

New Jersey Highlands and Borough of Wharton Initial Assessment Grant Report

Borough of Wharton,
Morris County, New Jersey

Prepared For:

Borough of Wharton Planning Board
BA#: 2210.03

July 31, 2009

INITIAL ASSESSMENT GRANT REPORT

BOROUGH OF WHARTON,
MORRIS COUNTY, NEW JERSEY

PREPARED FOR:

BOROUGH OF WHARTON PLANNING BOARD
BA#: 2210.03

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I. Introduction

As part of the municipal process towards Plan Conformance, this initial assessment has been prepared to provide the Borough of Wharton with an analysis of its anticipated level of effort to bring its planning program into conformance with the Regional Master Plan (RMP). The Borough has been awarded an Initial Assessment Grant which allows the municipality to conduct an initial review of the policies and requirements contained in the RMP, evaluate the extent to which the local planning program must be amended to achieve “Basic” and/or Full Plan Conformance, and determine whether corrections are needed to bring the RMP up-to-date with local data.

The following report addresses each of these items, as well as provides a rough estimate of the time, effort and cost involved in completing them.

In preparing this report, we have consulted the following documents:

- 1989 Abandoned Mines of Minehill, Randolph, and Wharton Boro Report
- 1994 Borough of Wharton Master Plan
- 1996 Green Trust Application for Irondale Mountain
- 2001 Open Space and Recreation Plan Element
- 2005 Housing Element and Fair Share Plan
- 2005 Periodic Reexamination Report of the Master Plan & Land Use Plan
- 2008 Main Street Study and Improvement Plan
- Borough of Wharton Land Use Regulations
- 2008 Highlands Regional Master Plan
- Highlands Council ‘Basic Plan Conformance for Municipalities, Key Requirements’
- Highlands Council ‘Plan Conformance Guidelines’
- Highlands Council ‘Initial Assessment Grant Program’
- Digital spatial data available for download from the Highlands Council website, as well as updated data transmitted to the Borough.

This report is not designed to provide an exhaustive review of the RMP's provisions or the specific changes that will ultimately need to be made to the Borough's planning programs. Clearly, at the time that the Borough's planning documents are amended to conform to the RMP, it will have to address all relevant items. However, that level of detail is not necessary for the purposes of this report.

It is also important to note that, given the fact that the majority of Wharton's planning documents were adopted prior to adoption of the RMP, a high level of consistency cannot be expected. *As discussed in more detail in the body of this report, it is anticipated that the Borough will need to prepare the following items in order to bring its planning program into Full Plan Conformance with the RMP:*

- A Natural Resources Inventory (NRI);
- An updated Master Plan document, which will include revised goals, policies, and objectives, and the creation of or amendments to an existing Land Use Plan, Housing Plan, Conservation Plan, Utilities Plan, Circulation Plan, Open Space Plan, Community Facilities Plan, Economic Plan, and Historic Preservation Plan. Incorporated within these plans will be a new or revised Community Forestry Plan, Stream Corridor Protection/Restoration Plan, Critical Habitat Conservation and Management Plan, Lake Management Plan(s), Water Use and Conservation Management Plan, Stormwater Management Plan and Wastewater Management Plan. In addition, if the Borough elects to participate in the optional Highlands TDR Program, it will need to prepare a Development Transfer Plan.
- Updated land use regulations, which amend or incorporate definitions, zone districts and district regulations, regulations pertaining to water and wastewater and all Highlands resources, low impact development best management practices, application procedures and submission checklists, and notice requirements. Amended stormwater management regulations also appear to be necessary.
- RMP Updates and/or Map Adjustments, which include factual revisions, corrections or updates to the RMP as well as other adjustments that go beyond factual updates to ensure sound regional planning in support of the RMP and the Highlands Act.

Because the Highlands Council recognizes the large volume of work that will need to be done in order to bring most municipalities into conformance with the RMP, it has created a two-step process for achieving Plan Conformance. The first step is "Basic" Plan Conformance, wherein the Borough is required to complete only the most immediate mandatory conformance requirements by **December 8, 2009**. These requirements are outlined in Chapter IV of this report. As detailed therein, the Borough is required to complete a Municipal Self-Assessment and Implementation Schedule, which details the remaining steps and expected timeframe to achieve "Full" Plan Conformance. Under Full Plan Conformance, the Borough's planning program will reflect all elements of the RMP, and will entail all of the changes detailed above.

These issues are discussed in more detail in the body of this report.

II. Overview of Highlands Regional Master Plan

a. The Highlands Act

On August 10, 2004, the New Jersey Legislature enacted the Highlands Water Protection and Planning Act in an effort to protect water and other critical natural resources in the Highlands region. The Highlands region is located in the northwest part of New Jersey, encompassing 88 municipalities in seven counties. It includes 859,358 acres and is divided into two areas: Preservation Area and Planning Area. The Borough of Wharton has land only in the Planning Areas. The Highlands Act sets forth a number of goals for these Areas, as well as for the Highlands region as a whole. These are as follows:

Region-Wide Goals:

- Protect, restore and enhance the quality and quantity of surface and ground waters.
- Preserve farmland and historic sites and other historic resources.
- Preserve outdoor recreation opportunities, including hunting and fishing on publically owned lands.
- Promote conservation of water resources.
- Promote brownfield remediation and redevelopment.

Preservation Area Goals:

- Preserve extensive and, to the maximum extent possible, contiguous areas of land in its natural state, thereby ensuring the continuation of Highlands environment which contains the unique and significant natural, scenic and other resources representative of the Highlands Region.
- Protect the natural, scenic, and other resources of the Highlands Region, including, but not limited to, contiguous forests, wetlands, vegetated stream corridors, steep slopes, and critical habitat for fauna and flora.
- Promote compatible agricultural, horticultural, recreational, and cultural uses and opportunities within the framework of protecting the Highlands environment.
- Prohibit or limit, to the maximum extent possible, construction or development which is incompatible with preservation of this unique area.

Planning Area Goals:

- Preserve to the maximum extent possible any environmentally sensitive lands and other lands needed for recreation and conservation purposes.
- Protect and maintain the essential character of the Highlands environment.
- Promote the continuation and expansion of agricultural, horticultural, recreational, and cultural uses and opportunities.
- Encourage, consistent with State Development and Redevelopment Plan and smart growth strategies and principles, appropriate patterns of compatible residential, commercial and industrial development, redevelopment, and economic growth, in or adjacent to areas already utilized for such purposes; discourage piecemeal, scattered and inappropriate development, in order to accommodate local and regional growth and economic development in an orderly way while protecting the Highlands environment from the individual and cumulative adverse impacts thereof.
- Promote a sound, balanced transportation system that is consistent with smart growth strategies and principles and which preserves mobility in the Highlands Region.

The Preservation Area, as the name suggests, is the area with the highest resource value that was subject to the immediately effective standards in the Highlands Act, governed by rules and regulations adopted by the New Jersey Department of Environmental Protection (NJDEP). The Planning Area, however, was not subject to the immediately effective standards. Instead, the Highlands Council was required to analyze the protection needs of the Planning Area through preparation of the Regional Master Plan (RMP).

b. Highlands Regional Master Plan.

On July 17, 2008, the Highlands Council adopted the Highlands Regional Master Plan (RMP). This plan is a requirement of the Highlands Act approved in 2004 and endorsed by Governor Corzine on September 5, 2008, with the issuance of Executive Order 114 to further protect the Highlands Region. The RMP provides an outlook on the Region's capacity to provide appropriate economic growth while still sustaining the area's valuable natural and cultural resources. It further establishes capacity limitations, related to both natural systems and the built environment, for municipalities and counties located within this region to use as a tool for directing future development.

The Regional Master Plan offers municipalities and counties a set of guidelines and frameworks to ensure that the Highlands' significant natural and cultural resources are maintained and enhanced. While the majority of land use decisions are typically made with only local considerations, the RMP provides municipalities and counties the opportunity to look at planning and policy issues in a broader, more regional context.

As noted previously, the Preservation Area is subject to detailed and stringent standards through the RMP as well as the Highlands Water Protection and Planning Act Rules. The RMP additionally sets forth goals specific to the Planning Area. It contemplates that development and redevelopment within the Planning Area could incorporate development rights transferred from lands in the Preservation Area in order to mitigate any disproportionate burden imposed on Preservation Area landowners and to protect the most critically sensitive natural and agricultural resources. The RMP also promotes organic development in the Planning Area which respects and reflects historical development practices in individual communities balanced by the preservation of core environmentally sensitive lands.

In order to guide the implementation of the policies contained in the RMP, the Highlands Council developed the Land Use Capability Zone Map. The Land Use Capability Zone Map divides the region into three primary overlay zones and four sub-zones, each of which is based upon a determination of overall carrying capacity for development. The underlying municipal zoning establishes permitted land uses, while the overlay zones may detail more site specific requirements aimed at a certain goal, with the stricter standard applying. Examples of these standards may include best management practices related to preservation of agricultural lands or green building approaches for development initiatives.

The three primary overlay zones include the Protection Zone, Conservation Zone, and Existing Community Zone. The four Sub-Zones include the Wildlife Management Sub-Zone, Conservation Zone – Environmentally Constrained Zone, Existing Community Zone – Environmentally Constrained Sub-Zone, and Lake Community Sub-Zone. Those relevant to Wharton include the Protection Zone, Existing Community Zone, Existing Community Zone – Environmentally Constrained Sub-Zone, and Lake Community Sub-Zone. These overlay zones and Sub-Zones are described in the table below:

**Applicable Land Use Capability Zones
Borough of Wharton**

Overlay Zone	Description
Protection Zone	Consists of areas with high natural resource value that are important to maintaining water quality and quantity, and sensitive ecological resources and processes. Land acquisition is a high priority in the Protection Zone and development activities will be extremely limited. Any development will be subject to stringent limitations on consumptive and depletive water use, degradation of water quality, and impacts to environmentally sensitive lands.
Existing Community Zone	Consists of areas with regionally significant concentrated development signifying existing communities. These areas tend to have limited environmental constraints due to previous development patterns, and may have existing infrastructure that can support development and redevelopment, if such development is compatible with the protection and character of the Highlands environment, at levels that are appropriate to maintain the character of established communities.
Existing Community Zone – Environmentally Constrained Sub-Zone	Consists of significant contiguous Critical Habitat, steep slopes and forested lands within the Existing Community Zone that should be protected from further fragmentation. They serve as regional habitat “stepping stones” to larger contiguous Critical Habitat and forested areas. As such, they are not appropriate for significant development, and are best served by land preservation and protection. Development is subject to stringent limitations on consumptive and depletive water use, degradation of water quality, and impacts to environmentally sensitive lands.
Lake Community Sub-Zone	Consists of patterns of community development that are within the Existing Community Zone within 1,000 feet of lakes. The Highlands Council focused on lakes that are 10 acres or greater and delineated lake management areas consisting of an area of up to 1,000 feet (depending on the protection focus) from the lake shoreline in order to protect water quality, resource features, shoreline development recreation, scenic quality and community character. A future management area is planned, encompassing the full lake watershed, for protection of the lake water quality. This sub-zone has unique policies to prevent degradation of water quality, and watershed pollution, harm to lake ecosystems, and promote natural aesthetic values within the Existing Community Zone.

Another key program developed by the Highlands Council to implement the policies of the RMP is the Highlands Transfer of Development (TDR) Program. This program is intended to preserve lands containing sensitive resources by permitting the transfer of development potential from areas identified for preservation, called Sending Zones, to areas that are more appropriate to accommodate increased growth, called Receiving Zones. Landowners in the Sending Zones receive compensation for the transferable development potential of their property that has been restricted in support of preservation. Payment for this lost development potential comes from purchasers who buy credits (terms HDCs within the RMP) representing the lost development potential of parcels in the Sending Zones. The credits then entitle the purchaser to build in a Receiving Zone at a density greater than that permitted in the existing zoning.

Lands that are eligible to apply for HDCs as a Sending Zone include those located within a Protection or Conservation overlay zone, whether in a Preservation Area or Planning Area. Lands that are eligible as Receiving Zones must be within the Planning Area and located within an Existing Community overlay zone, a Highlands Redevelopment Area, or a Conservation overlay zone (so long as the development does not conflict with viable agriculture). The Highlands Council has identified several parcels within the Borough on the accompanying Potential Voluntary TDR Receiving Zones Map. It is important to emphasize the fact that any Receiving Zones in the TDR Program are strictly voluntary and not a requirement of Plan Conformance.

Conformance with the RMP is mandatory for municipalities wholly or partially located in the Preservation Area, whereas it is voluntary for those municipalities in the Planning Area. The Borough of Wharton is wholly located in the Planning area and therefore Plan Conformance is a voluntary process. Because conformance is voluntary the Borough may submit its petition for Plan Conformance to the Highlands Council at any time.

The RMP encourages Plan Conformance through a variety of benefits and incentives, as detailed below:

- Council on Affordable Housing (COAH) Relief. On September 5, 2008, Governor Corzine officially endorsed the RMP and called for a balance between the constitutional obligation to provide affordable housing and the protection of critical natural resources in the Highlands region. Subsequently, the Highlands Council and the Council on Affordable Housing (COAH) entered into a joint Memorandum of Understanding to implement the provisions of E.O. 114. Among these provisions is that COAH will grant an extension for submitting housing Elements and fair share plans from December 31, 2008 to December 8, 2009 for those municipalities participating in Plan Conformance. Also, Plan Conformance will entitle municipalities to an adjusted growth projection, which will most likely reduce their affordable housing obligation.
- Planning Grants and Technical Assistance. The Highlands Council will make grant funds and other financial and technical assistance available to municipalities at all stages of Plan Conformance. Examples of grant funding include Initial Assessment Grants, Plan Analysis and Conformance Grants, and Voluntary Receiving Zone Feasibility Grants for assessing the potential for participation in a TDR Program. Examples of technical assistance include numerous model planning documents and land use regulations for use by municipalities.
- Tax Stabilization Funds. Funds may be authorized through the Highlands Property Tax Stabilization Board, which is in, but not of, the New Jersey Department of Treasury, to stabilize municipal budgets due to implications stemming from RMP implementation, including a decline in property values that is directly related to the Highlands Act.
- Strong Presumption of Validity, Extraordinary Deference, and Burden of Proof. For municipalities in conformance with the RMP, a strong presumption of validity shall apply to master plans, land use ordinances, and local decisions. If a conforming municipality is challenged in court, the actions it has taken to conform to the RMP shall be given extraordinary deference and the burden of proof shall be on the plaintiff to prove that the municipality acted in an arbitrary, capricious, or unreasonable manner.
- Legal Representation. The Highlands Council shall, where appropriate in accordance with the Highlands Act, provide legal representation to any requesting municipality that conforms with the RMP in any cause of action filed against the municipality.
- Equivalency of State Plan Endorsement. For any municipality in conformance with the RMP, the local plan for that municipality will be considered equivalent to having been endorsed by the State Planning Commission. This means that in addition to State monetary benefits available to the municipality, a Housing Plan Element and Fair Share Plan previously approved by COAH will continue to be

recognized as valid by COAH.

III. Summary of Borough of Wharton's Planning Reports & Land Use Regulations

a. Borough of Wharton's Master Plan Documents

Wharton's most recent comprehensive master plan document was adopted in 1994. Since this time, several amendments have been made to the Borough's Land Use Plan Element (2000 and 2005), Open Space and Recreation Plan Element (2001), Main Street Study and Improvement Plan (2008), Master Plan Amendment (1998), and a Housing Element and Fair Share Plan (1998). The Borough has also adopted periodic reexamination reports in 2000 and 2005.

The Borough's most recent up-to-date goals and objectives area as follows:

- To support a planning policy to reinforce the existing variety of housing types and densities, in appropriate locations, to serve the borough.
- To protect the existing single-family residential neighborhoods of the community by preserving areas exhibiting predomination of single family land uses. A principal goal of this plan is to preserve and protect the residential character and existing density of various neighborhoods within the community. The plan also seeks to restrict incompatible land uses from established residential areas, and limit intensities-of-use to the levels, and locations, prescribed herein.
- To restrict three family dwellings to sites where they currently exist and prohibit any further development or redevelopment with this land use.
- To promote uniform residential density among single family and two family residential parcels in the borough's RM-75 Medium Density One and Two Family District
- To promote the continued maintenance and rehabilitation of the borough's housing units.
- To discourage the development of flag lots and irregular lots in the municipality.
- To ensure that any prospective development is responsive to the borough's environmental features and can be accommodated while preserving theses physical characteristics.
- To require buffer zones to separate incompatible lands uses.
- To encourage new development and redevelopment, to take into account the aesthetic character of the community, in an effort to enhance the visual and aesthetic appearance of the municipality.
- To preserve and enhance the borough's Main Street Central Business District by defining its functional role in the community.
- To ensure that traffic and pedestrian circulation issues are affirmatively addressed on a local and regional scale.
- To maintain the passive recreation use of the former Morris Canal.
- To promote the continued redevelopment and adaptive reuse of the borough's former industrial sites.

- To support the overall philosophy of the Highlands Water Protection and Planning Act.
- To support the overall philosophy of the State Development and Redevelopment Plan (SDRP) as a means of providing growth management on a state-wide basis while retaining the principles of home-rule.

The Land Use Element contained in the 2005 Reexamination Report recommends eleven residential land use districts, three commercial land use districts, one mixed-use land use district, three industrial land use districts, and an open space/parkland land use district. Minimum lot sizes range from a high of 40,000 square feet per dwelling to a low of 7,500 square feet per dwelling. The Borough also has residential districts specifically for townhouse and apartment developments. These designations are generally designed to reflect the established development patterns of the areas they encompass, incorporate an environmentally sensitive approach to development, including the preservation of trees, and retain the community's overall prevailing intensity of residential development and character.

The Recycling Plan Element incorporates the State's recycling Plan goals, including provisions for the collection, disposition, and recycling of recyclable materials for both residential and commercial developments. The Recycling Plan Element also provides and establishes the Borough's Recycling Ordinance, in conformance with State statute. Furthermore, the ordinance establishes a Recycling Program that includes provisions for the collection of leaves, certain paper products, glass and aluminum.

The Utilities Element includes data relating to existing and proposed utility systems, as they directly impact density of development and the resultant need for municipal services and facilities. The Element identifies the existing water and sewer service areas, of which serve almost the entire Borough. The Element notes that ninety-three housing units are serviced by individual septic systems and 67 housing units are serviced by on-site wells; it further notes that a small portion of the Borough receives water service from the Town of Dover's Water Department. The Element identified the Borough's primary water supply sources, which are comprised of three wells, two of which are located along West Central Avenue and the third on Eileen Court. Combined, all three wells have a total capacity of two million gallons per day that satisfied a demand of 65,000 gallons per day. As such, the Element anticipated no difficulty in meeting further demand for potable water. With regard to sanitary sewers, the Element notes that the majority of properties in Wharton are serviced by the sanitary sewer facilities operated by the Rockaway Valley Regional Sewer Authority, providing service for approximately ninety-six percent of all housing units. The municipal sewerage discharges into the Rockaway Valley Regional Sewer Authority's trunk sewer located in Dover. The average effluent flow has varied over the years. The Element indicates that the average daily effluent flow in 1990 was 508,000 gallons per day up from 472,775 gallons per day in 1980. The Element also notes that from 1990 to 1992, daily effluent flows decreased from 508,000 gallons per day to 415,000 gallons per day.

The 1994 Master Plan also included a section on the Borough's physical features. This section provided information on the community's environmental features as a means to help the Borough assess its development potential. The section further described the various environmental features in the Borough including topography, slope, soil types, wetlands, and flood plain characteristics. Each of these resources was described in text along with a depiction of the Borough's wetlands shown in an accompanying map.

The Open Space and Recreation Plan provides an extensive inventory of the Borough's system of recreational facilities and preserved open spaces. The Open Space and Recreation Plan Element found that while the total amount of open space in the Borough was adequate, there were some residential areas that lacked convenient access. Potential sites for open space, recreation and historic preservation are also included in the Open Space and Recreation Plan. In addition, the Open Space and Recreation Plan recommends a range of improvements to existing facilities and improving the distribution of open space.

The Housing Element and Fair Share Plan addressed Wharton’s second round COAH obligation and afforded the Borough substantive certification until May 11, 2005. The borough met its obligation through various methods including rehabilitating 20 units, occupied by low income households; a 100-unit senior housing project; and addressed the remaining obligation through the retention of two of the three inclusionary developments located on West Dewey Avenue and Irondale Road, both sites providing 39 lower income housing units. In addition the Borough sought credit for 9 units, occupied by lower income households, which were rehabilitated and brought up to code standards previously.

b. Borough of Wharton Land Use Regulations

As noted in the above discussion on Wharton’s Land Use Plan Element, the Borough has a wide range of residential, commercial/industrial, and mixed-use zone districts. A majority of the Borough’s lands within are zoned for moderate density residential use (R-75, RM-75, and R-15). However, there are also lands in low density residential use zones (R-40 and R-15) and industrial use zones (I-1, I-2, and I-3). Wharton’s commercial/industrial districts are concentrated along Highways 80 and 15, Main Street, and portions of Dewey Avenue. The following table provides an overview of the conventional requirements of Borough’s residential zoning districts.

Zone	Min. Lot Size (SF)	Min. Lot Width (ft)	Min. Lot Depth (ft)	Min. Front Yard (ft)	Min. Rear Yard (ft)	Min Side Yard (ft)	Max. Imp. Coverage (%)
R-40	40,000	150	200	50	50	25	30
R-15	15,000	100	150	30	30	20	40
R-10	10,000	100	100	30	30	15	40
R-75	7,500	75	100	25	20	10	40
RM-75							
1-Family	7,500	75	100	25	20	10	40
2-Family	15,000	120	100	25	20	10	40
A	3 acres	250	500	50	50	50	70
SH	4 acres	300	300	40	30	30	50
AH-1	5 acres	150	200	50	30	30	65
AH-2	9 acres	150	200	50	30	30	60
OAL (assisted living facilities)	40,000	100	300	50	40	30	60
ALR	5 acres	400	300	100	N/A	50	70

IV. Conformance Assessment

The Regional Master Plan is divided into ten elements, which represent the major policy areas covered in the document and correspond with the goals set forth above. The following section addresses the significant natural resources of the Highlands region and the protection strategies that the Borough of Wharton will need to enact to achieve plan conformance. Each of these categories is described in more detail below, along with a discussion of RMP requirements and their anticipated impacts on the Borough of Wharton. It is noted that where a change to the Borough's existing planning program appears to be required for Plan Conformance, such a change is ***bold and italicized***.

a. Forested Areas.

Goals, Policies, & Objectives

Protecting the integrity of the Highlands Region forests is dependent on the maintenance of large contiguous forested areas and healthy forest stands. The Highlands Council has prepared a Forest Resource Area map, which delineates the areas within the Highlands region that exhibit the least fragmentation and are the most vital for the maintenance of the ecological process. Lands within the Forest Resource Area were included because they express one or more of the following integrity indicators: a contiguous forest patch of equal to or greater than 500 acres in size; an area consisting of greater than 250 acres of core forest area greater than 300 feet from an altered edge; or areas that include greater than 45 percent of mean total forest cover and mean distance to the nearest patch.

Also of importance to the Highlands Region is the integrity of the forested sub-watersheds that provide important water quality benefits. The following indicators were used to evaluate forest cover integrity at the subwatershed level: the size of the forest patch; the total percentage of the area covered in forest; the area and percent of a forest patch that is greater than 300 feet from a forest edge; and the shortest edge-to-edge distance between distinct patches within a 1,000 foot search area.

The Forest Cover Integrity Map assigns an integrity level to every sub-watershed in the Borough, including high, moderate and low. A high integrity subwatershed is one that includes a subwatershed that is predominately forested, including a high proportion of forest cover consisting of high core area, large patch size and a low distance to the nearest patch. Moderate integrity forests include those subwatersheds with are predominantly forested, but do not exhibit a high proportion of forest cover, core area or patch size and an increase in distance to nearest patch. Low integrity forests include subwatersheds that are pre-dominantly non-forested or include low values for proportion of forest cover and patch size, or a high distance to nearest patch.

The RMP sets forth a number of policies and objectives relating to Forest Resources. The following will impact Wharton's planning program:

- To limit human development in the Forest Resource Area in the Preservation Area as follows: implement regulations which limit permissible uses to maintenance of pre-existing uses and restoration of impaired forest areas; prohibit deforestation for human development, except where exempt from the Highlands Act; and prohibit the expansion or creation of public water supply systems and public or community wastewater systems into forested areas.
- To prohibit in the Planning Area the expansion or creation of public water supply systems and public or community wastewater systems into forested areas of the Forest Resource Area where located in a Protection Zone, Conservation Zone, or Environmentally-Constrained Sub-Zone.
- To prohibit forest clear-cutting within the Forest Resource Area, except in accordance with a Forest Management Plan.
- To limit human development of forests to low impact residential development in the Protection

Zone and the Conservation Zone in the Planning Area.

- To limit deforestation in the Forest Resource Area and forested lands within High Integrity Forest Subwatersheds within the Existing Community Zone (ECZ) to the maximum extent practicable.
- To ensure that forest resources are protected on a site-specific basis during local development review.
- To implement resource management programs that provide guidance on sustainable forest management, restoration, improved ecological health, carbon sequestration, 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.
- To implement programs which encourage the application of agro-forestry practices and techniques within cultivated farmland located within both the Agricultural Resource Area and Forest Resource Area.
- To address the protection of Forest Resource Areas and High Integrity Forest Subwatersheds in municipal master plans and development regulations, including the adoption of municipal tree protection and clearing ordinances.

In order to assist local municipalities with these goals, policies, and objectives, the Council will provide model documents that can be adopted or used to supplement the existing planning program. Specifically, the Council will provide a model municipal tree protection ordinance, as well as guidance on community forestry plans, forest conservation and mitigation plans, forest stewardship plans, and low impact development best management practices.

RMP Analysis

The accompanying Forest Resource Area Map delineates the forest resource areas within Wharton. As shown, the northern portion of the Borough has been classified as a Forest Resource Area. The accompanying Land Use Capability Zone Map also shows that the majority of Wharton's land within the Forest Resource Area is classified as either an Existing Community Zone or Existing Community Environmentally Constrained subzone; small portions of the Forest Resource Area have been designated as Protection Zone.

Additionally, the accompanying Forest Cover Integrity Map assigns an integrity level to every subwatershed in the Borough, including high, moderate, and low. As shown, the entire Borough is classified as High Integrity Forest.

Wharton Borough Plans & Regulations

The Borough does not have a Natural Resources Inventory and therefore will have to prepare one as part of Plan Conformance Module 4 (Natural Resources Inventory). ***As such, the Borough will need to include documentation, in both text and mapped form, the location and descriptions of the Forest Resource Area and the Forest Cover Integrity, as contained in the RMP.***

The 2005 Periodic Reexamination of the Master Plan provides that the borough's land use policy calls for limiting development to that which preserves the Borough's environmental features and is sensitive to its physical characteristics. It further realizes that there are sites in the municipality that are typified by environmentally sensitive features and may not be able to accommodate the full-zoned development potential. The land use plan also includes development regulations that consider the preservation of mature trees in the borough's MB-Mixed Business district. However, there is no specific language regarding forested areas or the protection thereof. Therefore, in order to achieve consistency with the RMP, the Borough will need to revise its master plan in a number of ways. ***First it must prepare a Conservation Plan Element, which incorporates the relevant goals, policies, and objectives contained in the RMP. Also, because many of the RMP's goals, policies, and objectives rely on Land Use Capability Zone designations, the Borough must adopt the Land Use Capability Zones into the Land Use Plan Element. Lastly, the Borough must also***

prepare a Community Forestry Plan Element, which will be used to maintain and improve forest cover in developed areas.

The Borough does in fact have a tree preservation ordinance however it does not include the specific goals, policies, and objectives contained in the RMP. The preservation ordinance provides protection for the Borough's trees and requires a permit before any tree or shrub removal. In order to receive such a permit, an applicant must prove that the removal will not impair the growth and development of the remaining trees, cause soil erosion, impair existing drainage patterns, or impair the aesthetic value of the area. However, the ordinance does not incorporate the Land Use Capability Zone designations or the applicable goals, policies, and objectives of the RMP as it was prepared well before the adoption of the RMP. Therefore, ***the Borough's land use regulations will need to be revised to incorporate the Land Use Capability Zone designations, each of the applicable RMP goals, policies, and objectives set forth above, low impact development best management practices, and include the model tree protection and clearing ordinances.***

b. Open Waters and Riparian Areas

Goals, Policies, & Objectives

Highlands Open Waters include all springs, wetlands, intermittent or ephemeral streams, perennial streams, and bodies of surface water, whether natural or artificial, located wholly or partially within the boundaries of the Highlands Region. Riparian Areas are areas adjacent to, and hydrologically interconnected with, rivers and streams. They are areas that exhibit periodic inundation or saturation of soils, are subject to periodic flooding, and include wildlife corridors within 300 feet of a surface water feature. These two resources are presented in the Highlands Open Waters and Riparian Areas Map, respectively.

As watershed's are increasingly becoming the most accepted and appropriate geographic unit for managing water resources, the RMP examined and evaluated the ecological function and water protection ability of each riparian area at the subwatershed level. Several different ecological indicators were selected to evaluate and assign an integrity level to each of the subwatersheds in the Highlands Region. High Integrity Riparian Areas have a low incidence of impervious cover, agricultural uses, and/or road crossings, high quality habitats for water/wetland species and are predominantly covered with natural vegetation. Moderate Integrity Riparian Areas have a higher proportion of impervious coverage, agricultural uses, and/or road crossings and a reduced proportion of natural vegetation that includes high quality habitats for water/wetland dependent species. Low Integrity Riparian Areas have a high prevalence of impervious coverage, agricultural uses, and/or road crossings and minimal natural vegetation, including high quality habitat for water/wetland dependent species. Each subwatershed and their respective values are presented in the Riparian Integrity by HUC14 Map.

A high priority of the RMP is for municipalities to develop and implement a Stream Corridor Protection/Restoration Plan, which will be used as a basis for both development review and restoration activities. The Stream Corridor Protection/Restoration Plan shall identify existing disturbed areas within Highlands Open Waters buffers, identify and require opportunities for restoration of such areas, and identify the extent of stream corridor features that are critical to supporting the functions of a healthy Highlands Open Waters buffer. Where a Stream Corridor Protection/Restoration Plan has not been approved by the Highlands Council, site-by-site development applications in municipalities will be required to strictly adhere to the RMP goals, policies and objectives below.

The RMP goals, policies and objectives relating to Open Waters and Riparian Areas that would impact Wharton's planning program are as follows:

- To establish a protection buffer of 300 feet from the edge of the discernable bank of streams, from the delineated LOI line for wetlands, or from a field delineated boundary for other Highlands Open

Waters features. The protection buffer width may be modified for Category 2 streams in the Planning Area or in approved Redevelopment Areas.

- To require that all local development applications include the identification and mapping of Highlands Open Waters and Riparian Areas.
- To prohibit all major Highlands developments within Highlands Open Waters and their 300-foot buffer in the Preservation Area, except for linear development, which may be permitted provided there is no feasible alternative.
- In the Protection, Conservation and Existing Community Zones, to allow disturbances of Highlands Open Waters buffers only in previously disturbed areas.
- To limit disturbance of existing natural vegetation or increases in impervious area within High and Moderate Integrity Riparian Areas in any Land Use Capability Zone to the minimum alteration feasible in areas beyond Highlands Open Waters buffer requirements; protect the water quality of adjacent Highlands Open Waters; and maintain or restore habitat value of the Riparian Area.
- To prohibit modifications to Riparian Areas in the Protection Zone, except where a waiver is approved by the NJDEP or Highlands Council.
- To restrict modifications to Riparian Areas in the ECZ that would alter or be detrimental to the water quality and habitat value of a Riparian Area.
- To 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 subwatershed.

In order to assist municipalities with the implementation of these goals, policies and objectives, the Highlands Council will provide technical guidance for the development of Stream Corridor Protection/Restoration Plans, and for the restoration of impaired streams and riparian areas.

RMP Analysis

The accompanying Highlands Open Waters Map and Riparian Areas Map delineate the location of those resources within the Borough of Wharton. As shown, Highlands Open Waters and their associated buffer areas are located throughout the borough, particularly in the northeastern corner and along the Morris Canal/Rockaway River. The Riparian Areas Map shows that the areas roughly correspond with the locations of the Highlands Open Waters and buffers.

Additionally, the Riparian Integrity by HUC14 Map assigns a riparian area integrity level to every subwatershed in the borough including high, moderate, and low. As shown, the borough is classified in both the High and Low integrity area. The High Integrity Riparian Area is located in the northeastern portion of the Borough while the remaining portion is compromised of Low Integrity Riparian Area.

Wharton Borough Plans and Regulations

The Borough does not have a Natural Resources Inventory and will need to prepare one as part of the Plan Conformance process. ***As part of Plan Conformance Module 4, the Borough will have to complete a Natural Resource Inventory which will need to include documentation, in both text and mapped form, the locations and descriptions of Highlands Open Waters and associated buffers, Riparian Areas, and Riparian Integrity, as contained in the RMP.***

The Borough's 2005 Reexamination Report contains some language regarding the Borough's environmental sensitivities however the Plan does not specifically identify riparian areas or 300-foot protection area buffers. It does however recognize that "new development and redevelopment must comply with wetlands preservation [...]" It also recognizes that the NJDEP's Stormwater Management Regulations will create areas requiring

significant buffers from designated waterways. The 1994 Master Plan included information regarding the Borough's flood hazard areas as well as its wetland areas. The plan identifies that the Borough contains approximately 249 acres or 19 percent of wetlands, comprised of both the Palustrine and Riverine systems. The Borough's master plan documents also do not contain a Conservation Plan Element or a Stream Corridor Protection/Restoration Plan, as required by the RMP. ***Therefore, in order to achieve consistency with the RMP, the Borough will need to revise its Master Plan to include a Conservation Plan Element, containing the relevant RMP goals, policies, and objectives; a Stream Corridor Protection/Restoration Plan; and adoption of the Land Use Capability Zones into the Land Use Plan Element, because many of the RMP's goals, policies, and objectives rely on these designations.***

The Borough's land use regulations contain specific regulations for wetlands consistent with the New Jersey Freshwater Wetlands Protection Act. These regulations require that all development applications identify the location of any wetlands and wetland transition areas on-site and submit a NJDEP-issued letter of interpretation ("LOI") or certification that wetlands do not exist. The land use regulations also require that applicants identify potential impacts on and, if necessary, proposed mitigation for wetlands, floodplains, and stream encroachments in an Environmental Impact Assessment. Additionally the stormwater management regulations establish a 300-foot protection area buffer around Category one Streams, wherein disturbance can only occur where previous development or disturbance has occurred. However, none of the Borough's land use regulations specifically address the RMP requirements for open waters and riparian areas, namely the creation of 300-foot buffers around all open waters and limitations of development based on Land Use Capability Zones. ***Therefore, the Borough will's land use regulations will need to be revised as follows: require that applicants identify and map Highlands Open Waters, 300-foot buffer areas, and Riparian areas; incorporate the Land Use Capability Zone designations; and limit development in accordance with each of the applicable RMP goals, policies, and objectives set forth above.***

Additionally, while the stormwater management regulations contain some low impact development standards, they do not specifically relate to the disturbance of Highlands Resources. ***Therefore, the Borough land use regulations will also need to be revised to include low impact development best management practices relating to Highlands Open Waters and Riparian Areas.***

c. Steep Slopes

Goal, Policies, & Objectives

The Highlands Council conducted an analysis of the Highlands region to identify areas that are significantly constrained by steep slopes and to ensure that the level of protection for these areas is appropriate. The resultant Steep Slope Protection Areas Map identifies slopes in the Highlands region that encompass a minimum of 5,000 square feet and that exhibited one of the following grade classifications: slopes of 20 percent or greater, slopes between 15 percent and 20 percent, and slopes between 10 percent and 15 percent that occur within the Riparian Area.

The RMP goes on to define slopes as follows: Lands with slopes of 20 percent or greater and lands within Riparian Areas with slopes of 10 percent and greater are considered Severely Constrained Slopes. All non-Riparian Area lands having a slope of 15 percent to less than 20 percent, which are forested, are considered Moderately Constrained Slopes. All non-Riparian Area lands having a slope of 15 percent to less than 20 percent, which are non-forested, and either are highly susceptible to erosion, have a shallow depth to bedrock, or have a Soil Capability Class indicative of wet or stony soils are considered Moderately Constrained Slopes. All non-Riparian Area lands having a slope of 15 percent to less than 20 percent, which are non-forested, and are not highly susceptible to erosion, do not have a shallow depth to bedrock, and do not have a Soil Capability Class indicative of wet or stony soils are considered Limited Constrained Slopes.

The RMP goals, policies and objectives relating to Steep Slopes that would affect Wharton Borough's planning program are as follows:

- To require that applications for development include topographic information identifying the location of any Steep Slope Protection Areas.
- To require that applications for development involving parcels of land with slopes of 10 percent or greater include identification of forested lands, areas which are highly susceptible to erosion, depth to bedrock, and Soil Suitability Classes.
- To prohibit land disturbance within areas which are considered Severely Constrained Slopes and Moderately Constrained Slopes, except for linear development that meets the requirements of the Highlands Water Protection and Planning Act Rules.
- 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, or that involves an approved disturbance of a Severely Constrained or Moderately Constrained Slope

In order to assist municipalities with the implementation of these goals, policies and objectives, the Highlands Council will provide model steep slope protection standards for inclusion in municipal planning and regulatory documents, as well as other technical guidance in support of Plan Conformance activities.

RMP Analysis

As shown on the accompanying Steep Slope Protection Areas Map, the majority of the borough's steep slopes are located in the southwestern portion of the borough. There is a small section of steep slope area located in the northern portion of the borough however it is considerably more isolated. It is noted that this map only identifies slopes by steepness and does not further define slopes as Severely, Moderately, or Limited Constrained Slopes. Discussions with Highlands Council staff members indicate that maps identifying the locations of these categories will be released soon.

Wharton Borough Plans and Regulations

The Borough does not have a Natural Resources Inventory and will need to prepare one as part of the Plan Conformance process. ***As part of Plan Conformance Module 4, the Borough will have to complete a Natural Resource Inventory which will need to include documentation, in both text and mapped form, the locations and descriptions of steep slopes which reflect the different slope categories (greater than 20%, greater than 5%, and greater than 10% within riparian areas) contained in the RMP and must also contain the slope constraint classes defined in the RMP.***

The Borough's 2005 Reexamination Report includes an environmental constraints map relating to steep slope areas in Wharton however, the map only addresses slopes greater than 15 percent and does not distinguish between different slope classes. In addition, the 1994 Master Plan provides a narrative on the topography and slope of the Borough, detailing that the majority of the steep slopes are located in the southwestern section while the areas to the east and north are generally level. Steep slopes are again mentioned in the 2005 Reexamination Report in its goal of "ensuring that any prospective development is responsive to the borough's environmental features, and can be accommodated while preserving these physical characteristics." It further distinguishes that the borough seeks to limit development to that which preserves steeply sloped areas. While this goal is generally consistent with the RMP, it does not reflect the specific goals, policies, and objectives contained in the RMP. ***As such, the Borough must revise its master plan documents to include a Conservation Plan Element, which incorporates the relevant goals, policies, and objectives contained in the RMP.***

The Borough's land use regulations contain specific regulations for steep slopes. These regulations limit disturbance to 40 percent on slopes 15-19.99 percent, to 20 percent on slopes 20-24.99 percent, and 10 percent

on slopes 25 percent unless such disturbance is essential for certain improvements or has been shown to satisfy the applicable board or Borough Engineer. However these regulations are not consistent with the RMP's requirements for how to identify and protect steep slopes. ***Therefore the Borough's land use regulations must be revised to require applicants to identify steep slopes and slope constraint classes as defined in the RMP; to limit development in accordance with each of the applicable RMP goals, policies, and objectives set forth above and to include low impact development best management practices related to steep slope areas.***

d. Critical Habitats

Goals, Policies, & Objectives

There are three categories of Critical Habitat in the Highlands region: 1) Critical Wildlife Habitat, which includes habitat for rare, threatened or endangered species; 2) Significant Natural Areas, which are regionally significant ecological communities, including habitat for documented threatened and endangered plant species; and 3) Vernal Pools, which are confined, ephemeral wet depressions that support distinctive, and often endangered, species that are specially adapted to periodic extremes in water pool levels. These categories are identified spatially on the Critical Wildlife Habitat, Significant Natural Areas, and Certified Vernal Pools Maps, respectively.

A high priority is for municipalities to develop and implement a Critical Habitat Conservation and Management Plan, which will be used as a basis for both development review and restoration activities. Critical Habitat Conservation and Management Plans shall address the applicable goals, policies and objectives outlined in the RMP. Where a Critical Habitat Conservation and Management Plan has not been approved by the Highlands Council, site-by-site development applications in municipalities will be required to strictly adhere to the RMP goals, policies and objectives below.

The RMP goals, policies and objectives relating to Critical Habitats are as follows:

- To prohibit the direct impact of new human development or expansion or increased intensity of existing development within Critical Habitat.
- To implement a Habitat Conservation and Management Program through a Critical Habitat Conservation and Management Plan. Such Plan shall establish performance standards requiring all development to employ Low Impact Development Best Management Practices as follows: 1) avoid the disturbance of Critical Habitat, 2) minimize impacts to Critical Habitat, and 3) mitigate all adverse modification to Critical Habitat so that there is no net loss of habitat value. Additional performance standards shall include requirement and criteria for mitigation of disturbed Critical Habitat, and the enhancement or restoration of historically disturbed Critical Habitat.
- To include in a Critical Habitat Conservation and Management Plan a Critical Habitat Overlay District, which identifies habitat in need of protection from fragmentation and other anthropogenic impacts, habitat critical to maintaining wildlife and plant populations, and habitat that serves other essential ecosystem functions such as carbon sequestration and ground water recharge.
- To require that applications for any local development review for Critical Habitat be subject to minimum standards and criteria outlined in a Habitat Conservation and Management Plan.
- To require that projects qualifying as major Highlands developments, affecting or potentially affecting Critical Habitat in the Preservation Area, comply with the Highlands Water Protection and Planning Act Rules and with the minimum standards and criteria outlined in the Critical Habitat Conservation and Management Plan.

In order to assist municipalities with the implementation of these goals, policies and objectives, the Highlands Council will provide a model municipal conservation and management overlay district ordinance, and a Critical Habitat Conservation and Management Plan guidance document.

RMP Analysis

The accompanying Critical Wildlife Habitat and Significant Natural Areas and Vernal Pools Map identify the locations of these resources within Wharton. As shown on the Critical Wildlife Habitat Area Map, critical habitat areas occupy almost the entire southwestern portion of the Borough with the majority located on Irondale Mountain. Smaller portions are located in the north and eastern sections of the Borough and along the outer edges of Interstate Route 80. A small portion in the northeastern corner of the Borough has been identified within the 1,000 foot protection buffer of a vernal pool, located in Rockaway Township. The Borough does not contain any significant natural areas and therefore that map is not included in this report. ***However the Borough should verify that there are, in fact, no significant natural areas in the Borough. If such areas are found within the municipality, the Borough will need to pursue RMP Updates and revise its NRI, master plan, and land use regulations in accordance with the RMP goals, policies, and objectives, as set forth above.***

Wharton Borough Plans and Regulations

The Borough does not have a Natural Resources Inventory and will need to prepare one as part of the Plan Conformance process. ***As part of Plan Conformance Module 4, the Borough will have to complete a Natural Resource Inventory which will need to include documentation, in both text and mapped form, the locations and descriptions of Critical Wildlife Habitat, Significant Natural Areas, and Vernal Pools, as contained in the RMP.***

Wharton's master plan documents do not contain any language regarding critical habitats or the protection thereof. Therefore, in order to achieve consistency with the RMP, the Borough will need to revise its master plan in the following ways. ***It must prepare a Conservation Plan Element, which incorporates the relevant goals, policies, and objectives contained in the RMP. Also, the Borough must prepare a Critical Habitat Conservation and Management Plan, which incorporates all of the performance standards, set forth in the RMP and establish a Critical Habitat Overlay District.***

The Borough's land use regulations only address critical habitat to a limited extent. The stormwater management regulations at Section 267-4(B) require that stormwater management measures for major development avoid adverse impacts of concentrated flow on habitat for threatened and endangered species as documents in the NJDEP's Landscape Project or the Natural Heritage Database. ***To be consistent with the RMP, the Borough must amend its land use regulations to include minimum performance standards and a Critical Habitat Overlay District ordinance, as set forth in the Borough's Critical Habitat Conservation and Management Plan.***

e. Land Preservation and Stewardship

Goals, Policies, & Objectives

The Highlands Council has prepared a Preserved Lands Map, which identifies the location of preserved open space, farmland, water supply watershed lands, and conservation easements throughout the Highlands region. The Highlands Act contemplates preservation of additional open space and farmland resources in order to protect and enhance ecosystem function, protect drinking water resources, and provide for passive and recreational lands. These lands are identified on the Conservation Priority Area and Agricultural Priority Area Maps. In order to accomplish these purposes, the RMP includes strategies for land preservation and stewardship among preservation partners, and ensuring that sufficient financial, institutional, and innovative resources are available for land preservation and stewardship.

The RMP goals, policies and objectives relating to Land Preservation and Stewardship that effect the Borough are as follows:

- To establish and fund local open space acquisition and stewardship programs or to expand existing open space and stewardship programs.
- To adopt and enforce development regulations for the Special Environmental Zone in the Preservation Area, where development shall not occur in order to protect water resources and environmentally sensitive lands and which shall be permanently preserved through use of a variety of tools including, but not limited to, fee simple acquisition, easement acquisition, TDR programs, and development regulations. These areas are identified spatially on the Special Environmental Zone Map.
- To include an Open Space Preservation and Land Stewardship Element in municipal master plans.
- To identify and delineate existing preserved open space, including fee simple and easements; maintain a current Recreation and Open Space Inventory (ROSI); and identify lands subject to stewardship programs in municipal master plans.
- To require conservation or land stewardship easements as a condition of development approval for lands within parcels proposed for development that are identified for preservation on a proposed site plan or subdivision plat.
- To establish stewardship and monitoring programs for preserved lands owned by the municipality or county by fee acquisition or easement acquisition.

In order to assist municipalities with the implementation of these goals, policies and objectives, the Highlands Council will provide model Cluster/Conservation Design development standards, and will establish a technical assistance program to aid in the development of stewardship plans. The Highlands Council will also develop an outreach and education program for Highlands landowners to help them take advantage of funding opportunities and incentives available for land preservation.

RMP Analysis

As shown in the accompanying Preserved Lands Map, the majority of Wharton's preserved lands are located in the southwest corner of the Borough, including the Irondale Mountain area. It is noted that the Borough was required to verify the accuracy of this data during Plan Conformance Module 1 (Current Municipal Conditions & Build-Out Analysis) and found that several parcels were not recognized on the RMP map. In addition, the public open space map provided in the Borough's 2001 Open Space and Recreation Plan and more recently the 2005 Reexamination Report, identifies several parcels located throughout the Borough that were not recognized on the RMP Map. These parcels will be submitted to the Highlands Council as RMP Updates, which, as discussed in more detail in the next chapter of this report, are factual corrections to the data in the RMP. The Borough should continue to monitor and inform the Highlands Council of additional parcels acquired for preservation.

As previously noted, areas prioritized by the Highlands Council for future preservation are shown on the Conservation Priority Area and Agricultural Priority Area Maps. As shown on the accompanying Conservation Priority Area Map, the Highlands Council designates a number of areas in the Borough as moderate conservation priority. The RMP also designates certain areas as a Special Environmental Zone however this has not been included in this report because the Highlands Council does not designate any areas as a Special Environment Zone. An Agricultural Priority Area Map has also not been included in this report because the Highlands Council does not designate any land in Wharton as priority for agricultural preservation.

Wharton Borough Plans and Regulations

The Borough does not have a Natural Resources Inventory and will need to prepare one as part of the Plan Conformance process. ***As part of Plan Conformance Module 4, the Borough will have to complete a***

Natural Resource Inventory which will need to include documentation, in both text and mapped form, the locations and descriptions of Critical Wildlife Habitat, Significant Natural Areas, and Vernal Pools, as contained in the RMP.

Wharton's master plan documents provide an extensive inventory of parks and preserved lands within the Borough. The 2001 Open Space and Recreation Plan and the 2005 Reexamination Report both address existing and proposed preservation areas in both text and mapped form. The acquisition of open space has been identified as major goal in the 2005 Reexamination Report, particularly in the southwestern portion of the municipality. The 2001 Open Space and Recreation Element also recommends that the Borough should continue to utilize the local open space tax for acquisition of lands for open space, recreation and conservation. However, as both plans were prepared well before the RMP was adopted a number of things will need to be done to bring the Borough's master plan into conformance with the RMP. ***First, the Borough will need to update and consolidate its inventory of existing and proposed preserved lands into one complete document, for inclusion into the NRI and Open Space Element. Second, the Borough needs to review the inventory to ensure it is up-to-date and consistent with the RMP maps. If necessary, the Borough should submit additional RMP Updates to the Highlands Council. Additionally, the Borough must amend its Open Space Plan Element to incorporate the relevant goals, policies and objectives contained in the RMP, as well as to include land stewardship strategies, which are presently lacking in the Borough's master plan documents. As part of its review of land stewardship strategies, the Borough should consider participation in the voluntary Highlands TDR Program, which is further discussed in the previous chapter of this report.***

The Borough's land use regulations do not explicitly address preserved lands or open space within the Borough. Therefore in order to be consistent with the RMP, ***the Borough must amend its land use regulations to incorporate the pertinent RMP goals, policies and objectives set forth above, including regulations requiring conservation easements on lands identified for preservation in the master plan.***

f. Carbonate Rock (Karst) Topography

Goals, Policies, & Objectives

The term karst describes a distinctive topography that indicates dissolution of underlying carbonate rocks by surface water or ground water over time. This dissolution process causes surface depressions and the development of such features as sinkholes, sinking streams, enlarged bedrock fractures, caves and underground streams. Such features function as funnels, directing surface water runoff into karst aquifers with little or no attenuation of any transported contaminants. Stormwater basins, septic system leaching fields, sewers, agricultural runoff, lawn runoff, underground pipelines, and soil disturbance may also contribute contaminants directly to ground water through karst features. Therefore, management of development activities in carbonate rock areas is necessary to address the potential problems that are common to karst areas.

The Highlands Council relied upon existing New Jersey Geologic Survey and United States Geological Survey data to map areas of the Highlands region that are underlain by carbonate rocks. These areas are identified on the Carbonate Rock Area Map.

The RMP goals, policies and objectives relating to Carbonate Rock are as follows:

- To identify and delineate karst features and subwatersheds that drain surface water into the Carbonate Rock Area.
- For municipalities in, or within subwatersheds draining directly to, the Carbonate Rock Area, to ensure protection of public health and safety and the quality of ground waters from inappropriate land uses and

pollutant discharges.

- To require that applications for site plan or subdivision approval include a multi-phased geotechnical site investigation to locate any potential karst features and potential hazards to public health and safety, structures, and ground water quality.
- To require that all potential hazards to public health and safety, structures, and ground water quality are fully addressed and mitigated in the construction plans and subsequent approval process.
- To prohibit new land uses and facilities that constitute unacceptable risks of discharge due to karst topography where karst features have been identified, including, but not limited to, underground storage tanks, solid waste landfills, hazardous waste storage and disposal, and hazardous materials storage and handling

In order to assist municipalities with the implementation of these goals, policies and objectives, the Highlands Council will provide critical requirements for development ordinances, as well as develop a technical guidance manual containing requirements for multi-phased geotechnical studies.

Wharton Borough Plans and Regulations

According to the Carbonate Rock Area Map in the RMP, Wharton does not contain any such areas and therefore the map is not included in this report. This would suggest that the Borough does not have to amend its planning program to address this Highlands Resource. ***However, the Borough should verify that there are in fact, no carbonate rock areas in the Borough. If such areas are found within the municipality, the Borough will need to pursue RMP Updates and revise its NRI, master plan, and land use regulations in accordance with the RMP goals, policies, and objectives, as set forth above.***

g. Lake Management

Goals, Policies, & Objectives

Efforts to protect, restore, and enhance the water quality of Highlands lakes and to protect the unique character of Highlands lake communities require a delineation of lake resources to facilitate land use and water resource planning. The Highlands Council therefore created a Lake Management Area Map, which identifies the locations of lakes greater than 10 acres in size and associated Lake Management Areas throughout the region. Lake Management Areas are defined to include four tiers: 1) Shoreland Protection Tier, consisting of an area measured 300 feet or the first public road perpendicular to the shoreline of the lake; 2) Water Quality Management Tier, consisting of an area measured 1,000 feet perpendicular from the shoreline of the lake, including the Shoreland Protection Tier; 3) Scenic Resources Tier, consisting of an area measured 300 to 1,000 feet perpendicular from the shoreline of the lake; and 4) Lake Watershed Tier, consisting of the entire land area draining to the lake.

The RMP goals, policies and objectives relating to Lake Management that effect the Borough are as follows:

- To establish unique standards (as compared to lakes within the Protection and Conservation Zones) for the Lake Community Sub-Zone within the ECZ within 1,000 feet of lakes, particularly with respect to the Shoreline Protection Tier, to prevent degradation of water quality, harm to lake ecosystems, and promote aesthetic values within the ECZ.
- To adopt and implement standards for application to public lakes in the Shoreland Protection Tier to address direct and proximate impacts upon the lake, such as shoreline modification and development, docks, piers, boathouses, dredging, vegetation removal, increased impervious cover, and pollutant discharges.
- To adopt and implement standards for application to public lakes in the Water Quality Management Tier to prevent or minimize continuous pollutant sources that can contribute pollutants overland or through ground water to the lake from greater distances than the Shoreland Protection Tier.

- To adopt and implement standards for application to public lakes in the Scenic Resources Tier, including requirements for vegetative screening of buildings, building height limitations, and limits on tree and understory removal.
- To develop and adopt lake restoration plans for each of the municipality's developed lakes that has been identified as water quality impaired to restore, protect and, where possible, enhance lake water quality through management of pollutant sources in the Lake Watershed Tier. Total Maximum Daily Loads (TMDLs) adopted by the NJDEP to address known pollution problems may be used as lake restoration plans.
- To adopt standards for lake character and aesthetics for application to public lakes.
- To encourage increased public access to publicly-owned lakes, within the lake's carrying capacity and while maintaining the lake character.
- To discourage or control teardowns that result in altered lake-community character, and the potential loss of historic and cultural values, and to encourage community-supported limitations in lot coverage and building height for new construction.
- To establish and implement performance and development standards for shoreline uses which achieve compatibility among shoreline activities and nearby neighborhoods.
- To utilize recreational sites as opportunities to educate the public regarding the ecological value of the lake environs.
- To explore appropriate means to provide public recreation at the shoreline and on the water while ensuring retention of opportunities for passive recreation.

In order to assist municipalities with the implementation of these goals, policies and objectives, the Highlands Council will establish standards for adoption by municipalities for the Shoreland Protection Tier, Water Quality Management Tier, and Scenic Resources Tier. The Highlands Council will also implement measures to encourage the maintenance of public and private lakes and the restoration of lake beds and downstream areas when lakes are drained.

RMP Analysis

The accompanying Lake Management Area Map identifies the location of lakes greater than 10 acres in size and associated Lake Management Areas within the Borough. As shown, the Borough has one water body greater than 10 acres in size, Washington Pond. The Lake Management Area associated with Washington Pond is also located within a Lake Community Sub-Zone. ***However, the Borough takes exception to this classification and will file a petition for a Map Adjustment in conjunction with Plan Conformance.***

Wharton Borough Plans and Regulations

The Borough does not have a Natural Resources Inventory and will need to prepare one as part of the Plan Conformance process. ***As part of Plan Conformance Module 4, the Borough will have to complete a Natural Resource Inventory which will need to include documentation, in both text and mapped form, the locations and descriptions of Lake Management Areas as contained in the RMP.***

The Borough's master plan documents discuss Washington Pond to a limited extent however it does discuss the surrounding land uses in greater detail, all of which are included in the Lake Management Area. The 2005 Reexamination Report's land use plan identified the areas surrounding Washington Pond as largely industrial with some areas identified as residential use. A Mixed Business District, which is part of the Main Street Improvement Plan, encompasses 22 acres and is zoned for of the following land uses: business, office and commercial use; eating and drinking establishments; and light industrial use mixed with office use. The purpose of the mixed business designation is to foster redevelopment with a comprehensive and integrated design. The development regulations also call for consideration of the environmental features of the site including the

adjoining Rockaway River, of which runs through Washington Pond. ***In order to achieve consistency with the RMP, the Borough must first prepare a Conservation Plan Element, which incorporates the relevant goals, policies, and objectives contained in the RMP. Also, the Borough may need to develop and adopt lake restoration plans for Washington Pond. These may be contained within the Conservation Plan Element.***

The Borough's land use regulations only address lake management to a limited extent. Wharton's storm water management regulations contain standards for the minimization of pollutants sources, either over land or through ground water, however these standards are general and do not contain the specific requirements contained in the RMP. ***As such, the Borough must amend its land use regulations to require that all applications for development identify lakes and Lake Management Areas in accordance with the following categories: Shoreland Protection Tier, Water Quality Management Tier, Scenic Resources Tier, and Lake Watershed Tier. The borough must also revise its land use regulations to incorporate the applicable performance and development standards set forth in the RMP's goals, policies, and objectives.***

h. Water Resources Availability

Goals, Policies, & Objectives

Sustaining the region's water resources is of significant statewide importance. The availability of water for human use is an essential factor in determining the capacity for growth and continued economic stability for existing development within and outside of the Highlands region. The availability of water for ecological purposes is critical to sustaining the aquatic ecosystems of streams, ponds, and lakes in the Highlands region.

The RMP provides a method for identifying the quantity of available water resources throughout the region. Groundwater availability was determined using stream flow information, with thresholds based upon the predominant Land Use Capability Zone for each HUC14 subwatershed. This is shown in the Net Water Availability by HUC14 Map. Where Net Water Availability is positive, it is assumed there is water available beyond the existing demand. Where net water availability is negative, the subwatershed is deemed a Current Deficit Area, meaning existing uses are exceeding sustainable supplies.

For those subwatersheds deemed a Current Deficit Area, the Land Use Capability Water Availability Map displays net water available if conditional availability was granted. The map represents upper capacity thresholds based on current demands of water resources in the Highlands region.

The RMP goals, policies and objectives relating to Water Resources Availability that effect Wharton Borough's planning program are as follows:

- To develop Water Use and Conservation Management Plans for all subwatersheds that will set priorities for use of available water (where net water availability is positive) and will establish provisions to reduce or manage consumptive and depletive uses of ground and surface waters (where developed for Current Deficit Areas). In all cases, efficient use of water is required through water conservation and Low Impact Development Best Management Practices to make the best use of limited resources.
- To require that proposed new consumptive or depletive water uses within a Current Deficit Area only occur under the auspices of an approved Water Use Conservation Management Plan, or through mitigation of the proposed use through a permanent reduction of existing consumptive and depletive water uses, ground water recharge in excess of Stormwater Management Rules, or other permanent means.
- To conditionally provide water availability (Conditional Water Availability) within a Current Deficit Area

with appropriate standards regarding its use. A Current Deficit Area subwatershed that is primarily within the Protection Zone or Conservation Zone shall be assigned Conditional Water Availability not to exceed an aggregate of 1 percent of Ground Water Capacity. A Current Deficit Area subwatershed that is primarily within the ECZ shall be assigned Conditional Water Availability not to exceed an aggregate of 2 percent of Ground Water Capacity.

- To assign highest priority for the use of non-agricultural Net Water Availability or Conditional Water Availability within Protection Zone and Conservation Zone subwatersheds to uses that address threats to public health and safety from contaminated water supplies, cluster developments (subject to certain conditions), affordable housing projects where at least 10 percent of the units are affordable, and development permitted through a Highlands Redevelopment Area or takings waiver.
- To assign highest priority for the use of Net Water Availability or Conditional Water Availability within a ECZ to uses that address threats to public health and safety from contaminated water supplies, designated TDR Receiving Zones, infill development, designated Highlands Redevelopment Area, affordable housing projects where at least 10 percent of the units are affordable, or new areas for development that meet all other requirements of the RMP.
- To assign highest priority for agricultural water uses in the Conservation Zone to those Preservation Area uses that promote agricultural and horticultural uses and opportunities compatible with protection of the Highlands environment, and those Planning Area uses that promote the continuation and expansion of agricultural, horticultural, recreation and cultural uses and opportunities.
- To require the use of water conservation, recycling, and reuse methods and devices for any redevelopment or development activity, including renovations to existing structures, to minimize consumptive water use.
- To ensure that area wide Water Quality Management Plans (WQMPs), Wastewater Management Plans (WMPs) or their amendments will not directly or indirectly cause or contribute to a Net Water Availability deficit, and will help mitigate any existing deficit.

In order to assist municipalities with the implementation of these goals, policies and objectives, the Highlands Council is currently working to prepare guidelines for the development of municipal Water Use and Conservation Management Plans.

RMP Analysis

As shown in the accompanying Net Water Availability by HUC14 Map, the entire municipality has negative net water availability. Therefore the entire Borough is deemed a Current Deficit Area. The subwatershed that encompasses the largest portion of the Borough has the most severe deficit (-7.10 to - 1.00 MGD). The northwestern portion of the Borough has a deficit of -0.09 to -0.01 while the northeastern portion of the Borough has a deficit of -0.99 to -0.10.

The accompanying Land Use Capability Water Availability Map displays net water available if conditional availability were granted in the Borough's Current Deficit Areas. The Map shows that all of the Current Deficit Area subwatersheds are assigned a conditional net water availability of 0.01 to 0.05 MGD.

Wharton Borough Plans and Regulations

The Borough does not have a Natural Resources Inventory and will need to prepare one as part of the Plan Conformance process. ***As part of Plan Conformance Module 4, the Borough will have to complete a Natural Resource Inventory which will need to include documentation, in both text and mapped form, the RMP data as it relates to Water Resources Availability.***

Wharton's master plan documents address water resources availability only insofar as it pertains to the Borough's public water distribution system. The Public Utilities Element of the 1994 Master Plan outlines the Borough's

water system and concludes that the supply was adequate to meet the demands into the next century. In addition, a goal of the 2005 Reexamination Report is to support the overall philosophy of the Highlands Water Protection and Planning Act and encourages that future growth in the community be sensitive to environmental constraints. As the master plan documents were prepared well before the RMP was adopted, the Borough's documents do not address water resources availability as prescribed in the RMP. ***Therefore, in order to achieve consistency with the RMP, the Borough must prepare a Conservation Plan Element, which incorporates the relevant goals, policies, and objectives contained in the RMP. Also, the Land Use Element must be revised to assign density/intensity of development in accordance with the relevant goals, policies, and objectives contained in the RMP. Lastly, the Borough will also need to develop Water Use and Conservation Management Plans for all subwatersheds that will set priorities for use of available water (where net water availability is positive) and establish provisions to reduce or manage consumptive and depletive uses of ground and surface waters (where developed for Current Deficit Areas). These Plans may be incorporated within the Conservation Plan Element.***

The Borough's land use regulations discuss water availability in that those development applications required to submit an Environmental Impact Statement (EIS) are required to evaluate and provide an assessment of the impacts that the proposed development will have on the Borough's water supply and outlines steps to minimize any adverse impacts on this resource. Although these represent important actions taken within the Borough's planning program, additional regulations will need to be incorporated in order to be consistent with the RMP. ***The Borough must amend its land use regulations in conformance with the Water Use and Conservation Management Plans required for all subwatersheds, including the criteria for prioritizing and assigning conditional water availability, including the sue of water conservation, recycling, and reuse methods and devises for any redevelopment or development activity, including renovations to existing structures, to minimize consumptive water use.***

i. Prime Groundwater Recharge

Goals, Policies, & Objectives

The RMP 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. The Highlands Council has mapped the best areas for recharge, defined as the areas in each subwatershed that have the highest recharge rates and, in total, provide 40 percent of total recharge for that subwatershed. This is reflected in the Prime Ground Water Recharge Areas Map. Protection of these lands and the quality and quantity of recharge from them has a high priority in the RMP.

The RMP goals, policies and objectives relating to Prime Groundwater Recharge are as follows:

- To implement master plans and development review ordinances that protect Prime ground Water Recharge Areas and minimize the potential for disruption of recharge in such areas by development.
- To establish minimum site design guidelines and permissible uses within a Prime Ground Water Recharge Area, including identification of land use categories or other activities posing sufficient risk of contamination that are not allowed within Prime Ground Water Recharge Areas.
- To apply standards for development in Prime Ground Water Recharge Areas. Specifically, development shall not occur in Prime Ground Water Recharge Areas unless necessary to avoid Critical Habitat, Highlands Open Waters Buffers and Moderately and Severely Constrained Slopes. Any development approved to occur in a Prime Ground Water Recharge Area shall provide an equivalent of 125 percent of pre-construction recharge volumes for the affected Prime Ground Water Recharge Area of the site. The disruption of Prime Ground Water Recharge Area shall be minimized through implementation of Low Impact Development Best Management Practices, limited to no greater than 15 percent of the Prime Ground Water Recharge Area on the site, and preferentially sited on that portion of the Prime Ground

Water Recharge Area with the lowest ground water recharge rates and the lowest potential for aquifer recharge.

In order to assist municipalities with the implementation of these goals, policies and objectives, the Highlands Council will provide model municipal development regulations and master plan elements for the protection of Prime Ground Water Recharge Areas. In addition, the Highlands Council will develop technical guidance for Low Impact Development and other Best Management Practices.

RMP Analysis

The accompanying Prime Ground Water Recharge Areas Map displays the area within Wharton that have the highest recharge rates, based on soil, precipitation, land cover, and other factors. As shown the areas defined as Prime Ground Water Recharge Areas in Wharton, according to the RMP, are located primarily in the southwestern region of the Borough in the Irondale Mountain area. Small portions also exist in the northwest and eastern portions of the Borough.

Wharton Borough Plans and Regulations

The Borough does not have a Natural Resources Inventory and will need to prepare one as part of the Plan Conformance process. ***As part of Plan Conformance Module 4, the Borough will have to complete a Natural Resource Inventory which will need to include documentation, in both text and mapped form, the RMP data as it relates to Water Resources Availability.***

As indicated above, the Borough's master plan documents do not go into great detail regarding Prime Ground Water Recharge Areas, however the Irondale Mountain area was purchased in order to preserve the numerous environmental sensitivities and thereby the majority of the Borough's Prime Ground Water Recharge Areas will remain undeveloped.

The Borough's land use regulations at Chapter 267 address ground water recharge in the Borough. However, since they were prepared prior to the adoption of the RMP, they are not quite as consistent with that document. For example, the Storm Water Management Regulations do not define Prime Ground Water Recharge, as defined in the RMP, and therefore do not set forth specific requirements for these areas. In addition, whereas the RMP requires that any development in a Prime Ground Water Recharge Area provide an equivalent of 125 percent of pre-construction recharge volumes for the affected area of the site, the existing regulations only require that stormwater management measures maintain 100 percent of the average annual pre-construction recharge volume for the site. However the ground water recharge requirement does not apply to projects within the "urban redevelopment area" or to stormwater that has been exposed to pollutants or source material. ***As such, in order to achieve Plan Conformance, the Borough's Stormwater Management Plan Element and stormwater management regulations must be revised to identify Prime Ground Water Recharge Areas and incorporate permitted uses, minimum site design guidelines, and development standards in accordance with the RMP. The Borough must also prepare a Conservation Plan Element, which incorporates the relevant goals, policies, and objectives contained in the RMP. Lastly, the Borough must review the low impact development best management practices contained in its stormwater management regulations and, if necessary, amend them to address Prime Ground Water Recharge Areas.***

j. Water Quality

Goals, Policies, & Objectives

The RMP focuses on three aspects of water quality: 1) surface water quality, 2) ground water quality, and 3) wellhead protection. Each are discussed in more detail below.

Surface Water Quality: The Highlands Council, working with the NJDEP, prepared a map which displays the quality of surface water by HUC14 subwatershed throughout the Highlands region. This map, known as the Impaired Waters Overall Assessment by HUC14 Map, illustrates that waterbodies in 119 of the 183 subwatersheds in the Highlands region are impaired or threatened. The NJDEP, as required by the Federal Clean Water Act, has adopted regulatory, enforceable plans, known as Total Maximum Daily Loads (TMDLs) for many waterbodies to reduce pollutant levels and restore surface water quality.

Ground Water Quality: The NJDEP has identified several categories of ground water contamination areas, which provide information on ground water quality impacts related to natural ground water quality, permitted discharges or contaminated site remediation. Classification Exception Areas and Well Restriction Areas are areas where the ground water quality standards are exceeded. Currently Known Extent Areas are those areas known to be compromised because the water quality fails to meet drinking water and/or ground water quality standards. Deed Notice Exhibits document known soil contamination at levels that may restrict the use of, or access to, a property because soil contamination can lead to impacts on ground water quality. There is no equivalent to the TMDL process for ground water quality, but several programs exist to regulate ongoing discharges, reduce the potential for accidental discharges, and restore ground water quality from past pollution events.

Wellhead Protection: A Wellhead Protection Area (WHPA) is a mapped area around a public water supply well that delineates the horizontal extent of ground water captured by a public water supply well pumping at a specific rate over a specific time. A WHPA has three tiers which serve to mark the boundaries for priority areas for the protection of ground water quality. Tier 1 is a two-year time of travel (that is, the ground-water within this tier flows to the well within a two-year time period); Tier 2 is equivalent to a five-year time of travel; and Tier 3 is equivalent to a twelve-year time of travel. The WHPAs for public community water supply systems in the Highlands region are depicted in the Wellhead Protection Areas Map.

The RMP goals, policies and objectives relating to Water Quality are as follows:

- To adopt and implement water quality protections, including: the prohibition of land uses that would increase pollutant loadings to waters for which TMDLs have been adopted by the NJDEP unless in compliance with the relevant TMDL; the insurance that new land uses draining to a stream designated as impaired but lacking a TDML avoid increased pollutant loadings for the parameter or parameters for which a TDML is required; and the requirement that WQMPs, WMPs, or amendments demonstrated that the proposed service area will not directly or indirectly support development that would be in violation of an adopted TDML.
- To adopt and implement stormwater management controls, which require recharge of clean stormwater rather than contaminated stormwater wherever feasible, pretreatment of contaminated stormwater wherever its recharge is required, and implementation of Low Impact Development and Agricultural Best Management Practices standards.
- To implement municipal master plans and development regulations which incorporate relevant TMDLs, additional water quality protection measures, and wellhead protection for public water supply wells and nitrate standards.
- To develop and implement 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.
- To revise municipal master plans and development regulations to address wellhead protection requirements, including the restriction of development activities which pose threats to the water quality of public water supply wells and the implementation of best management practices for development activities and existing land use activities.

In order to assist municipalities with the implementation of these goals, policies and objectives, the Highlands Council will provide model municipal development regulations and master plan elements to protect the quality of ground and surface water and address wellhead protection requirements. In addition, the Highlands Council will develop technical guidance for Low Impact Development and other Best Management Practices.

RMP Analysis

As shown in the accompanying Impaired Waters Overall Assessment by HUC14 Map, the entire Borough has been deemed to have impaired water quality. The accompanying Wellhead Protection Areas Map displays the location of the Borough's public water supply wells and the associated two-year, five-year, and twelve-year protection tiers. As shown, Wharton contains three public water supply wells in the eastern and western portions of the municipality.

Wharton Borough Plans and Regulations

The Borough does not have a Natural Resources Inventory and will need to prepare one as part of the Plan Conformance process. ***As part of Plan Conformance Module 4, the Borough will have to complete a Natural Resource Inventory which will need to include documentation, in both text and mapped form, the RMP data as it relates to Surface Water Quality, Ground Water Quality, and Wellhead Protection Areas.***

Wharton's Stormwater Management Plan is fairly consistent with the RMP's goals, policies, and objectives relating to water quality. The Plan provides background discussion, goals, and design and performance standards for the protection of ground water and water supply resources, with reference to TMDLs and wellhead protection areas. The Borough's 1994 Master Plan also includes information on the Borough's public water supply well system however, only describing the locations and capacity of each well. ***Therefore the Borough's master plan documents must be supplemented with a Conservation Plan element, which incorporates the relevant goals, policies, and objectives contained in the RMP.***

The Borough's stormwater management regulations also appear to be generally consistent with the RMP's goals, policies and objectives related to water quality in that they require recharge of clean stormwater rather than contaminated stormwater wherever feasible, pretreatment of contaminated stormwater wherever its recharge is required, and implementation of Low Impact Development Best Management Practices standards. ***The Borough should review the model stormwater management regulations once released by the Highlands Council and, if necessary, supplement its existing regulations with additional standards set forth in the model.***

Presently, the Borough has not adopted a Wellhead Protection Ordinance and should prepare and adopt one that incorporates standards and restricted uses that are applicable to all of the Borough's wellhead protection areas. ***Also, the Borough's stormwater management regulations should incorporate Low Impact Development Best Management Practices standards which apply to all of the Borough's wellhead protection areas.***

Lastly, it does not appear that the Borough's land use regulations are consistent with the RMP's goals, policies and objectives related to TMDLs. There are currently no restrictions on land uses that would increase pollutant loadings to waters for which TMDLs have been adopted by the NJDEP, nor are there requirements that new land uses draining to a stream designated as impaired but lacking a TMDL avoid increased pollutant loadings. ***Therefore, the Borough must amend its land use regulations by incorporating water quality protection measures related to TMDLs, as set forth in the RMP.***

k. Public Water/Wastewater Utilities and Private Septic Systems

Goals, Policies, & Objectives

The Highlands Council developed three maps as part of the Land Use Capability Map Series that pertain to public water/wastewater utilities and private septic systems. The Land Use Capability Public Community Water Systems Map provides an overview of the areas of the Highlands region that are currently served by the public community water systems and their estimated net capacity. The Land Use Capability Domestic Sewerage Facilities Map provides an overview of the areas of the Highlands region that are currently served by the Highlands Domestic Sewerage Facilities and their estimated capacity. Highlands Domestic Sewerage Facilities include publicly-owned and investor-owned domestic wastewater treatment facilities. Finally, the Land Use Capability Septic System Yield Map identifies septic system yields by HUC14 subwatersheds, the results of which are based on the median nitrate concentration analysis illustrated in the Median Nitrate Concentration by HUC14 Map.

The RMP goals, policies and objectives relating to Public Water/Wastewater Utilities and Private Septic Systems are as follows:

- To prohibit the expansion or creation of public water supply systems, public wastewater collection and treatment systems and community on-site treatment facilities in the Preservation Area, unless approved through a Highlands Applicability Determination (HAD) or a HPAWA waiver.
- To prohibit the creation or extension of public water supply systems, public wastewater collection and treatment systems and community on-site treatment facilities within the Protection Zone, the Conservation Zone and the Environmentally Constrained Sub-Zones of the Planning Area, unless they are shown to be necessary to address threats to public health and safety from contaminated water supplies, cluster developments (subject to certain conditions), and development permitted through a Highlands Redevelopment Area or takings waiver.
- To allow for the creation or extension of public water supply systems or wastewater collection systems within the ECZ of the Planning Area to serve lands that are appropriate for designated TDR Receiving Zones, infill, redevelopment, to serve new areas for development that meet all other requirements of the requirements of the RMP, or to address the same provisions set forth above for the Protection Zone, the Conservation Zone and the Environmentally Constrained Sub-Zones.
- To require that new residential development served by public water supply systems and public wastewater collection and treatment systems be at a minimum density of ½ acre per dwelling unit for the developed part of the site (excluding wetlands, Highlands Open Waters buffers, and recreational space).
- To require that new non-residential development served by public water supply systems and public wastewater collection and treatment systems and community on-site be designed to target a floor area ratio (FAR) of 0.84 for the developed part of the site, to the maximum extent feasible.
- To 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.
- To use the median nitrate concentrations in ground water as a basis for establishing septic system densities in the Planning Area (septic system densities in the Preservation Area shall rely on the NJDEP Highlands Preservation Area rules). The median nitrate concentrations for the Protection and Conservation Zones within the Planning Area are 0.72 mg/L and 1.87 mg/L, respectively. The median that shall be used, on a project-by-project basis, for the ECZ in the Planning Area is 2 mg/L. New residential development using septic systems where clustering or conservation design techniques are employed shall have a gross density based on the nitrate dilution target appropriate for the Land Use Capability Zone, but with the density for the developed portion of the site based on a nitrate dilution target not to exceed 10 mg/L.

- To approve clustered development served by public water supply within the Protection Zone, the Conservation Zone, and the Environmentally-Constrained Sub-zones of the Planning Area only if the following conditions are met: development impacts are consistent with the RMP, including provision for mandatory clustering in ARAs; extension of existing public water system will occur only where the cluster development is within or adjacent to an Existing Area Served with available capacity; creation of a new public water system will occur only where such development is not within or adjacent to an Existing Area Served with available capacity; the development preserves at least 80% of the cluster project area in perpetuity for environmental protection or agricultural purposes and that the developed proportion occupies no more than 10% of the cluster project area if served by a public or community on-site wastewater system; and where the preserved land supports continued agricultural viability, requires best management practice, including development and implementation of a Farm Conservation Plan that address the protection of water and soil resources prepared by an appropriate agency and approved by the Bergen County Soil Conservation District.

In order to assist municipalities with the implementation of these goals, policies and objectives, the Highlands Council will provide a model Utility Services Element for a municipal master plan, which will include water and wastewater utility components. However, where a County Wastewater Management Plan has been approved by the NJDEP that includes the necessary information, it may be incorporated by reference. The Highlands Council will also prepare model development standards regarding water and wastewater utility capacity, service areas, service densities, environmental protection requirements, and other relevant issues. In addition, the Council will provide a build-out analysis tool, which can be used by municipalities to determine the ability of a water supply or wastewater utility to serve additional development.

RMP Analysis

The accompanying Land Use Capability Public Community Water Systems Map and Land Use Capability Domestic Sewerage Facilities Map illustrate the areas within Wharton that are currently served by potable water utilities and sewer utilities, respectively. It is noted that the Borough was required to verify the accuracy of this data during Plan Conformance Module 1 (Current Municipal Conditions & Build-Out Analysis); however as this has been a continuing effort with the Highlands Staff, the submitted data has not yet been approved by the Council and therefore its accuracy is still uncertain. Corrected data was submitted to the Council as RMP Updates, which, as discussed in more detail in the next chapter of this report, are factual corrections to the data in the RMP. ***The Borough should continue to modify and inform the Highlands Council of any additional areas being actively served by the water and sewer service providers.***

The accompanying Land Use Capability Septic System Yield identifies septic system yields in Wharton by HUC14 subwatersheds, the results of which are based on the median nitrate concentration analysis illustrated in the accompanying Median Nitrate Concentration by HUC14 Map.

Wharton Borough Plans and Regulations

As discussed in the previous chapter of this report, Wharton contracts with the Rockaway Valley Regional Sewer Authority (RVRSA) and is therefore subject to the RVRSA's Wastewater Management Plan (WMP). However, recognizing that this WMP is outdated, Morris County has been working with NJDEP since mid-2008 towards the preparation of County-wide Wastewater Management Plan that will be in conformance with the New Jersey Water Quality Planning Act (N.J.S.A. 58:11A-1 et seq.) and Water Quality Management Planning Rules (N.J.A.C.7:15-3.4). This revised Wastewater Management Plan is expected to be completed by September 15, 2009.

Based on discussions with Morris County officials, it is expected that although the County WMP will be consistent with NJDEP regulations, it will not be consistent with the RMP in that it will not remove properties

within the Protection Zone, the Conservation Zone, and the Environmentally Constrained Sub-Zones of the Planning Area from future sewer service areas. Instead, the County WMP will simply contain a notation that municipalities participating in the Highlands Plan Conformance will prepare their own WMP in conformance with the provisions of the RMP. ***Therefore, in order to achieve Plan Conformance, the Borough will need to prepare its own, updated Wastewater Management Plan, which restricts future creation or extension of sewer service based on Land Use Capability Zones, as set forth in the RMP. The Borough must also prepare a Utilities Plan Element, which incorporates the RMP goals, policies and objectives relating to water and wastewater. Lastly, the Borough must prepare land use regulations specifying where new or expanded public water supply systems, public wastewater collection and treatment systems and community on-site treatment facilities can be provided, based on the RMP goals, policies and objectives.***

With regard to density and development, the Borough needs to make major changes in order to be consistent with the RMP. For example, as set forth above, the RMP requires that new residential development served by public water supply systems and public wastewater collection and treatment systems are at a minimum density of ½ acre per dwelling unit for the developed part of the site. However, the majority of existing areas served by water and sewer in Wharton are located in the R-10, R-15, R-75, RM-75 and A zone districts, all of which require higher density development than prescribed in the RMP. Also, the RMP requires that new non-residential development served by public water supply systems and public wastewater collection and treatment systems be designed to target a floor area ratio (FAR) of 0.84 for the developed part of the site. However, all of the Borough's non-residential zone districts permit a maximum FAR between 35 and 40 percent, which is well under the 84 percent called for in the RMP. Finally, whereas the RMP requires that median nitrate concentrations in ground water be used as a basis for establishing septic system densities in the Planning Area, and that such septic system densities vary by Land Use Capability Zone, this is not reflected in the Borough's existing planning program. ***Therefore, in order to be consistent with the RMP, the Borough must amend its Land Use Plan Element and land use regulations to incorporate revised standards for density and intensity of development in zoning districts based on utility capacity and maximum septic system yields, as set forth in the RMP.***

1. Agricultural Resources

Goals, Policies, & Objectives

Agriculture is a vital component of the economy, culture and landscape of the Highlands region. It provides economic benefits through agricultural production and agri-tourism, provides a local food source to area residents, and helps maintain the rural character of Highlands communities. For purposes of identifying critical agricultural lands in the Highlands region, the Highlands Council examined the distribution, size and quality of existing farms. The most important agricultural resources were determined to be those farming landscapes that account for 250 acres or more of contiguous farmland, farms that include Important Farmland Soils, extent of the lands adjoining a farm that is in agricultural use, and concentrations of preserved farmland. These lands are spatially represented in the Agricultural Resource Area Map.

The RMP goals, policies and objectives relating to Agricultural Resources are as follows:

- To implement Agriculture Retention/Farmland Preservation Plan elements and development regulations promoting preservation in Agricultural Resource Areas (ARAs) and limiting non-agricultural uses within the ARA to those uses that support the preservation of farmland, avoid conflicts with agriculture, maintain and enhance the sustainability and continued viability of the agricultural industry, protect important farmland soils, and meet resource management and protection requirements of the RMP.
- To require mandatory clustering for residential development in an ARA, where it is not feasible to

preserve agricultural lands within the ARA by such methods as fee simple acquisition, easement acquisition, or a TDR Program. The use of clustering shall preserve at least 80 percent of the total cluster project area in perpetuity in agricultural use or for environmental protection.

- To permit limited development, including family and farm labor housing in ARAs, which are necessary to support the viability of the agricultural operation, upon a demonstration that the proposed development is consistent with the resource management and protection requirements.
- To prohibit the development of additional water and wastewater infrastructure in an ARA within the Conservation and Protection Zones of the Planning Area, unless it meets the provisions for water and wastewater utility creation and expansion in the RMP, and will maximize the preservation of agricultural lands within the ARA.
- To require any agricultural or horticultural development in the Preservation Area and the Planning Area which involves new agricultural impervious cover to the total land area of a Farm Management Unit of greater than 3 percent but less than 9 percent to develop and implement a Farm Conservation Plan.
- To require any agricultural or horticultural development in the Preservation Area and the Planning Area which involves new agricultural impervious cover to the total land area of a Farm Management Unit of 9 percent or greater to develop and implement a Resource Management System Plan.
- To include an Agriculture Retention/Farmland Preservation Plan (AR/FPP) element in municipal master plans and development regulations.
- To incorporate Right to Farm provisions into municipal master plans and development regulations where farmland preservation programs or a significant agricultural land base exist.

In order to assist municipalities with the implementation of these goals, policies and objectives, the Highlands Council will develop Cluster/Conservation Design Development Conformance Guidelines for incorporation into municipal planning programs. Such guidelines will address required AR/FPP elements and cluster ordinances. The Council will also provide a model Right to Farm ordinance.

RMP Analysis

According to the Agricultural Resource Area Map in the RMP, Wharton does not contain any such areas and therefore the map is not included in this report. It is noted that the Borough was required to verify the accuracy of this data during Plan Conformance Module 1(Current Municipal Conditions & Build-Out Analysis); however as this has been a continuing effort with the Highlands Staff, the submitted data has not yet been approved by the Council and therefore its accuracy is still uncertain. ***Therefore the Borough should verify that there are, in fact, no areas that meet the RMP definition of Agricultural Resource Area. If such areas are found within the municipality, the Borough will need to pursue RMP Updates and include in a NRI and revise its master plan and land use regulations in accordance with the RMP goals, policies, and objectives, as set forth above.***

If the analysis reveals that there are, in fact, no Agricultural Resource Areas, no planning program amendments would be required for Plan Conformance. ***However, it is recommended that the Borough consider whether an optional Agricultural Retention/Farmland Preservation Plan Element would be appropriate for Wharton.*** The Borough may elect to prepare such a plan in order to promote preservation of the other existing farms in the Borough. If so desired, the Borough could incorporate such a plan into the Land Preservation and Land Stewardship Plan Element.

m. Historic, Cultural, and Archaeological Resources

Goals, Policies, & Objectives

Historic, cultural, and archeological resources play a critical role in defining the character of the Highlands region. These resources will continue to attract people to the region and must be managed to take advantage of

their contribution to economic vitality and a high quality environment for the future. In collaboration with the State Historic Preservation Office (SHPO), the Highlands Council prepared a baseline inventory of the 618 historic and cultural resources within the Highlands region. This includes all properties listed on the New Jersey or the National Register of Historic Places, all properties which have been deemed eligible for listing on the New Jersey or National Register, and all properties for which a formal SHPO opinion has been issued. The inventory is illustrated in the Historic Preservation Map.

The RMP goals, policies and objectives relating to Historic, Cultural and Archaeological Resources are as follows:

- To include a Historic, Cultural and Archaeological Resource Protection element in municipal master plans and development regulations and update the Historic and Cultural Resources Inventory through local development reviews.
- To adopt a local historic preservation ordinance with minimum standards for the protection and enhancement of historic, cultural, and archaeological resources listed in the Highlands Historic and Cultural Resources Inventory in municipal development regulations.
- To require that all applications for site plan or subdivision approval shall include identification of any resources listed on the Highlands Historic and Cultural Resources Inventory and, where the municipality has adopted an historic preservation ordinance, comply with minimum standards for the preservation of the affected resources.
- To establish a local advisory historic preservation body to review and make recommendations on applications for development or municipal permits which affect historic, cultural, and archeological resources listed on the Highlands Historic and Cultural Resources Inventory.

In order to assist municipalities with the implementation of these goals, policies and objectives, the Highlands Council will provide model historic preservation standards for inclusion in municipal planning and regulatory documents, as well as other technical guidance in support of Plan Conformance activities.

RMP Analysis

The accompanying Historic Preservation Map identifies the locations of Wharton's historic, cultural, and archeological resources listed on the New Jersey or the National Register of Historic Places, deemed eligible for listing on the New Jersey or National Register, and/or have been issued a formal SHPO opinion. As shown, the Borough contains two historic districts, including the Morris Canal Historic Districts, as well as 4 historic properties.

Wharton Borough Plans and Regulations

The Borough's master plan documents address historic, cultural, and archeological resources to a limited extent. Specifically the 2005 Reexamination Report includes, as a general objective, that the Borough promote the conservation of historic sites. In addition the 2001 Open Space and Recreation Element contains more specific language regarding the preservation of historic and cultural sites and recommends that the Borough consider acquiring a residential dwelling located on Block 1704, Lot 2. It also includes an action plan for this property, if it were to be sold. ***However, an inventory of the Borough's historic resources has not been prepared and the Borough should consider amending its Master Plan to include an inventory of historic, cultural, and archeological resources and prepare and adopt an Historic Preservation Plan Element to incorporate the relevant goals, policies, and objectives contained in the RMP, as set forth above.***

The Borough's land use regulations do not contain any language regarding the preservation of historic, cultural, or archeological resources. ***Therefore, the Borough should review the Highlands Council's model historic preservation standards upon release and in order to achieve Plan Conformance, the Borough will have***

to adopt provisions that establish minimum standards for the protection and enhancement of its historic, cultural, and archeological resources.

n. Transportation

Goals, Policies, & Objectives

The Highlands transportation system is a complex network of roads, railways, and bridges that supports various modes of travel, including automobile, bus, rail, truck, bicycle and pedestrian. The major roadways and commuter rail lines in the Highlands region are shown on the Roadway Network Map and Transit Network Map, respectively.

One of the critical challenges of the transportation system is one of balancing regional transportation needs and environmental integrity. The region can achieve the goals outlined in the Highlands Act by encouraging a more compact mixed-use pattern for new development and redevelopment, creating more transportation choices, including mass transportation, bicycle, and pedestrian travel. The RMP supports Transit-Oriented Development as one example of a method that integrates mixed uses and transportation planning, by promoting more compact development in and around existing transportation infrastructure as an alternative to sprawl. The RMP also supports low impact development practices as a key to reducing surface runoff pollution, as well as context sensitive design as a strategy based on designing and planning projects in close collaboration with communities and stakeholders.

The RMP goals, policies and objectives relating to Transportation are as follows:

- To improve public safety through implementation of traffic calming measures in areas with high pedestrian activity.
- To provide for safe and efficient pedestrian connections and promote safe routes for children to travel to and from school.
- To promote more efficient use of existing road capacity by appropriate means, including increased bus, van, jitney, and car pool ridership.
- To 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 road improvements for increased motorized vehicle traffic capacity.
- To prohibit road improvements in areas for which a Growth Inducing Study demonstrates that proposed improvements do not support the RMP resource protection and smart growth policies and are likely to be growth-inducing for lands with limited or no capacity to support human development without a significant adverse impact on the Highlands ecosystem.
- To limit road improvements where roads are constrained by topography, forested lands, or the community character of land uses fronting on the road.
- To promote the use of mass transit and other alternative modes of transportation.
- To adopt a Circulation Plan element in municipal master plans that coordinates with the land use plan and demonstrates consistency with the RMP. Additionally, the Circulation Plan element and associated development regulations shall 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, as well as include an evaluation of shared parking opportunities to support transit, commuter, commercial and mixed-use neighborhoods.

In order to assist municipalities with the implementation of these goals, policies and objectives, the Highlands Council will provide a model Circulation Plan element for adoption onto municipal master plans, model

development standards relating to circulation, as well as other technical guidance in support of Plan Conformance activities.

RMP Analysis

The accompanying Roadway Network and Transit Network Maps depict the major roadways and public transportation opportunities within the Borough of Wharton. As shown on the Roadway Network Map, Wharton's major roadways include Interstate Route 80 and U.S. Route 15 in the northern portion of the Borough and U.S. Route 46 in the southern portion of the Borough. As shown on the Transit Network Map, the Borough is served by a number of private bus routes, with service along Interstate Route 80 and Route 15.

Wharton Borough Plans and Regulations

The Borough's planning documents contain limited information regarding transit and roadway networks. However the 2005 Reexamination Report encourages the location and design of transportation routes which promote the free flow of traffic while discouraging the location of facilities and routes which would result in congestion blight, or unsafe conditions. In addition, the 2008 Main Street Study and Improvement Plan recommends various street design improvements that promote a more pedestrian friendly, vehicular circulation. The Plan also addresses, in detail, pedestrian circulation, parking and vehicle circulation, streetscape design, and landscaping and site amenities in order to provide and encourage a more walkable, sustainable Main Street. In sum, the Main Street Study and Improvement Plan contains similar policies and recommendations needed to be consistent with the RMP.

The Main Street central business district is a unique area with unique opportunities and the Borough should consider, where appropriate, multi-modal transportation options with a focus on improving vehicular circulation, only where necessary. ***Therefore, in order to be consistent with the RMP, the Borough must prepare an up-to-date Circulation Plan Element which coordinates with changes to development density/intensity in the Land Use Element, and addresses all of the goals, policies, and objectives related to Transportation in the RMP.***

p. Redevelopment, Smart Growth, Housing and Community Facilities

Goals, Policies, & Objectives

As discussed throughout this report, future land use in the Highlands region is guided by the Land Use Capability Zones, which direct development away from environmentally sensitive and agricultural lands. However, the RMP also establishes a framework for future land use which involves the following:

- 1) The use of redevelopment in underutilized areas, brownfields and grayfields;
- 2) A smart growth approach to resource planning and management, which promotes land use patterns with a sense of community and place, multi-modal and alternative modes of transportation, sustainable economic development, and an equitable distribution of the costs and benefits of development;
- 3) The use of Low Impact Development, which is an Element of smart growth that uses a variety of landscape and design techniques to manage development activities to mitigate potential adverse impacts on the natural environment; and
- 4) Mechanisms to address the need for a full range of variety and choice in housing opportunities and access to community facilities, while protecting the character and natural resources of the region and acknowledging infrastructure limitations.

The RMP goals, policies and objectives relating to Redevelopment, Smart Growth, Housing and Community Facilities are as follows:

- To encourage Preservation Area redevelopment of sites with 70 percent or greater impervious surfaces or a brownfield in areas designated as Highlands Redevelopment Areas.
- To encourage redevelopment in the Conservation and Protection Zones and ECZ in the Planning Area of brownfields and grayfields and (and, in the ECZ, other previously developed areas) that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields.
- To require identification of any development, redevelopment, and brownfield opportunities in the Land Use Plan Element of municipal master plans, as appropriate.
- To amend municipal development regulations and zoning to enable project implementation of local redevelopment initiatives that are identified under municipal master plans, consistent with RMP smart growth and Low Impact Development policies and objectives.
- To encourage new development in the ECZ in the form of “center-based” and mixed-use development, where desired by the municipality. Densities of five dwelling units per acre or more is encouraged.
- To incorporate programs for community and neighborhood design into municipal master plans and development regulations, including minimum requirements for the use of Low Impact Development and sustainable design practice to support affordable maintenance of housing, particularly affordable housing; regulations and guidelines advocating mixed-use development and redevelopment; regulations and guidelines that incorporate form-based zoning to support compact, walkable communities; increased opportunities for pedestrian and bicycle networks; and regulations and guidelines advocating shared parking, driveways, and other infrastructure in order to limit paved surfaces.
- To require that municipalities develop an Economic Plan Element of the municipal master plan, which provides strategies for achieving sustainable and appropriate economic development and identifies any development, redevelopment, and brownfield opportunities.
- To adopt municipal Low Impact Development Best Management Practices where disturbance of Highlands resources is proposed to avoid or minimize the net loss of Highlands resources. The RMP provides site-specific techniques relating to site design, building orientation, landscaping, water conservation, stormwater management, and ground water recharge.
- To require the identification of existing and planned community facilities and encourage shared service opportunities as part of the local Community Facilities Plan Element.
- To require that municipalities implement both the resource protection requirements of the RMP and the NJ Supreme Court’s doctrine that every municipality in a “growth area” has a constitutional obligation to provide a realistic opportunity for a fair share of its region’s present and prospective needs for affordable housing.
- To require that municipalities update and adopt a Housing Element, Fair Share Plan, and implementing ordinance(s), which evaluate and provide for alternate mechanisms to address affordable housing obligations where RMP resource protection standards restrict the ability of planned but not built sites to be developed for affordable housing.

In order to assist municipalities with the implementation of these goals, policies and objectives, the Highlands Council will provide model Economic and Community Facilities Plan Elements. The Council will also provide a Smart Growth Manual and Community Development Design Guidebook, which can be used by municipalities to develop standards for mixed-use, infill, historic resources, green building, cluster and lot-averaging, jobs-housing balance, redevelopment, affordable housing, community facilities, and other smart growth issues. Lastly, the Council will develop technical guidance for Low Impact Development and other Best Management Practices.

Wharton Borough Plans and Regulations

Redevelopment: With regard to redevelopment, the Borough's 2005 Periodic Reexamination Report states that the Borough has initiated the redevelopment process with two former industrial sites in the municipality and recently approved the adaptive reuse of the Rongene site on East Dewey Avenue. Additionally, the Report states that there are other sites in the community that may also lend themselves to the application of the Local Redevelopment and Housing Law (LRHL) to foster the redevelopment of former industrial buildings and sites. However, Highlands Redevelopment is not limited to projects that are designated as areas in need of redevelopment under the LRHL.

As discussed in the 2008 Main Street Study and Improvement Plan, an analysis of the Main Street corridor was prepared wherein some segments of the corridor were found to be either undeveloped or underutilized. The Study further recommends that the area should be the focus of various improvement projects including façade modifications, streetscape design, signage and parking. It should be noted that the plan encourages the creation of a "special improvement district" in which a special assessment, on properties within this area, is imposed for the purpose of promoting the economic and general welfare of the district. A large number of the sites identified as 'Redevelopment and Infill Opportunities' in the accompanying Potential TDR Receiving Zones Map are parcels located along Main Street and included in the Main Street Study and Improvement Plan.

As part of Plan Conformance, it is recommended that the Borough continue to monitor and identify lands within the Borough that are appropriate for redevelopment, in accordance with the goals, policies and objectives set forth in the RMP, and to encourage the redevelopment of these lands through Land Use Plan and development regulation amendments.

Smart Growth: The Borough has made significant progress in the last few years towards meeting the RMP's goals, policies and objectives related to smart growth and low impact development. In the Existing Community Zone of the Planning Area, the RMP encourages community and neighborhood-based design that incorporates and utilizes Smart Growth techniques. Such measures include, varied housing options, mixed-uses, redevelopment, adaptive re-use of historic sites and structures and in-fill development. The RMP states that new development in the Existing Community Zone should be 'center-based,' meaning that development should be compact, walkable, and include a variety of uses. As stated previously, the Main Street Study and Improvement Plan contains exactly the kind of policies and recommendations needed to be consistent with the RMP.

The Borough also made progress with the adoption of its stormwater management regulations in 2005 which requires, to the maximum extent practicable, that minimum standards to control erosion, infiltration, ground water recharge, and stormwater runoff be met by incorporating low impact development best management practices strategies into site design. Examples of such low impact development strategies include the minimization of impervious surfaces and land disturbance, protection of natural drainage features and vegetation, provision of low-maintenance landscaping and vegetated open-channel conveyance systems, and provision of other site design features to minimize the use or exposure of pollutants at the site.

Although these efforts have moved the Borough toward consistency with the RMP, there is still much that the Borough must do to ensure that its entire planning program is in line with the RMP's goals, policies and objectives relating to smart growth and low impact development. ***For example, as part of the Land Use Plan amendment process, the Borough will need to analyze the ECZ portions of the municipality to determine if there are any other areas suitable for compact, mixed-use development and, if so, prepare master plans and development regulations encouraging their development in accordance with "center-based" design standards. Also, the Borough must amend its master plan and development regulations to incorporate additional Low Impact Development and sustainable design standards, such as green architecture, reuse of existing structures, indigenous landscaping, gray water reuse, solar energy use, and LEED (Leadership in Energy and Environmental Design) certification. The Borough should consult the Highlands Council's Smart Growth Manual and Community Development Design***

Guidebook in both of these efforts. Lastly, the Borough must prepare an Economic Plan Element of the master plan, which provides strategies for achieving sustainable and appropriate economic development and identifies any opportunities for infill development and redevelopment.

Housing and Community Facilities: With regard to housing, the Borough has a long history of providing for low- and moderate-income housing in accordance with the Council on Affordable Housing (COAH) regulations. As discussed in the previous chapter of this report, the Borough's most recent Housing Element and Fair Share Plan was prepared in 1998 and addressed Wharton's second round COAH obligation. The Plan incorporated a variety of features to address the community's low-to-moderate income housing obligation. The Plan included a provision for 20 units, occupied by low income households, to be rehabilitated and brought up to code, sought credit for a 100-unit senior housing project, and addressed the remaining obligation through the retention of two of the three inclusionary developments located on West Dewey Avenue and Irondale Road, both sites providing 39 lower income housing units. In addition the Borough sought credit for 9 units, occupied by lower income households, which were rehabilitated and brought up to code standards previously.

COAH adopted new rules in November 2004 for the implementation of their third round methodology; however these rules were subsequently determined, through litigation, to require modification. A new set of revised third round rules were adopted in 2008. Wharton, due to its participation in Highlands Plan Conformance, was granted an extension to prepare a new Housing Element and Fair Share Plan. ***The Borough must prepare and adopt a new Housing Plan no later than December 8, 2009.***

The Borough does not have a Community Facilities Plan Element, however its 2005 Reexamination Report, 1994 Master Plan, 2001 Open Space and Reaction Element, and 1998 Housing and Fair Share Plan piece together an inventory of some of Wharton's community facilities, parks and open space and recommendations for long-range improvements and preservation. ***As such, the Borough must prepare an updated Community Facilities Plan Element, which identifies existing and planned community facilities, and encourages shared service opportunities in accordance with the RMP's goals, policies and objectives.***

IV. STEPS TO BASIC PLAN CONFORMANCE

a. Basic versus Full Plan Conformance

The Highlands Council has created a two-step process for Plan Conformance. Under Full Plan Conformance, a municipality's planning program will reflect all elements of the RMP, as well as the results of specific environmental and planning analyses at the local level. However, in an effort to assist Preservation Area municipalities in achieving mandatory conformance within the 9 to 15 month deadline, the Highlands Council will grant "Basic" Plan Conformance once the municipality has satisfactorily completed all immediate mandatory conformance requirements.

Basic Plan Conformance does not relieve a municipality from the obligation to achieve Full Plan Conformance, but minimizes the upfront requirements and commits the municipality to fulfillment of the remainder in accordance with a Council-approved Action Plan and Implementation Schedule. Basic Plan Conformance will entitle the petitioner to all of the rights and benefits of Full Plan Conformance, provided that the Implementation Plan and scheduling requirements included therein are rigorously adhered to.

The process of Basic Plan Conformance is also available to the Planning Area, but is not mandatory and has no statutory deadline. However, municipalities in the Planning Area must adhere to the same December 8, 2009 deadline for Basic Plan Conformance in order to be eligible to receive extensions and adjusted growth projections from the Council on Affordable Housing, as described previously in this document. As noted previously in this report, the Borough of Wharton has already adopted a "Notice of Intent" indicating its intent to pursue Plan Conformance for the Planning Area by the December 8, 2009 deadline.

b. Key Requirements for Basic Plan Conformance

The following section details each of the key requirements for Basic Plan Conformance, and evaluates the Borough's planning program to determine the level of effort required to complete these key requirements:

1. Build-Out Analysis

The Borough is required to prepare a Build-Out Analysis, on a parcel-by-parcel basis, of the entire municipality. The analysis will involve a two-step process using models provided by the Highlands Council, which will correspond with Highlands Plan Conformance Modules 1 and 2, respectively.

In Module 1, the Highlands Council will provide the Borough with current information available regarding developable lands, preserved lands, and areas served with potable water and wastewater utilities, which will then be verified for accuracy by the Borough. Once the Highlands Council reviews the municipally-revised data, it will provide an updated Municipal Build-Out Geodatabase and local build-out Land Use Capability Map series capacity conditions based on existing local conditions.

In Module 2, the Borough will then use the Municipal Build-Out Geodatabase and local build-out Land Use Capability Map series capacity conditions to evaluate the extent to which the build-out for developable lands under current municipal zoning will exceed available capacity for water availability, public water and wastewater utilities, and septic system yield. This information will then be used to perform a "limiting factor" analysis regarding the developable lands and associated constraints. Overall, the exercise will highlight any conflicts between current municipal zoning and the RMP, and help establish appropriate zoning densities.

2. Environmental Resource Inventory

The Borough is required to create an Environmental or Natural Resources Inventory (ERI/NRI) by adoption of Highlands Resource Area Maps, along with descriptions of Highlands Resource categories as defined in the RMP. Highlands Resource categories include the following, where applicable: Forest Resources, Open Waters and Riparian Areas, Steep Slopes, Critical Habitat, Carbonate Rock Topography, Lakes, Ponds and Reservoirs, Water Resources, Agricultural Resources, Historic and Cultural Resources, Scenic Resources, and Infrastructure.

Wharton does not currently have a Natural Resource Inventory, and will have to complete an NRI as part of Plan Conformance Module 4. The Highlands Council will provide municipalities with a model Highlands ERI, along with tabular data, which can be used by Wharton to prepare a NRI.

3. Master Plan

The Borough is required to adopt a “Highlands Element” as a supplement to the municipal Master Plan. The Highlands Element is required to contain the following components: Policies, Goals, and Objectives; Land Use Plan; Housing Plan; Conservation Plan; Utility Services Plan; Circulation Plan; Open Space Plan; Agriculture Retention/Farmland Preservation Plan; Community Facilities Plan; Sustainable Economic Development; Historic Preservation Plan; Relationship of Master Plan to State/Regional/Local Plans; and an optional Development Transfer Plan.

As part of Plan Conformance Module 5, the Highlands Council will provide municipalities with a model Highlands Element for Basic Plan Conformance, which the Borough may adopt as a supplement to its existing Master Plan. The Borough may either retain the Highlands Element as a single document in the Master Plan, with the understanding that all portions of previously adopted plan components inconsistent therewith would be repealed, or the Borough may individually amend each plan component to reflect the contents of the Highlands Element.

What follows is a more detailed discussion of the Basic Plan Conformance requirements for each individual component of the Highlands Element:

(a) Policies, Goals, and Objectives

The Borough is required to adopt all broad-based, municipally-relevant Goals, Policies, and Objectives contained in the RMP, modified to apply at the local level. In all cases where the Goals, Policies, and Objectives are modified to apply to the local level, the resulting policies and objectives must be no less stringent than those of the RMP. Where the Goals, Policies, and Objectives in the RMP are discretionary, the Borough may choose which to incorporate, if any.

(b) Land Use Plan

For the Land Use Plan component, the Borough is required to adopt all applicable Highlands Land Use categories, including Areas, Zones, and Sub-Zones. The Borough is also required to adopt the complete Land Use Capability Map (LUCM) series, which includes the Land Use Capability Zone Map, Land Use Capability Water Availability Map, Land Use Capability Public Community Water Systems Map, Land Use Capability Domestic Sewerage Facilities Map, and Land Use Capability Septic System Yield Map. Additionally, the Borough must adopt, by reference, Highlands water and wastewater management provisions as the major criteria for assessing proposed density/intensity of development. The Borough is also required to incorporate the basis for cluster development standards into the municipal Land Use Plan. Lastly, the Borough is required to prepare an up-to-date developed land inventory map, or amend an existing map, if applicable.

(c) *Housing Plan*

For the Housing Plan component, the Borough is required to adopt all applicable RMP Goals, Policies, and Objectives as they relate to Housing, modified to apply to the local level. Additionally, the Borough must recognize and cross-reference to the existing housing plan, adopting a statement of commitment to: a) satisfying the municipality's constitutional obligation to provide for affordable housing; and b) doing so in accordance with the revised policies, goals and objectives.

As part of Highlands Plan Conformance Module 3, the Borough will be required to prepare a new Housing Element and Fair Share Plan addressing its 3rd Round requirements. This plan must incorporate the results of the Build-Out Analysis prepared as part of Plan Conformance Modules 1 and 2 in the determination of housing and employment projections for the Borough through 2018.

(d) *Conservation Plan*

For the Conservation Plan component, the Borough is required to adopt Highlands Resource Area Maps, as applicable, as well as Highlands Resource categories as defined in the RMP. The Borough is also required to adopt specific applicable RMP Goals, Policies, and Objectives, as they relate to each of the Highlands Resource categories, modified to apply at the local level. Additionally, the Borough will need to recognize and provide cross-reference to any applicable municipal resource maps, data, studies, environmental inventories, etc., that supplement, enhance, or refine Highlands resource information. Lastly, the Borough is required to incorporate the basis for requiring Low Impact Development and use of Best Management Practices throughout resource areas.

Since the Conservation Plan is intended to be based on the Highlands Environmental Resource Inventory (ERI), much of the required information set forth above can simply be duplicated from this effort. In addition, special studies prepared on behalf of the Borough over the years, can be used to supplement, where necessary, the data and provisions contained in the RMP.

(e) *Utility Services Plan*

For the Utility Services Plan, the Borough is required to adopt all applicable RMP Goals, Policies, and Objectives as they relate to Utilities, modified to apply to the local level. The Borough is also required to recognize adherence to adopted Highlands water and wastewater technical guidance documents, and emphasize that existing water and sewer service will not be extended: a) in the Preservation Area, unless approved through a Highlands Preservation Area Approval (HPAA) pursuant to N.J.A.C. 7:38 or deemed exempt from the Highlands Act, or b) in the Protection and Conservation Zones, unless in conformance with the RMP requirements. Lastly, the Borough is required to incorporate into the Utility Services Plan the basis for preparation and adoption of a water deficit management plan, wellhead protection plan, septic system management/maintenance plan, and stormwater management plan, to the extent that these do not exist or require amendment to gain consistency with the RMP.

(f) *Circulation Plan*

For the Circulation Plan, the Borough is required to adopt all applicable RMP Goals, Policies, and Objectives as they relate to Circulation, modified to apply to the local level. In addition, the Borough must ensure coordination with the Land Use Plan and incorporation of smart growth principles.

(g) *Open Space Plan*

For the Open Space Plan, the Borough is required to adopt all applicable RMP Goals, Policies, and Objectives as they relate to Recreation and Open Space, modified to apply to the local level. In addition, the Borough must cross-reference to any existing Open Space Plan. Lastly, the Borough is required to adopt an up-to-date, mapped Recreation and Open Space Inventory, unless an existing inventory remains current. The identification of these properties has already been done as part of Wharton Borough's Highlands Plan Conformance Module 1; they will simply need to be incorporated as part of the overall inventory.

(b) Agriculture Retention/Farmland Preservation Plan (if applicable)

An Agriculture Retention/Farmland Preservation Plan element is required to be adopted where applicable. In such cases, the municipality is required to adopt all applicable RMP Goals, Policies, and Objectives as they relate to Agricultural Resources, modified to apply to the local level. In addition, the municipality must cross-reference to any existing Farmland Preservation Plan, incorporate a commitment to the Right to Farm Act, and, if applicable and desired, incorporate a commitment to the protection and promotion of farm labor housing. Lastly, the municipality must also adopt an up-to-date, mapped inventory of preserved farmland, unless an existing inventory map remains current.

The Borough needs to determine whether an Agriculture Retention/Farmland Preservation Plan element would be appropriate for Wharton. It does not appear that such an element would be required for Wharton's Plan Conformance, given that no areas of the Borough are designated as an Agricultural Resource Area or Agricultural Priority Area in the RMP. However, the Borough may elect to prepare a Farmland Preservation Plan, should further analysis find preserved farm property. Although the identification of these properties will be included as part of the ERI updates, efforts to preserve additional farmland in the Borough will require the creation of this plan element.

(i) Community Facilities Plan

For the Community Facilities Plan, the Borough is required to adopt all applicable RMP Goals, Policies, and Objectives as they relate to Community Facilities, modified to apply to the local level. In addition, the Borough must incorporate energy efficiency goals and consideration of shared services.

(j) Sustainable Economic Development Plan

For the Sustainable Economic Development Plan, the Borough is required to adopt all applicable RMP Goals, Policies, and Objectives as they relate to Sustainable Economic Development, modified to apply to the local level. In addition, the Borough must provide for coordination with Highlands Council eco-, agri- and heritage tourism programs, where applicable.

(k) Historic Preservation Plan (if applicable)

A Historic Preservation Plan element is required to be adopted where applicable. In such cases, the municipality is required to adopt all applicable RMP Goals, Policies, and Objectives as they relate to Historic, Cultural, Archeological, and Scenic Resources, modified to apply to the local level. In addition, the municipality must include listing and discussion of any historic, cultural, archaeological, and scenic resources listed in Highlands Historic, Cultural, Archaeological, and Scenic Resources Inventories.

A review of the RMP indicates that a Historic Preservation Plan element is indeed required for Wharton Borough, given that it contains a number of properties listed on the Highlands Historic, Cultural, Archaeological, and Scenic Resources Inventories.

(l) Relationship of Master Plan to Other Plans, Including RMP

The Borough is also required to provide a policy statement indicating that proposed development and/or redevelopment in the municipality, as set forth in the municipal Master Plan, is consistent with the RMP.

(m) Development Transfer Plan (optional)

At the Borough's discretion, it may also prepare and adopt a Development Transfer Plan element. Creation of a Development Transfer Plan element would be the first step towards voluntary participation in the Highlands TDR Program, which is intended to preserve sensitive resources by permitting the transfer of development rights from areas identified for preservation (Sending Zones) to areas more appropriate for increased growth (Receiving Zones). The RMP identifies a number of areas in Wharton as Potential Areas for Voluntary TDR Receiving Zones, which are further categorized into Greenfield Opportunities and Redevelopment and Infill Opportunities. The Borough should, therefore, consider the potential benefits and drawbacks of Wharton's voluntary participation in the Highlands TDR Program. If the Borough decides to pursue voluntary participation, the Development Transfer Plan element would need to incorporate all applicable RMP Goals, Policies, and Objectives as they relate to Landowner Equity, modified to apply to the local level.

4. Land Use Ordinances/Development Regulations

The Borough is required to adopt a "Highlands Regulations" section as a supplement to the municipal Zoning/Land Development Ordinances. The Highlands Regulations are required to include the following sections: Definitions; Zone Districts and District Regulations; Application Submission Checklists; Notice Requirements; Highlands Council Review; Resource Area and Supporting Regulations; and Application Procedures.

As part of Plan Conformance Module 6, the Highlands Council will provide municipalities with sample Highlands Regulations, which the Borough may adjust as needed for municipal applicability. Alternatively, the Borough may propose specific revisions to existing regulations to achieve conformance with the RMP.

What follows is a more detailed discussion of the Basic Plan Conformance requirements for each individual section of the Highlands Regulations:

(a) Definitions

The Borough is required to adopt definitions of general terms specific to the RMP, including "Highlands Council", "areas", "zones" and "sub-zones". The Highlands Council will provide the Borough with these definitions so as to avoid interference with existing municipal zoning definitions. Where follow-up ordinances applicable only to non-exempt development require specific terms such as "impervious coverage", Highlands definitions will be incorporated therein along with clear indication that they pertain only to the ordinance in question.

(b) Zone Districts and District Regulations

The Borough is required to adopt a caveat applicable to existing municipal zone districts and district regulations, indicating that Highlands RMP Provisions will apply with respect to non-exempt development. Also, water and/or wastewater treatment availability and limitations on utility extensions may affect lot size and lot coverage requirements.

(c) Application Submission Checklists

The Borough is required to amend its application submission checklist ordinance to require that any application for development include the following items: 1) For applicants in the Preservation Area claiming an exemption from the Highlands Act, a Highlands Applicability Determination from the NJDEP; 2) For applicants in the Planning Area claiming an exemption from the Highlands Act, a Highlands Planning Area Exemption Determination from the Highlands Council; 3) For non-exempt development applications in the Preservation Area, a Highlands Preservation Area Approval (HPAA) or HPAA with waiver from the NJDEP; 4) For all non-exempt development applications, a Highlands Consistency Determination from the Highlands Council indicating that the proposal is consistent with the RMP or can be revised to achieve consistency via specific changes outlined therein; and 5) For non-exempt development applications having received a Consistency Determination indicating that specific revisions are required to achieve consistency, a certification from the applicant's professional(s) affirming that the plans have been revised to specifically address the inconsistencies identified by the Highlands Council and that to the best of his/her knowledge, they have achieved consistency.

(d) Notice Requirements

The Borough is required to amend its notice requirements to require the following: 1) that, for any non-exempt development applications, the applicant shall provide notice to the Highlands Council at least 10 days prior to the date on which the application is scheduled for consideration by the Planning or Zoning Board; 2) that such applications be deemed complete prior to scheduling, and that a copy of the complete application be sent to the Highlands Council along with such notice; and 3) that the applicant provide copies of any subsequent revisions to such applications to Highlands Council at the same time these are provided to the reviewing board.

(e) Highlands Council Review

The Borough is required to include a requirement that, in the case of any non-exempt development applications, the reviewing board shall provide a certified copy of the fully-executed resolution memorializing its final decision in the matter to the Highlands Council within 10 days of its adoption.

(f) Resource Area and Supporting Regulations

The Borough is required to adopt, at minimum, Highlands ordinance requirements regulating water and wastewater, Highlands resources, and all Highland Resource Areas located within the municipality. These will apply to all non-exempt development. Resource regulations will require that development applications include maps and plans identifying and delineating Highlands resources, and that application approvals be conditioned upon imposition of conservation easements to protect them, to the extent that the reviewing board's final decision does not approve their disturbance. Resource area regulations will ultimately cover the following, where applicable: steep slopes, forest areas, open waters and riparian areas, ground water recharge management, wellhead protection, stormwater management, Right to Farm, critical habitat, carbonate rock areas, agricultural resources, lake management, Low Impact Development, and historic, cultural, and scenic resources.

(g) Application Procedures

The Borough is required to adopt procedural requirements applicable to resource area applications and review thereof. Also, the Borough must prepare municipal application forms (as needed) and fee/escrow ordinance amendments (as appropriate), and determine and assign responsibility for review of application packages pertinent to these areas by the qualified individual(s).

5. RMP Updates

The Highlands Council recognizes that the various maps, data and technical information contained in the RMP was created at a regional scale and that new, updated or additional information may be available at the county or municipal level. Therefore, the RMP Updates Program was designed to allow counties and municipalities to submit factual revisions, corrections or updates to the RMP. For Basic Plan Conformance, the Borough is required to prepare a list of proposed RMP Updates, along with the justification for each.

Examples of RMP Updates would be development or other lands use changes that have occurred since preparation of the LUCM Series, updates and corrections to Existing Areas Served for water and wastewater utilities, additional preserved lands, topographic mapping enabling a more precise delineation of steep slopes, modifications to Highlands resource boundaries, and updates regarding transportation facilities. Proposed RMP Updates will be reviewed by the Highlands Council for accuracy and used to determine whether changes to the LUCM Series are appropriate.

6. Map Adjustments

The Map Adjustment Program was designed to allow for the exchange of additional planning information between the Highlands Council and counties/municipalities in order to ensure sound regional planning in support of the RMP and the Highlands Act. More specifically, a Map Adjustment is a Council-approved adjustment of the Land Use Capability Zone Map designations and shall only be undertaken after other means, such as RMP Updates and Highlands Act waivers and exemptions, have proven inadequate to address the underlying planning issue. For Basic Plan Conformance, the Borough is required to submit requests for Map Adjustments, if applicable, along with the justification for each.

An example of a Map Adjustment might include modification of a Conservation Zone immediately adjacent to an Existing Community Zone (ECZ), where utilities and water availability could support extension of the ECZ to accommodate a fully conforming TDR Receiving Zone.

7. Municipal Self-Assessment and Implementation Schedule

At the time the Borough submits its Petition for Basic Plan Conformance, it is required to include a Municipal Self-Assessment (MSA) Report. The MSA Report must list and discuss all changes to the Borough's planning program that will remain necessary after Basic Plan Conformance in order to achieve Full Plan Conformance. The MSA Report must also include a proposed Implementation Schedule, which indicates the timeframe for anticipated completion of each outstanding item leading to Full Plan Conformance.

As part of Plan Conformance Module 7, the Highlands Council will provide municipalities with a sample resolution (required for the Preservation Area) and a sample ordinance (required for the Planning Area) for municipal adoption, which, when accompanied by the rest of the aforementioned key requirements, will constitute a complete Petition to the Highlands Council for Plan Conformance.

V. ANTICIPATED COSTS & PROJECT TIMEFRAMES

As outlined in the previous section of this report, the Borough of Wharton has until December 8, 2009 to complete the steps necessary for Basic Plan Conformance and submit its Petition to the Highlands Council. The following table details each of the key requirements for Basic Plan Conformance and the estimated deadline and cost associated with each. The table also identifies the base amount of grant funding available from the Highlands Council for each requirement.

**Estimated Timeframes and Costs for Basic Plan Conformance
Borough of Wharton**

Requirement	Estimated Deadline*	Estimated Cost	Highlands Base Grant Amount
Conduct first step of Highlands Build-Out Analysis (Module 1) and submit to Highlands Council for review	March 6, 2009 (completed)	\$ <u>15,000</u>	\$15,000
Conduct second step of Highlands Build-Out Analysis (Module 2) and submit to Highlands Council for review	May, 2009 (completed)	\$ <u>10,000</u>	\$10,000
Prepare draft Housing Element and Fair Share Plan (Module 3) and submit to Highlands Council for review	August, 2009	\$ <u>7,500</u>	\$7,500
Prepare draft Environmental Resource Inventory (Module 4) and submit to Highlands Council for review	June 30, 2009 (completed)	\$ <u>2,000</u>	\$2,000
Prepare draft Highlands Master Plan Element (Module 5) and submit to Highlands Council for review	October, 2009	\$ <u>2,500</u>	\$2,500
Prepare draft Highlands Development Regulations (Module 6) and submit to Highlands Council for review	November, 2009	\$ <u>5,000</u>	\$5,000
Adopt Housing Element and Fair Share Plan	November, 2009	\$ <u>1,000</u>	--
Prepare Municipal Self-Assessment (MUA) and Implementation Schedule (Module 7) and submit with draft plans, ordinances, RMP Updates, Map Adjustments, and Petition for Plan Conformance to Highlands Council	December 8, 2009	\$ <u>8,000</u>	\$8,000
Submit Petition for Substantive Certification to COAH	December 8, 2009	\$ <u>1,000</u>	--

* Except where **bold**, which indicates mandatory deadline set by the Highlands Council.

APPENDICES

APPENDIX A-2:
BOROUGH OF WHARTON INITIAL ASSESSMENT GRANT REPORT ADDENDUM

Instructions: Complete chart below, indicating for each subject area, whether current municipal planning documents include language concerning the applicable topic (insert “yes,” “no,” or “N/A,” for not applicable), whether or not existing language covers and includes all RMP provisions (insert “yes,” “no,” or “N/A,” for not applicable), and what actions are needed for Plan Conformance (i.e., “revise applicable ordinance to include RMP provisions,” “develop new ordinance to address topic,” “supplement ERI, Master Plan and Ordinances to include topic and RMP provisions,” or “none”).

	EXISTING ERI/NRI		EXISTING MASTER PLAN		EXISTING LAND USE ORDINANCES		Action(s) Required
	Includes Topic?	Addresses RMP?	Includes Topic?	Addresses RMP?	Includes Topic?	Addresses RMP?	
Forest Resources	No	No	No	No	Yes	No	Prepare NRI and revise MP and LUO to include topic and incorporate RMP provisions; Major revisions necessary
Highlands Open Waters & Riparian Areas	No	No	Yes	No	Yes	No	Prepare NRI and revise MP and LUO to incorporate RMP provisions and include topic; Major revisions necessary.
Steep Slopes	No	No	Yes	No	Yes	No	Revise NRI, MP, and LUO to incorporate RMP provisions; Minor revisions necessary.
Critical Habitat	No	No	No	No	No	No	Prepare NRI and revise MP and LUO to incorporate RMP provisions and include topic; Major revisions necessary.
Carbonate Rock	N/A	N/A	N/A	N/A	N/A	N/A	Does not apply; no revisions necessary
Lake Management	No	No	No	No	No	No	Prepare NRI and LUO and revise MP to include topic and incorporate RMP provisions; Major revisions necessary.
Water Resources Availability	No	No	Yes	No	Yes	No	Prepare NRI and revise MP and LUO to include topic and incorporate RMP provisions; Major changes necessary
Prime Groundwater Recharge	No	No	No	No	Yes	No	Prepare NRI, revise MP, and supplement LUO to include topic and incorporate RMP

	EXISTING ERI/NRI		EXISTING MASTER PLAN		EXISTING LAND USE ORDINANCES		Action(s) Required
	Includes Topic?	Addresses RMP?	Includes Topic?	Addresses RMP?	Includes Topic?	Addresses RMP?	
							provisions; Major changes necessary.
Water Quality	No	No	No	No	Yes	No	Prepare NRI and revise MP and LUO to include topic and incorporate RMP provisions; Major changes necessary
Wellhead Protection	No	No	No	No	No	No	Prepare NRI and revise MP and LUO to include topic and incorporate RMP provisions; Major changes necessary
Stormwater Management	No	No	No	No	Yes	No	Prepare NRI and revise MP and LUO to include topic and incorporate RMP provisions; Major changes necessary.
Water/Wastewater Utilities	No	No	Yes	No	Yes	No	Prepare NRI and revise MP and LUO to include topic and incorporate RMP provisions; Major changes necessary.
Septic Densities	No	No	Yes	No	Yes	No	Prepare NRI and revise and supplement LUO and MP to include topic and incorporate RMP provisions; Major changes necessary
Low Impact Development	No	No	Yes	No	Yes	No	Revise MP and LUO and prepare NRI to include topic and include topic and incorporate RMP provisions; Moderate changes necessary
Transportation	No	No	Yes	No	No	No	Supplement NRI and MP and supplement LUO to include topic and incorporate RMP provisions; Moderate changes necessary
Land Pres/Stewardship	No	No	Yes	No	No	No	Prepare NRI and revise MP and LUO to include topic and incorporate RMP provisions; Major changes necessary
Agricultural Resources	N/A	N/A	N/A	N/A	N/A	N/A	Does not apply; No changes necessary
Cluster Development	No	No	No	No	No	No	Prepare NRI, MP, and LUO to include topic and incorporate RMP provisions; Major

	EXISTING ERI/NRI		EXISTING MASTER PLAN		EXISTING LAND USE ORDINANCES		Action(s) Required
	Includes Topic?	Addresses RMP?	Includes Topic?	Addresses RMP?	Includes Topic?	Addresses RMP?	
							changes necessary
Community Facilities	No	No	Yes	No	No	No	Prepare NRI and MP and revise LUO to include topic and incorporate RMP provisions; Major changes necessary
Sustainable Economic Development	No	No	Yes	No	No	No	Prepare NRI and revise MP and LUO to include topic and incorporate RMP provisions; Major changes necessary
Historic, Cultural, Archaeological , and Scenic Resources	No	No	Yes	No	No	No	Prepare NRI and revise MP and LUO to include topic and incorporate RMP provisions; Major changes necessary

APPENDIX A-3: HIGHLANDS ACT EXEMPTIONS

The activities listed below are exempt from meeting the requirements of the Highlands Act, Regional Master Plan (RMP), and any NJDEP or municipal regulations adopted to be in conformance with the RMP:

1. The construction of a single-family dwelling, for an individual's own use or the use of an immediate family member, on a lot owned by the individual on August 10, 2004 or on a lot for which the individual has on or before May 17, 2004 entered into a binding contract of sale to purchase that lot;
2. The construction of a single-family dwelling on a lot in existence on August 10, 2004, provided that the construction does not result in the ultimate disturbance of more than one acre of land or a cumulative increase in impervious surface by one-quarter acre or more;
3. A major Highlands development that received on or before March 29, 2004:
 - a. one of the following approvals pursuant to the "Municipal Land Use Law,":
 - i. Preliminary or final site plan approval;
 - ii. Final municipal building or construction permit;
 - iii. Minor subdivision approval where no subsequent site plan approval is required; or
 - iv. Preliminary or Final subdivision approval where no subsequent site plan approval is required; and
 - b. At least one of the following DEP permits, if applicable to the proposed major Highlands development:
 - . A permit or certification pursuant to the "Water Supply Management Act";
 - i. A water extension permit or other approval or authorization pursuant to the "Safe Drinking Water Act";
 - ii. A certification or other approval or authorization issued pursuant to the "The Realty Improvement Sewerage and Facilities Act (1954)";
 - iii. A treatment works approval pursuant to the "Water Pollution Control Act,"); or
 - c. One of the following DEP permits, if applicable to the proposed major Highlands development, and if the proposed major Highlands development does not require one of the permits listed above:
 - . A permit or other approval or authorization issued pursuant to the "Freshwater Wetlands Protection Act";
 - i. A permit or other approval or authorization issued pursuant to the "Flood Hazard Area Control Act
 - d. The exemption provided in c. above applies only to the land area and the scope of the major Highlands development addressed by the qualifying

approvals applicable to the project and described in a-c. above and shall expire:

- . If any of those qualifying approvals expire;
 - i. If construction beyond site preparation does not commence within three years after August 10, 2004; or
 - ii. If construction ceases for a cumulative total of one year after August 10, 2007.
4. Reconstruction of any building or structure for any reason within 125 percent of the footprint of the lawfully existing impervious surfaces on the site, provided that the reconstruction or redevelopment does not increase the lawfully existing impervious surface by one-quarter acre or more. This exemption shall not apply to the reconstruction of any agricultural or horticultural building or structure for a non-agricultural or non-horticultural use;
 5. Any improvement to a legally existing single-family dwelling in existence on August 10, 2004, including but not limited to an addition, garage, shed, driveway, porch, deck, patio, swimming pool, or septic system as long as the improvement maintains the use as a single-family dwelling as defined by code or ordinance in the municipality in which the dwelling is located and does not permit the use of the structure as a multiple unit dwelling;
 6. Any improvement, for non-residential purposes, to a place of worship owned by a nonprofit entity, society or association, or association organized primarily for religious purposes, or a public or private school, or a hospital, in existence August 10, 2004, including but not limited to new structures, an addition to an existing building or structure, a site improvement, or a sanitary facility;
 7. An activity conducted in accordance with an approved woodland management plan issued pursuant to the Farmland Assessment Act, N.J.S.A.54:4-23.3 or for public lands, the normal harvesting of forest products in accordance with a forest management plan approved by the State Forester;
 8. The construction or extension of trails with non-impervious surfaces (use definition of "impervious" in the act to establish the meaning of non-impervious) on publicly owned lands or on privately owned lands where a conservation or recreational use easement has been established and filed with the deed for the lots on which the easement exists;
 9. The routine maintenance and operations, rehabilitation, preservation, reconstruction, or repair of transportation or infrastructure systems by a State entity or local government unit, provided that the activity is consistent with the goals and purposes of the Highlands Act and does not result in the construction of any new through-capacity travel lanes;
 10. The construction of transportation safety projects and bicycle and pedestrian facilities by a State entity or local government unit, provided that the activity does not result in the construction of any new through-capacity travel lanes;

11. The routine maintenance and operations, rehabilitation, preservation, reconstruction, repair, or upgrade of public utility lines, rights of way, or systems, by a public utility, provided that the activity is consistent with the goals and purposes of the Highlands Act;
12. The reactivation of rail lines and rail beds existing on August 10, 2004;
13. The construction of a public infrastructure project approved by public referendum prior to January 1, 2005 or a capital project approved by public referendum prior to January 1, 2005;
14. The mining, quarrying, or production of ready mix concrete, bituminous concrete, or Class B recycling materials occurring or which are permitted to occur on any mine, mine site, or construction materials facility existing on June 7, 2004;
15. The remediation of any contaminated site pursuant to N.J.S.A. 58:10B-1 et seq.;
16. Any lands of a federal military installation existing on August 10, 2004 that lie within the Highlands Region; and
17. A major Highlands development located within an area designated as Planning Area 1 (Metropolitan), or Planning Area 2 (Suburban), as designated pursuant to the State Planning Act, N.J.S.A. 52:18A-196 et seq. as of March 29, 2004, that on or before March 29, 2004 has been the subject of a settlement agreement and stipulation of dismissal issued by the Superior Court, or a builder's remedy issued by the Superior Court, to satisfy the constitutional requirement to provide for the fulfillment of the fair share obligation of the municipality in which the development is located. This exemption shall expire if construction beyond site preparation does not commence within three years after receiving all final approvals required pursuant to the "Municipal Land Use Law," N.J.S.A. 52:18A-196 et seq.

MAPS



Rockaway Township

Jefferson Township

Township of Roxbury

Township of Mine Hill

Town of Dover

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  Lake Management Area
-  Lakes Greater Than 10 Acres

Dwg. Title <p style="text-align: center;">Lake Management Area Map</p>	Project No. <p style="text-align: center;">2210.03</p>	Dwg. Date <p style="text-align: center;">04/29/09</p>	Drawn By <p style="text-align: center;">AP</p>
 BURGIS ASSOCIATES, INC. PROFESSIONAL PLANNERS / LANDSCAPE ARCHITECTS 25 WESTWOOD AVENUE WESTWOOD, N.J. 07675 201-666-1811 FAX: 201-666-2599	Project Title <p style="text-align: center;">Highlands Initial Assessment Report</p> <small>BOROUGH OF WHARTON MORRIS COUNTY, NEW JERSEY</small>	Sheet No. <p style="text-align: center;">1 of 1</p>	Drawing No. <p style="text-align: center;">LMA</p>



Rockaway Township

Jefferson Township

Township of Roxbury

Township of Mine Hill

Town of Dover

Net Water Availability (Conditional) by HUC14, Million Gallons Per Day

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  0.01 to 0.05



Dwg. Title
Land Use Capability Water Availability Map

Project No.
2210.03

Dwg. Date
05/11/09

Drawn By
AS

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Project Title
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BOROUGH OF WHARTON
MORRIS COUNTY, NEW JERSEY

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1 of 1

Drawing No.
LUCM2



Jefferson Township

Rockaway Township

Township of Roxbury

Township of Mine Hill

Town of Dover

Available Capacity in Million Gallons Per Month

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  No Capacity

Dwg. Title Land Use Capability Public Community Water Systems Map	Project No. 2210.03	Dwg. Date 05/11/09	Drawn By AS
 BURGIS ASSOCIATES, INC. PROFESSIONAL PLANNERS / LANDSCAPE ARCHITECTS 25 WESTWOOD AVENUE WESTWOOD, N.J. 07675 201-666-1811 FAX: 201-666-2599	Project Title Highlands Initial Assessment Report <small>BOROUGH OF WHARTON MORRIS COUNTY, NEW JERSEY</small>	Dwg. Scale N.T.S.	Sheet No. 1 of 1 Drawing No. LUCM3
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Jefferson Township

Rockaway Township

Township of Roxbury

Township of Mine Hill

Town of Dover

Current Available Waste Water Capacity in Million Gallons Per Day

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  0.10 to 0.49

Dwg. Title
Land Use Capability Domestic Sewerage Facilities Map

Project No.
2210.03

Dwg. Date
5/11/09

Drawn By
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MORRIS COUNTY, NEW JERSEY

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Drawing No.
LUCM4



Rockaway Township

Jefferson Township

Township of Roxbury

Township of Mine Hill

Town of Dover

Septic System Yield by HUC14

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  Protection Zone 0 to 10



Dwg. Title

Land Use Capability Septic System Yield

Project No.

2210.03

Dwg. Date

5/11/09

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BOROUGH OF WHARTON
MORRIS COUNTY, NEW JERSEY

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Jefferson Township

Township of Roxbury

Township of Mine Hill

Town of Dover

Median Nitrate Concentrations (Milligrams Per Liter)



Highlands Preservation Area



Municipal Boundaries



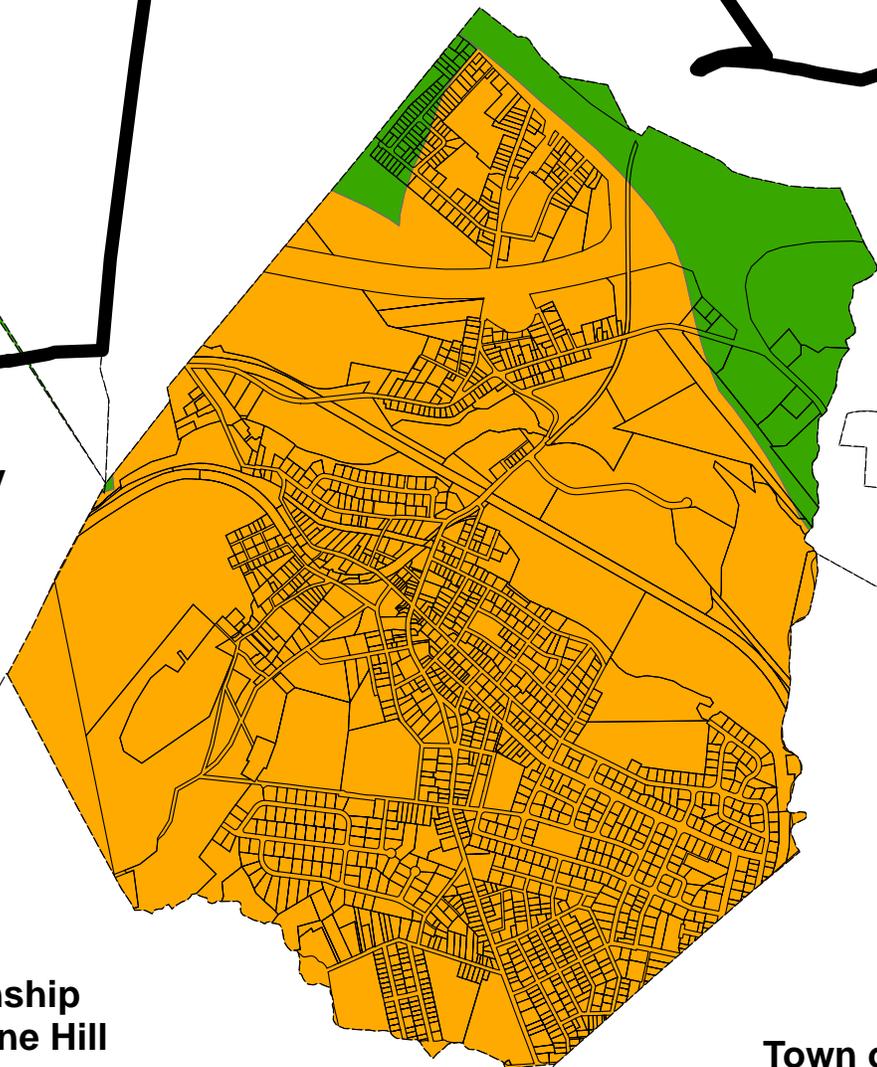
Parcels



0.17 to 0.72



0.73 to 1.87



Dwg. Title
Median Nitrate Concentration by HUC14 Map

Project No.
2210.03

Dwg. Date
5/11/09

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BOROUGH OF WHARTON
MORRIS COUNTY, NEW JERSEY

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Drawing No.
MNC



Jefferson Township

Rockaway Township

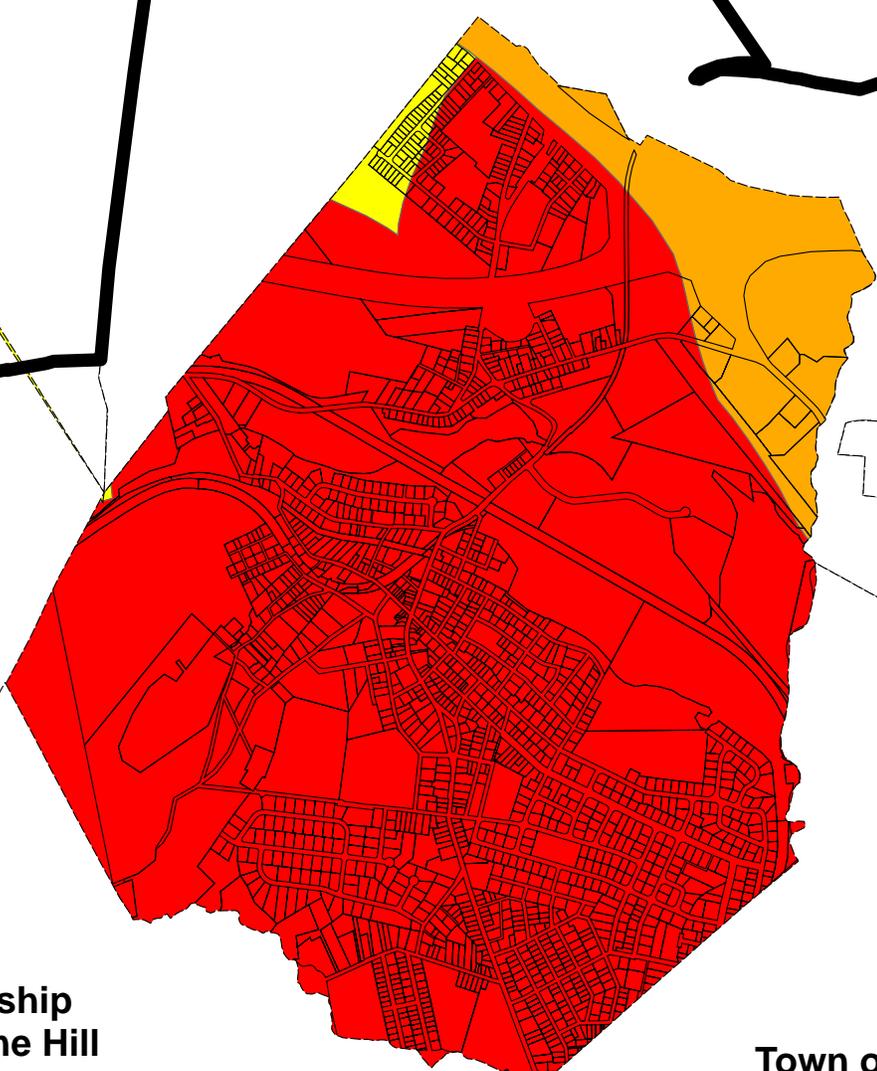
Township of Roxbury

Township of Mine Hill

Town of Dover

Million Gallons Per Day

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  -7.10 to -1.00
-  -0.99 to -0.10
-  -0.09 to -0.01



Dwg. Title

Net Water Availability by HUC 14 Map

Project No.

2210.03

Dwg. Date

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Rockaway Township

Township of Roxbury

Township of Mine Hill

Town of Dover

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  Prime Ground Water Recharge Areas

Dwg. Title
Prime Ground Water Recharge Areas Map

Project No.
2210.03

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05/11/09

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 MORRIS COUNTY, NEW JERSEY

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1 of 1

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Rockaway Township

Jefferson Township

Township of Roxbury

Township of Mine Hill

Town of Dover

 Highlands Preservation Area

 Municipal Boundaries

 Parcels

Preserved Lands

 COUNTY

 MUNICIPAL

Dwg. Title

Preserved Lands Map

Project No.

2210.03

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04/29/09

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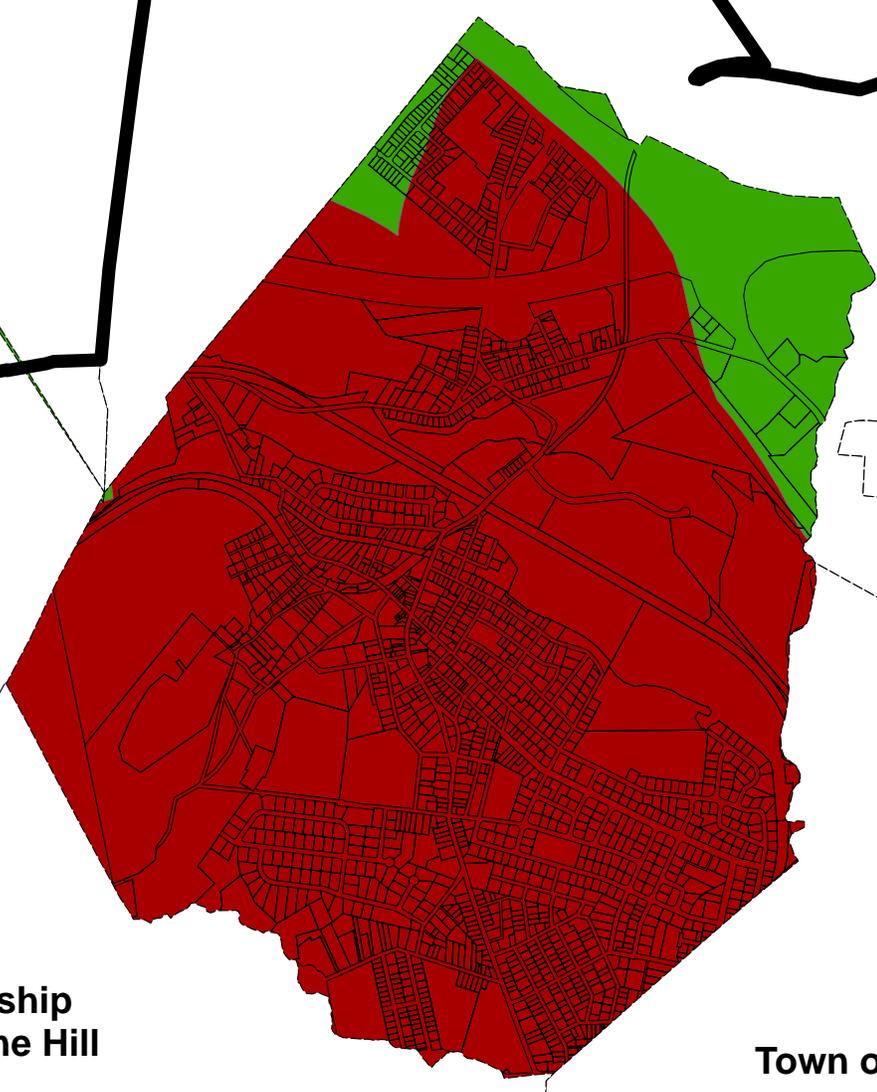
Township of Roxbury

Township of Mine Hill

Town of Dover

Riparian Integrity

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  High
-  Low



Dwg. Title

Riparian Integrity by HUC 14 Map

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2210.03

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BOROUGH OF WHARTON
MORRIS COUNTY, NEW JERSEY

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Jefferson Township

Township of Roxbury

Township of Mine Hill

Town of Dover

Riparian Areas

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  Riparian Areas

Dwg. Title

Riparian Areas Map

Project No.

2210.03

Dwg. Date

04/29/09

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MORRIS COUNTY, NEW JERSEY

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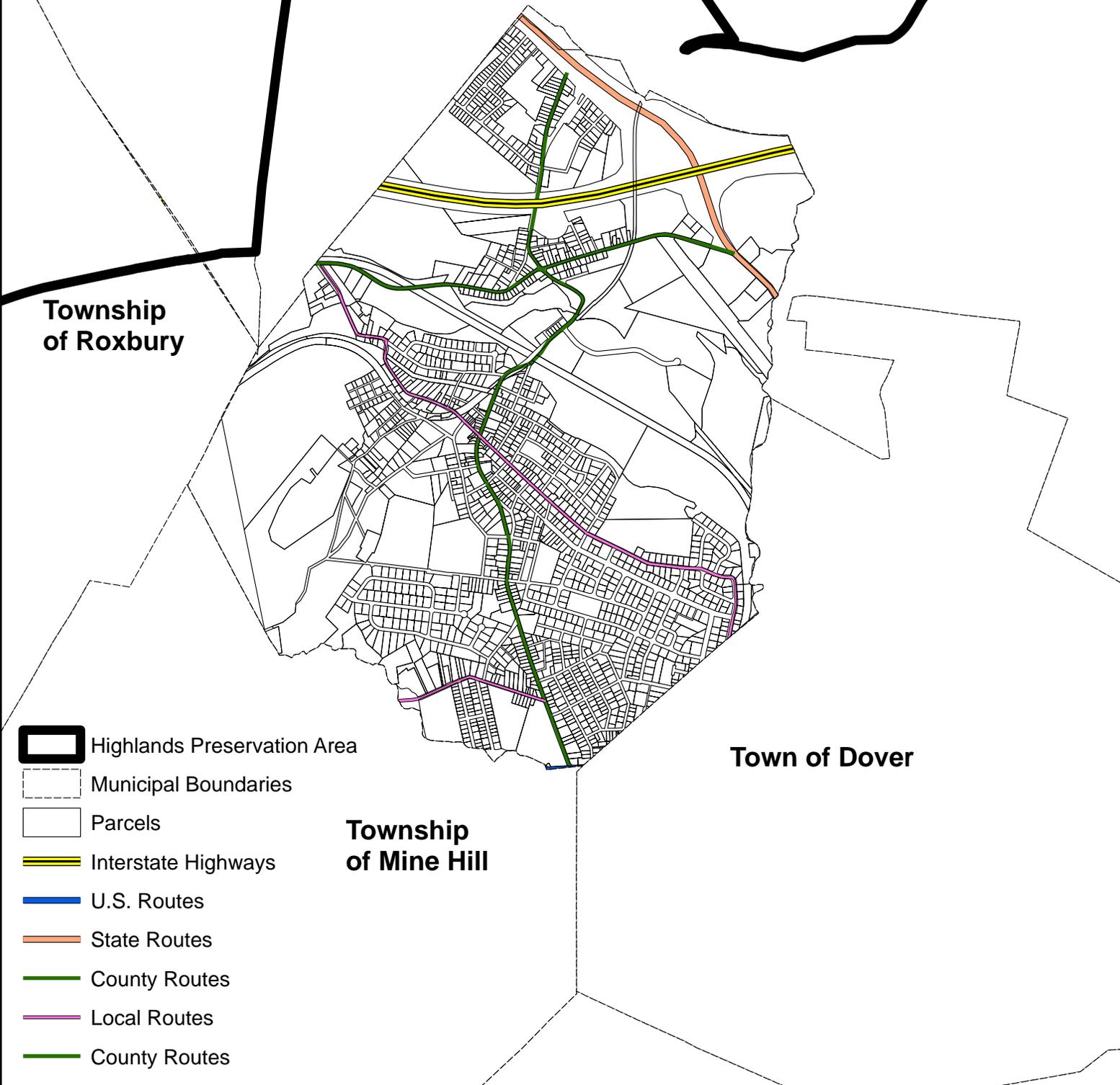
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Rockaway Township

Jefferson Township

Township of Roxbury



Township of Mine Hill

Town of Dover

Highlands Preservation Area

Municipal Boundaries

Parcels

Interstate Highways

U.S. Routes

State Routes

County Routes

Local Routes

County Routes

Dwg. Title

Roadway Network Map

Project No.

2210.03

Dwg. Date

04/29/09

Drawn By

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BOROUGH OF WHARTON
MORRIS COUNTY, NEW JERSEY

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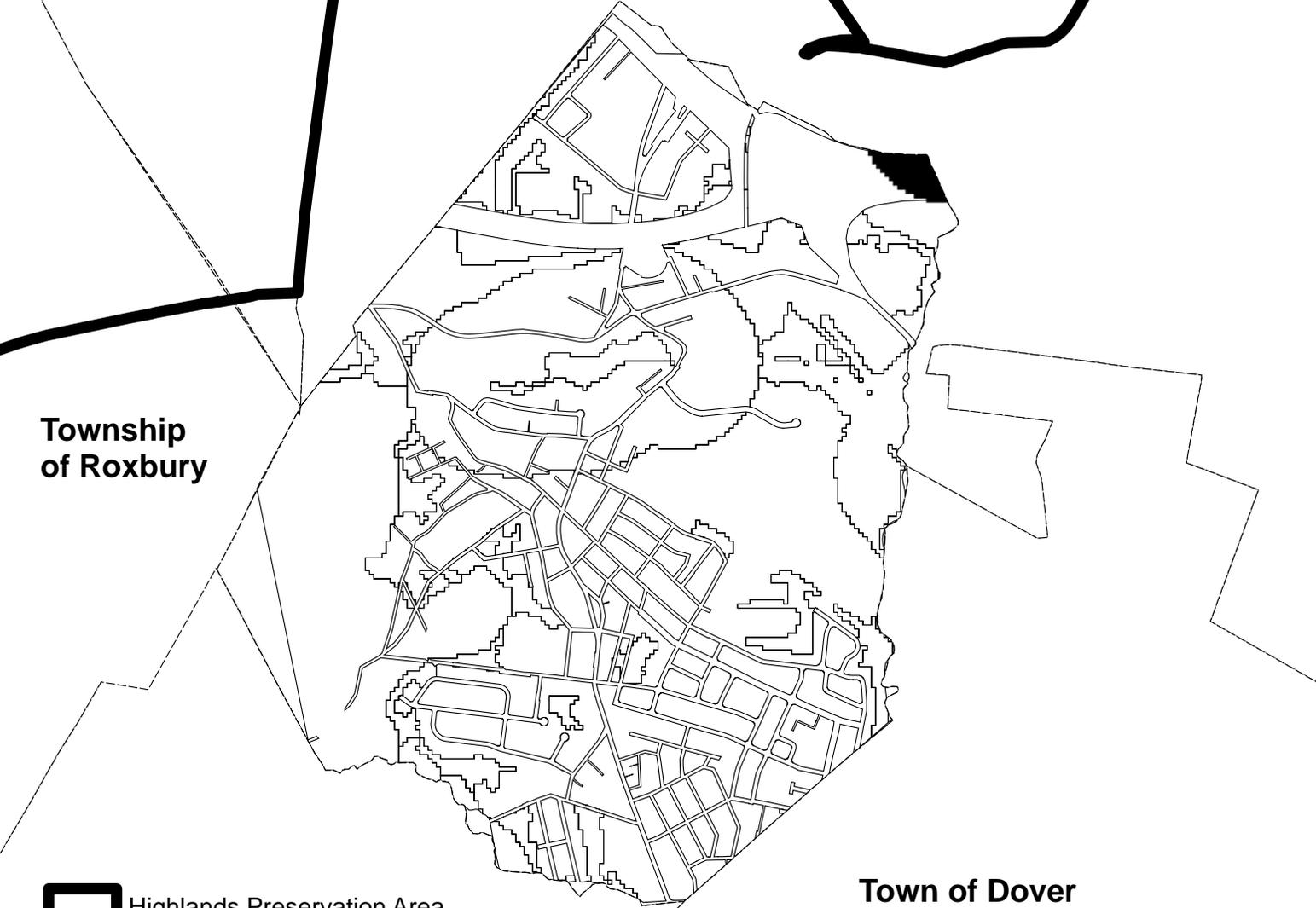
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Rockaway Township

Jefferson Township

Township of Roxbury



Town of Dover

 Highlands Preservation Area

 Municipal Boundaries

 Parcels

Vernal Pools + 1,000ft Buffer



Township of Mine Hill

Dwg. Title
Significant Natural Areas and Vernal Pools Map

Project No.
2210.03

Dwg. Date
05/11/09

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Rockaway Township

Jefferson Township

Township of Roxbury

Township of Mine Hill

Town of Dover

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  Slope Greater than 20%
-  Slope Between 15% and 20%
-  Slope Between 10% and 15% within Riparian Area

Dwg. Title

Steep Slopes Protection Areas Map

Project No.

2210.03

Dwg. Date

04/29/09

Drawn By

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Project Title

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Rockaway Township

Jefferson Township

Township of Roxbury

Township of Mine Hill

Town of Dover

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  Redevelopment and Infill Opportunities
-  Greenfield Opportunities

Dwg. Title
Potential Voluntary TDR Receiving Zones Map

Project No.
2210.03

Dwg. Date
04/29/09

Drawn By
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BOROUGH OF WHARTON
MORRIS COUNTY, NEW JERSEY

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1 of 1

Drawing No.
TDR



Rockaway Township

Jefferson Township

Township of Roxbury

Township of Mine Hill

Town of Dover

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  Private Bus Routes

Dwg. Title <p style="text-align: center;">Transit Network Map</p>	Project No. <p style="text-align: center;">2210.03</p>	Dwg. Date <p style="text-align: center;">04/29/09</p>	Drawn By <p style="text-align: center;">AP</p>
 BURGIS ASSOCIATES, INC. PROFESSIONAL PLANNERS / LANDSCAPE ARCHITECTS 25 WESTWOOD AVENUE WESTWOOD, N.J. 07675 201-666-1811 FAX: 201-666-2599	Project Title <p style="text-align: center;">Highlands Initial Assessment Report</p> <small>BOROUGH OF WHARTON MORRIS COUNTY, NEW JERSEY</small>	Sheet No. <p style="text-align: center;">1 of 1</p>	Drawing No. <p style="text-align: center;">TRANS</p>



Rockaway Township

Jefferson Township

Township of Roxbury

Township of Mine Hill

Town of Dover

 Highlands Preservation Area

 Municipal Boundaries

 Parcels

Wellhead Protection Areas

 2-Year Tier

 5-Year Tier

 12-Year Tier

Dwg. Title
Wellhead Protection Areas Map

Project No.
2210.03

Dwg. Date
05/11/09

Drawn By
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25 WESTWOOD AVENUE
WESTWOOD, N.J. 07675
201-666-1811 FAX: 201-666-2599

Project Title
Highlands Initial Assessment Report
BOROUGH OF WHARTON
MORRIS COUNTY, NEW JERSEY

Dwg. Scale
N.T.S.

Sheet No.
1 of 1

Drawing No.
WHPA



Jefferson Township

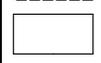
Rockaway Township

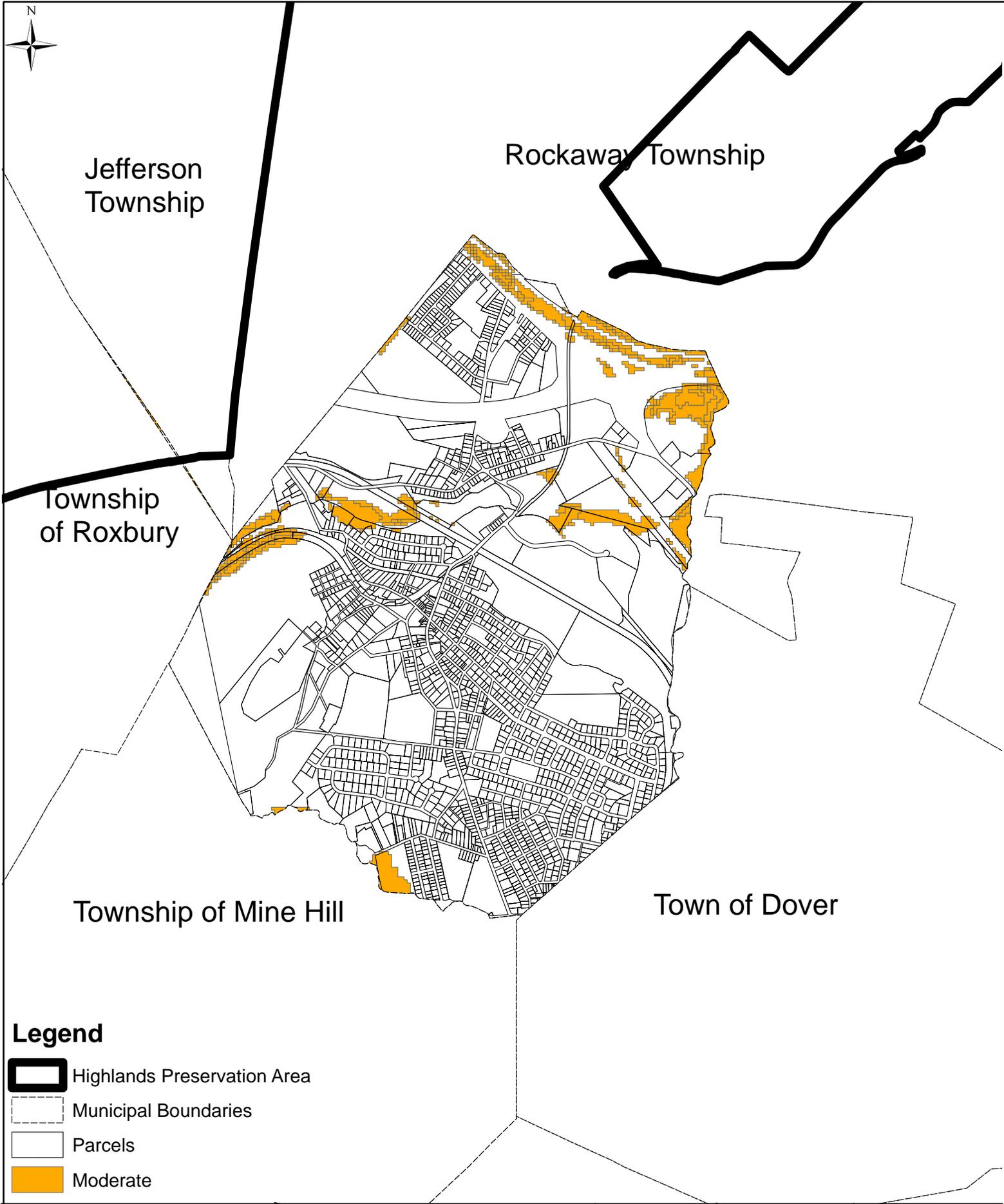
Township of Roxbury

Township of Mine Hill

Town of Dover

Legend

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  Moderate



Dwg. Title Conservation Priority Area Map	Project No. 2210.03	Dwg. Date 04/29/09	Drawn By AP
 BURGIS ASSOCIATES, INC. PROFESSIONAL PLANNERS / LANDSCAPE ARCHITECTS 25 WESTWOOD AVENUE WESTWOOD, N.J. 07675 201-666-1811 FAX: 201-666-2599	Project Title Highlands Initial Assessment Report <small>BOROUGH OF WHARTON MORRIS COUNTY, NEW JERSEY</small>	Sheet No. 1 of 1	Drawing No. CPA
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**Jefferson
Township**

Rockaway Township

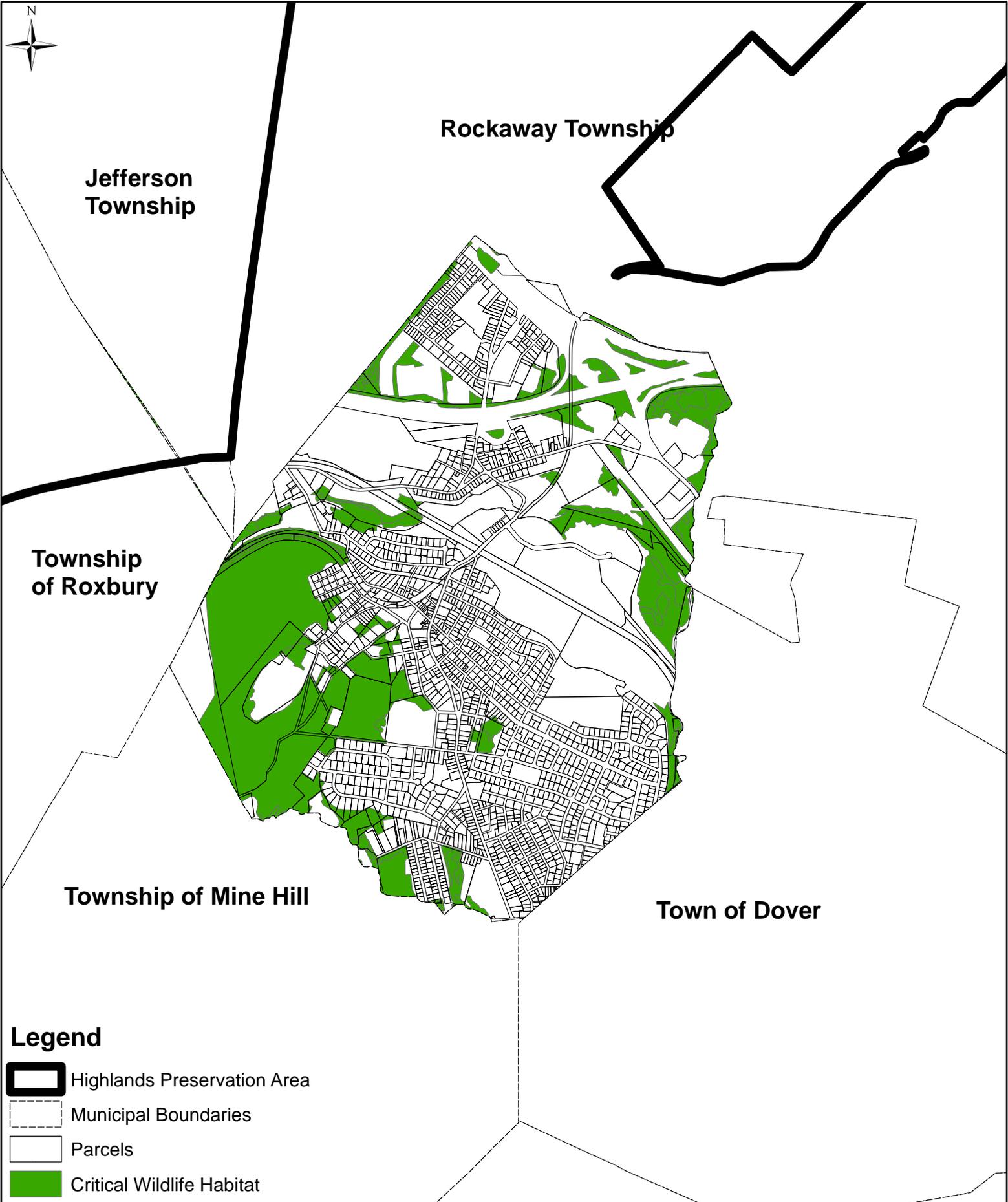
**Township
of Roxbury**

Township of Mine Hill

Town of Dover

Legend

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  Critical Wildlife Habitat



Dwg. Title

Critical Wildlife Habitat Map

Project No.

2210.03

Dwg. Date

04/29/09

Drawn By

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Jefferson Township

Rockaway R (Stephens Bk to Longwood Lk)

Township of Roxbury

Township of Mine Hill

Town of Dover

Forest Integrity

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  High



Dwg. Title

Forest Cover Integrity Map

Project No.

2210.03

Dwg. Date

05/11/09

Drawn By

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Township of Roxbury

Township of Mine Hill

Town of Dover

Legend

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  Forest Resource Area

Dwg. Title

Forest Resource Area Map

Project No.

2210.03

Dwg. Date

04/29/09

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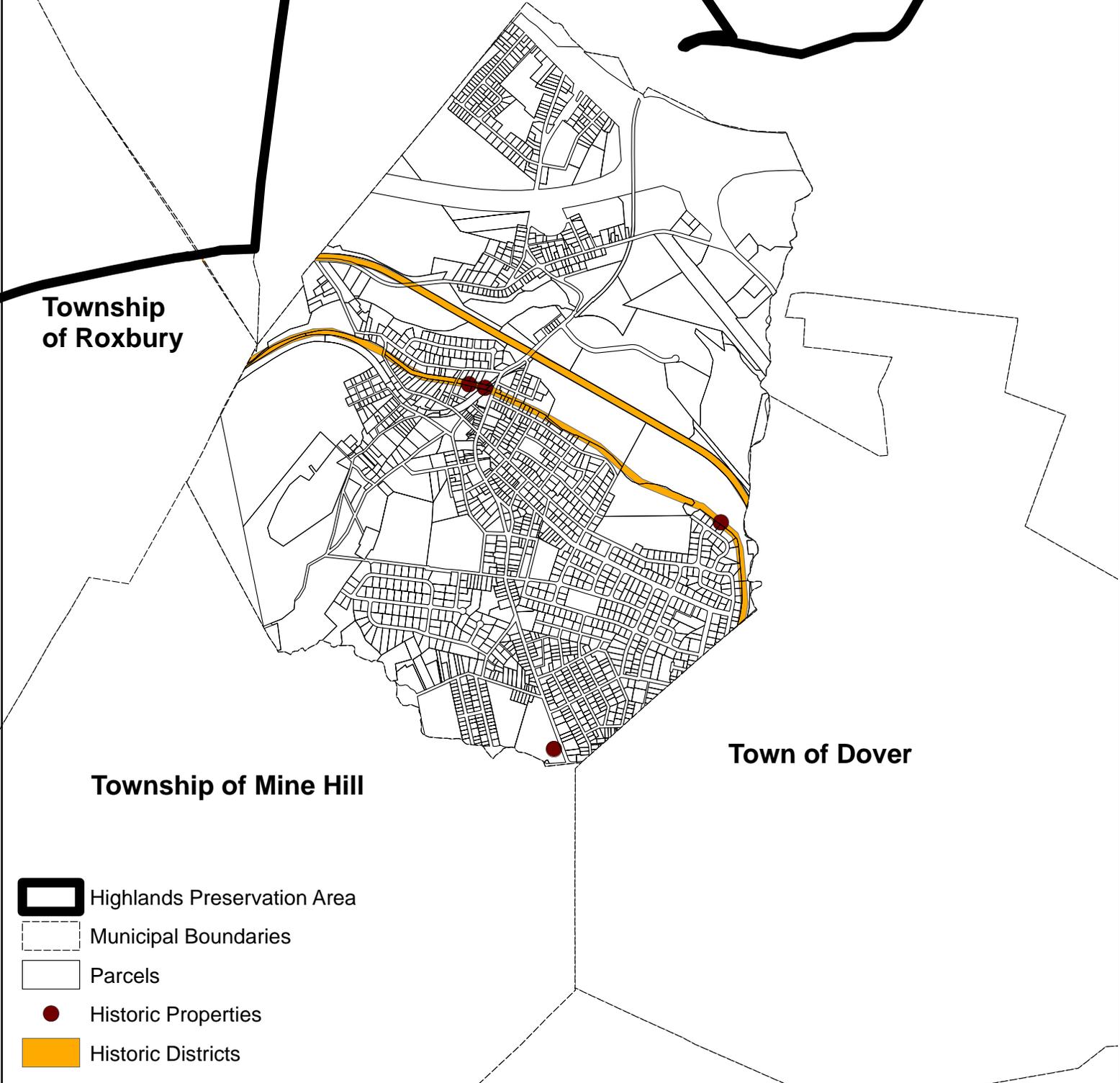
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Jefferson Township

Township of Roxbury



Township of Mine Hill

Town of Dover

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  Historic Properties
-  Historic Districts

Dwg. Title

Historic Preservation Map

Project No.

2210.03

Dwg. Date

04/29/09

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Jefferson Township

Township of Roxbury

Township of Mine Hill

Town of Dover

-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  Streams - Planning Area
-  C1 Waters
-  Water Bodies
-  Wetlands
-  Open Waters Buffers

Dwg. Title <p style="text-align: center;">Open Waters Map</p>	Project No. <p style="text-align: center;">2210.03</p>	Dwg. Date <p style="text-align: center;">04/29/09</p>	Drawn By <p style="text-align: center;">AP</p>
 BURGIS ASSOCIATES, INC. <small>PROFESSIONAL PLANNERS / LANDSCAPE ARCHITECTS 25 WESTWOOD AVENUE WESTWOOD, N.J. 07675 201-666-1811 FAX: 201-666-2599</small>	Project Title Highlands Initial Assessment Report <small>BOROUGH OF WHARTON MORRIS COUNTY, NEW JERSEY</small>	Dwg. Scale <p style="text-align: center;">N.T.S.</p>	Sheet No. <p style="text-align: center;">1 of 1</p> Drawing No. <p style="text-align: center;">HOW</p>



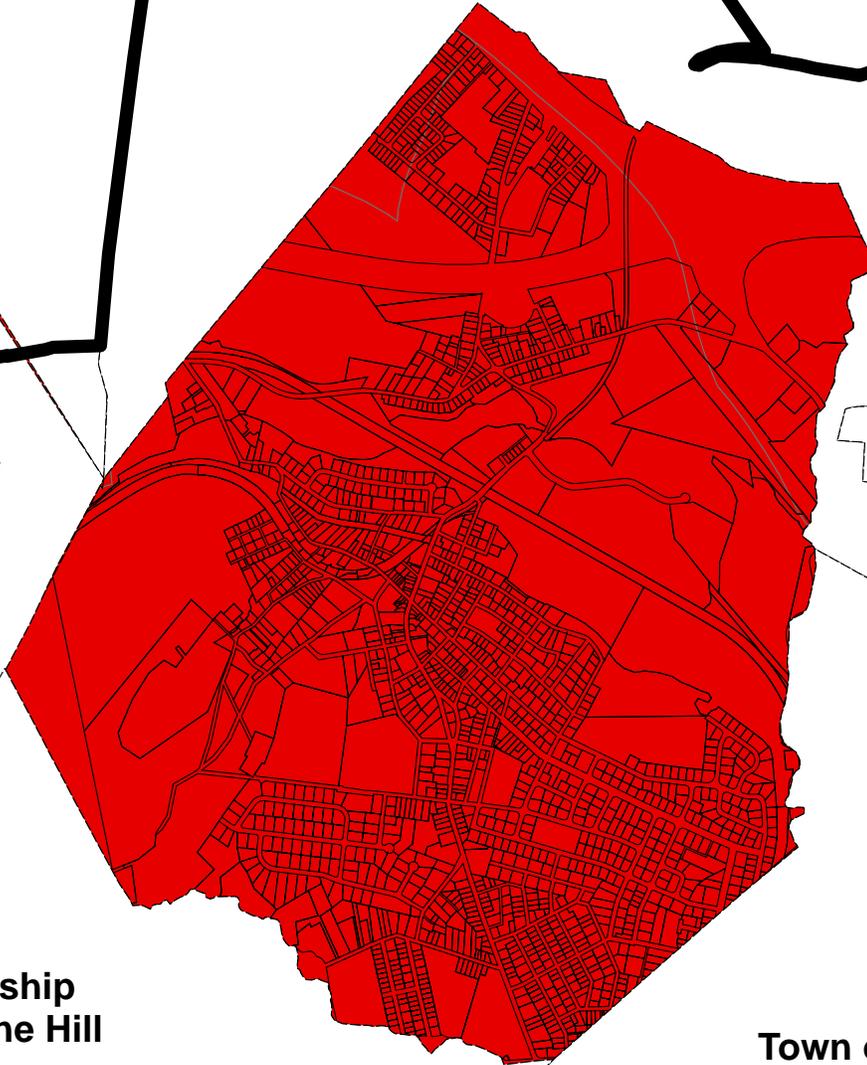
Jefferson Township

Rockaway Township

Township of Roxbury

Township of Mine Hill

Town of Dover



-  Highlands Preservation Area
-  Municipal Boundaries
-  Parcels
-  Water Quality Impaired

Dwg. Title

Impaired Waters Overall Assessment by HUC 14 Map

Project No.

2210.03

Dwg. Date

05/11/09

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Township of Roxbury

Township of Mine Hill

Town of Dover

 Highlands Preservation Area

 Municipal Boundaries

 Parcels

 Lakes Greater Than 10 Acres

Land Use Capability Zone Map

 ECZ-Environmentally Constrained Sub-Zone

 Existing Community Zone (ECZ)

 Lake Community Sub-Zone

 Protection Zone

Dwg. Title

Land Use Capability Zone Map

Project No.

2210.03

Dwg. Date

04/29/09

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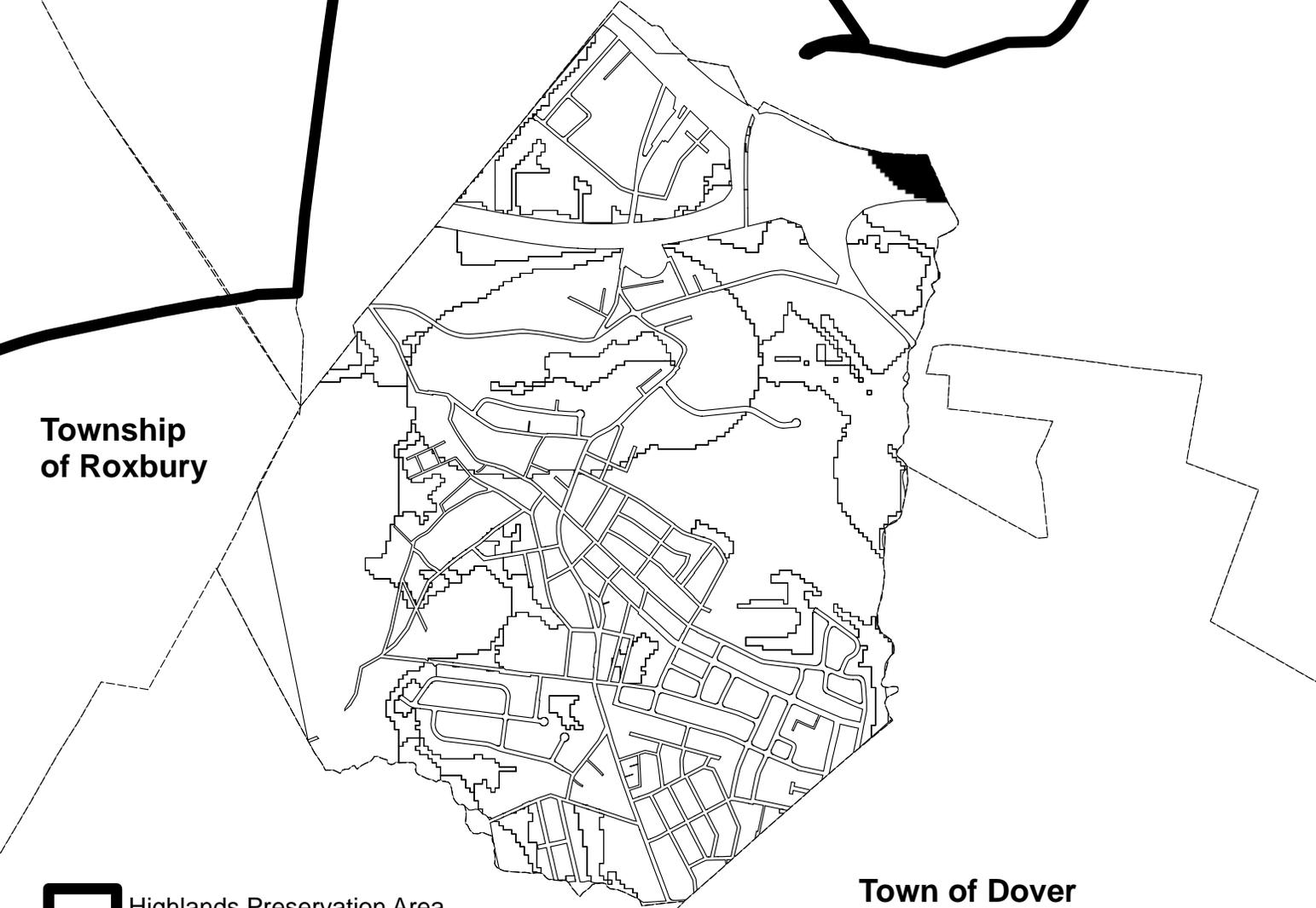
LUCM1



Rockaway Township

Jefferson Township

Township of Roxbury



Town of Dover

 Highlands Preservation Area

 Municipal Boundaries

 Parcels

Vernal Pools + 1,000ft Buffer



Township of Mine Hill

Dwg. Title
Significant Natural Areas and Vernal Pools Map

Project No.
2210.03

Dwg. Date
05/11/09

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