to maximum extent practicable.
- Objective 1.1.2.3.1. Implementation of regulations which limit the clearing of trees in conjunction with human development to circumstances where the clearing will not diminish the integrity of forest resources.*
- Objective 1.1.2.3.2. Implementation of resource management programs to avoid loss of forests such as low impact development best management practices and mitigation and/or restoration.*
- Policy 1.1.2.4. To encourage the restoration of forest resources through forest management and stewardship practices.
- Policy 1.1.2.5. To ensure that forest resources are protected on a site specific basis during site plan or subdivision review.
- Objective 1.1.2.5.1. Applications for development approval require identification of any forest area on and adjacent to a site in accordance with the Highlands Council's Alternate Method for Identifying Upland Forest Areas in the Highlands Region.*
- Policy 1.1.2.6. To establish standards and criteria for sustainable forestry activities in order to conserve and enhance the Forest Resource Areas and forested lands within High Integrity Forest Subwatershed within the Highlands Region.
- Objective 1.1.2.6.1. Forestry activities allowed within a Forest Resource Area or forested lands within a High Integrity Forest Subwatershed only in compliance with an approved Forest Management Plan.*
- Policy 1.1.2.7. To prohibit clear-cutting of forest lands except to the extent necessary to promote native forest regeneration, early successional wildlife habitat, or to remove invasive species pursuant to an approved Forest Management Plan.

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GOAL 1.1.3. CONFORMING MUNICIPALITIES AND COUNTIES INCLUDE FOREST PROTECTION PROGRAMS IN THEIR MASTER PLANS AND DEVELOPMENT REGULATIONS.

Policy 1.1.3.1. To require that conforming municipalities and counties address the protection of forested portions of Forest Resource Areas and High Integrity Forest Subwatersheds in their master plans and development regulations.

Objective 1.1.3.1.1 Maintain forest cover to the extent possible in the Highlands Region in natural as well as built environment.

Policy 1.1.3.2. To develop technical guidelines and procedures to assist municipalities and counties in the development of forest mitigation and community forestry plans for inclusion in municipal and county master plans and development regulations.

Objective 1.1.3.2.1. *Technical guidelines and procedures for development and implementation of low impact development best management practices to protect, enhance, and restore forest resources.*

Objective 1.1.3.2.2. *Guidelines for the development of community forestry plans by municipalities for inclusion in municipal master plans.*

Objective 1.1.3.2.3. *A model municipal tree ordinance for municipalities that allow active forest management with approved Forest Management Plans.*

Objective 1.1.3.2.4. *Criteria for demonstrating intrinsic forest values and societal benefits that could be used to issue a Farmland Assessment Tax Credit.*

Objective 1.1.3.2.5. *Technical guidelines establishing forest clearing thresholds for inclusion in municipal development ordinances.*

Policy 1.1.3.3. To require that conforming municipalities adopt a tree clearing ordinance consistent with an approved community forestry plan under the New Jersey Forest Service Community Forestry Program as part of the municipal master plan and local development regulations.

Objective 1.1.3.3.1 *Standardize tree protection ordinances throughout the Highlands Region to the extent feasible.*

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Subpart 2
Highlands Open Waters and Riparian Areas

Introduction

The Highlands Regional Master Plan focuses on four areas of action to address the need to protect, restore and enhance Highlands Open Waters and Riparian Areas:

- Identify and inventory each type of resource area;
- Evaluate the integrity each type of resource area;
- Establish resource protection measures; and
- Establish programs to promote consistent standards for the protection, restoration and acquisition of important waters and riparian areas of the Highlands Region.

GOAL 1.2.1 PROTECTION, RESTORATION, AND ENHANCEMENT OF HIGHLANDS OPEN WATERS AND RIPARIAN AREAS.

Policy 1.2.1.1 To establish and maintain an inventory of Highlands Open Waters and their integrity.

“Highlands Waters” shall include all Highlands Open Waters that are located within the Preservation Area.

“Special Waters” shall include all Highlands Open Waters other than “Highlands Waters:” (1) that are designated Category One (C1); (2) that are upstream of, within the same HUC14 subwatershed, and hydrologically interconnected with C1 or Highlands Waters; or (3) that are those Highlands Open Waters within a National Wildlife Refuge or a designated Wild and Scenic River.

“Exceptional waters” shall include all Highlands Open Waters other than Highlands Waters or Special Waters that drain to a FW1 waterway or include habitat for water/wetland dependent rare, threatened, or endangered species. In addition, this will include any other waters (which are not considered Highlands Waters or Special Waters) that are upstream of and within the same HUC14 subwatershed and hydrologically connected.

“Intermediate Waters” shall include all Highlands Open Waters that are not a Highlands Waters, Special Waters or Exceptional Waters.

Objective 1.2.1.1.1. *The Watershed Resource Value of Highlands subwatersheds shall be established through an analysis of the relative amount of developed lands, habitat quality for threatened and endangered wildlife species, total forest and core forest in each HUC14 subwatershed.*

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Policy 1.2.1.2. To establish and maintain an inventory of Highlands Riparian Areas and their integrity.

Objective 1.2.1.2.1. Highlands Riparian Areas shall consist of the floodprone areas, wetlands, hydric soils and wildlife passage corridors that are associated with Highlands Region Open Waters.

Objective 1.2.1.2.2. The integrity value of Highlands Riparian Areas shall be based upon the relative amount of impervious cover, agricultural land use, density of road crossings of streams, vegetative condition, and habitat for wetland/water dependent threatened and endangered wildlife species of riparian areas, within each HUC14 subwatershed.

Policy 1.2.1.3. To periodically review and update, as necessary, the Watershed Resource Value and Riparian Area Integrity Values, including adjustments to protection buffer requirements whenever HUC14 subwatersheds of lower value are restored to a higher value.

Policy 1.2.1.4. Highlands Open Waters shall include a protection buffer of 300 feet from the edge of the Highlands Open Water feature. All development shall comply with buffer standards which provide for the protection of Highlands Open Waters reviewed on a site-specific basis during site plan or subdivision.

Objective 1.2.1.4.1. Require that all applications for site plan or subdivision approval include the identification and mapping of Highlands Open Waters.

Objective 1.2.1.4.2. Preservation Area buffers for Highlands Open Waters shall comply with the Highlands Preservation Area rules at N.J.A.C. 7:38, requiring 300 foot buffers.

Objective 1.2.1.4.3. Planning Area buffers for Highlands Open Waters shall avoid further impairment and encourage opportunities to restore ecological integrity where appropriate.

Objective 1.2.1.4.4. Exceptions may be made to the 300 foot Highlands Open Water buffer in the Planning Area in the following circumstances, where the applicant further demonstrates that the exception will not cause measurable degradation to the quality and ecological integrity of Highlands Open Waters. Specifically, 1) Exceptional Waters within a HUC14 subwatershed that exhibit a Low Resource Value Watershed integrity value and a Low Integrity Riparian Area integrity may have a 150-foot protection area buffer from each edge of the Highlands Open Waters feature; and 2) Intermediate Waters within a HUC14 subwatershed that exhibit a Low Resource Value Watershed and a Low Integrity Riparian Area may have a 75-foot protection area buffer from each edge of the Highlands Open Waters feature.

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- Objective 1.2.1.4.5. Prohibit adjustments and revisions to Highlands Open Waters protection buffers other than in Objective 1.2.1.4.4., except as necessary to protect public health and safety, or to provide for minimum practical use in the absence of any alternative.*
- Objective 1.2.1.4.6. Implement a Stream Corridor Protection/Restoration plan and Low Impact Development Best Management Practices for any development activity proposed within a Highlands Open Water buffer.*
- Objective 1.2.1.4.7. Require that development within the Highlands Open Water buffer of any HUC14 subwatershed with a Regional Stormwater Plan adopted pursuant to N.J.A.C. 7:8 (Stormwater Management Rules) conform to any applicable requirements which will be reviewed at time of site plan application.*
- Objective 1.2.1.4.8. The Highlands Council may determine to require on a case-by-case basis an expansion of the 300-foot buffer to protect the habitat of a water or wetlands-dependant rare, threatened or endangered species, to the minimum expansion necessary to achieve protection of that species.*
- Policy 1.2.1.5. Protect the integrity of the Riparian Areas through the application of project review standards during site plan review.**
- Objective 1.2.1.5.1. Require that all applications for site plan or subdivision approval include the identification and mapping of Highlands Riparian Areas.*
- Objective 1.2.1.5.2. Limit alterations to existing natural vegetation or increases in impervious area within High and Moderate Integrity Riparian Areas to the minimum extent feasible in areas beyond the Highlands Open Water buffer requirements; protect the water quality of adjacent Highlands Open Water; and maintain or restore habitat value of the Riparian Area.*
- Objective 1.2.1.5.3. Implement Low Impact Development Best Management Practices for any development activity proposed within a Riparian Area, which minimize both alterations of natural vegetation and increases in impervious area, and provide for mitigation through restoration of impaired Riparian Areas in the same HUC14 subwatershed..*
- Objective 1.2.1.5.4. Require that development within Riparian Areas of any HUC14 subwatershed with a Regional Stormwater Plan adopted pursuant to N.J.A.C. 7:8 (Stormwater Management Rules) conform to any applicable requirements for any site plan approval.*
- Policy 1.2.1.6. All development in a Protection Zone and Conservation Zone shall comply with standards to protect and enhance Highlands Open Waters and Riparian Areas.**

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- Objective 1.2.1.6.1. Restrict new land uses or the alteration of existing land uses that would alter or be detrimental to the water quality and habitat value of a Highlands Open Water or a Riparian Area.*
- Objective 1.2.1.6.2. Prohibit adjustments and revisions to Highlands Open Water buffer requirements or Riparian Areas, except as necessary to protect public health and safety, or to provide for minimum practical use in the absence of any alternative.*
- Objective 1.2.1.6.3. Require, where land disturbance is otherwise permitted, that low impact development best management practices are followed to minimize any potential for habitat or water quality impairment.*
- Objective 1.2.1.6.4. Require identification and implementation of opportunities where the restoration and enhancement of previously impaired Highlands Open Waters or Riparian Areas are feasible and appropriate as mitigation to any allowable adjustment or revision to Highlands Open Water or Riparian Area protection buffer requirements.*
- Policy 1.2.1.7. All development in a Planned Community Zone shall comply with standards which will protect and enhance Highlands Open Waters and Riparian Areas.**
- Objective 1.2.1.7.1. Restrict the impact of new land uses or the alteration of existing land uses that would be detrimental to the water quality and habitat value of a Highlands Open Water or a Riparian Area.*
- Objective 1.2.1.7.2. Require, where land disturbance is otherwise permitted, that low impact development best management practices are followed to minimize any potential for habitat or water quality impairment.*
- Objective 1.2.7.3. Require identification and implementation of opportunities where the restoration and enhancement of previously impaired Highlands Open Waters or Riparian Areas are feasible and appropriate as mitigation to any allowable adjustment or revision to Highlands Open Water or Riparian Area protection buffer requirements.*
- Policy 1.2.1.8. To establish priorities for preservation and restoration of Highlands Open Waters and Riparian Areas.**
- Objective 1.2.1.8.1. Assign high priority to land acquisition, development restrictions and Highlands TDR credit bonuses for lands within both High Resource Value Watersheds and High Integrity Riparian Areas.*
- Objective 1.2.1.8.2. Identify opportunities for and implement Highlands Open Waters and Riparian Area restoration practices on public and private lands that give priority to ecological and watershed protection measures.*

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Subpart 3
Steep Slopes

Introduction

Steep slopes within the Highlands Region play an important ecological, recreational, scenic and functional role. Areas of steep slope provide popular recreational opportunities including hiking, climbing and wildlife observation. Ridgelines, hillsides and steep slopes provide scenic views and vistas, which contribute to the rural character of the Highlands Region and help to define the landscape. Disturbance of areas containing steep slopes can trigger erosion and sedimentation, resulting in the loss of topsoil. It can also result in the disturbance of habitats, degradation of surface water quality, silting of wetlands, and alteration of drainage patterns. These processes, when severe, can also result in land slumping and landslides that can damage both developed property and ecosystems. The identification and classification of steep slopes is important in order to effectively manage critical natural resources in the Highlands Region.

GOAL 1.3.1. PROTECTION AND ENHANCEMENT OF THE NATURAL, SCENIC, AND OTHER RESOURCES OF THE HIGHLANDS REGION BY PROTECTION OF STEEP SLOPES FROM INAPPROPRIATE DEVELOPMENT

Policy 1.3.1.1. To establish and maintain an inventory of steep slope areas with slopes equal to or greater than 10% that constitute the Steep Slope Protection Area.

Objective 1.3.1.1.1 A mapped inventory of steep slope areas in the Highlands Region showing slopes that are a minimum of 5,000 square feet and: a) 10% or greater, but less than 15%, b) 15% or greater, but less than 20%, and c) 20% and greater

Objective 1.3.1.1.2. Periodic updates and refinements to the Steep Slope Protection Area.

Objective 1.3.1.1.3. Apply LiDAR to develop a 2-foot interval contour topographic map as a basis for refining the identification of Steep Slope Protection Areas, upon completion of LiDAR data processing..

Policy 1.3.1.2. All lands with slopes of 20% or greater and lands within Riparian Areas with slopes of 10% and greater shall be considered as Severely Constrained Slopes.

Policy 1.3.1.3. All lands other than Riparian Areas with a slope 15% or greater, but less than 20% and are forested lands shall be considered Moderately Constrained Slopes.

Policy 1.3.1.4. All lands other than Riparian Areas with a slope 15% or greater, but less than 20% and are non-forested lands with one or more of the following characteristics shall be considered Constrained Slopes: a) highly susceptible to erosion; b) shallow depth to bedrock; or c) a Soil Capability Class indicative of wet or stony soils.

Policy 1.3.1.5. All lands other than Riparian Areas with a slope of 15% or greater, but less than 20%, are non-forested lands, are not highly susceptible to erosion, and do not have a

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shallow depth to bedrock or a Soil Capability Class indicative of wet or stony soils shall be considered Limited Constrained Slopes.

- Policy 1.3.1.6. To require that applications for site plan or subdivision approval include topographic information identifying the location of any Steep Slope Protection Areas located on the parcel proposed for development.
- Policy 1.3.1.7. To require that applications for site plan or subdivision approval involving parcels of land with slopes of 10% or greater include identification of forested lands, areas which are highly susceptible to erosion, depth to bedrock and Soil Capability Classes.
- Policy 1.3.1.8. To prohibit land disturbance within areas which are Severely Constrained Slopes and Moderately Constrained Slopes.
- Policy 1.3.1.9. To require the use of low impact best development practices for any land disturbance or human development within areas which are Constrained or Limited Constrained Slopes.
- Policy 1.3.1.10. To require that conforming municipalities include steep slope protection provisions in municipal master plans and development regulations.
- Policy 1.3.1.11. To provide technical guidelines and assistance to municipalities in support of municipal conformance activities.

**Subpart 4
Critical Habitat**

Introduction

Biodiversity is the variety of plant species, animal species, and all other organisms found in a particular environment and is a critical indicator of ecological viability. The protection of habitats that are critical to maintaining biodiversity contributes to the protection of rare, threatened, or endangered plant and animal species of the Highlands Region. There are three categories of critical habitat in the Highlands Region: 1) Critical Wildlife Habitat (habitat for rare , threatened or endangered species); 2) Significant Natural Areas (regionally significant ecological communities); and 3) Vernal Pools (confined, ephemeral wet depressions that support distinctive [and often endangered] species that are specially adapted to periodic extremes in water pool levels).

GOAL 1.4.1 PROTECTION AND ENHANCEMENT OF CRITICAL WILDLIFE HABITATS, SIGNIFICANT NATURAL AREAS, AND VERNAL POOLS.

- Policy 1.4.1.1. To protect and promote the biodiversity of Vernal Pools through assignment of a terrestrial habitat protection buffer of 1,000 feet around Vernal Pools to address the habitat requirements of vernal pool-breeding wildlife.

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- Objective 1.4.1.1.1. A Vernal Pools buffer may be rebutted if existing land uses present a human, natural, or development barrier to vernal pool-breeding wildlife.*
- Objective 1.4.1.1.2. A Vernal Pools buffer may be rebutted if vernal pool-breeding wildlife identified at a site do not require a 1,000-foot habitat buffer.*
- Objective 1.4.1.1.3. Prohibit adjustments and revisions to Vernal Pool protection buffers other than in Objective 1.4.1.1.1 or 1.4.1.1.2, except as necessary to protect public health and safety, or to provide for minimum practical use with required mitigation, (including a habitat protection buffer in addition to mitigation), in the absence of any alternative through issuance of a waiver by NJDEP or the Highlands Council.*
- Policy 1.4.1.2. To prohibit the direct impact of new human development or expansion or increased intensity of existing development within Critical Wildlife Habitats, Significant Natural Areas, or within 1,000 feet of Vernal Pools.**
- Policy 1.4.1.3. To assign land within Critical Wildlife Habitats, Significant Natural Areas, and within 1,000 feet of Vernal Pools a high priority for simple and easement and for the allocation of Highlands Transferable Development Rights.**
- Policy 1.4.1.4. To promote the restoration and enhancement of impaired lands in Critical Wildlife Habitats, Significant Natural Areas, or within 1,000 feet of Vernal Pools.**
- Policy 1.4.1.5. To establish resource management programs including minimum standards and criteria for the protection of lands within Critical Wildlife Habitats, Significant Natural Areas, and within 1,000 feet of Vernal Pools.**
- Objective 1.4.1.5.1. Implementation of performance standards requiring all development to employ low impact development best management practices and avoid disturbance of a critical habitat feature whenever possible and to promote avoidance and minimize when disturbance is unavoidable.*
- Objective 1.4.1.5.2. Implementation of performance standards which require the restoration and enhancement of previously impaired critical habitat through appropriate mitigation measures.*
- Policy 1.4.1.6 To require that applications for site plan or subdivision approval for lands within Critical Wildlife Habitats, Significant Natural Areas, or within 1,000 feet of Vernal Pools be subject to resource management programs, including minimum standards and criteria.**
- Objective 1.4.1.6.1. Prohibit alteration or disturbance of Critical Wildlife Habitat, Significant Natural Areas, and within 1,000 feet of Vernal Pools, except as necessary to protect public health and safety, or to provide for minimum practical use of in the absence of any alternative.*

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Objective 1.4.1.6.2. Require that any disturbance to a critical habitat feature include conservation and management measures that mitigate all adverse modification and provide for no net loss of habitat value.

Objective 1.4.1.6.3. Require conformance with any applicable Council-approved Habitat Conservation and Management Plan.

Objective 1.4.1.6.4. Allow a decrease in vernal pool protection buffers, to the minimum decrease feasible, if an applicant can demonstrate, to the satisfaction of the Highlands Council and NJDEP's Endangered and Nongame Species Program, that:

- *In an undisturbed wetland, the existing vernal pool-breeding wildlife require a smaller protective buffer;*
- *Existing land uses present a human, natural or development barrier to the migration or viability of vernal pool-breeding wildlife; or*
- *There is a need to protect public health and safety, or to provide for minimum practical use with required mitigation, (including a habitat protection buffer in addition to mitigation), in the absence of any alternative through issuance of a waiver by NJDEP.*

Policy 1.4.1.7 To prohibit the indirect impact of any human development activity which would result in damage or destruction of habitat for rare, threatened, or endangered species of animal or plant.

Objective 1.4.1.7.1. Prohibit the indirect impact of any activity that that is off-site, adjacent to, or within critical habitat that would result in the destruction or adverse modification of habitat for any rare, threatened, or endangered species of animal or plant.

Policy 1.4.1.8 To establish standards and procedures for the identification of lands where it is necessary that Critical Wildlife Areas, Significant Natural Areas, or Vernal Pool buffers be expanded in order to protect an individual species or ecological community in the event that it is determined that a larger area is required to protect the functional integrity of the habitat.

Policy 1.4.1.9. To develop technical guidance and assistance for municipalities, land owners and others preparing Habitat Conservation and Management Plans.

Objective 1.4.1.9.1. To develop and distribute low impact development best management practices to protect, enhance, and restore critical habitat.

Policy 1.4.1.10. To establish standards and criteria for the identification of critical habitat features, including formal procedures for the refinement of resource management areas.

Policy 1.4.1.10.1. To develop and distribute low impact development best management practices to protect, enhance, and restore critical habitat.

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GOAL 1.4.2. INCLUSION OF CRITICAL HABITAT AREA MANAGEMENT PROGRAMS IN THE MASTER PLANS AND DEVELOPMENT REGULATIONS FOR CONFORMING MUNICIPALITIES AND COUNTIES.

Policy 1.4.2.1. To require that conforming municipalities and counties identify Critical Habitat Areas and management programs in their master plans and development regulations.

Policy 1.4.2.2. To require that conforming municipalities and counties include approved Habitat Conservation and Management Plans in master plans and development regulations.

**Subpart 5
Open Space**

Introduction

Public and private investment in land preservation over the years has protected nearly a third of the Highlands Region as perpetual open space. Maintaining the land in a natural condition is necessary to preserve ecosystem integrity and the protection of drinking water supplies. The Highlands Act contemplates preservation of additional open space resources in order to protect and enhance ecosystem function, protect drinking water resources, and preserve natural and recreational lands. As a result, preservation of open space provides compensation to landowners.

GOAL 1.5.1. PROTECTION OF CRITICAL RESOURCES THROUGH PRESERVING OPEN SPACE THROUGHOUT THE HIGHLANDS REGION.

Policy 1.5.1.1. To identify and maintain an inventory of private and public open space land holdings and conservation easements in the Highlands Region.

Objective 1.5.1.1.1 Create a coordinated and continually updated open space preservation data base of preserved lands and land stewardship activities by municipal, county, state and federal agencies, non-profit organizations and individuals

Policy 1.5.1.2. To serve as a regional clearinghouse for information regarding funding sources for land acquisition, restoration and enhancement, and long-term stewardship of open space lands in the Highlands Region.

Policy 1.5.1.3. To provide assistance to land acquisition efforts of public and private organizations in order to maximize land preservation efforts in the Highlands Region.

Objective 1.5.1.3.1. Creation of a 5 and 10 year priority for lands which should be acquired in the Highlands.

Objective 1.5.3.2. Creation of an open space preservation and land stewardship technical assistance program.

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Policy 1.5.1.4. To identify and maintain an inventory of lands within Conservation Priority Areas which should be preserved as open space.

Objective 1.5.1.4.1. Creation of a current list of lands which are 5 and 10 year priorities for land acquisition in the Highlands Region.

Policy 1.5.1.5. To promote the establishment of dedicated sources of funding for the preservation of open space lands in the Highlands Region.

Objective 1.5.1.5.1. Establishment of a dedicated source of state revenue to be used for open space preservation in the Highlands Region, such as coordination with NJDEP Green Acres Program for re-authorization of the Garden State Preservation Trust Fund, including a dedicated fund for the anticipated land acquisition needs of the Highlands Region. Also the imposition of a water user fee.

Objective 1.5.1.5.2. Establishment of dedicated sources of state revenue for a reserve fund to capitalize the Highlands Transfer of Development Rights Program.

Objective 1.5.1.5.3. Establishment of an on-going program to secure significant federal funding in support of land acquisition and stewardship efforts in the Highlands Region including, but not limited to, additional appropriations under the Federal Highlands Conservation Act.

Objective 1.5.1.5.4. Establishment of an on-going program to seek funding for land acquisition and stewardship from unique sources of funding such as federal and state court-imposed fines for environmental damage, gifts, endowments and donations.

Objective 1.5.1.5.5. Establishment of a dedicated source of revenue for the preservation and land stewardship of open space through a surcharge on public water supply system rates for any system that directly or indirectly relies on Highlands water resources for more than 5 percent of their annual needs.

Policy 1.5.1.6. To promote the acquisition and protection of open space resources within the Highlands Region under existing local and state open space preservation and land stewardship programs.

Objective 1.5.1.6.1. Coordination of Highlands Region priority open space preservation and land stewardship activities with the NJDEP Green Acres Program and the State Agriculture Development Committee with regard to land acquisition and preservation priorities in the Highlands Region.

Objective 1.5.1.6.2. Coordination with NJDEP regarding the review of applications for Green Acres diversions for consistency with the Highlands Regional Master Plan.

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Policy 1.5.1.7. To promote the creation of a Highlands Water Protection and Planning Trust Fund to secure monies from alternate sources of funding to assist in land acquisition and stewardship.

Policy 1.5.1.8. To encourage municipalities and counties to establish and fund local open space acquisition and land stewardship programs or to expand existing open space and land stewardship programs.

Policy 1.5.1.9. To support legislation to extend the dual appraisal methodology used by the Garden State Preservation Trust for lands in the Highlands Region beyond the June 30, 2009 expiration date to a minimum of five years beyond adoption of the Regional Master Plan.

Policy 1.5.1.10. To promote and facilitate the formation of an interagency working group comprised of representatives of appropriate federal, state and county agencies for the purpose of coordinating open space acquisition activities, including identification of high priority lands for preservation, land stewardship initiatives, and funding needs.

GOAL 1.5.2. CONFORMING MUNICIPALITIES AND COUNTIES INCLUDE OPEN SPACE PRESERVATION AND LAND STEWARDSHIP PROGRAMS IN THEIR MASTER PLANS AND DEVELOPMENT REGULATIONS.

Policy 1.5.2.1. To require conforming municipalities and counties to include an open space preservation and land stewardship element in their master plans.

Policy 1.5.2.2. To require conforming municipalities and counties to identify existing preserved open space and lands subject to land stewardship programs in their master plans and provide that information to the Highlands Council.

Policy 1.5.2.3. To require conforming municipalities and counties to require conservation or land stewardship easements as a condition of development approval for lands within parcels proposed for development which are identified as preservation on proposed site plan or plat of subdivision.

GOAL 1.5.3 PRESERVATION OF FORESTS IN PRIVATE OWNERSHIP THROUGH CREATION OF A FOREST PRESERVATION EASEMENT PROGRAM.

Policy 1.5.3.1. To promote the creation of a Forest Preservation Easement Program for the Highlands Region which would be eligible for use by the State Agricultural Development Committee and participation in the Green Acres Program.

Objective 1.5.3.1.1 Achieve maximum preservation of working forests through the Forest Preservation Easement Program, including public access on lands preserved through the Green Acres Program.

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PART 2.
WATER RESOURCES AND WATER UTILITIES

Introduction

The Highlands Regional Master Plan addresses five fundamental issues with regard to water resources in the Highlands Region:

- The availability of water resources for human and ecological use
- The protection of water resource availability
- The protection, restoration, and enhancement of water quality
- The management of land development patterns and densities to ensure that the carrying capacity of water resources are not exceeded
- The cost-effective and efficient provision and use of water utility capacity in a manner that ensures compatibility with the carrying capacity of water resources.

Subpart 1

Water Resources Availability

Introduction

The Highlands Regional Master Plan provides a method for identifying the quantity of available water resources in the Highlands Region, which is used to identify areas where water resources are or are not sufficient to support existing human and ecological uses, and to support future uses. Where sufficient water availability exists, the method fairly allocates available water resources among future human uses by LUCM Zone.

GOAL 2.1.1 PROTECTION OF THE VALUE OF THE HIGHLANDS REGION AS AN “ESSENTIAL SOURCE OF DRINKING WATER, PROVIDING CLEAN AND PLENTIFUL DRINKING WATER FOR ONE-HALF OF THE STATE’S POPULATION” (HIGHLANDS ACT, SECTION 2), ALONG WITH THE ECOLOGICAL VALUES OF CLEAN WATER, THROUGH THE PROTECTION, ENHANCEMENT AND RESTORATION OF WATER RESOURCES QUANTITY, FLOW CHARACTERISTICS AND QUALITY AS FUNDAMENTAL TO ENSURING THAT THERE ARE ADEQUATE WATER SUPPLIES TO SUPPORT THESE NEEDS.

Policy 2.1.1.1. To incorporate analysis of water availability and related thresholds in the Plan and these results shall be updated and utilized periodically to revise the Land Use Capability Map.

Policy 2.1.1.2. To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Map zones and its status as Current Deficit Area or Existing Constrained Area.

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GOAL 2.1.2. PROTECTION, RESTORATION AND ENHANCEMENT OF WATER QUALITY AND QUANTITY OF SURFACE AND GROUND WATERS (SECTIONS 10(B)1 AND 10(C)1), AND TO DETERMINE “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...” (SECTION 11.A.(1)(A)).

Policy 2.1.2.1. To track and consider water availability in the review of site-specific and regional planning activity, including any major Highlands development, issuance of a Highlands Preservation Area Approval or waiver, State or local capital projects that involve disturbing two or more acres of land or a cumulative increase in impervious surface by one acre or more, development applications that disturb two or more acres of land or increase impervious surface by one acre or more, wastewater management plan amendments, and other applications under the purview of the Highlands Council.

Policy 2.1.2.2. To estimate Net Water Availability on a subwatershed basis.

Objective 2.1.2.2.1. Estimate Ground Water Capacity for each subwatershed using the Low Flow Margin Method.

Objective 2.1.2.2.2. Establish Ground Water Availability thresholds for application to HUC14 subwatersheds based on Land Use Capability Map zone, and as modified by status as an Existing Constrained Area. Ground Water Availability Thresholds shall be determined by multiplying Ground Water Capacity by specified percentages that are related to the nature of the environmental resources and conservation objectives of the Plan for each.

Ground Water Availability Thresholds As Percentage Of Ground Water Capacity		
Land Use Capability Map Zone	Standard Threshold	Existing Constrained Area*
Protection Zone	5%	5%
Conservation Zone	5% non-agricultural 10% agricultural	5% + 2003 Depletive & Consumptive Use (up to Standard Threshold)
Planned Community Zone	20%	5% + 2003 Depletive & Consumptive Use (up to Standard Threshold)

***Within HUC14 Subwatershed upstream of a Current Deficit Area**

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- Objective 2.1.2.2.3. Estimate Net Water Availability by subtracting from Ground Water Availability an estimate of maximum monthly consumptive and depletive ground water and surface water use (other than from reservoir storage or other supply with a NJDEP approved safe yield) for that HUC14 subwatershed.*
- Objective 2.1.2.2.4. Adjust Net Water Availability to account for the return of wastewater discharging within the HUC14 subwatershed from which the water originated, or as appropriate within another HUC14 subwatershed.*
- Objective 2.1.2.2.5. Identify Current Deficit Areas where the Net Water Availability is less than zero.*
- Objective 2.1.2.2.6. Identification of Existing Constrained Areas as HUC14 subwatersheds that are upstream of and contributing flow to a Current Deficit Area.*
- Policy 2.1.2.3 To ensure that Net Water Availability within each subwatershed supports Smart Growth to the maximum extent possible.
- Objective 2.1.2.3.1. Water utilities that serve a HUC14 subwatershed that has a positive Net Water Availability shall be given priority for public community water systems serving the Planned Community Zone, based on the LUCM development capacity for that Zone.*
- Objective 2.1.2.3.2. The remaining Net Water Availability shall be available to the remaining Protection Zone and the Conservation Zones based on the applicable threshold, relative area, and LUCM development capacity for each Zone.*
- Policy 2.1.2.4. To require the development and implementation of Water Management Plans to address any Current Deficit Areas or subwatershed that could become deficit areas based on projected development and water uses, to ensure sustainable water supply, water resource, and ecological value.
- Objective 2.1.2.4.1. Water Management Plans shall include provisions to reduce consumptive and depletive uses of ground and surface waters as necessary to reduce or prevent deficits in Net Water Availability; or to ensure continued stream flows to downstream Current Deficit Areas from Existing Constrained Areas, to the extent practicable within each zone.*
- Objective 2.1.2.4.1. Proposed increases in water use, including consumptive or depletive water uses, within a Current Deficit Area or Existing Constrained Area shall provide mitigation equal to 125% of the proposed new consumptive or depletive water uses within the same HUC14 subwatershed through: a permanent reduction of existing consumptive and depletive water uses; ground water recharge in excess of the requirements of N.J.A.C. 7:8 (Stormwater Management Rules); or other permanent means.*

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Objective 2.1.2.4.2 All water users within a Current Deficit Area or Existing Constrained Area shall seek funding and opportunities to prevent exacerbation of and help reduce or eliminate existing deficits to ensure sustainable water supply, water resource and ecological values, emphasizing techniques including, but not limited to water reuse, recycling and conservation.

Policy 2.1.2.5 To conditionally provide water availability within Current Deficit Area.

Objective 2.1.2.5.1. Within a Current Deficit Area, a Planned Community Zone shall be assigned a Conditional Net Water Availability of 2 percent of Ground Water Capacity, based on the Low Flow Margin Method, conditioned upon prior implementation or commitment for implementation of the 125% mitigation requirement in Objective 2.1.2.4.1.

Objective 2.1.2.5.2. Within a Current Deficit Area, a Protection or Conservation Zone shall be assigned a Conditional Net Water Availability of 1 percent of Ground Water Capacity, based on the Low Flow Margin Method, conditioned upon prior implementation or commitment for implementation of the 125% mitigation requirement in Objective 2.1.2.4.1.

Policy 2.1.2.6. To require use of water conservation, recycling, and reuse methods (where appropriate) and devices for any redevelopment or development activity, including renovations to existing residential, institutional, commercial or industrial buildings, to minimize consumptive water use tailored to meet the resource protection and other goals for each zone and considering subwatershed-specific conditions and Net Water Availability status.

Policy 2.1.2.7. To require that wastewater management plans or amendments demonstrate that the proposed service area will not directly or indirectly cause or contribute to, or could help mitigate, a Net Water Availability deficit.

Policy 2.1.2.8. The percentage standard for the Protection Zone is designed to maintain the integrity of aquatic ecosystems, recognizing the regional significance of these resources. Consumptive and depletive water uses and associated land uses shall be stringently limited. The Highlands Council shall apply the following standards within the Protection Zone to provide for the protection of water supply and ecological resources:

Objective 2.1.2.8.1 Restrict consumptive and depletive uses of ground and surface waters by HUC14 subwatershed to no more than 5 percent of Ground Water Capacity.

Objective 2.1.2.8.2. Prevent net increases in consumptive and depletive water uses in Current Water Deficit Areas to prevent exacerbation of and help reduce or eliminate the deficit to ensure sustainable water supply, water resource and ecological values, emphasizing techniques including, but not limited to water reuse, recycling and conservation.

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- Objective 2.1.2.8.3. Limit consumptive and depletive water uses in Existing Constrained Areas to 5 percent of the Ground Water Capacity to ensure continued stream flows to downstream Current Deficit Areas, emphasizing techniques including, but not limited to water reuse, recycling and conservation.*
- Objective 2.1.2.8.4. Give highest priority for the use of Net Water Availability to redevelopment sites as designated by the Highlands Council.*
- Objective 2.1.2.8.5. Ensure, through NJDEP Water Allocation regulations, that any new or increased water allocation permits do not result in significant reductions in safe yields for any water supply facility with an existing water allocation permit and NJDEP-approved safe yield.*
- Policy 2.1.2.9.** To apply standards in the Conservation Zone which recognize that significant ecological resources exist in these areas and protect these resources. Agricultural water uses will also occur in these areas along with limited, low density development and appropriate redevelopment. There is value to reserving significant amounts of net water availability for operations that employ water quality protection, conservation, reuse, and recycling best management practices, and to provide specific Ground Water Availability targets to agricultural and non-agricultural water uses, to minimize the potential for conflict between these uses.
- Objective 2.1.2.9.1. Limit consumptive and depletive uses of ground and surface waters for agricultural purposes to no more than 10 percent of Ground Water Capacity, and for non-agricultural purposes to no more than 5 percent of Ground Water Capacity, based on the Low Flow Margin Method.*
- Objective 2.1.2.9.3. Prevent net increases in consumptive and depletive water uses in Current Water Deficit Areas to prevent exacerbation of and help reduce or eliminate the deficit to ensure sustainable water supply, water resource and ecological values, emphasizing techniques including, but not limited to water reuse, recycling and conservation.*
- Objective 2.1.2.9.4. Limit consumptive and depletive water uses in Existing Constrained Areas to the 2003 consumptive and depletive water use plus 5 percent of the Ground Water Capacity (up to the standard thresholds in Objective 2.2.9.1) to ensure continued stream flows to downstream Current Deficit Areas, emphasizing techniques including, but not limited to, water reuse, recycling and conservation.*
- Objective 2.1.2.9.5. Give highest priority for the use of Net Water Availability for agricultural and related water uses to those using best management practices for irrigation and other activities, and to Specially Planned Areas or TDR Receiving Areas.*
- Objective 2.1.2.9.6. Give highest priority for the use of Net Water Availability for non-agricultural water uses to clustered or compact development, redevelopment sites as designated by the Highlands Council, and municipal TDR Receiving Areas*

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that result in the preservation of agricultural and environmentally sensitive lands..

Objective 2.1.2.9.7. Ensure, through NJDEP Water Allocation regulations, that any new or increased water allocation permits do not result in significant reductions in safe yields for any water supply facility with an existing water allocation permit and NJDEP-approved safe yield.

Policy 2.1.2.10. To apply standards within the Planned Community Zone to provide for the protection of water supply, water resources and ecological values of the Region.

Objective 2.1.2.10.1. Limit consumptive and depletive uses of ground and surface waters to no more than 20 percent of Ground Water Capacity, based on the Low Flow Margin Method.

Objective 2.1.2.10.3. Prevent net increases in consumptive and depletive water uses in Current Water Deficit Areas to prevent exacerbation of and help reduce or eliminate the deficit, emphasizing techniques including, but not limited to, water reuse, recycling and conservation.

Objective 2.1.2.10.4. Limit consumptive and depletive water uses in Existing Constrained Areas to the 2003 consumptive and depletive water use plus 5 percent of the Ground Water Capacity (up to the standard thresholds in Objective 2.2.10.1) to ensure continued stream flows to downstream Current Deficit Areas, emphasizing techniques including, but not limited to, water reuse, recycling and conservation.

Objective 2.1.2.10.5. Give highest priority allocation of remaining Net Available Water to areas that can accommodate TDR Receiving Zones as determined by the Highlands Council.

Objective 2.1.2.10.6. Establish and implement best management practices for recreational, landscape irrigation and other practices through applicable State and federal programs.

Objective 2.1.2.10.7. Allow water resource transfers between subwatersheds only when there is no other viable alternative and where such transfers would demonstrably not result in impairment of resources in any subwatershed. Potential effects on upstream and downstream subwatersheds should be included in any such evaluation.

Objective 2.1.2.10.8. Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.

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Objective 2.1.2.10.9. Ensure, through NJDEP Water Allocation regulations, that any new or increased water allocation permits do not result in significant reductions in safe yields for any water supply facility with an existing water allocation permit and NJDEP-approved safe yield.

**Subpart 2
Protection of Water Resources Quantity**

Introduction

The Highlands Regional Master Plan focuses on a variety of measures to protect the replenishment of water resources in the Highlands Region through ground water recharge and other means, to ensure the maintenance of aquatic ecosystems and human water uses.

GOAL 2.2.1. CONTINUATION OF REFINEMENT TO THE REGIONAL MASTER PLAN WITH THE BEST AVAILABLE WATER SUPPLY INFORMATION.

Policy 2.2.1.1. To improve estimates of Net Water Availability over time, including testing, development and adoption of ecologically-based assessment techniques to evaluate the high and low flow needs of streams necessary to maintain the health of aquatic ecosystems, and the relationship between ground water recharge, ecological flow needs, consumptive water uses and estimates of water availability for both ground and surface water resources.

Policy 2.2.1.2. To evaluate potable water supply reservoir safe yield and passing flow requirements and examine the effects of upstream consumptive and depletive water uses on safe yields and of passing flows on Highlands Open Waters and recommend regulatory changes to NJDEP as appropriate.

Policy 2.2.1.3. To develop a more refined Hydrologic Unit Map using Light Detection and Ranging (LiDAR) technology and high resolution digital elevation modeling to support more detailed geographic estimates of water availability.

Policy 2.2.1.4. To develop more refined estimates of the effects on Net Water Availability regarding the exportation and importation of water and wastewater.

GOAL 2.2.2. MAINTENANCE OF HYDROLOGIC INTEGRITY THROUGH THE PROTECTION OF GROUND WATER RECHARGE.

Policy 2.2.2.1. To map and maintain an inventory of ground water recharge potential for the Highlands Region

Policy 2.2.2.2. To delineate Prime Ground Water Recharge Areas as those lands within a HUC14 subwatershed that have the highest recharge volumes as of 2002, relative to other land areas, and in the aggregate provide 40 percent of total ground water recharge during drought conditions.

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Policy 2.2.2.3. To protect the quantity and quality of Prime Ground Water Recharge Areas.

Objective 2.2.2.3.1. Implement low impact development, or other best management practices to minimize the need for engineered recharge methods for the purpose of complying with N.J.A.C. 7:8 (Stormwater Management Rules).

Objective 2.2.2.3.2. Restrict development activities and other activities which result in a reduction in ground water recharge volumes or will contribute to or results in water quality degradation within Prime Ground Water Recharge Areas.

Policy 2.2.2.3. To prohibit uses of land within a Prime Ground Water Recharge Area that may reduce recharge volumes, or other uses that may impair water quality within or draining to a Prime Ground Water Recharge Area.

Objective 2.2.2.3.1. Implement a requirement that any development activity in a Prime Ground Water Recharge Area demonstrate that an equivalent of 125% of pre-existing recharge volumes of the site will be provided for within the same subwatershed, or by other means as determined by the Highlands Council.

Policy 2.2.2.4. To apply standards within the Protection Zone to protect, restore and enhance the functionality and the water resource value of Prime Ground Water Recharge Areas.

Objective 2.2.2.4.1. Restrict the creation of impervious surfaces and other surfaces within a Prime Ground Water Recharge Area due to their potential to reduce recharge volumes, and to restrict other land uses that may degrade water quality within or draining to a Prime Ground Water Recharge Area.

Objective 2.2.2.4.2. Allow for adjustments and revisions to Prime Ground Water Recharge Area protection requirements, such as increases in impervious cover or loss of forest or other natural land cover, only upon demonstration that any relief from protection requirements will not impair or reduce ground water recharge quality or volumes and are necessary to protect public health and safety, or to provide for minimum practical use in the absence of any alternative.

Policy 2.2.2.5. To apply standards within the Conservation Zone to protect, restore and enhance the functionality and the water resource value of Prime Ground Water Recharge Areas.

Objective 2.2.2.5.1. Discourage and restrict uses of land within a Prime Ground Water Recharge Area that may reduce recharge volumes, or other uses that may degrade water quality within or draining to a Prime Ground Water Recharge Area.

Objective 2.2.2.5.2. Allow for adjustments and revisions to Prime Ground Water Recharge Area protection requirements, such as increases in impervious cover or loss of forest or other natural land cover only upon demonstration that any relief from protection requirements will not impair or reduce ground water recharge quality or volumes.

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Policy 2.2.2.6. To apply standards within the Planned Community Zone, including Specially Planned Areas to provide for the protection of ground water recharge areas.

Objective 2.2.2.6.1. Achieve a net improvement in ground water recharge volume and maintenance of water quality through compliance with any related provisions of an adopted regional stormwater plan.

Objective 2.2.2.6.2. Achieve a net improvement in ground water volume and maintenance of water quality through redevelopment, enhanced infiltration, pretreatment or other means where feasible.

Policy 2.2.2.7. To implement resource protection standards to provide for the protection of ground water recharge areas on a site-specific basis during site plan review.

Objective 2.2.2.7.1. Establishment of minimum site design guidelines and permissible uses within a Prime Ground Water Recharge Area.

Objective 2.2.2.7.2. Increases in pre-existing impervious area shall not be permitted if they will contravene an applicable management, low impact design standard, or other best management practice.

Objective 2.2.2.7.3. Identify and implement opportunities for the restoration or enhancement of impaired Prime Ground Water Recharge Areas through the retrofit or rehabilitation of stormwater recharge facilities, land management improvements, reforestation, etc.

Objective 2.2.2.7.4. Implementation of programs for Prime Ground Water Recharge Areas which encourage redevelopment of previously developed areas and allow for other compatible uses that improve recharge area productivity or water quality.

Objective 2.2.2.7.5. Require conformance with applicable components of regional stormwater management plans, where applicable, as a mandatory requirement for any site plan application.

Policy 2.2.2.8. To develop technical guidelines and procedures for low impact development, engineering and other appropriate best management practices to protect, restore and enhance Prime Ground Water Recharge Areas.

Policy 2.2.2.9. To identify land use categories or other activities that pose sufficient risk of contamination and that should not be allowed within Prime Ground Water Recharge Areas.

Policy 2.2.2.10. To develop model municipal development regulations and master plan elements for the protection of Prime Ground Water Recharge Areas, through mechanisms that both complement and supplement the provisions of N.J.A.C. 7:8 (Stormwater Management Rules).

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GOAL 2.2.3. IMPROVEMENT OF GROUND WATER RECHARGE THROUGH REGIONAL MANAGEMENT EFFORTS.

- Policy 2.2.3.1. To develop regional stormwater plans to promote regional protection, restoration and enhancement of ground water recharge volume and quality where specific watersheds are at risk in the absence of regional analysis and enhanced standards (see N.J.A.C. 7:8, Stormwater Management Rules).
- Policy 2.2.3.2. To coordinate programs, funding and activities among public and private entities to encourage regional ground water recharge protection, restoration and enhancement activities consistent with the Plan.

**Subpart 3
Water Quality**

Introduction

The Highlands Regional Master Plan focuses on a variety of measures to protect, enhance and restore as necessary the quality of water resources in the Highlands Region, to ensure that human and ecological water uses have water quality appropriate to those uses, and that human water uses do not alter water quality in unacceptable ways.

GOAL 2.3.1. ASSESSMENT AND RESTORATION OF SURFACE AND GROUND WATER QUALITY OF THE HIGHLANDS REGION.

- Policy 2.3.1.1. To identify surface and ground water resources currently impaired or at risk of impairment, and in need of protection, restoration or enhancement.
- Policy 2.3.1.2. To coordinate with NJDEP regarding a unified water quality assessment and the development and implementation of Total Maximum Daily Loads, where necessary, for all surface waters within the Highlands Region.
- Policy 2.3.1.3. To coordinate with NJDEP regarding a unified ground water quality assessment, monitoring and attainment program.
- Policy 2.3.1.4. To coordinate with NJDEP regarding efforts to monitor areas of known contamination to ground water resources within the Highlands Region and activities to remediate and restore water quality.
- Policy 2.3.1.5. To coordinate with NJDEP and other agencies to identify impairments and implement improved regulatory actions and management practices that will also support the water quality goals of the Highlands Act.
- Policy 2.3.1.6. To remediate the pollutant sources associated with existing or historic land uses in conjunction with redevelopment.

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GOAL 2.3.2 PROTECTION, RESTORATION, AND ENHANCEMENT OF THE WATER QUALITY OF THE HIGHLANDS REGION.

Policy 2.3.2.1. To evaluate locations and density of development which are sustainable in conjunction with the use of best management practices applicable to these various water resource needs and support the protection and management of critical lands for water quality purposes.

Policy 2.3.2.2. To use land use controls for water quality protection purposes by reducing or avoiding water quality impacts of new land uses.

Policy 2.3.2.3. To adopt and implement water quality protections.

Objective 2.3.2.3.1. Prohibit land uses that would increase pollutant loadings to waters for which TMDLs have been adopted by NJDEP unless in compliance with the relevant TMDL.

Objective 2.3.2.3.2. Ensure that new land uses draining to a stream designated as impaired but lacking a TMDL (i.e., Sublist 5) avoid increased pollutant loadings for the parameter or parameters for which a TMDL is required.

Objective 2.3.2.3.3. Wastewater management plans or amendments shall demonstrate that the proposed service area will not directly or indirectly support development that would be in violation of an adopted TMDL.

Policy 2.3.2.4. To determine where water quality improvements are necessary or beneficial for the improvement of water availability, develop watershed-based plans to achieve such improvements such as restoration techniques including disconnection and reduction of existing impervious surfaces, develop implementation mechanisms, and implement these plans.

Policy 2.3.2.5. To adopt and implement storm water management controls.

Objective 2.3.2.5.1. Require recharge of clean stormwater rather than contaminated stormwater wherever feasible to meet stormwater management requirements, and to pretreat contaminated stormwater wherever its recharge is required.

Objective 2.3.2.5.2. Require low impact development and other best management practices standards for stormwater management to minimize the discharge of stormwater-entrained pollutants to ground and surface waters.

Objective 2.3.2.5.3. Require agricultural best management practices for water conservation, water reuse, nutrient and pesticide application, animal waste management, environmental restoration, pollution assessment and prevention, and irrigation efficiency in farm operations for the protection of ground and surface water quality.

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Policy 2.3.2.6. To establish minimum criteria for municipal government water quality management programs.

Objective 2.3.2.6.1. Develop technical guidelines and procedures for low impact development and best management practices to protect ground and surface water quality.

Objective 2.3.2.6.2. Develop model municipal development regulations for the protection of ground and surface water quality.

Objective 2.3.2.6.2. Require municipal and county master plans and development regulations to incorporate relevant TMDLs, additional water quality protection measures and wellhead protection for public water supply wells and nitrate standards as development standards.

Policy 2.3.2.7. To promote the implementation of low impact development standards and best management practices to protect the quality of ground and surface water quality.

Policy 2.3.2.8. To develop an educational program to further the understanding of the importance of water quality and methods of protecting water resources in the Highlands.

GOAL 2.3.3. LIMITATION OF THE TYPE AND AMOUNT OF HUMAN DEVELOPMENT IN THE WELLHEAD PROTECTION AREAS OF PUBLIC WATER SUPPLY WELLS.

Policy 2.3.3.1. To identify Wellhead Protection Areas for public community and public noncommunity nontransient water supply wells in or affecting the Highlands Region.

Objective 2.3.3.1.1. Coordinate with NJDEP to establish and maintain an inventory of Wellhead Protection Areas in or affecting the Highlands Region.

Objective 2.3.3.1.2. Identify land uses within the Wellhead Protection Areas that have a significant potential for contributing pollutants of concern to ground water.

Objective 2.3.3.1.3. Each Wellhead Protection Area shall include three tiers. The time of travel for ground water to the well in Tier 1 shall be 2 years; Tier 2 shall be 5 years; and Tier 3 shall be 12 years.

Policy 2.3.3.2. To develop resource protection measures 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.

Objective 2.3.3.2.1. Prohibit land uses that have a significant potential to result in the discharge of pathogens (including but not limited to septic systems and engineered stormwater infiltration from surfaces with significant potential for contact with pathogenic contaminants) to ground water or to the land surface

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within a designated Tier 1 Wellhead Protection Area, such that may degrade or contribute to the degradation of ground water quality.

Objective 2.3.3.2.2. Prohibit land uses that have a significant potential to result in the discharge of persistent organic chemicals sources (including but not limited to existing discharges of industrial or other non-sanitary wastewater effluent) to ground water or to the land surface within a designated Tier 2 Wellhead Protection Area, such that may degrade or contribute to the degradation of ground water quality.

Objective 2.3.3.2.3. Require that land uses that have a significant potential to result in major discharges of pollutants to ground water or to the land surface (including but not limited to non-sanitary wastewater effluent and any major sources of potential discharges such as spills and leaks), such that they may degrade ground water quality within a designated Tier 3 Wellhead Protection Area, shall incorporate ongoing management of toxic chemical sources and prohibition, so that the potential for ground water contamination is minimized and the opportunity for discharge discovery and control is maximized.

Policy 2.3.3.3. To develop educational materials to further the understanding of the importance of Wellhead Protection Areas to protect ground water supply.

Policy 2.3.3.4. To prepare design standards in order to encourage appropriate conservation-based design.

Objective 2.3.3.4.1. Require site specific or municipal stormwater management plans to address wellhead protection requirements.

Objective 2.3.3.4.2. Encourage stormwater reuse for non-agricultural irrigation and other non-potable water purposes to minimize the volume of stormwater discharges within a Tier 1 or Tier 2 Wellhead Protection Area.

Objective 2.3.3.4.3. Develop technical guidelines and procedures for the identification of potable sources at risk and protection of Wellhead Protection Areas for public water supply wells in the Highlands Region.

Objective 2.3.3.4.4. Develop technical guidelines and procedures for wellhead protection best management practices to protect ground water quality.

Policy 2.3.3.5. To require that conforming municipalities revise master plans and development regulations to address wellhead protection requirements.

Objective 2.3.3.5.1. Develop model master plan elements and land development regulations for Wellhead Protection Areas.

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- Objective 2.3.3.5.2. Restrict development activities that pose threats to the water quality of public water supply wells.*
- Objective 2.3.3.5.3. Ensure that development activities and existing land use activities implement best management practices to protect the quality of ground water within Wellhead Protection Areas.*
- Objective 2.3.3.5.4. Amend wastewater management plans for conforming municipalities and counties to ensure that any activity associated with the proposed service area will not adversely affect a Wellhead Protection Area.*

**Subpart 4
Sustainable Development and Water Resources**

Introduction

The Highlands Regional Master Plan includes a variety of measures to ensure that future development is at densities necessary to remain within the carrying capacity of water resources for both quality and quantity, and to ensure that water supply and wastewater utility capacities are made available in ways that provide maximum regional benefit within the constraints of water availability and water quality protection, and are used in ways that provide cost-effective and efficient service.

GOAL 2.4.1. LIMITATION OF THE EXPANSION OF WATER AND WASTEWATER INFRASTRUCTURE IN THE PRESERVATION AREA.

- Policy 2.4.1.1.** To ensure compliance with the statutory revocation of designated sewer service areas unless the wastewater collection systems had been installed by August 10, 2004, and unless extensions are warranted for reasons of public health or are exempt from the Highlands Act.
- Policy 2.4.1.2.** To identify water and wastewater infrastructure necessary for appropriate and environmentally-sensitive redevelopment of Council-approved redevelopment sites and brownfields in the Preservation Area.

GOAL 2.4.2. ALL EXISTING AND FUTURE DEVELOPMENT IN THE HIGHLANDS REGION THAT USE PUBLIC WATER SUPPLY SYSTEMS ARE SERVED BY ADEQUATE AND APPROPRIATE INFRASTRUCTURE.

- Policy 2.4.2.1.** To establish and maintain an inventory of Highlands Public Community Water System infrastructure including developed parcels with current connections to existing utility service areas.
- Objective 2.4.2.1.1. The development and maintenance of an inventory of Existing Areas Served.*
- Objective 2.4.2.1.2. The development and maintenance of an inventory of the service areas and capacity of Highlands Public Community Water Supply Systems.*

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- Objective 2.4.2.1.3. The development of an estimate Available Water Supply Capacity for each Highlands Public Community Water Supply System.*
- Objective 2.4.2.1.4. The identification of remaining available water supply system capacity to support regional growth opportunities within the Highlands Region.*
- Policy 2.4.2.2. To ensure that the service areas of Highlands Public Community Water Systems shall be limited such that the maximum monthly demand shall not exceed or contribute to an exceedance of the water availability of its source waters.
- Policy 2.4.2.3. To identify potential opportunities for public water systems where domestic water supplies have been identified as public health concerns due to source contamination
- Policy 2.4.2.4. To minimize the extension of public water supply systems within the Protection Zone and the Conservation Zone for the protection of water resources.
- Objective 2.4.2.4.1. Prohibit new, expanded, or extended public water systems unless they are shown to be necessary and are approved by the Highlands Council to address a demonstrated need to protect public health and safety.*
- Objective 2.4.2.4.2. Accommodate compact development served by existing or proposed public water systems only where such development is within or immediately adjacent to an existing service area and provides for the clustering or aggregation of development that will preserve at least 80 percent of the project area in perpetuity for environmental protection or agriculture purposes with an impervious cover of less than 3 percent, and the development impacts are otherwise consistent with the goals and requirements of the Plan.*
- Objective 2.4.2.4.3. All development in areas which are not served by public water systems shall be at a density which can be supported by on-site domestic wells.*
- Policy 2.4.2.5. To allocate available water supply in the Planned Community Zone to provide for the maximum direct and indirect protection of water resources in the Highlands Region.
- Objective 2.4.2.5.1. The highest priority for the allocation of available utility capacity in Planned Community Zones and Specially Planned Areas shall be given to area of regional growth opportunities that constitute Highlands TDR Receiving Areas.*
- Objective 2.4.2.5.2. Develop a comprehensive data base of water utilities that are dependent on Current Water Availability Deficit Areas or Existing Water Availability Constrained Areas as a source of water, with estimates of the extent to which service area demands and water allocation permits may exceed available water.*

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- Objective 2.4.2.5.3. Limit future water system demand and/or reducing existing demand by water systems that are dependent on Current Water Availability Deficit Areas or Existing Water Availability Constrained Areas as a source of water.*
- Objective 2.4.2.5.4 Limit future water system demands to levels that will not cause a Current Water Availability Deficit where one does not currently exist.*
- Policy 2.4.2.6. To prohibit new or increased water resource transfers between subwatersheds unless it is demonstrated that no other option to meet public health, safety and welfare objectives and where such transfers do not result in impairment of resources in the subwatershed from which water is proposed to be transferred.
- Policy 2.4.2.7. To encourage water recycling/reuse measures, such as domestic and institutional grey water systems, where appropriate, to minimize water use in existing land uses.
- Policy 2.4.2.8. To require water resource management for all development in the Highlands Region.
- Objective 2.4.2.8.1. Require maximized feasible water conservation and recycling or any redevelopment or development activity, including renovations to existing single family residences and commercial/industrial buildings.*
- Objective 2.4.2.8.2. Require consideration of and the cost-effective use of recycled or re-used water rather than potable public water for non-potable purposes such as fountains, nonessential uses such as golf courses, certain recreational, commercial, or agricultural uses.*
- Objective 2.4.2.8.3. Require that new residential development served by public community water systems be at a minimum density of 1/2 acre per dwelling unit for the developed part of the site (i.e., not including wetlands, open water buffers, recreational space), and equivalent commercial and business lot coverage to ensure cost-effective utility service.*
- Policy 2.4.2.9. To ensure continued refinement and development of the Regional Master Plan.
- Objective 2.4.2.9.1. Implement a coordinated program with NJDEP to track ground water and surface water withdrawals and water allocations within the Highlands Region to maintain current estimates of net utility capacity and to fill critical missing data gaps.*
- Objective 2.4.2.9.2. A program of coordination with NJDEP, water purveyors and water utilities to ensure that service areas and franchise areas are supplied by and consistent with sustainable yields from their designated sources.*
- Objective 2.4.2.9.3. Determine where water quality improvements are necessary or beneficial for the improvement of Net Water Availability or protection of existing drinking*

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water supplies, develop watershed-based plans to achieve such improvements, and develop mechanisms to implement these plans.

GOAL 2.4.3. ALL EXISTING AND FUTURE DEVELOPMENT IN THE HIGHLANDS REGION THAT USES PUBLIC WASTEWATER TREATMENT SYSTEMS SERVED BY ADEQUATE AND APPROPRIATE INFRASTRUCTURE.

Policy 2.4.3.1. To establish and maintain an inventory of Highlands public wastewater management infrastructure including developed parcels with current connections to existing utility service areas.

Objective 2.4.3.1.1. The development and maintenance of an inventory of Existing Areas Served.

Objective 2.4.3.1.2. The development and maintenance of an inventory of the service areas and capacity of Highlands Domestic Sewerage Facilities.

Objective 2.4.3.1.3. The development of an estimate Available Wastewater Treatment Capacity for each Highlands Domestic Sewer Facility.

Objective 2.4.3.1.4. The identification of remaining available waste water treatment capacity to support regional growth opportunities within the Highlands Region.

Policy 2.4.3.2. To base projected demand for appropriate economic revitalization and opportunities for Highlands TDR Receiving Zones within Existing Areas Served on existing maximum three month demands plus an estimate of redevelopment needs based on either Highlands Council regional analyses or more detailed local analyses, to assess whether there is adequate treatment capacity to encourage redevelopment.

Policy 2.4.3.3. To provide new growth and development in the Protection Zone and the Conservation Zone with adequate and appropriate wastewater treatment.

Objective 2.4.3.3.1. Any available sewer system capacity is allocated to address existing public health concerns on a priority basis.

Objective 2.4.3.3.2. Prohibit new, expanded, or extended wastewater collection or treatment outside of Existing Areas Served unless there is a demonstration of a public health and safety concern.

Objective 2.4.3.3.3. Expansion of wastewater service shall be permitted in areas where there is a pattern of documented failing septic systems located within Existing Areas Served, or adjacent to Existing Areas Served where the failing septic systems cannot reasonably be addressed through rehabilitation or replacement of the existing septic system.

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- Objective 2.4.3.3.4. Compact development served by existing or expanded wastewater collection and treatment systems shall be permitted in an Agricultural Resource Area only where such development is within or immediately adjacent to an Existing Areas Served and adequate provision is made for the protections of farmland and sensitive environmental resources through dedication of at least 80 percent of the site to farmland and open space preservation and provided that the proposed development is otherwise consistent with the goals and requirements of this Plan.*
- Objective 2.4.3.3.5. Ensure that new growth and development that is not served by public wastewater collection and treatment systems is limited to densities suitable for on-site wastewater treatment.*
- Policy 2.4.3.4. To provide new growth and development in the Planned Community Zone with adequate and appropriate wastewater treatment.
- Objective 2.4.3.4.1. The highest priority for allocation of excess or additional wastewater treatment capacity is to areas where there are clusters of failed septic systems that are located within or adjacent to Existing Areas Served.*
- Objective 2.4.3.4.2. The second highest priority for the allocation of excess or additional wastewater treatment capacity is to regional growth and redevelopment areas that can serve as Highlands TDR Receiving Areas adopted by a municipality and approved by the Highlands Council.*
- Objective 2.4.3.4.3. Allow the expansion or creation of wastewater collection systems beyond Existing Areas Served to serve lands which are appropriate for infill or redevelopment, or to serve areas identified as public health concerns due to failing septic systems where the failing septic systems cannot reasonably be addressed through rehabilitation or replacement of the existing septic system.*
- Policy 2.4.3.5. To provide adequate, appropriate, efficient and cost-effective wastewater management to all development in the Highlands Region.
- Objective 2.4.3.5.1. Allow community-based on-site treatment facilities for those areas located outside Existing Areas Served and have public health concerns due to failing septic systems; these facilities shall only serve existing wastewater and shall not include infrastructure to support future growth.*
- Objective 2.4.3.5.2. Prohibit the construction of sewer lines within Tier 1 of Well Head Protection Areas that may result in seepage of untreated sewage into ground water supplies.*
- Objective 2.4.3.5.3. Prohibit expansion of a public wastewater collection and treatment systems within critical natural resource areas in the Preservation Area and in Open Water buffer areas, Riparian Areas, the Forest Resource Area, agricultural*

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lands of Agricultural Resource Areas, Steep Slopes, and Critical Habitat unless to address existing public health concerns.

Objective 2.4.3.5.4. Require the use of recycled or re-used water wherever possible including aesthetic purposes and non-potable purposes such as fountains, golf courses, and other recreational, commercial or agricultural uses.

Objective 2.4.3.5.5. Existing wastewater collection and treatments systems which are non-compliant with state water quality standards in regard to existing wastewater treatment and effluent discharge in regard to state water quality standards shall be prohibited from collecting and treating additional wastewater until the treatment systems is fully compliant with State water quality .

Objective 2.4.3.5.6. Wastewater Management Plan or amendments thereto, or to an Areawide Water Quality Management Plan, shall be consistent with requirements of this Plan.

Policy 2.4.3.6. To ensure the efficiency and cost-effectiveness of public wastewater collection and treatment systems.

Objective 2.4.3.6.1. Require that new residential development served by public wastewater collection and treatment systems be at a minimum density of 1/2 acre per dwelling unit for the developed part of the site (i.e., not including wetlands, open water buffers, and recreational space).

Objective 2.4.3.6.2. Require that new non-residential development served by public wastewater collection and treatment systems be at a minimum intensity of a floor area ratio (FAR) of 0.35 for the developed part of the site (i.e., not including wetlands, open water buffers, recreational space).

GOAL 2.4.4. ESTABLISH ON-SITE WASTEWATER TREATMENT DENSITIES TO ENSURE THAT DISCHARGES DO NOT EXCEED THE NATURAL CAPACITY OF GROUND WATER TO ATTENUATE LOADINGS, EXACERBATE EXISTING NITRATE IMPAIRMENT, OR CONTRIBUTE TO POTENTIAL NITRATE IMPAIRMENT FOR SUBWATERSHEDS OF THE HIGHLANDS REGION.

Policy 2.4.4.1. To use nitrate concentrations in ground water as an indicator of water quality, and to use nitrate dilution modeling as the primary method for assessing the carrying capacity of lands for development that relies on septic systems for wastewater treatment.

Objective 2.4.4.1.1. Determine background median concentrations of nitrate in ground water by HUC14 subwatershed.

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- Objective 2.4.4.1.2. Identify the factors affecting the suitability of densities for development that relies on septic systems for wastewater treatment.*
- Objective 2.4.4.1.3. Develop appropriate protection measures to minimize contamination of ground water from septic systems.*
- Objective 2.4.4.1.4. Develop drought ground water recharge estimates by HUC14 subwatershed for use in the NJDEP nitrate dilution model.*
- Policy 2.4.4.2 To use the median background nitrate concentrations in ground water in the Highlands Region as a basis for establishing on-site wastewater treatment densities.**
- Objective 2.4.4.2.1. Use the median concentrations of nitrate in ground water for Planning Area HUC14 subwatersheds where the Protection Zone is predominant as the nitrate target for new development reliant on septic systems within the Protection Zone. The median is 0.81 mg/L.*
- Objective 2.4.4.2.2. Use the median concentrations of nitrate in ground water for Planning Area HUC14 subwatersheds where the Conservation Zone is predominant as the nitrate target for new development reliant on septic systems within the Conservation Zone. The median is 1.88 mg/L.*
- Objective 2.4.4.2.3. Use the NJDEP Highlands Preservation Area rules and nitrate thresholds for the Preservation Area.*
- Objective 2.4.4.2.4. Use a nitrate target of 2 mg/L for the Planned Community Zone within Planning Area, on a project-by-project basis, where new development will rely on septic systems.*
- Objective 2.4.4.2.5. Carrying capacity shall be reported through the Land Use Capability Map as the number of allowable septic systems per Conservation and Protection Zone for each HUC14 subwatershed, taking into account the nitrate target, the HUC14 subwatershed drought ground water recharge, and the acreage that is privately owned, undeveloped or underdeveloped, and not preserved.*
- Objective 2.4.4.2.6. New residential development utilizing septic systems where lot-size averaging, clustering or open space subdivision design techniques are employed shall have a gross density (for all parcels involved in the development proposal) based on the nitrate dilution target appropriate for the LUCM Zone, but with the density for the developed portion of the site based on a nitrate dilution target not to exceed 10 mg/L.*
- Objective 2.4.4.2.7. New residential development utilizing septic systems shall be designed in a manner that minimizes the risk of well contamination due to the flow of septic system plumes within or between developed lots, addressing general ground water flow patterns, major fracture systems and other appropriate geological, geophysical and hydrogeological issues.*

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Policy 2.4.4.3. To prepare and maintain an inventory of areas where existing ground water or surface water quality is impaired to such a degree that any increase in nitrate concentration would have an adverse impact on water quality.

Policy 2.4.4.4. To establish methods for restoration of ground water quality for subwatersheds where existing ground water is impaired on a subwatershed by subwatershed basis.

Policy 2.4.4.5. To establish minimum standards for the placement, design, monitoring and maintenance of septic systems necessary to protect, restore, and enhance ground water quality.

GOAL 2.4.5. REFINEMENT AND IMPROVEMENT OF THE GROUND WATER RESOURCE MANAGEMENT ELEMENT.

Policy 2.4.5.1. To monitor and assess nitrate-related impacts to water resources within the Highlands Region.

Policy 2.4.5.2. To develop appropriate and innovative resource management programs to protect, restore, and enhance subwatersheds where existing ground water quality is impaired.

Objective 2.4.5.2.1. Identify innovative technologies that may be appropriate for the design, installation and maintenance of on-site wastewater treatment systems to minimize impairment to ground water or surface water quality due to elevated nitrate concentrations providing the systems meet the minimum standards of NJAC 7:9A.

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Part 3. Agricultural Resources

Introduction

Agriculture is an important part of the essential character of the Highlands Region's culture, landscape, and economy. It provides important economic benefits to the Highlands Region in the form of agricultural production and agro tourism, provides food to area residents using less energy than would be required to import produce from other regions and helps maintain the Highland's rural character.

GOAL 3.1 PROTECTION AND ENHANCEMENT OF THE AGRICULTURAL RESOURCES OF THE HIGHLANDS REGION.

Policy 3.1.1. To create and maintain an inventory of agricultural lands which includes lands which are used for agricultural purposes or which contain soils which are highly suitable for agricultural use.

Policy 3.1.2. To maintain an inventory of farmland assessed lands in the Highlands Region.

Policy 3.1.3 Within the Agricultural Resource Area, to treat Prime, Statewide Importance, Unique, and Locally Important soils as Important Farmland Soils which are critical agricultural resources of the Highlands Region.

Policy 3.1.4. To identify Important Farmland Soils as a critical factor in delineating Agricultural Resource Areas in the Highlands Region.

Policy 3.1.5. To promote farmland preservation within the Agricultural Resource Areas and accord priority to the preservation of agricultural lands within Agricultural Priority Areas, through less than fee acquisition, TDR, and other agricultural land conservation techniques.

Policy 3.1.6. To ensure land uses within an Agricultural Resource Area are compatible with and support sustainable agriculture or are compatible with cluster development.

Objective 3.1.6.1. Implementation of regulations which limit non-agricultural uses within an Agricultural Resource Area to those uses that support the preservation of farmland, the continued viability of the agricultural industry, or are compatible with cluster development.

Policy 3.1.7. To permit human development, including family and farm worker housing in Agricultural Resource Areas which are accessory to and/or supportive of sustainable agriculture, subject to compliance with the resource management programs of the Highlands Regional Master Plan.

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- Objective 3.1.7.1. Implementation of regulations which allow for construction of ancillary structures and housing for family and farm workers that are necessary to support farm operations, upon a demonstration that the proposed development is consistent with the resource protection goals of the Plan.*
- Policy 3.1.8. To encourage the use of agro-forestry best management practices and techniques on cultivated farmland located within the Agricultural Resource Area and the Forest Resource Area.
- Objective 3.1.8.1. Implementation of agro-forestry best management practices for cultivated farmland in Agricultural Resource Areas and Forest Resource Area.*
- Policy 3.1.9 To implement programs which encourage owners and operators of farmland with woodlots within Agricultural Resource Areas to prepare and implement approved Forest Management Plans that conform to the resource protection standards of this Plan.
- Objective 3.1.9.1. Coordinate with the State Forester to provide guidance for the development of Forest Management Plans that improve maintenance of ecosystem and water resource values of the Highlands Region.*
- Policy 3.1.10. To establish and implement resource management programs which protect agricultural resources during site plan or subdivision review and approval.
- Objective 3.1.10.1. Implementation of regulations which ensure non-agricultural land development within an Agricultural Resource Area is compatible with the protection and enhancement of agricultural production, protection of important farmland soils, or other natural resource management and protection requirements.*
- Objective 3.1.10.2. Implementation of regulations which provide that all non-agricultural development which is proposed in an Agricultural Resource Area comply with open space design requirements to avoid conflicts between such development and agricultural activities and protect farmland and sensitive environmental resources.*
- Objective 3.1.10.3. Implementation of regulations which require mandatory clustering for residential development in a Agricultural Resource Area such that at least 80% of the parcel proposed for residential development is preserved as farmland or natural resource area.*
- Objective 3.1.10.4. Implementation of regulations which require that all land preserved as farmland or natural resource area as a result of clustering be subject to a conservation easement enforceable by the appropriate municipality and the Highlands Council.*

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Policy 3.1.11. To require agricultural activities which involve agricultural impervious surfaces of greater than 3% but less than 9%, to prepare and obtain approval for a Farm Conservation Plan from the USDA Natural Resource Conservation Service.

Policy 3.1.12. To require agricultural activities which involve agricultural impervious surfaces of 9% or greater to prepare and obtain approval of a Resource Management System Plan from the USDA Natural Resource Conservation Service in the Planning Area.

Policy 3.1.13. To advocate for the amendment of the Farmland Assessment Act to permit the inclusion of credits for the control of invasive species, white-tailed deer reduction programs, and the water value of a well-managed agricultural lands.

GOAL 3.2. PROTECTION AND ENHANCEMENT OF AGRICULTURAL VIABILITY WITHIN THE HIGHLANDS REGION.

Policy 3.2.1. To encourage private and public owners of lands within an Agricultural Resource Area in the Conservation Zones to lease open lands to farmers and/or to manage open space lands in a manner which is compatible with adjoining agricultural uses.

Policy 3.2.2. To promote research and study, and support proposals to enhance the long-term viability of the agriculture industry in the Highlands Region through innovative programs with regard to health care, banking practices, housing, and labor.

Policy 3.2.3. To seek additional funding from any and all state and federal funding programs for agriculture within the Highlands Region.

Policy 3.2.4. To coordinate with other municipal, County, state, and federal agencies to ensure to the maximum extent practicable that other agency programs are coordinated with the resource protection requirements of the Highlands Regional Master Plan.

Policy 3.2.5. To promote and enhance innovative agricultural practices including direct marketing, farmers markets, road side stands, agro-tourism and community supported agriculture.

GOAL 3.3. LIMITATION OF CONSTRUCTION OF NON-AGRICULTURAL DEVELOPMENT-INDUCING WATER AND WASTEWATER INFRASTRUCTURE IN AGRICULTURAL RESOURCE AREAS.

Policy 3.3.1. To prohibit the development of additional water and wastewater infrastructure in a Agricultural Resource Area within the Protection Zone and the Preservation Area, except where such additional infrastructure is necessary to address an existing public health concern, a redevelopment waiver, or to provide for minimum practical use in the absence of any alternative through issuance of a waiver by NJDEP.

Policy 3.3.2. To prohibit the development of additional water and wastewater infrastructure in a Agricultural Resource Area in a Conservation Zone, except where such additional

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infrastructure is necessary to address the needs of an existing public health concern, mandatory clustering, or open space design development as approved by the Highlands Council.

GOAL 3.4. PROTECTION AND ENHANCEMENT OF SURFACE AND GROUND WATER QUALITY IN AGRICULTURAL RESOURCE AREAS.

Policy 3.4.1. To promote the use of appropriate alternative and innovative wastewater treatment systems to provide enhanced protection of surface and ground water quality in the Conservation Zone.

Policy 3.4.2. To promote efforts to increase Integrated Pest Management and Integrated Crop Management programs and other innovative management techniques that reduce pesticide and fertilizer use in conjunction with agricultural activities.

Policy 3.4.3. To identify subwatersheds with elevated nitrate levels, develop management plans for enhancing water quality, and implementing those plans in ways that enhance agricultural viability wherever feasible.

GOAL 3.5. CONFORMING MUNICIPALITIES AND COUNTIES INCLUDE FARMLAND PRESERVATION PLAN ELEMENTS IN THEIR MASTER PLANS AND DEVELOPMENT REGULATIONS.

Policy 3.5.1. To prepare technical guidelines for the preparation of a Farmland Preservation Plan Element for inclusion municipal and county master plans and development regulations.

Policy 3.5.2. To require conforming municipalities and counties to include a Farmland Preservation Plan Element in municipal and county master plans and development regulations.

Policy 3.5.3. To require conforming municipalities and counties to incorporate Right to Farm provisions in their master plans and development regulations.

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PART 4. HISTORIC, CULTURAL, ARCHAEOLOGICAL AND SCENIC RESOURCES

Introduction

The Highlands Region contains important historic, cultural, archaeological and scenic resources. These resources provide the public with an understanding of how the land and the people of the Highlands Region have changed over time. They also are important for fostering an appreciation for the events that contributed to the development of the towns, villages, and cities that exist of the Highlands Region.

Historic resources include buildings, structures, objects, districts, areas or sites which are significant in the history or culture of a place or time and connect communities with their pasts. Cultural resources include sites, artifacts or materials which relate to the people and how they live or lived. Cultural resources also reflect the way in which a community currently lives and the values which are important to it. Scenic resources are sites, landscapes and vistas that are remarkable or distinctive because of geology, topography, vegetation, history, culture or use of land. In the Highlands Region, topography forming ridgelines and mountainsides, panoramic views, streams and rivers, forests, agricultural landscapes and leafy suburbs are important scenic resources. The Highlands Council has assembled a Historic and Cultural Resource Inventory and a Scenic Resources Inventory.

GOAL 4.1. PROTECTION AND PRESERVATION OF THE HISTORIC, CULTURAL AND ARCHAEOLOGICAL RESOURCES OF THE HIGHLANDS REGION.

Policy 4.1.1. To maintain and periodically update the Highlands Region Historic and Cultural Resources Inventory.

Objective 4.1.1.1. Encourage municipalities and counties to include a historic, cultural and archaeological survey(s) as part of the Historic Preservation Plan element of their master plans.

Policy 4.1.2. To provide a process whereby resources may be nominated, considered, and included in the Highlands Historic and Cultural Resources Inventory.

Policy 4.1.3. To ensure that human development does not adversely affect the character or value of resources which are listed on the Highlands Historic and Cultural Resource Inventory to the maximum extent practicable.

Policy 4.1.4. To require that the impact of proposed human development on the historic and cultural resources of the Highlands Region be addressed during site plan or subdivision review and approval.

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Objective 4.1.4.1. All applications for site plan or subdivision approval shall include identification of any cultural, historic or archaeological resources in the Highlands Region which are listed on the Highlands Historic and Cultural Resource Inventory and may be affected by the proposed development.

Objective 4.1.4.2. All development which affects identified cultural, historic or archaeological resources shall comply with minimum standards for the preservation of the affected resources.

Policy 4.1.5. To use the Secretary of the Interior’s Standards for the Treatment of Historic Properties as the standard for municipal historic and cultural preservation review and include, at a minimum, the preservation and re-use of historic structures.

Policy 4.1.6. To coordinate the Highlands Council’s activities with regard to the historic and cultural resources with the *New Jersey Historic Trust*.

Policy 4.1.7. To promote historic and cultural heritage tourism in the Highlands Region.

GOAL 4.2 PROTECTION AND ENHANCEMENT OF THE SCENIC RESOURCES WITHIN THE HIGHLANDS REGION.

Policy 4.2.1. To maintain and periodically update the Highlands Scenic Resources Inventory.

Policy 4.2.2. To provide a process whereby regionally significant resources may be nominated, considered and included in the Highlands Scenic Resources Inventory.

Policy 4.2.3. To ensure that human development does not adversely affect the character or value of resources which are listed on the Highlands Scenic Resources Inventory.

Policy 4.2.4. To establish minimum standards to ensure that Highlands Scenic Resources are not impaired by new human development.

Policy 4.2.5. To require that the impact of proposed human development on the scenic resources of the Highlands Region be addressed during site plan or subdivision review and approval.

Objective 4.2.5.1. All applications for site plan or subdivision approval shall include identification of any scenic resources in the Highlands Region which are listed on the Highlands Scenic Resources Inventory and may be affected by the proposed development.

Objective 4.2.5.2. All development which affects identified scenic resources shall comply with minimum standards for the preservation of the affected resources.

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- GOAL 4.3. CONFORMING MUNICIPALITIES AND COUNTIES INCLUDE MINIMUM STANDARDS FOR HISTORIC, CULTURAL, ARCHAEOLOGICAL AND SCENIC PROTECTION IN MUNICIPAL AND COUNTY MASTER PLANS AND LAND DEVELOPMENT REGULATIONS.**
- Policy 4.3.1.** To encourage municipalities and counties to establish historic preservation commissions or boards to review applications for development which affect historic, cultural and archaeological resources listed on the Highlands Historic and Cultural Resources Inventory.
- Policy 4.3.2** To require that conforming municipalities and counties include a Historic, Cultural and Scenic Resource Protection Element in municipal and county master plans and development regulations.
- Policy 4.3.3.** To require that conforming municipalities and counties include minimum standards for the protection and enhancement of historic, cultural and archaeological resources listed in the Highlands Historic and Cultural Resources Inventory in their development regulations.
- Policy 4.3.4.** To require that conforming municipalities and counties include minimum standards for the protection and enhancement of scenic resources listed in the Highlands Scenic Inventory in their development regulations.

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PART 5. TRANSPORTATION

Introduction

The Highlands Regional transportation system is a complex network of roads, highways, railways and bridges which support various modes of travel, including private automobile, buses, truck, rail bicycle and walking. There are four major commuter rail lines with 24 stations on these lines which are located within the Highlands Region as well as three small plane airport facilities. The Region is served by four interstate highways, eight state roads and many county and local roads. In general, most of the highways and roads within the Highlands Region operate at or above design capacity. There is limited intra-regional bus service except for extensive commuter service which is provided by NJ Transit and by private operators, particularly in Morris County and along the Route 78 and 80 corridors.

GOAL 5.1. PROVISION OF SAFE AND REASONABLE MOBILITY TO RESIDENTS AND VISITORS TO THE HIGHLANDS REGION, WITHIN THE HIGHLANDS, AND BETWEEN THE HIGHLANDS AND DESTINATIONS OUTSIDE OF THE REGION.

Policy 5.1.1. To ensure that the Highlands transportation system provides safe and reasonable intra-regional and inter-regional mobility.

Policy 5.1.2. To ensure that the Highlands transportation system affords Highlands industries, including agriculture, cost-effective transportation for raw materials, products and employees.

Objective 5.1.2.1. Movement of goods from the roadway network to the freight rail network wherever possible.

Objective 5.1.2.2. Evaluate opportunities to increase freight service through the reactivation of abandoned freight lines.

Policy 5.1.3. Implement traffic calming measures in areas with high pedestrian activity.

Policy 5.1.4. To provide for safe pedestrian connections including features such as sidewalks, proper lighting, shade trees, and shelters consistent with NJDOT's Pedestrian Safety Initiative.

Policy 5.1.5. Promote safe routes for children to travel to and from school in support of the NJDOT's Safe Routes to School Program.

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GOAL 5.2 MAINTENANCE OF THE LEVEL OF SERVICE ON THE EXISTING HIGHLANDS ROAD SYSTEM WITHOUT THE USE OF INFRASTRUCTURE IMPROVEMENTS THAT COULD TRIGGER ADDITIONAL DEVELOPMENT IN AREAS THAT ARE NOT APPROPRIATE FOR “GROWTH INDUCING” LAND USES.

Policy 5.2.1. To promote more efficient use of existing road capacity by appropriate means, including increased bus, van and car pool rider-ship.

Policy 5.2.2. Require an evaluation of potential growth inducing effects such as substantial new land use, new residents, or new employment that could occur as a result of increased capacity road improvements.

Policy 5.2.3. To prohibit road improvements in the Highlands Region which a Growth Inducing Study demonstrates that proposed improvements are likely to be growth-inducing for lands with limited or no capacity to support human development without an adverse impact on the Highlands ecosystem.

GOAL 5.3 TRANSPORTATION IMPROVEMENTS WITHIN THE HIGHLANDS REGION THAT ARE CONSISTENT WITH THE HIGHLANDS REGIONAL MASTER PLAN.

Policy 5.3.1. To ensure, to the extent practicable, that proposed transportation improvements which are not consistent with the Regional Master Plan be modified to be consistent or be re-evaluated in the context of state and regional planning goals.

Policy 5.3.2. To coordinate with NJ DOT, NJ Transit, NJTPA (North Jersey Transportation Planning Authority) and counties with regard to transportation planning within the Highlands Region.

Objective 5.3.2.1. Highlands Region transportation site development activities will reflect Regional Master Plan resource protection, development, and redevelopment goals.

Policy 5.3.3. To limit road improvements where roads are constrained by topography, forested lands or the community character of land uses fronting on the road.

Policy 5.3.4. To support economic development by ensuring that transportation planning and improvements support regional development, redevelopment, and tourism opportunities.

Objective 5.3.4.1 Increase tourism opportunities through innovative multi-modal transportation measures and accessible transit schedules.

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Objective 5.3.4.2 Support Regional tourism economy through enhanced street furnishings, directional signage and Highlands Region tourism information.

Policy 5.3.5. To recognize and support the unique needs of the agricultural industry to move farm vehicles and goods along transportation corridors, and establish safe travel routes for farmers in order to ensure the safety and viability of farming as an occupation in the Highlands Region.

Policy 5.3.6. To require conforming municipalities to prepare a Circulation Plan Element that coordinates with the land use plan and addresses smart growth principles and consistency with the Regional Master Plan.

Policy 5.3.7. To require conforming counties to develop a transportation plan that supports local and regional land use planning that promotes connectivity, shared service opportunities and long-term transportation network needs.

Policy 5.3.8. To evaluate the existing and proposed Residential Site Improvement Standards (RSIS) in the context of the Regional Master Plan and develop an action plan for recommendations to minimize environmental impacts and maximize utility efficiency from new residential developments in a context-specific manner..

GOAL 5.4. A MULTI-MODAL TRANSPORTATION SYSTEM WHICH FACILITATES THE MOVEMENT OF PEOPLE AND GOODS WITHIN THE HIGHLANDS REGION WITHOUT ADVERSELY AFFECTING ECOSYSTEM INTEGRITY AND COMMUNITY CHARACTER.

Policy 5.4.1. To promote the use of alternative modes of transportation within the Highlands Region.

Objective 5.4.1.1. Increase the performance of the public and private bus carrier systems within the Highlands Region.

Objective 5.4.1.2. Increase overall transit rider-ship and the use of multi-modal transportation systems for peak hour travel.

Objective 5.4.1.3 Increase employer initiated transit opportunities in the Highlands Region such as shuttle bus service, van and car pool service, and smart car options.

Policy 5.4.2 To promote transit improvements within the Highlands Region which primarily support intra-regional mobility.

Policy 5.4.3. To promote priority for transportation improvements which primarily improve intra-regional mobility.

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Policy 5.4.4. To promote transit improvements which will increase capacity for inter-regional mobility.

Policy 5.2.5. To encourage and promote tourism through appropriate transportation measures, accessible transit schedules, and enhanced street furnishings and information and directional signage.

GOAL 5.5 PROMOTION OF DEVELOPMENT AND REDEVELOPMENT WHICH REDUCES TRAVEL DEMAND AND VEHICLE MILES OF TRAVEL

Policy 5.5.1. To promote land use patterns that support a balance of jobs to housing as a means of reducing average trip lengths.

Objective 5.5.1.1. Development and redevelopment which provides housing and jobs in close proximity.

Objective 5.5.1.2. Development and redevelopment in close proximity to rail stations and along bus routes.

Policy 5.5.2. To promote municipal and county master plans and development regulations which facilitate the development of mixed land uses in locations that result in reduced average trip lengths, increase community and regional connectivity and support existing development patterns.

Policy 5.5.3. To promote land use patterns which facilitate use of alternative modes of transportation including walking and the use of bicycles.

Policy 5.5.4. To promote shared parking programs in support of mixed use development and redevelopment.

Objective 5.5.4.1. Circulation plan element will require, where appropriate, a municipal and county evaluation of shared parking opportunities through a comprehensive parking study.

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PART 6. FUTURE LAND USE

Introduction

The future of the Highland Region will be determined in part by the future land use decisions. The Highlands Regional Master Plan establishes a framework for future land use which guides development away from environmentally sensitive lands and promotes compact development and redevelopment in The Planned Community Zone where adequate public facilities are available to serve new growth and development, provided that such development and redevelopment is compatible with existing land uses and community character. The Highlands Regional Master Plan encourages development within existing development areas.

Subpart 1 Regional Guidance

GOAL 6.1.1 GUIDANCE OF DEVELOPMENT AWAY FROM ENVIRONMENTALLY SENSITIVE AND AGRICULTURAL LANDS AND PROMOTE DEVELOPMENT AND REDEVELOPMENT IN OR ADJACENT TO EXISTING DEVELOPED LANDS.

Policy 6.1.1.1 To limit, to the maximum extent permitted by law, development, and use of undeveloped lands that are critical to protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas.

Objective 6.1.1.1.1 Identification of lands within the Highlands Region which contain sensitive environmental resources of the Highlands Region.

Objective 6.1.1.1.2. The Protection Zone of the Highlands Land Use Capability Map shall include regionally significant environmental resources to the maximum extent feasible.

Objective 6.1.1.1.3. Preparation and implementation of standards and criteria governing the use and development of land in Protection Zone.

Policy 6.1.1.2 To protect and enhance lands within the Highlands Region used for agricultural purposes and which are associated with or adjacent to lands used for agricultural purposes.

Objective 6.1.1.2.1. Identification of Agricultural Resource Areas within the Highlands Region.

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- Objective 6.1.1.2.2. The Conservation Zone of the Land Use Capability Map shall include regionally significant agricultural lands within the Agricultural Resource Areas of the Highlands Region.*
- Objective 6.1.1.2.3. Preparation and implementation of standards and criteria governing the use and development of land in the Conservation Zone.*
- Policy 6.1.1.3. To promote compatible growth opportunities that include in-fill development, adaptive re-use, redevelopment, and brownfields redevelopment in existing developed areas.
- Objective 6.1.1.3.1 Identification of existing developed areas and contaminated sites within the Highlands Region using the Developed Lands Analysis.*
- Objective 6.1.1.3.2 Designation of existing, extensively developed areas as The Planned Community Zone in the Highlands Land Use Capability Map.*
- Objective 6.1.1.3.3. Preparation and implementation of standards and criteria governing new growth and development activities in The Planned Community Zone.*
- Policy 6.1.1.4. To promote land uses which create a sense of place with attractive, walkable neighborhoods that support community connectivity of developed lands and community facilities.
- Objective 6.1.1.4.1. Communities of place with a mix of uses which promote multi-purpose trips, through proximity of neighborhood retail, commercial and entertainment uses to residential land uses that create communities that are largely self-sufficient regarding daily needs.*
- Objective 6.1.1.4.2. Communities of place with a pattern of development which promotes walking and biking.*
- Policy 6.1.1.5. To integrate public parks and green spaces into development and redevelopment projects.
- Policy 6.1.1.6 Provisions and standards relating to regional growth activities which increases the intensity of development shall be discretionary for conforming municipalities and counties.
- Policy 6.1.1.7. Regional growth, based on local desire, should identify opportunities to maximize land use intensity while protecting natural features and community character.
- Objective 6.1.1.7.1. Center based development initiatives should be planned to meet minimum density thresholds of three dwelling units per acre. Higher densities of 5*

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dwelling units and above are encouraged in areas designated as TDR receiving areas. Attainment of these density thresholds is discretionary, and shall be consistent with the resource and capacity goals and requirements in this plan.

Objective 6.1.1.7.2 Development and redevelopment initiatives shall maximize land use intensity provided that it enhances the existing or adjacent community while protecting local and regional natural resources.

Policy 6.1.1.8. To incorporate smart growth principles and green building design and technology in development and redevelopment initiatives.

GOAL 6.1.2 UTILIZATION OF THE HIGHLANDS LAND USE CAPABILITY MAP AS A FRAMEWORK FOR THE CHARACTER, LOCATION, AND MAGNITUDE OF NEW GROWTH AND DEVELOPMENT IN THE HIGHLANDS REGION.

Policy 6.1.2.1. To use the Highlands Land Use Capability Map as a geographic framework for land use planning and management within the Highlands Region.

Objective 6.1.2.1.1. A Highlands Land Use Capability Map based on the most current and available data.

Objective 6.1.2.1.2 A Highlands Land Use Capability Map based on a defined methodology which produces replicable outputs.

Objective 6.1.2.1.3. A Highlands Land Use Capability Map identifying Protection Zones, Conservation Areas Zones and The Planned Community Zone.

Policy 6.1.2.2. To develop a program for adjustments and revisions to the LUCM based on the Highlands RMP Conformance process, the update and verification of LUCM data, Highlands Project Reviews, and factual updates from non-conforming entities.

**Subpart 2
Protection Zones**

Introduction

Protection Zones include lands within the Highlands Region which contain the highest quality resource value lands which are essential to maintaining and enhancing water quality and quantity and preserving ecological function. Protection Zones include regionally significant lands that serve to protect environmentally sensitive resources of the Highlands Region.

GOAL 6.2.1 PRESERVATION OF THE LAND AND WATER RESOURCES AND ECOLOGICAL FUNCTION OF HIGHLANDS AREAS.

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Policy 6.2.1.1. To preserve high quality land and water resources and ecological function within the Protection Zone

Policy 6.2.1.2. To limit use and development of land in Protection Zone,

Policy 6.2.1.3. To give the highest land acquisition priority to non-preserved, undeveloped lands within the Protection Zone in the Preservation Area.

Policy 6.2.1.4. To give the highest Highlands TDR allocation priority to undeveloped environmentally sensitive lands within the Protection Zone in the Preservation Area.

GOAL 6.2.2. LIMITATION OF DEVELOPMENT IN PROTECTION ZONES TO DEVELOPMENT AND REDEVELOPMENT WHICH DOES NOT ADVERSELY AFFECT THE NATURAL RESOURCES OF THE HIGHLANDS REGION ECOSYSTEM.

Policy 6.2.2.1. To limit new human development in the Protection Zone redevelopment, exempt activities, and environmentally-compatible low density new land uses, in accordance with RMP resource protection needs and water quality and quantity capacity constraints and to ensure that the development of exemptions under Section 30 of the Highlands Act are considered in regional protection measures.

Policy 6.2.2.2. To ensure that any future development or redevelopment which does occur in a Protection Zone is subject to standards and criteria which protect the land and water resources of the Protection Zone from any potential adverse impact to the maximum extent possible.

Policy 6.2.2.3. To encourage owners of lands which are eligible for exemptions under Section 30 of the Highlands Act to voluntarily offer their land for acquisition, participate in the TDR program, or engage in contiguous or non-contiguous clustering in cooperation with other exempt landowners, and comply with standards and criteria which protect the land and water resources of the Highlands Region from any adverse impacts.

Policy 6.2.2.4. To establish voluntary programs whereby owners of land who are eligible for exemptions under Section 30 of the Highlands Act have an incentive to develop or use such exemptions in a manner which limits or mitigates any potential adverse impacts on the land and water resources of the Protection Zones.

GOAL 6.2.3. CONFORMING MUNICIPALITIES AND COUNTIES INCORPORATE REGIONAL AND LOCAL LAND AND WATER RESOURCE PLANNING AND MANAGEMENT PROGRAMS IN THEIR MASTER PLANS AND DEVELOPMENT REGULATIONS.

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- Policy 6.2.3.1.** To require that conforming municipalities and counties include land and water resource planning and management programs in their master plans and development regulations.
- Policy 6.2.3.2.** To encourage conforming municipalities and counties to include voluntary programs with incentives for the development or use of Section 30 exemptions in a manner which limits or mitigates any potential adverse impacts on the land and water resources of the Protection Zones

**Subpart 3
Conservation Zones**

Introduction

Conservation Zones include lands of significant agricultural importance and associated natural resource lands which are adjacent or in common ownership with land used for agricultural purposes. Development potential in Conservation Zones is limited in location and intensity because of natural resource protection requirements and infrastructure constraints.

GOAL 6.3.1 PROTECTION AND ENHANCEMENT OF AGRICULTURAL USES AND PRESERVATION OF ASSOCIATED LAND AND WATER RESOURCES IN HIGHLANDS AREAS.

- Policy 6.3.1.1.** To protect existing agricultural uses in the Highlands Conservation Zones from incompatible development.
- Policy 6.3.1.2.** To promote the expansion of sustainable and economically viable agricultural activities in Highlands Conservation Zones not constrained by existing environmentally sensitive resources.
- Policy 6.3.1.3.** To limit the use and development of lands within the Conservation Zones to agriculture use and development, including ancillary and support uses, redevelopment of existing developed areas, and environmentally-compatible low density land uses that are to the maximum extent possible achieved in compact development patterns, to be designed and developed in a manner which is compatible with the long term use of adjacent land for agricultural purposes.

GOAL 6.3.2. CONFORMING MUNICIPALITIES AND COUNTIES INCORPORATE REGIONAL AND LOCAL LAND AND WATER RESOURCE PLANNING AND MANAGEMENT PROGRAMS IN THEIR MASTER PLANS AND DEVELOPMENT REGULATIONS.

- Policy 6.3.2.1.** To require conforming municipalities and counties to incorporate land and water

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resource planning and management programs for the Conservation Zone which protect natural resources from the adverse impacts and support Agricultural sustainability.

Objective 6.3.2.1.1. Municipal and county master plans and development regulations which ensure that new non-agricultural development is compatible with the long term vitality of agriculture in the Conservation Zones.

Objective 6.3.2.1.2. Municipal and county master plans and land development regulations which require clustering or lot-averaging of non-agricultural development with a minimum of 80% of the property dedicated to agriculture and natural resources protection in order to avoid adverse impacts on agricultural uses and natural resources.

Objective 6.3.2.1.3. Municipal and county master plans and development regulations which require appropriate and potable water, wastewater disposal and transportation facilities.

Policy 6.3.2.2 To require conforming municipalities and counties to include site development programs, including clustering and lot-size averaging, to protect agricultural use and development and natural resources.

**Subpart 4
Planned Community Zone**

Introduction

The Planned Community Zone includes those areas characterized by existing development with comparatively fewer natural resource constraints than the Protection and Conservation Zones and are currently or more easily served with public infrastructure. The Planned Community Zone includes previously developed lands of regional significance in size, geography and infrastructure that are areas of opportunity for future growth and development, including development and redevelopment which may involve the use of Highlands TDRs, provided that such growth and development are consistent and compatible with existing community character.

GOAL 6.4.1. SUPPORT OF COMPACT DEVELOPMENT AND MAXIMIZATION OF WATER, WASTEWATER AND TRANSIT INFRASTRUCTURE INVESTMENTS FOR FUTURE USE OF LAND AND DEVELOPMENT WITHIN THE PLANNED COMMUNITY ZONE.

Policy 6.4.1.1. To promote compatible development and redevelopment within the Planned Community Zone.

Policy 6.4.1.2. To promote the restoration and redevelopment of brownfields, particularly those located in or adjacent to transportation corridors or transit stations. In cases where

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redevelopment is not appropriate, encourage “brownfield to greenfield” approaches.

Policy 6.4.1.3. To ensure that development activities within the Planned Community Zone are subject to standards and criteria which ensure that development and redevelopment does not adversely affect natural resources and incorporate smart growth principles..

Policy 6.4.1.4. To ensure that development and redevelopment within the Planned Community Zone are served by adequate public facilities including water, wastewater treatment and transportation.

Policy 6.4.1.5. To ensure that development and redevelopment in the Planned Community Zone are compatible with existing community character.

GOAL 6.4.2. PROMOTION OF MIXED USE DEVELOPMENT AND REDEVELOPMENT IN THE PLANNED COMMUNITY ZONE.

Policy 6.4.2.1. To encourage new growth and development in the Planned Community Zone in the form of center based and mixed use development.

Policy 6.4.2.2. To encourage redevelopment in the Planned Community Zone as a means to relieve development pressure from more environmentally sensitive areas.

**Subpart 5
Redevelopment**

Introduction

Redevelopment is a planning tool that converts underutilized areas, brownfields, and greyfields into new land uses through structure replacement, infill, and adaptive reuse approaches. Redevelopment will help to meet the Region’s growth needs by maximizing the efficient use of previously settled areas with existing communities and available infrastructure, thus conserving natural resources and protecting drinking water. Brownfields and greyfields are two types of sites which commonly possess characteristics worthy of investigating for purposes of redevelopment. The definition of a brownfield is, “any former or current commercial or industrial site that is currently vacant or underutilized and on which there has been or there is suspected to have been, a discharge or contaminant.” Greyfields are sites usually containing industrial or commercial facilities exhibiting signs of abandonment or underutilization in areas with existing infrastructure, but without evidence or expectation of contamination.

GOAL 6.5.1. ACCOMMODATION OF REGIONAL GROWTH AND DEVELOPMENT NEEDS THROUGH THE REUSE AND REDEVELOPMENT OF PREVIOUSLY DEVELOPED AREAS, INCLUDING BROWNFIELDS, GREYFIELDS, AND UNDERUTILIZED SITES.

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Policy 6.5.1.1. To encourage Preservation Area redevelopment activities of designated sites with 70% or greater impervious surfaces or a brownfield in accordance with N.J.A.C 7:38-6.6.

Policy 6.5.1.2. To encourage redevelopment activities in the Planned Community Zone in the Planning Area on sites that meet the Preservation Area redevelopment site designation criteria, greyfields, and other previously developed lands that have adequate water, wastewater, transportation capacity and are appropriate for increased land use intensity or conversion to greenfields.

Policy 6.5.1.3. To encourage redevelopment activities in the Conservation and Protection Zones in the Planning Area on sites that meet the Preservation Area redevelopment site designation criteria, or are greyfields, and that have adequate water, wastewater, transportation capacity and are appropriate for increased land use intensity or conversion to greenfields.

GOAL 6.5.2. OCCURANCE OF RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL DEVELOPMENT, REDEVELOPMENT AND ECONOMIC GROWTH IN DEVELOPED AREAS IN LOCATIONS WITH LIMITED ENVIRONMENTAL CONSTRAINTS, ACCESS TO EXISTING UTILITY AND TRANSPORTATION INFRASTRUCTURE, AND EXISTING COMMUNITIES.

Policy 6.5.2.1. To encourage redevelopment of brownfields, greyfields, and other previously developed areas in a manner consistent with the goals, and requirements of the Plan.

Objective 6.5.2.1.1. Establish a Highlands Interagency Team to support and expedite redevelopment and development activities that conform to the Plan.

Objective 6.5.2.1.2. Encourage and support the use of planning and financing tools that are available through state agencies and programs.

Policy 6.5.2.2. To maintain a Developed Land Inventory to encourage opportunities for land development, redevelopment and economic growth, where appropriate.

Objective 6.5.2.2.1. A parcel based inventory of lands in the Highlands Region that are developed, vacant (adjacent to developed), economically underutilized, oversized residential lots, and contaminated sites, to serve as a tool for identifying and marketing sites.

GOAL 6.5.3. CONFORMING MUNICIPALITIES AND COUNTIES CONSIDER DEVELOPMENT, REDEVELOPMENT AND BROWNFIELDS OPPORTUNITIES IN THEIR MASTER PLANS.

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- Policy 6.5.3.1. To require that conforming municipalities review the existing Developed Land Inventory and identify additional developed properties that appropriate for addition to the inventory.
- Policy 6.5.3.2. To require that conforming municipalities utilize the Highlands Build-out Model and Fiscal Impact Analysis as tools in the identification of appropriate areas for development, redevelopment and brownfields opportunities.
- Policy 6.5.3.3. To require that conforming municipalities identify existing and planned community facilities and encourage shared service opportunities as part of the local Community Facility Plan element.

GOAL 6.5.4. PROTECTION AND ENHANCEMENT OF HIGHLANDS'S RESOURCES THROUGH THE DECONTAMINATION OF CONTAMINATED SITES IN REGION.

- Policy 6.5.4.1. Encourage and support the restoration and redevelopment or open space use of contaminated areas.

Objective 6.5.4.1.1. Any restoration of contaminated sites will be conducted in accordance with the criteria required by the NJDEP's technical requirements for site remediation (NJAC 7:26E)

Objective 6.5.4.1.2. Coordinate with NJDEP on Highlands Brownfield designations and in support of a mechanism that facilitates remedial activities within the Highlands Region;

Objective 6.5.4.1.3. Evaluate mechanisms for remedial activities that apply resource protection, enhancement, and restoration approaches that allow for a minimal redevelopment footprint, encourage "brownfields to greenfields" approaches, and include green energy and building concepts;

**Subpart 6
Smart Growth**

Introduction

Smart growth is an approach to resource planning and management where growth and development are concentrated and organized around "centers" with compact, walk-able, bicycle-friendly land use patterns, typically including mixed-use development with a range of housing choices. It generally reflects value for long-range, regional considerations of sustainability over short-term economic benefits. Smart growth promotes land use patterns with a sense of community and place, multi-modal and alternative use of modes of transportation, a balance of employment and housing and an

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equitable distribution of the costs and benefits of development. It also includes the preservation and enhancement of enhance natural and cultural resources.

GOAL 6.6.1. USE OF SMART GROWTH PRINCIPLES TO GUIDE DEVELOPMENT AND REDEVELOPMENT IN THE HIGHLANDS REGION.

Policy 6.6.1.1. To establish smart growth programs for use within the Highlands Region to guide and control development and redevelopment throughout the Highlands Region.

Objective 6.6.1.1.1. Conservation development standards which protect natural resources, environmentally sensitive areas, open space and agricultural lands, and enhance community character.

Objective 6.6.1.1.2. Site development review programs which require a site specific analysis of environmental features and constraints of the property proposed for development as a basis for determining compliance with Smart Growth requirements.

Objective 6.6.1.1.3. Flexible site development review programs, including reduction of minimum setbacks, modification of uniform road frontage requirements, increase in maximum permitted height or allowing non-contiguous clustering of development entitlements where necessary to mitigate or eliminate adverse impacts on Highlands natural resources.

Objective 6.6.1.1.4. Development standards which recognize that portions of a parcel proposed for development which are not developable may be considered for the purpose of satisfying on-site passive open space requirements.

Objective 6.6.1.1.5. Minimum requirements that all development include energy efficient features in site layouts and all structures.

Objective 6.6.1.1.6. Minimum requirements for water conservation measures in site layout and structures, including but not limited to water efficient landscaping (including use of native and drought-tolerant plant species), rain collection systems, use of grey water, and water-efficient landscape irrigation.

Objective 6.6.1.1.7. Strict limitation of site disturbance, clearing and grading to the minimum necessary to make reasonable use of the designated building envelope for the parcel proposed for development.

Objective 6.6.1.1.8. Minimum requirements for use of micro-climate conditions to maximize solar gain for winter heating and minimize solar gain during high temperature summer conditions.

Objective 6.6.1.1.9. Minimum requirements for re-use and recycling of building materials when development involves demolition.

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Policy 6.6.1.2. To require municipalities to adopt low impact development standards to protect the natural hydrologic features of the land.

Objective 6.6.1.2.1. Implementation of on-site stormwater management features that maintain, restore and enhance the pre-existing natural drainage patterns of the site.

Objective 6.6.1.2.2. Strict limitations on the amount of impervious cover allowed on a site as a means to increase stormwater infiltration and reduce stormwater runoff.

Objective 6.6.1.2.3. Minimum requirements for site-specific hydrologic studies during development review which identify the velocity, volume and pattern of water flow into, through, and off of the parcel proposed for development.

Objective 6.6.1.2.4. Minimum requirements that stormwater management systems employ a “design with nature” approach.

Objective 6.6.1.2.5. Minimum requirements for use of grass channels, dry swales, wet swales, infiltration basins, bio-swales and water gardens, green roofs, and other low impact approaches to attenuate and control stormwater and provide multiple environmental benefits.

Policy 6.6.1.3. To require conforming municipalities and counties to incorporate programs for community and neighborhood design that support a variety of housing options for people with different income levels and different needs, mixed uses, redevelopment, adaptive re-use of historic sites and structures, and infill development in their master plans and development regulations.

Subpart 7.
Housing

Introduction

The Highlands Regional Master Plan seeks to address a full range of housing needs for the Region. This includes the needs to address low and moderate income ranges as well as middle and upper income housing needs. In addition, the Region should support a variety of housing types such as rental housing, multi-family housing, age-restricted housing, and supportive and special needs housing. The Highlands Regional Master Plan seeks to provide mechanisms to address the need to have a full range of variety and choice in housing opportunities in the Highlands Region.

GOAL 6.7.1. MARKET-RATE AND AFFORDABLE HOUSING SUFFICIENT TO MEET THE NEEDS OF THE HIGHLANDS REGION.

Policy 6.7.1.1. To establish a region-wide, comprehensive approach to addressing residential needs in the Highlands Region, serving all age groups, income levels, and mobility options. Conforming municipalities must prepare and submit a petition for substantive certification to COAH.

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Objective 6.7.1.1.1. To develop a comprehensive Highlands housing program addressing regional housing needs within the context of preserving the character and environmental integrity of the Highlands.

Policy 6.7.1.2. To promote center-based development approaches that recognize and address a mix of housing types including affordable housing, support mixed uses where appropriate, and implement compact development approaches in the Planned Community Zone

Policy 6.7.1.3. To promote affordable housing within new residential and mixed use development, redevelopment, or adaptive reuse projects in the Planned Community Zone.

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Part 7. Landowner Fairness

Introduction

The Highlands Act recognizes that implementation of a regional master plan, which directs and guides future development, inevitably has an impact on landowner expectations regarding future land use potential. The Act provides several mechanisms that seek to mitigate such impacts, including a transfer of development rights (“TDR”) program, land acquisition, exemptions, and waivers.

The Act requires the Highlands Council to establish a regional Highlands TDR program. This is intended as an equitable means of guiding human development away from sensitive lands in the Preservation Area to areas both within the Planning Area as well as outside the boundaries of the Highlands Region but within other parts of the seven Highlands counties which are suitable for more intense human development. The Act contemplates that transferable development rights will be allocated to the owners of land within the Preservation Area which should be developed not at all or at very low densities and impacts, and that voluntary receiving zones for Highlands TDRs will be identified. The Highlands TDR Program is required to be consistent with the State Transfer of Development Rights Act, except as otherwise expressly provided for in the Highlands Act TDR provisions. (Section 13.a)

The Highlands Regional Master Plan also recognizes the need to set priorities for acquisition or purchase of conservation easements in those lands within the Region that have the most significant resource values. To this end, the Plan proposes numerous policies in Part 1, subpart 5 and Part 3 to address open space acquisition and farmland preservation.

The Act also includes seventeen (17) exemptions. If a project or activity falls within one of these seventeen exemptions, the project or activity is exempt from the Highlands Act, the Highlands Preservation Area rules adopted by the New Jersey Department of Environmental Protection (NJDEP), the Regional Master Plan, and any municipal master plan or development regulations that are revised to conform to the Regional Master Plan.

Tens of thousands of acres throughout the Region could potentially be developed under the exemptions based upon an analysis conducted by the Highlands Council. While the exemptions are one of the primary means for landowners to utilize their properties where development potential is limited by the Highlands Act, the exercise of these exemptions may result in further fragmentation of the Region’s ecosystems and the construction of additional impervious surface. Given this circumstance, the Highlands Regional Master Plan addresses the need to develop programs that attempt to mitigate these impacts, including programs to encourage non-contiguous clustering, intra-local government transfers of development rights and economic incentives.

In addition to the exemptions, the Act also provides NJDEP with the authority to grant waivers from

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its Highlands rules on a case by case basis under certain circumstances. Under this authority, NJDEP may issue waivers (1) where a project or activity is necessary in order to protect public health and safety; (ii) for redevelopment in previously developed areas as identified by the Highlands Council, provided that the areas are either a brownfield site designated by DEP or a site at which at least 70% of the area thereof is covered with impervious surface; or (c) necessary to avoid a taking of property without just compensation.

Lastly, the Highlands Regional Master Plan acknowledges that some landowners may have development expectations which are recognized by New Jersey law as vested development rights and makes provision for protecting those rights.

GOAL 7.1. PROTECTION OF LANDS THAT HAVE LIMITED OR NO CAPACITY TO SUPPORT HUMAN DEVELOPMENT WITHOUT COMPROMISING THE ECOLOGICAL INTEGRITY OF THE HIGHLANDS REGION, THROUGH MECHANISMS INCLUDING BUT NOT LIMITED TO A REGION-WIDE TRANSFER OF DEVELOPMENT RIGHTS PROGRAM.

Policy 7.1.1. Transferable development rights shall be used to guide growth and development away from ecologically sensitive lands in the Preservation Area and towards lands within the Planning Area which have the capacity to support additional human development without compromising the ecological integrity of the Highlands Region. These rights shall also be used to guide growth towards lands outside of the Highlands Region, but within the seven Highlands counties, to willing municipalities.

Objective 7.1.1.1. Creation of a region-wide Highlands TDR program as soon as practicable.

Objective 7.1.1.2. Identification and implementation of any and all program elements which would promote the transfer and use of development rights.

GOAL 7.2. PROVISION FOR COMPENSATION TO LANDOWNERS IN THE PRESERVATION AREA WHOSE PROPERTIES HAVE LIMITED OR NO CAPACITY TO SUPPORT ADDITIONAL DEVELOPMENT AND WHO ARE DISPROPORTIONATELY BURDENED BY THE PROVISIONS OF THE HIGHLANDS ACT THROUGH A REGION-WIDE PROGRAM OF TRANSFERABLE DEVELOPMENT RIGHTS.

Policy 7.2.1. The Highlands TDR program shall seek to mitigate impacts of the Highlands Act and the Highlands Regional Master Plan on reasonable landowner development expectations which have been disproportionately affected.

Policy 7.2.2. The Highlands TDR program shall establish a transferable development right to be known as a “Highlands Development Credit.”

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- Policy 7.2.3. All lands within the Preservation Area, except for those in the Planned Community Zone and approved redevelopment and brownfield sites, shall be Sending Zones under the Highlands TDR Program. [At a future time, lands within the Protection Zone and Conservation Zone of the Planning Area may also serve as Sending Zones.]
- Policy 7.2.4. The Highlands TDR program shall provide for the allocation of Highlands Development Credits to landowners in the Preservation Area where reasonable future development expectations have been disproportionately limited by the provisions of the Highlands Act or implementation of the programs established by the Highlands Regional Master Plan.
- Policy 7.2.5. Land in the Preservation Area located in either the Planned Community Zone or Specially Planned Areas shall not be eligible for an allocation of Highlands Development Credits.
- Policy 7.2.6. Establish a Highlands TDR program which is sufficiently certain and predictable to allow sending zone landowners to sell Highlands Development Credits or borrow against the value of such credits.
- Objective 7.2.6.1. Establishment of criteria for eligibility for an allocation of Highlands Development Credits.*
- Objective 7.2.6.2. Highlands TDR program elements which provide priority for the transfer and use of Highlands Development Credits for Sending Zone parcels based on their relative regional resource value and likelihood of development.*
- Objective 7.2.6.3. Creation of a process by which affected landowners can apply to the Highlands Council for an allocation of Highlands Development Credits.*
- Objective 7.2.6.4. Establishment of a Highlands Development Credit conveyance system, including covenants and restrictions on the use of Sending Zone parcels.*
- Objective 7.2.6.5. Creation of a tracking system for Highlands Development Credits which provides public records for the transfer and use of Highlands Development Credits.*
- Objective 7.2.6.6. Establishment of Receiving Zones where Highland Development Credits can be used as soon as possible.*
- Objective 7.2.6.7. Active transfer and use of Highlands Development Credits throughout the Highlands Region, and the seven Highlands counties.*
- Objective 7.2.6.8. Review and assessment of the Highlands TDR Program five (5) years after*

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the effective date of the Highlands Regional Master Plan.

Policy 7.2.7. The determination as to whether a particular parcel of land is disproportionately limited by the provisions of the Highlands Act or implementation of the Highlands Regional Master Plan shall be based upon the development potential as of August 9, 2004 based upon municipal zoning and land use regulations then in effect; State and federal environmental laws and regulations then in effect; and a determination of whether development is precluded or severely constrained by the restrictions imposed pursuant to the Highlands Act.

Policy 7.2.8. The allocation of Highlands Development Credits to individual Sending Zone parcels shall be adjusted according to the location of the parcel within the Highlands Region, the comparative development potential of the parcel, the resource value of the parcel.

GOAL 7.3 CREATION OF A HIGHLANDS DEVELOPMENT CREDIT BANK

Policy 7.3.1. A Highlands Development Credit Bank shall be created and become operational as soon as possible.

Policy 7.3.2. The Highlands Development Credit Bank shall be authorized to serve and shall serve as a region-wide information clearinghouse.

Policy 7.3.3. The Highlands Development Credit Bank shall be authorized to buy and sell Highlands Development Credits.

Policy 7.3.4. The Highlands Development Credit Bank shall be authorized to serve as the official records keeper of the Highlands TDR Program, including recording and tracking all Highlands Development Credit transactions and use.

Policy 7.3.5. The Highlands Development Credit Bank shall be authorized to enter into any agreement which promotes the transfer and use of Highlands Development Credits, provided that the substance of the agreement is not in conflict with any express provision of the Highlands Act or the State Transfer of Development Rights Act (N.J.S.A. 40:55D-137 et seq.).

Policy 7.3.6. The Highlands Development Credit Bank should establish a program for the purchase of Highlands Development Credits as soon as possible.

Policy 7.3.7. To provide an opportunity for landowners who receive an allocation of Highlands Development Credits to sell their Highlands Development Credits in advance of the establishment of Receiving Zones through municipal conformance.

Objective 7.3.7.1. Funding for the purchase of Highlands Development Credits prior to the

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establishment of Receiving Zones pursuant to municipal conformance.

Objective 7.3.7.2. A purchase of Highlands Development Credits program which gives priority to landowners who can demonstrate conditions of economic hardship.

Policy 7.3.8. The Highlands Development Credit Bank shall monitor real estate values throughout the Highlands region and shall submit an annual report to the Highlands Council, including a recommendation with regard to the minimum value of a Highlands Development Credit.

Policy 7.3.9. The Highlands Council shall seek funding for the Highlands Development Credit Bank.

GOAL 7.4. ESTABLISHMENT OF SUFFICIENT HIGHLANDS TDR PROGRAM RECEIVING ZONES TO CREATE A POSITIVE MARKET FOR TDR CREDITS

Policy 7.4.1. Lands located within the Planned Community Zone and Specially Planned Areas within the Planning Area may be designated as Receiving Zones by a Highlands municipality upon approval by the Highlands Council in conformance with the Regional Master Plan.

Policy 7.4.2. Lands located within redevelopment and brownfield sites approved by the Highlands Council within the Preservation Area may also be designated as Receiving Zones by a Highlands municipality, subject to a conformance determination by the Highlands Council.

Policy 7.4.3. Lands located within a Highlands County, but not within the Highlands Region may be also designated as Receiving Zones.

Policy 7.4.4. Highlands municipalities in the Planning Area may seek designation of Receiving Zones and participate in the Highlands TDR program without regard to whether such municipality is in conformance with the Highlands Regional Master Plan.

Policy 7.4.5. The Highlands Council shall provide technical assistance to Highlands municipalities in support of designating appropriate Receiving Zones.

Policy 7.4.6. The Highlands Council shall provide Highlands municipalities with financial grants-in-aid for planning and feasibility studies in support of designating appropriate Receiving Zones.

Policy 7.4.7. A Highlands municipality may limit the use of Highlands Development Credits to

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intra- municipal transfers in designated Receiving Zones if the Highlands Council determines that the goals, policies and objectives of the Highlands Regional Master Plan will be best served by a determination of conformance, notwithstanding the limited use of Highlands Development Credits within the municipality.

GOAL 7.5. MAXIMIZATION OF THE TRANSFER AND USE OF HIGHLANDS DEVELOPMENT CREDITS.

Policy 7.5.1. To develop and implement incentive mechanisms to create the highest possible demand for Highlands Development Credits.

Policy 7.5.2 To identify ways and means by which the highest possible value of Highlands Development Credits can be achieved.

Policy 7.5.3. To promote the availability of capital funding for municipal infrastructure which is required to support additional human development using Highlands Development Credits.

Policy 7.5.4 To seek and support priority allocation of available State and federal funding for Highlands municipalities which have established Receiving Zones for Highlands Development Credits.

GOAL 7.6 USE OF SMART GROWTH PRINCIPLES IN THE HIGHLANDS REGION THROUGH THE HIGHLANDS TDR PROGRAM.

Policy 7.6.1. The Highlands TDR program shall be used as a means of promoting smart growth within the Highlands Region through the use of Highlands Development Credits in areas which are suitable for additional human development on a fiscally beneficial basis in designated Receiving Zones where adequate public facilities are available or can be provided on a cost-effective basis.

Policy 7.6.2. The Highlands TDR program shall be used as a means of promoting in-fill and community redevelopment in Planned Community Zones within the Planning Area.

Policy 7.6.3 The Highlands Council shall seek funding in support of in-fill and community development in the Planned Community Zones within the Planning Area which involves the use of Highlands Development Credits.

Policy 7.6.4. The Highlands Council shall not find a Highlands municipality in conformance with the Highlands Regional Master Plan unless the municipal master plan and development regulations require that all increases in development or redevelopment density or intensity of use after a determination of conformance shall require the use of Highlands Development Credits for achieve such increase in density or intensity

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of use.

GOAL 7.7 **MITIGATION TO THE MAXIMUM EXTENT POSSIBLE OF THE IMPACTS OF EXEMPT DEVELOPMENT ON THE ECOSYSTEM INTEGRITY OF THE HIGHLANDS REGION THROUGH USE OF INNOVATIVE LAND USE PROGRAMS.**

Policy 7.7.1. To encourage municipalities with jurisdiction over lands which are entitled to an exemption under Section 30 of the Highlands Act to establish voluntary, incentive-based innovative land use programs to avoid adverse impacts on the Highlands ecosystem or the fiscal integrity of the municipality.

Objective 7.7.1.1 *Establish an intra-municipal transfer of development rights program for landowners of whose property is entitled to an exemption under Section 30 of the Highlands Act who voluntarily apply for and receive transferable development rights under a municipal TDR program.*

Objective 7.7.1.2. *Establish municipal clustering programs which allow landowners whose property is entitled to an exemption under Section 30 of the Highlands Act, for both contiguous and non-contiguous properties, to minimize the impact of such exempted development on the ecological integrity of the Highlands Region or the fiscal integrity of the municipality.*

Policy 7.7.2. To provide an opportunity for landowners whose property is entitled to an exemption under Section 30 of the Highlands Act to voluntarily apply for and receive an allocation of Highlands Development Credits in lieu of developing on-site under the provisions of Section 30.

GOAL 7.8 **RECOGNITION OF AND RESPECT FOR THE POSSIBLE EXISTENCE OF VESTED RIGHTS OF DEVELOPMENT.**

Policy 7.8.1 The Highlands Council shall create a program whereby landowners who believe that they have a legally vested right to develop which is inconsistent with the provisions of the Highlands Regional Master Plan may seek acknowledgment of such right by the Highlands Council.

Policy 7.8.2. In order to be acknowledged by the Highlands Council, a claim of a vested right of development must be based on a prior judicial adjudication of such right, or a demonstration by clear and convincing evidence that it is likely, beyond any reasonable doubt, that a court of competent jurisdiction applying settled principles of law would hold that the claimed right constituted a vested right of development.

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Part 8. Sustainable Economic Development

Introduction

The long term integrity of the Highlands Region involves maintenance of the economic and fiscal vitality of the Highlands communities as well as preservation of its natural resources. It also involves economic development, particularly if it involves the sustainable use of the natural resources of the Region. Economic development comes in a variety of sizes and forms and the exceptional quality of life in the Highlands Region makes the Region particularly appropriate for technology-dependent enterprises of all sizes ranging from home occupations to corporate headquarters.

GOAL 8.1. SUSTAINABLE ECONOMIC DEVELOPMENT IN THE HIGHLANDS REGION.

Policy 8.1.1. To promote appropriate, sustainable, and environmentally compatible economic development throughout the Highlands Region.

Objective 8.1.1.1. Establish a Highlands Economic Development Program which identifies sustainable economic development opportunities and strategies for recruiting and promoting such development in the Highlands Region.

Objective 8.1.1.2. Serve as a technical resource and advocate for Highlands economic development assistance in working with municipalities, counties, regional agencies and the private sector to promote sustainable economic development in the Highlands Region on a coordinated basis.

Policy 8.1.2 To promote economic development in the Highlands Region which generates sound employment and wage earning opportunities across a variety of employment sectors and has a positive fiscal impact on local governments.

Policy 8.1.3. To pursue state and federal financial assistance for sustainable economic development in the Highlands Region.

Policy 8.1.4. To serve as a clearinghouse for economic development opportunities in the Highlands Region.

Objective 8.1.4.1. Identification and marketing of Highlands Region areas including brownfield sites that may be appropriate for local and regional redevelopment initiatives.

Objective 8.1.4.2. State agency coordination of economic development funding and programs that support Highlands Region development and redevelopment areas.

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Objective 8.1.4.3. A regional parcel-based economic support program for identifying Council and local-approved and ongoing redevelopment opportunities for enhanced growth.

Policy 8.1.5. To conduct original research in regard to catalytic economic development initiatives which would promote and support the long term integrity of the Highlands Region.

Policy 8.1.6. To be an active advocate for public investment in the Highlands Region through the location of public facilities and institutions in the Highlands Region.

GOAL 8.2. PRESERVATION AND ENHANCEMENT OF AGRICULTURE IN THE HIGHLANDS REGION.

Policy 8.2.1. To preserve and enhance existing agricultural practices in the Highlands Region.

Objective 8.2.1.1. Coordinated activities with the NJ Department of Agriculture and other entities to improve agricultural practices.

Policy 8.2.2. To expand and enhance the agricultural economy in the Highlands Region.

Objective 8.2.2.1. Coordinated activities with the NJ Department of Agriculture and other entities to improve opportunities for sustainable agricultural operations that improve farm incomes and the long-term viability of farming.

GOAL 8.3. THE EXPANSION OF TOURISM AND RECREATION WITHIN THE HIGHLANDS REGION.

Policy 8.3.1. To promote sustainable economic development like recreation and tourism which derive economic benefit from the natural resources of the Highlands Region through sustainable use.

Objective 8.3.1.1. Identification of specific economic development initiatives which would encourage and promote eco-, agro- and heritage tourism in the Highlands Region.

Objective 8.3.1.2. Evaluation of the feasibility of establishing transit-oriented tourism connections and opportunities.

Objective 8.3.1.3. Evaluation of economic feasibility of alternative forms of overnight accommodations to promote recreation and tourism.

Policy 8.3.2. To establish a certified eco-, agro- and heritage tourism program.

Objective 8.3.2.1. Identification of the necessary elements of a sustainable and comprehensive tourism program for the Highlands Region.

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Objective 8.3.2.2. Creation of a formal tourism program for the Highlands Region.

Policy 8.3.3. To allow certain overnight accommodations in the Protection Area and the Conservation Area subject to strict environmental performance standards as a part of a certified eco- or agro- tourism use or activity.

Objective 8.3.3.1. Evaluation of the feasibility of alternative tourism attractions which would enhance the attractiveness of the Highlands Region as a tourism destination like a summertime performance venue or regional bike and hike events.

Policy 8.3.4. To advocate for state and federal funding of recreation and tourism initiatives in the Highlands Region.

Policy 8.3.5. To facilitate coordinated marketing of public and private tourist attractions in the Highlands Region, such as historic, cultural, scenic, and recreation sites, as well as tourism uses such as bed and breakfast inns, restaurants, bicycle rentals, and provisioners.

**GOAL 8.4. EXPANSION OF INNOVATIVE TECHNOLOGY AND
ENTREPRENURIAL BUSINESSES INCLUDING HOME OFFICE,
ENERGY EFFICIENCY, AND RESOURCE CONSERVATION
ENTERPRISES IN THE HIGHLANDS REGION.**

Policy 8.4.1. To ensure opportunities for home office, entrepreneurial and other small business activities in the Highlands Region.

Objective 8.4.1.1. Municipal and county master plans and development regulations which permit the establishment of home occupations , small business incubator programs and innovative technologies that promote compact design, native species landscaping, low impact development, energy efficiency and resource conservation in support of comprehensive RMP goals.

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Part 9. Air Quality

Introduction

The Highlands Act recognizes that the Highlands Region includes “exceptional natural resources such as clean air” (Section 2) and the Highlands Regional Master Plan seeks to establish mechanisms for the protection and enhancement of air quality resources for the Highlands Region that consider the interplay of air quality conditions at local, regional, interstate, and global levels.

GOAL 9.1. REDUCTION OF AIR POLLUTION THROUGH USE OF ALTERNATIVE AND EFFICIENT MODES OF TRANSPORTATION AND THE USE OF RENEWABLE ENERGY SOURCES.

Policy 9.1.1. To encourage capital facility development and redevelopment that leads to attainment of the National Ambient Air Quality Standards (NAAQS).

Policy 9.1.2. To monitor performance of major air toxic point sources that affect the Region and promote source reduction measures to address quality concerns.

Policy 9.1.3. To encourage land use development and redevelopment practices that promote center-based growth and mixed-use development and offer alternative modes of transportation as a means to reduce automobile dependency, vehicle trip length, and duration.

Policy 9.1.4. To encourage and support state and federal regulatory action to reduce levels of ozone, sulfur dioxide, and fine particulate matter pollutants in the Highlands Region.

Policy 9.1.5. To implement resource protection standards to provide for the protection of air quality on a site-specific basis during site plan or subdivision review.

Objective 9.1.5.1. Encourage plans for development activities to include an evaluation of auto emissions, ambient air toxics, and hazardous air pollutants.

Policy 9.1.6. To support State and federal initiatives that will reduce air pollution in Warren County and the Region due to out-of-State power plant air pollution.

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