



# BURGIS ASSOCIATES, INC.

## COMMUNITY PLANNING AND DEVELOPMENT CONSULTANTS

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**Borough of Bloomingdale, Passaic County  
NJ Highlands Plan Conformance  
Module 3 - Housing Element and Fair Share Plan  
December 8, 2009**

**Consistency Review Summary for Bloomingdale Estates – Meer Tract**

**Block 59 Lot 1.04, Block 60 Lots 9.02, 16.01, 16.02, 21.02, 21.03, 45, 46, 47, 48.02, 60.01, 60.02**

The Highlands Council requires review of any development project proposed for affordable housing to ensure that the proposal is consistent with the Highlands Regional Master Plan (RMP). To assist municipalities in reviewing any proposed sites relative to RMP consistency, the Highlands Council has created a web-based Highlands Consistency Review tool, from which a Highlands Consistency Review Report can be created for each proposed affordable housing site.

The Highlands Consistency Review Report evaluates the consistency of the proposed affordable housing site with the Highlands RMP requirements for preservation of a number of natural resources. Such resources include forests, open waters and riparian areas, steep slopes, critical habitat areas, carbonate rock areas, and prime ground water recharge areas. The Highlands Consistency Review Report also evaluates each site's consistency with the RMP's provisions related to water supply, utility capacity, septic system yield, wastewater utility capacity, and water availability.

As a requirement for Module 3 December 8, 2009 submission, the Highlands Council requires a summary of the consistency review for any of the proposed sites meeting the municipalities Prior Round Obligation.

As a result of a court decision, the borough has approved an application to construct inclusionary development on the above mentioned site. The development will include 360 units, 72 of which would be affordable. The site is approximately 204 acres in area and is currently undeveloped. Access is provided by Paterson-Hamburg Turnpike to the south, Van Dam Avenue to the west, and Union Avenue to the north and west. Surrounding land uses generally include a quarry and open space to the east, commercial and residential uses to the south, particularly on the south side of Paterson-Hamburg Turnpike, and residential uses to the north and west. There are a few nonresidential uses scattered to the north and west, including the DPW site. The property is constrained in several areas by environmental features including water bodies, streams, wetlands, wildlife habitat and steep slopes.

According to the RMP, the subject site is primarily within the Protection Zone of the Land Use Capability Zones. However, portions of the site are within the Existing Community Zone. The site is



within the Planning Area 5 (Environmentally Sensitive) according the State Plan and Redevelopment Plan.

The Highlands website indicates that a summary review is to consist of an image of the site, and identify policies and objectives from the RMP by alpha-numerical codes that are applicable to the site. These codes can be cross-referenced with the RMP, where the full policy descriptions can be read. The map and codes are provided below.



### Policies

1A2	1E6	2B8	6F3
1A5	1E7	2D3	6F4
1B2	1E8	2D4	6F5
1B3	1E9	2J2	6H1
1B5	1F2	2J4	6J2
1B7	1F5	2J6	6J3
1C1	1F6	2K2	6N4
1C3	2A2	5C3	
1D4	2B6	6C1	
1E10	2B7	6C2	

### Objectives

1A2d	1D5g	2D3g	2J4c
1B3a	1F6a	2D4a	2K3c
1B5a	1F6b	2D4b	2K3d
1D4a	1F6c	2D4c	2K3e
1D4c	1F6d	2D4d	2K4b
1D4d	1F6f	2D4e	2L2a
1D4e	2B4a	2D4f	2L2d
1D4f	2B4b	2D4g	2L3f
1D4I	2B4c	2D4h	5A2a
1D4J	2B6a	2D4i	5E1b
1D5b	2B8a	2I1a	6C1a
1D5c	2B8b	2I1b	6F6a
1D5d	2B8c	2J2a	7F1d
1D5e	2B8d	2J2b	
1D5f	2D3c	2J4a	

As shown above, there are many Policies and Objectives of the RMP that are applicable to the subject site. Generally, these codes pertain to forest resource areas, open water protection areas, riparian areas, steep slope protection areas, critical wildlife habitat, and water and sewer service.

In conclusion, while it is clear that the site contains environmental constraints, the borough has been required to provide affordable housing on this site as a result of a court order. For reference, a copy of the full consistency report for each parcel of the site is enclosed.



## Regional Master Plan Consistency Report

12/23/2009

Prepared by State of New Jersey Highlands Water Protection and Planning Council  
100 North Road (Route 513), Chester, NJ 07930  
Telephone: (908) 879-6737 Fax: (908) 879-4205



Please consider the environment before printing this report

### Disclaimer

Please be advised that any reports generated from the online Consistency Review Application do not constitute a formal Consistency Determination from the Highlands Council. The information contained therein is provided solely for informational purposes and is not to be construed as providing advice, recommendations, endorsements, representations or warranties of any kind whatsoever.

, BLOOMINGDALE BOROUGH, County, Block 00059, Lot 00001 04



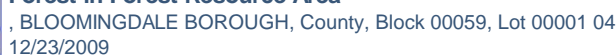
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The Forest Resource Area data layer is an intensity indicator that captures high ecological value forest areas including those forested lands that exhibit the least fragmentation, which are vital for the maintenance of ecological processes.

**Policy 1B3:** To limit through local development review and Highlands Project Review deforestation in the Forest Resource Area and forested lands within High Integrity Forest Subwatersheds within the Existing Community Zone to maximum extent practicable.



The Forest in Forest Resource Area data layer illustrates the forested lands located within the spatially delineated Forest Resource Area. The Regional Master plan provides for the protection of the integrity of these forested lands in order to maintain forest ecological function within the Forest Resource Area.

**Objective 1A2d:** To prohibit through Plan Conformance, local development review and Highlands Project Review the expansion or creation of public water supply systems or public wastewater collection and treatment systems or community-based on-site wastewater facilities into forested areas of the Forest Resource Area within the Planning Area except as provided for in Policy 2J4 with Objectives 2J4a through 2J4d, and Policy 2K3 with Objectives 2K3a through 2K3e, and within the Preservation Area except as provided for in Policy 2I1 and Objectives 2I1a and 2I1b.

**Policy 1C1:** To require that conforming municipalities and counties address the protection of forested portions of Forest Resource Areas and High Integrity Forest Subwatersheds in their master plans and development regulations.

**Policy 5C3:** To limit road improvements through local development review and Highlands Project Review where roads are constrained by topography, forested lands or the community character of land uses fronting on the road.





### Forest in Forest Resource Area in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00059, Lot 00001 04  
12/23/2009



Forest within Forest Resource Area: ■

Planning Area / Preservation Area: ■ Planning Area ■ Preservation Area

The Forest in Forest Resource Area in Planning Area data layer illustrates the forested lands located within the spatially delineated Forest Resource Area of the legislatively delineated Highlands Planning Area. The Regional Master Plan includes protection policies specific to forested lands in the Forest Resource Area in the Planning Area.

**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.





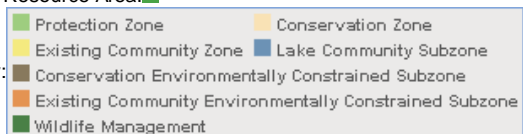
**Planning Area Forest in Protection or Conservation Zone**  
 , BLOOMINGDALE BOROUGH, County, Block 00059, Lot 00001 04  
 12/23/2009



Forest Outside of Forest Resource Area: ■

Forest within Forest Resource Area: ■

Land Use Capability:



Planning Area / Preservation Area: ■ Planning Area / ■ Preservation Area

Planning Area Forest in Protection or Conservation Zone data layer represents all forested lands in the Protection Zone or Conservation Zone in the legislatively delineated Planning Area. Regional Master Plan protection policies limit development of these forests to low impact residential in an effort to maintain valuable forested lands within these two Zones in the Planning Area.

**Policy 1B2:** To limit through local development review and Highlands Project Review human development of forests to low impact residential development in the Protection Zone and the Conservation Zone in the Planning Area.



### Forest Resources

, BLOOMINGDALE BOROUGH, County, Block 00059, Lot 00001 04  
12/23/2009



Forest Outside of Forest Resource Area: ■  
Forest within Forest Resource Area: ■

Forest Resources represents the Total Forest Area data layer that was extracted from the NJDEP 2002 draft Land Use Land Cover data. This data layer illustrates all upland and wetland forest and scrub/shrub categories (excluding old field) and represents all forested lands within the Region. The Regional Master Plan includes policies that limit clearing of trees within Forest Resources and that seek to protect overall forest resources integrity.

**Objective 1B3a:** Implementation through Plan Conformance of regulations, which limit the clearing of trees in conjunction with human development to circumstances where the clearing will not diminish the integrity of forest resources.

**Policy 1B5:** To ensure that forest resources are protected on a site specific basis during local development review and Highlands Project Review.

**Objective 1B5a:** Applications for local development review and Highlands Project Review require identification of any forest area on and adjacent to a site in accordance with the Highlands Councils Method for Identifying Upland Forest Areas in the Highlands Region.

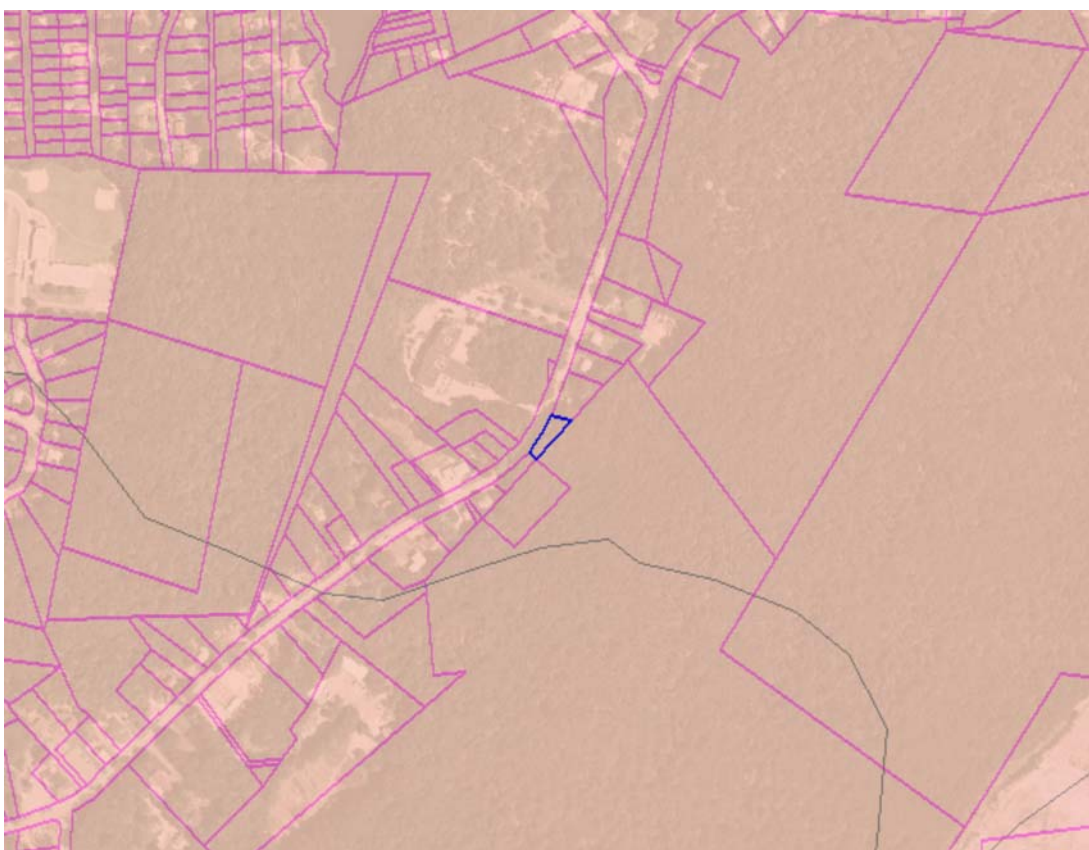
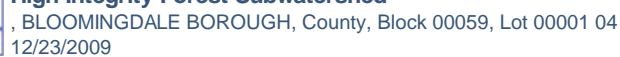
**Policy 1B7:** To prohibit clear-cutting of forest lands except pursuant to an approved Forest Management Plan approved by the State Forester.

**Policy 1C3:** To require that conforming municipalities adopt a tree clearing ordinance consistent with an approved community forestry plan under the New Jersey Forest Service Community Forestry Program as part of the municipal master plan and local development regulations.

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.







High Integrity Forest Subwatershed is a component of the Forest Integrity Value data layer. This data layer represents forest cover integrity in the Region at the watershed level because forests are important for the protection of water quality and quantity.

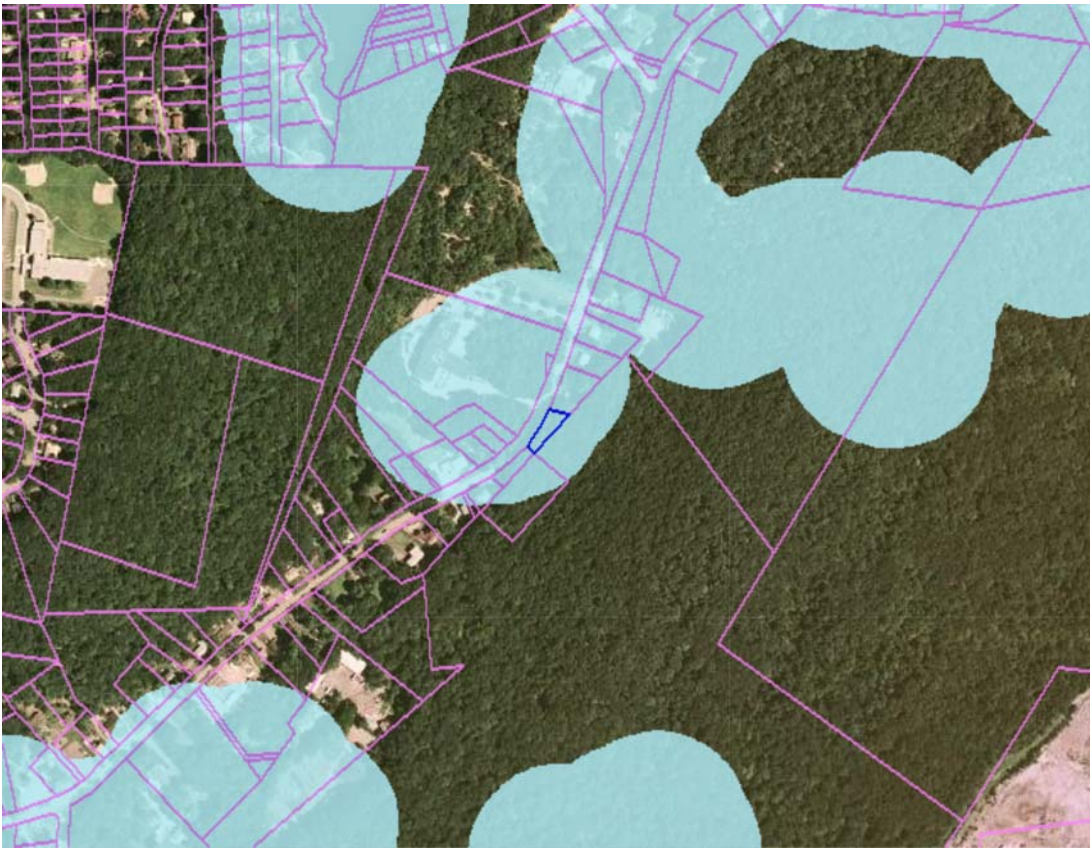
**Policy 1C1:** To require that conforming municipalities and counties address the protection of forested portions of Forest Resource Areas and High Integrity Forest Subwatersheds in their master plans and development regulations.





### Highlands Open Waters Protection Buffer

, BLOOMINGDALE BOROUGH, County, Block 00059, Lot 00001 04  
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Open Water Protection Area: ■

Highlands Open Waters are defined by the Highlands Act as all springs, streams including intermittent streams, wetlands, and bodies of surface water, whether natural or artificial. The vegetated corridors adjacent to Highlands Open Waters are effective and important tools to protect water quality and aquatic habitat. Protection buffers safeguard Highlands Open Waters from the impacts of adjacent land use practices. The Regional Master Plan includes a protection buffer of 300 feet from the edge of the discernable bank of a Highlands Open Waters feature, or from the centerline where no discernable bank exists.

**Policy 1D4:** Highlands Open Waters shall include a protection buffer of 300 feet from the edge of the discernable bank of the Highlands Open Waters feature, or from the centerline where no discernable bank exists. With respect to wetlands and other Highlands Open Waters features (e.g., seeps, springs, etc.), the feature shall include a protection buffer of 300 feet from the delineated Letter of Interpretation (LOI) line issued by the NJDEP for wetlands, or from a field-delineated boundary for other features. In areas where existing development or land uses within the protection buffers have reduced or impaired the functional values of the buffers, the Council will seek opportunities to restore the buffer and its functions. Any proposed disturbance shall, through local development review and Highlands Project Review, comply with Highlands Open Waters buffer standards. The protection buffer width for Category 2 streams in the Planning Area may be modified through a Stream Corridor Protection/Restoration Plan, as specified in Objective 1D4i. In approved Redevelopment Areas, the Council may, at its discretion, modify the required buffer, upon a showing of no alternatives, no impact to the functional value of the buffer, and provision of alternative approaches to enhancing or protecting Highlands Open Waters and resources of the buffer area.

**Objective 1D4a:** Require that all applications for approval through local development review and Highlands Project Review include the identification and mapping of Highlands Open Waters.

**Objective 1D4c:** Require that proposed development within all Highlands Open Waters buffers (Preservation and Planning Areas) conforms through local development review and Highlands

**Objective 1D4i:** Develop through Plan Conformance and implement stream corridor or subwatershed-based Stream Corridor Protection/Restoration Plans which shall include Steps 1, 2, and 3, and may include Steps 4 and 5: 1. Identify areas where existing development, land disturbances, or land uses are within Highlands Open Waters buffers have removed or substantially impaired natural vegetation communities, and have significantly reduced or impaired the functional values of Highlands Open Waters buffers. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland usesq; 2. Identify and require opportunities for restoration of areas identified in Step 1 as part of mitigation requirements under a Highlands Act waiver or Objectives 1D4e and 1D4f, and public or nongovernmental restoration/stabilization projects; 3. Identify the extent of stream corridor features that are critical to supporting the functions of a healthy Highlands Open Waters buffer and that extend beyond the buffers required by Objectives 1D4b and 1D4c. The 300 foot buffer in these areas may be expanded to be most protective of these features which may include, but are not limited to, Critical Habitat, pollutant source areas identified through scientific techniques, and steep slopes; 4. Where Highlands Open Waters buffers include areas identified in Step 1, regarding Category 2 surface waters in the Planning Area only, the Stream Corridor Protection/Restoration Plan may identify where, based on scientific analysis of site-specific conditions (e.g., topography, vegetation cover type, habitat, soil type, upstream land uses and pollution inputs, width of floodplain, rate and volume of run-off), a buffer of less than the full 300 feet (but including the undisturbed buffer area at a minimum) is sufficient to maintain or improve the protection of Highlands Open Waters and Riparian Areas. The plan must identify alternative buffers that provide functional buffer values at least equivalent to existing conditions and are no less than 150 feet or no less than the extent allowed in State or municipal regulation (including Objectives 1D4b and 1D4c), whichever is greater. Further, the plan shall include a functional value assessment to ensure that there is no net loss in the overall functional value of the subwatershedos stream buffers. Buffers established through this process shall be determined based on site conditions rather than fixed distances, reflecting findings of the scientific analysis, and shall be used in the site design and development review process regarding determinations of restoration, continued use, or increased use of the disturbed buffer area. Buffer averaging for the purpose of accommodating development proposals is deemed not to meet the requirements of this provision; and 5. Where a proposed Highlands Redevelopment Area would not meet, in full, Objectives 1D4b through 1D4h but affects an undisturbed buffer area determined to not be necessary for the protection of the functional values for Highlands Open Waters buffer (as determined through scientific analysis of site-specific conditions), modification of the undisturbed buffer may be allowed to no less than the extent allowed in State or municipal regulation. However the Council shall first determine that there is no alternative to the proposed reduction of the buffer, and require a showing of no impact to the functional values of the buffer and provision of alternative approaches to enhancing or protecting the Highlands Open Waters and resources of the buffer area. Restoration or enhancement of buffer functional values shall be provided on-site or within the same stream reach to achieve a net improvement of existing buffer functional values.

**Objective 1D5b:** 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.



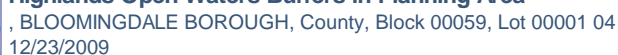
**Objective 211b:** The expansion or creation of public water supply systems, public wastewater collection and treatment systems and community on-site treatment facilities in the Preservation Area as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

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Planning Area / Preservation Area:  Planning Area /  Preservation Area

**Objective 1D4d:** Structures or other land improvements existing within a Highlands Open Waters buffer of the Planning Area on August 10, 2004 may remain, provided that the area of disturbance shall not be increased unless approved through local development review or Highlands Project Review in compliance with RMP policies and objectives. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q



## Highlands Open Waters Protection Buffers in Conservation or Protection Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00059, Lot 00001 04  
12/23/2009



Open Water Protection Area:

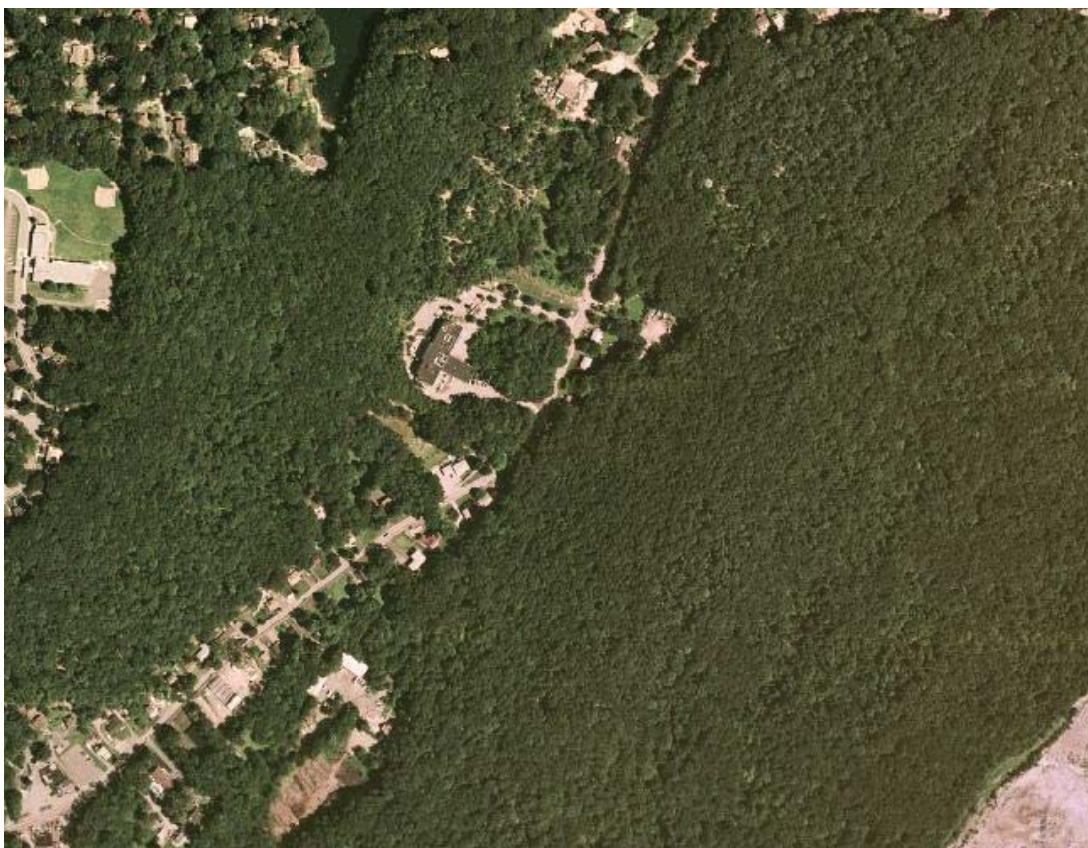
Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes all Highlands Open Waters protection buffers within the Protection and Conservation Zones of the Planning Area.

**Objective 1D4e:** In the Protection and Conservation Zones of the Planning Area, proposed disturbances of Highlands Open Waters buffers shall only occur in previously disturbed areas, unless a waiver is granted by the Highlands Council under Policy 7G2. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q Such proposed disturbances must demonstrate full utilization of the following performance standards in the listed order, to demonstrate the necessity of an encroachment into Highlands Open Waters buffers: 1) avoid the disturbance of Highlands Open Waters buffers; 2) minimize impacts to Highlands Open Waters buffers; and 3) mitigate all adverse impacts to Highlands Open Waters buffers so that there is no net loss of the functional value of the buffer, in compliance with Objective 1D4h. Minimization and mitigation opportunities shall be considered only upon a clear and convincing demonstration by the applicant that the protection buffer cannot be avoided and in no case shall the remaining buffer be reduced to less than 150 feet from the edge of Highlands Open Waters, unless a waiver is granted by the Highlands Council under Policy 7G2 and the proposed disturbance complies with Objective 1D4c.





Critical Wildlife Habitat data layer illustrates habitat areas that are critical for the survival of rare, threatened or endangered wildlife species of the Highlands Region. Critical Wildlife Habitat areas are lands within the NJDEPs Landscape Project Version 3 that are Landscape Rank 3 through 5 and Landscape Rank 2 with Highlands Conservation Rank of Critically Significant or Significant in the Planning Area.

**Objective 1F6b:** Prohibit indirect impacts from activity that is off-site, adjacent to, or within Critical Habitat that will jeopardize the continued existence of, or result in the likelihood of the destruction

**Objective 1F6c:** Waiver applications under Policy 7G2 for local development in a municipality with a Council-approved Critical Habitat Conservation and Management Plan shall be subject to the minimum standards and criteria for waiver provisions as set forth in the plan, to the maximum extent practicable.

**Objective 1F6f:** A Critical Wildlife Habitat area or Significant Natural Area delineation may be modified if an applicant can demonstrate, to the satisfaction of the Highlands Council in coordination with the NJDEPs Endangered and Nongame Species Program or Natural Heritage Program, that: 1. The nature of the site is such that it does not provide habitat for species of concern; 2. The species of concern are not present on the site during any critical part of their life cycle, do not depend upon the site for food, shelter or breeding, and the habitat; on the site is either unsuitable or not critical to species recovery in the Region; or 3. Existing land uses present a human, natural or development barrier to the use of the site by species of concern. Requirements for demonstrating the above criteria shall be included in the Critical Habitat Conservation and Management Plan.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas,

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.

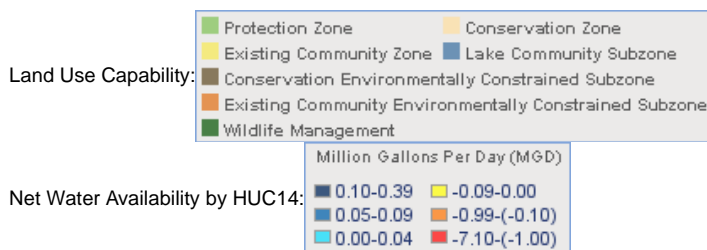




# Net Water Availability in Protection or Conservation Zone

, BLOOMINGDALE BOROUGH, County, Block 00059, Lot 00001 04

12/23/2009



Identifies the portion of a HUC14 subwatershed within the Protection or Conservation Zone.

**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

**Objective 2B4a:** Give highest priority for the use of non-agricultural Net Water Availability or Conditional Water Availability within Protection Zone and Conservation Zone subwatersheds, through a Water Use and Conservation Plan developed under Objective 2B8c, local development review, and Highlands Project review: 1. To address a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for Net Water Availability; 2. To serve a designated Highlands Redevelopment Area; 3. To serve a cluster development that complies with Objective 2J4b; and 4. To serve affordable housing projects where at least 10% of the units are affordable.

**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the

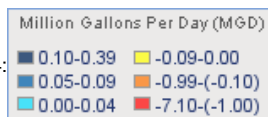


**Current Deficit Area**

, BLOOMINGDALE BOROUGH, County, Block 00059, Lot 00001 04  
12/23/2009



Net Water Availability by HUC14:



Identifies HUC14 subwatersheds that are in deficit of Net Water Availability.

**Policy 2B6:** To require through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, Highlands Project Review, and interagency coordination that proposed public water supply and wastewater service areas, new or increased water allocations and bulk water purchases will not directly or indirectly cause or contribute to a Net Water Availability deficit, and where feasible will help mitigate any existing deficit.

**Objective 2B6a:** Areawide Water Quality Management Plans, Wastewater Management Plans or their amendments shall ensure that the proposed service area will not directly or indirectly cause or contribute to a Net Water Availability deficit, and shall be in conformance with any Water Use and Conservation Plan developed under Objective 2B8c.

**Policy 2B8:** To require through Plan Conformance, local development review, and Highlands Project Review the efficient and effective use of water availability, the planning for future water needs, the reduction and elimination of water deficits, and the mitigation of new consumptive or depletive use in any Current Deficit Areas or subwatersheds that could become deficit areas based on projected development and water uses, to ensure sustainable water supply, water resource and ecological values in conformance with RMP policies and objectives.

**Objective 2B8a:** Prevent net increases in consumptive or depletive water uses in Current Water Deficit Areas to prevent exacerbation of and help reduce or eliminate the deficit to ensure sustainable water supply, water resource and ecological values, emphasizing techniques



including, but not limited to water reuse, recycling and conservation.

**Objective 2B8b:** Proposed new consumptive or depletive water uses within a Current Deficit Area shall only occur under the auspices of a Water Use and Conservation Management Plan approved under Objective 2B8c or through mitigation of the proposed consumptive or depletive use within the same HUC14 subwatershed through: a permanent reduction of existing consumptive and depletive water uses; ground water recharge in excess of the requirements of N.J.A.C. 7:8 (Stormwater Management Rules); or other permanent means. Where a Water Use and Conservation Management Plan has not been approved: 1. Each project shall achieve mitigation ranging from 125% to 200%, based on the severity of the Current Deficit and the amount of consumptive or depletive water use proposed; 2. Total consumptive and depletive water uses from any single project and all projects combined are not to exceed the Conditional Water Availability of Objectives 2B3a or 2B3b for any HUC14 subwatershed; 3. Mitigation shall be successfully completed prior to initiation of the water use, except as required by #4, below. Mitigation may be phased in keeping with project development; 4. For water uses where the combination of proposed consumptive and depletive water uses and current subwatershed deficit is high, according to a schedule established by the Highlands Council, off-site mitigation shall be successfully completed prior to any on-site construction. On-site mitigation shall be successfully completed prior to initiation of the water use but may be implemented concurrent with on-site construction. Mitigation may be phased in keeping with the level of consumptive or depletive water uses; and Mitigation plans for a project shall include: specific objectives for each mitigation component; monitoring and reporting requirements; methods by which shortfalls in meeting the mitigation objectives shall be addressed through additional action; and be guaranteed through performance bonds.

**Objective 2B8c:** Water Use and Conservation Management Plans shall be required through municipal Plan Conformance for all subwatersheds to meet the policies and objectives of Goal 2B, to ensure efficient use of water through water conservation and Low Impact Development Best Management Practices, and to avoid the creation of new deficits in Net Water Availability. Where developed for Current Deficit Areas, the plans shall include provisions to reduce or manage consumptive and depletive uses of ground and surface waters as necessary to reduce or eliminate deficits in Net Water Availability, or to ensure continued stream flows to downstream Current Deficit Areas from Existing Constrained Areas, to the maximum extent practicable within each HUC14 subwatershed. Water Use and Conservation Management Plans shall demonstrate through a detailed implementation plan and schedule how and when the current deficit will be resolved in a subwatershed prior to approval for new water uses in the subwatersheds with the most severe deficits (i.e., in excess of 0.25 million gallons per day), and the plan shall be implemented prior to initiation of new water uses.

**Objective 2B8d:** All water users within a Current Deficit Area shall seek funding and opportunities to meet the intent of Objective 2B4b.

**Objective 2J2a:** Limit future water system demand and reduce existing demand where feasible by water systems that are dependent on Current Deficit Areas or Existing Constrained Areas as a source of water.

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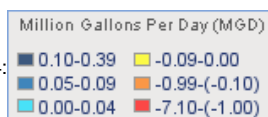


### Net Water Availability

, BLOOMINGDALE BOROUGH, County, Block 00059, Lot 00001 04  
12/23/2009



Net Water Availability by HUC14:



Net Water Availability is calculated for each HUC14 subwatershed by deducting consumptive and depletive water uses from Ground Water Availability. The Regional Master Plan incorporates Net Water Availability as a capacity threshold on future water uses. 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 in deficit and deemed to be a Current Deficit Area. In Current Deficit Areas where a Water Use and Conservation Management Plan has not yet been adopted, limited amounts of Conditional Water Availability are provided. The use of Net Water Availability or Conditional Water Availability is subject to Regional Master Plan policies.

**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

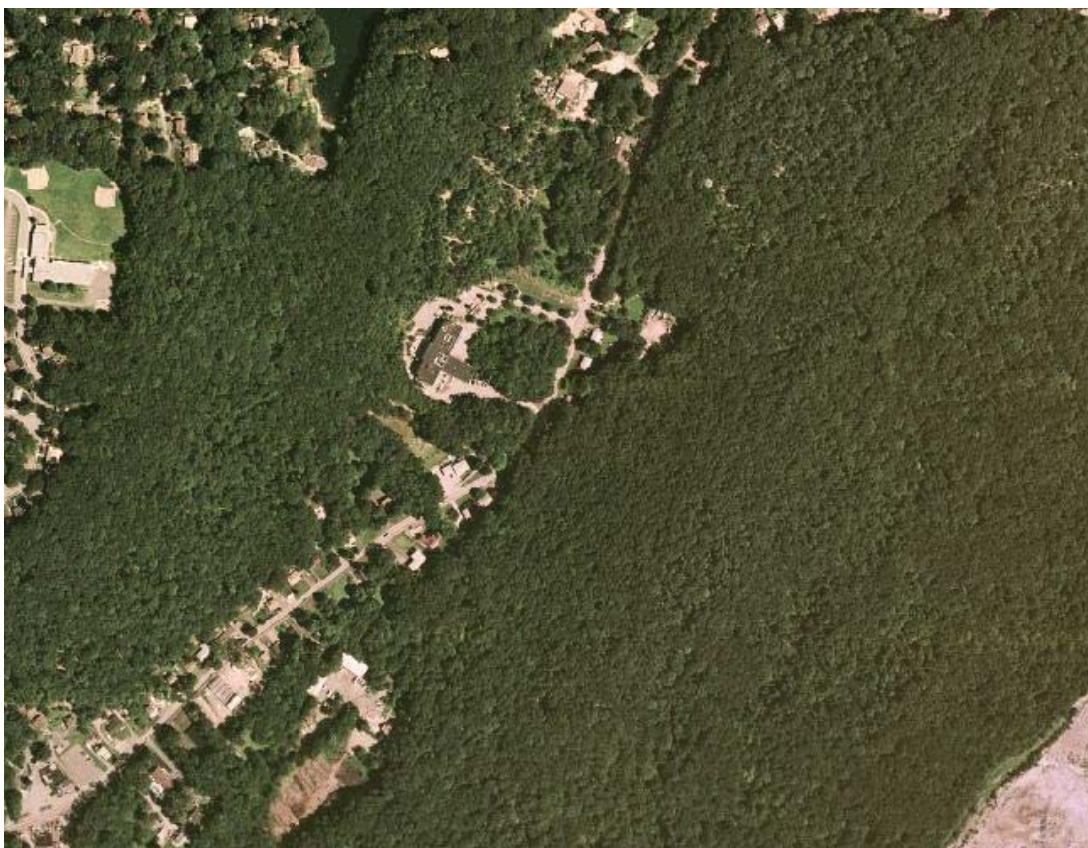
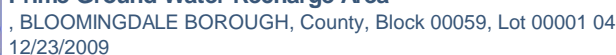
**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.

**Policy 2B7:** To ensure through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, and Highlands Project Review that the use of Net Water Availability and Conditional Water Availability within each subwatershed supports development patterns that are in conformance with RMP policies and objectives.

**Objective 2B8c:** Water Use and Conservation Management Plans shall be required through municipal Plan Conformance for all subwatersheds to meet the policies and objectives of Goal

**Objective 2J2b:** Limit future water system demands to levels that will not create a Current Deficit Area where one does not currently exist.





The layer displays the mapping of Prime Ground Water Recharge Areas. The Regional Master Plan defines Prime Ground Water Recharge Areas as those lands within a HUC14 subwatershed that most efficiently provide 40% of total drought recharge volume for that HUC14 subwatershed, using a GSR-32 analysis based upon land cover and the 1964-1966 drought of record precipitation.

**Objective 2D3c:** Implement master plans and development review ordinances through Plan Conformance that protect Prime Ground Water Recharge Areas and minimize the potential for disruption of recharge in such areas by development.

**Policy 2D4:** To apply standards through Plan Conformance, local development review and Highlands Project Review to protect, restore and enhance the functionality and the water resource value of Prime Ground Water Recharge Areas by restricting development and uses of land within a Prime Ground Water Recharge Area that reduce natural ground water recharge volumes or may directly or indirectly contribute to or result in water quality degradation.

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**Objective 2D4b:** Any development activity approved to occur in a Prime Ground Water Recharge Area shall provide an equivalent of 125% of pre-construction recharge volumes for the affected Prime Ground Water Recharge Area of the site within the following areas, in order of priority: (1) the same development site where feasible; (2) the same HUC14 subwatershed, or (3) an interrelated HUC14 subwatershed as approved by the Highlands Council where no feasible option exists in the same HUC14 subwatershed. This requirement shall apply to all portions of the Prime Ground Water Recharge Area where the recharge is disrupted through impervious surfaces, routing of stormwater runoff and recharge from natural flow paths, and other similar changes.

**Objective 2D4d:** Require through Plan Conformance, local development review and Highlands Project Review that the disruption of Prime Ground Water Recharge Area, after conformance with Objectives 2D4a, 2D4b and 2D4c is achieved, shall be limited to no greater than 15% of the Prime Ground Water Recharge Area on the site and shall be preferentially be sited on that portion of the Prime Ground Water Recharge Area that has the lowest ground water recharge rates and the lowest potential for aquifer recharge.

**Objective 2D4f:** Prohibit through Plan Conformance, local development review and Highlands Project Review new land uses, including those identified through Objective 2D3d, that have a significant potential to result in the discharge of persistent organic chemicals sources (including but not limited to existing discharges of industrial or other non-sanitary wastewater effluent) to ground water or to the land surface within a Prime Ground Water Recharge Area, such that they may degrade or contribute to the degradation of ground water quality.

**Objective 2D4h:** Achieve a net improvement in ground water recharge volume and maintenance of water quality as required through compliance with and implementation of any related provisions of an adopted regional stormwater plan.

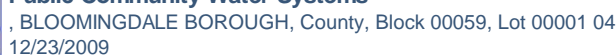
**Objective 2I1b:** The expansion or creation of public water supply systems, public wastewater collection and treatment systems and community on-site treatment facilities in the Preservation Area as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

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**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.





Public Community Water Systems displays those areas served by selected public water systems. The map indicates areas that are actually connected to a water distribution system, not simply located in a water utility's franchise area. Smaller, non-community water systems like those serving private developments or schools are not typically included. The Regional Master Plan limits the creation or extension of public water utilities.

**Objective 2J2a:** Limit future water system demand and reduce existing demand where feasible by water systems that are dependent on Current Deficit Areas or Existing Constrained Areas as a source of water.

**Policy 2J6:** To encourage water recycling/reuse measures, such as domestic and institutional gray water systems, where appropriate, to minimize water use in existing land uses.



### Highlands Domestic Sewerage Facilities

, BLOOMINGDALE BOROUGH, County, Block 00059, Lot 00001 04  
12/23/2009



Highlands Domestic Sewerage Facilities: ■

Highlands Domestic Sewerage Facilities displays those areas served by public wastewater utilities. The map indicates areas that are actually connected into a public wastewater collection system, not simply located in a Sewer Service Area. Public sewer systems discharging less than 0.15 million gallons per day (MGD) to surface water or 0.075 MGD to ground water are not included. Private, on-site treatment facilities like a package treatment plant are also not included. The Regional Master Plan limits the creation or extension of public wastewater systems.

**Objective 2J4b:** Clustered development served by public water supply within the Protection Zone, the Conservation Zone, and the Environmentally-Constrained Sub-zones of the Planning Area shall be approved only if the following conditions are met: 1. The development impacts are otherwise consistent with the requirements of the RMP, including provisions for mandatory clustering in Agricultural Resource Areas pursuant to Policy 3A5; 2. Extension of an existing public water system will occur only where the cluster development is within or immediately adjacent to an Existing Area Served with available capacity; 3. Creation of a new public water system will occur only where such development is not within or immediately adjacent to an Existing Area Served with available capacity; 4. The clustered development preserves at least 80% of the cluster project area in perpetuity for environmental protection or agricultural purposes. To the maximum extent feasible the developed portion (i.e., not including wetlands, Highlands Open Waters buffers, and recreational lands) occupies no more than 10% of the cluster project area if served by a public or community on-site wastewater system; and 5. Where the preserved land in the cluster project area is dedicated to agricultural purposes, the cluster development ordinance and an Agriculture Retention/Farmland Preservation Plan supports continued agricultural viability of the agricultural land and requires the implementation of best management practices, including development and implementation of a Farm Conservation Plan that addresses the protection of water and soil resources prepared by the USDA Natural Resources Conservation Service (NRCS), Technical Service Provider (TSP), appropriate agent or NJDA staff, and approved by the local Soil Conservation District (SCD).



**Policy 2J6:** To encourage water recycling/reuse measures, such as domestic and institutional gray water systems, where appropriate, to minimize water use in existing land uses.

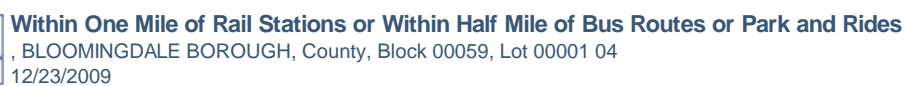
**Objective 211a:** Designated sewer service areas in the Preservation Area shall be restricted to the Existing Area Served as of August 10, 2004, except to serve development that is approved through a HAD or a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1.

**Policy 2K2:** To base projected demand for current needs, appropriate economic revitalization and opportunities for designated TDR Receiving Zones within Existing Areas Served on existing maximum three month demands plus an estimate of redevelopment needs based on either Highlands Council regional analyses or more detailed local analyses, to assess whether there is adequate treatment capacity to encourage redevelopment.

**Objective 2K3d:** Clustered development served by a public wastewater collection and treatment system or community on-site treatment facility within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area shall be approved only if the following conditions are met: 1. The development impacts are otherwise consistent with the requirements of the RMP, including provisions for mandatory clustering in Agricultural Resource Areas; 2. Extension of an existing public wastewater collection and treatment system will occur only where the cluster development is within or immediately adjacent to an Existing Area Served with available capacity; 3. Creation of a community on-site treatment facility will occur only where such development is not within or immediately adjacent to an Existing Area Served with available capacity, where the proposed system is designed, permitted, and constructed at a capacity limited to the needs of the clustered development, and where the system does not create the potential for future expansion into areas that are not the subject of cluster developments immediately adjacent to the initial cluster served; 4. The cluster development preserves at least 80% of the cluster project area in perpetuity for environmental protection or agriculture purposes. To the maximum extent feasible the developed portion of the project area (e.g., not including wetlands, Highlands Open Waters buffers, and recreational lands) occupies no more than 10% of the cluster project area if served by a public or community on-site wastewater system; and 5. Where the preserved land in the cluster project area is dedicated to agricultural purposes, the cluster development ordinance and an Agriculture Retention/Farmland Preservation Plan supports continued agricultural viability of the agricultural land and requires the implementation of best management practices, including development and implementation of a Farm Conservation Plan that addresses the protection of water and soil resources prepared by the USDA Natural Resources Conservation Service (NRCS), Technical Service Provider (TSP), appropriate agent or NJDA staff, and approved by the local Soil Conservation District (SCD).

**Objective 2K3e:** Allow the expansion or creation of wastewater collection systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to those provided at Objective 2K3c within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. The highest priority for allocation of excess or additional wastewater treatment capacity is to areas where there are clusters of failed septic systems that are located within or adjacent to Existing Areas Served. TDR Receiving Areas, where designated, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than other developments requiring expansion of sewer service areas.





Private Bus Routes:

- Bergen + Main Line
- Montclair Boonton Line
- Morris + Essex Line - Gladstone Branch
- Morris + Essex Line - Morristown Branch
- Raritan Valley Line

Park & Ride Sites: 

Includes all developed lands within a 1/2 mile buffer from all park and ride locations, rail stations, and NJ Transit public and major private bus routes in or within 1/2 mile of the Highlands Region.

**Objective 5E1b:** Development and redevelopment in close proximity to rail stations and along bus routes.



Means lands within the Highlands Region which are not within the Preservation Area.

**Objective 7F1d:** Planning Area exemptions, issued by the Highlands Council, shall be required, where appropriate, prior to consideration of a local development review or a Highlands Project Review. Guidance shall specify the exceptions where a review may proceed absent such an exemption determination. Applications for exemptions submitted to the Highlands Council shall be based upon the application requirements exemptions codified in N.J.A.C. 7:38.



**Protection Zone**

, BLOOMINGDALE BOROUGH, County, Block 00059, Lot 00001 04  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Consists of high natural resource value lands that are important to maintaining water quality, water quantity and sensitive ecological resources and processes.

**Policy 6C1:** To limit new human development in the Protection Zone to redevelopment, exempt activities, and environmentally-compatible low density new land uses, in accordance with RMP resource protection needs and water quality and quantity capacity constraints and to ensure that the impacts of development using exemptions under the Highlands Act (see Policy 7F1) are considered in regional protection measures.

**Objective 6C1a:** Centers in the Protection Zone, potentially including clustered development, shall be at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan, and the use of septic systems or community wastewater systems.

**Policy 6C2:** To ensure through Plan Conformance, local development review and Highlands Project Review that any future development or redevelopment which does occur in a Protection Zone is subject to standards and criteria which protect the land and water resources of the Protection Zone from any potential adverse impact to the maximum extent possible.





### Protection Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00059, Lot 00001 04  
12/23/2009



Land Use Capability:

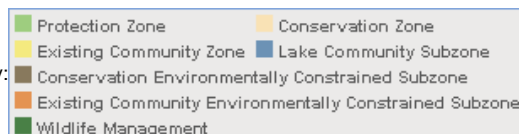
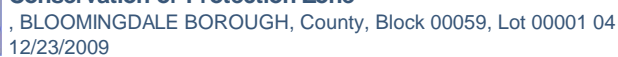
Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes the Protection Zone within the Planning Area.

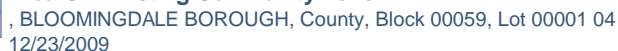
**Objective 2L2a:** Use the median concentrations of nitrate in ground water for Planning Area HUC14 subwatersheds where the Protection Zone is predominant as the nitrate target for new development reliant on septic systems within the Protection Zone. The median is 0.72 mg/L.

**Policy 6J3:** To encourage redevelopment in the Conservation and Protection Zones in the Planning Area of brownfields and grayfields that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields, as approved through Plan Conformance or the Highlands Redevelopment Area Designation process.



Includes both the Conservation Zone and the Protection Zone.





Protection Zone
  Conservation Zone
  Existing Community Zone
  Lake Community Subzone
  Conservation Environmentally Constrained Subzone
  Existing Community Environmentally Constrained Subzone
  Wildlife Management

Planning Area / Preservation Area:  Planning Area /  Preservation Area

Includes the Protection Zone, Conservation Zone, Environmentally Constrained Sub-Zones and the Existing Community Zone within the Planning Area.

**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.





**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.

## Regional Master Plan Consistency Report

12/23/2009

Prepared by State of New Jersey Highlands Water Protection and Planning Council  
100 North Road (Route 513), Chester, NJ 07930  
Telephone: (908) 879-6737 Fax: (908) 879-4205



Please consider the environment before printing this report

### Disclaimer

Please be advised that any reports generated from the online Consistency Review Application do not constitute a formal Consistency Determination from the Highlands Council. The information contained therein is provided solely for informational purposes and is not to be construed as providing advice, recommendations, endorsements, representations or warranties of any kind whatsoever.

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02



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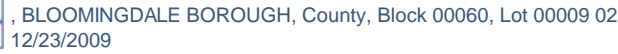


The Forest Resource Area data layer is an intensity indicator that captures high ecological value forest areas including those forested lands that exhibit the least fragmentation, which are vital for the maintenance of ecological processes.

**Policy 1A5:** To prohibit through local development review and Highlands Project Review forest clear-cutting within the Forest Resource Area except in accordance with a Forest Management Plan approved by the State Forester.

**Policy 1B3:** To limit through local development review and Highlands Project Review deforestation in the Forest Resource Area and forested lands within High Integrity Forest Subwatersheds within the Existing Community Zone to maximum extent practicable.







### Forest in Forest Resource Area in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02

12/23/2009



Forest within Forest Resource Area: ■

Planning Area / Preservation Area: ■ Planning Area ■ Preservation Area

The Forest in Forest Resource Area in Planning Area data layer illustrates the forested lands located within the spatially delineated Forest Resource Area of the legislatively delineated Highlands Planning Area. The Regional Master Plan includes protection policies specific to forested lands in the Forest Resource Area in the Planning Area.

**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.





**Planning Area Forest in Protection or Conservation Zone**  
 , BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02  
 12/23/2009



Forest Outside of Forest Resource Area: ■

Forest within Forest Resource Area: ■

Land Use Capability:

■ Protection Zone	■ Conservation Zone
■ Existing Community Zone	■ Lake Community Subzone
■ Conservation Environmentally Constrained Subzone	
■ Existing Community Environmentally Constrained Subzone	
■ Wildlife Management	

Planning Area / Preservation Area: ■ Planning Area / ■ Preservation Area

Planning Area Forest in Protection or Conservation Zone data layer represents all forested lands in the Protection Zone or Conservation Zone in the legislatively delineated Planning Area. Regional Master Plan protection policies limit development of these forests to low impact residential in an effort to maintain valuable forested lands within these two Zones in the Planning Area.

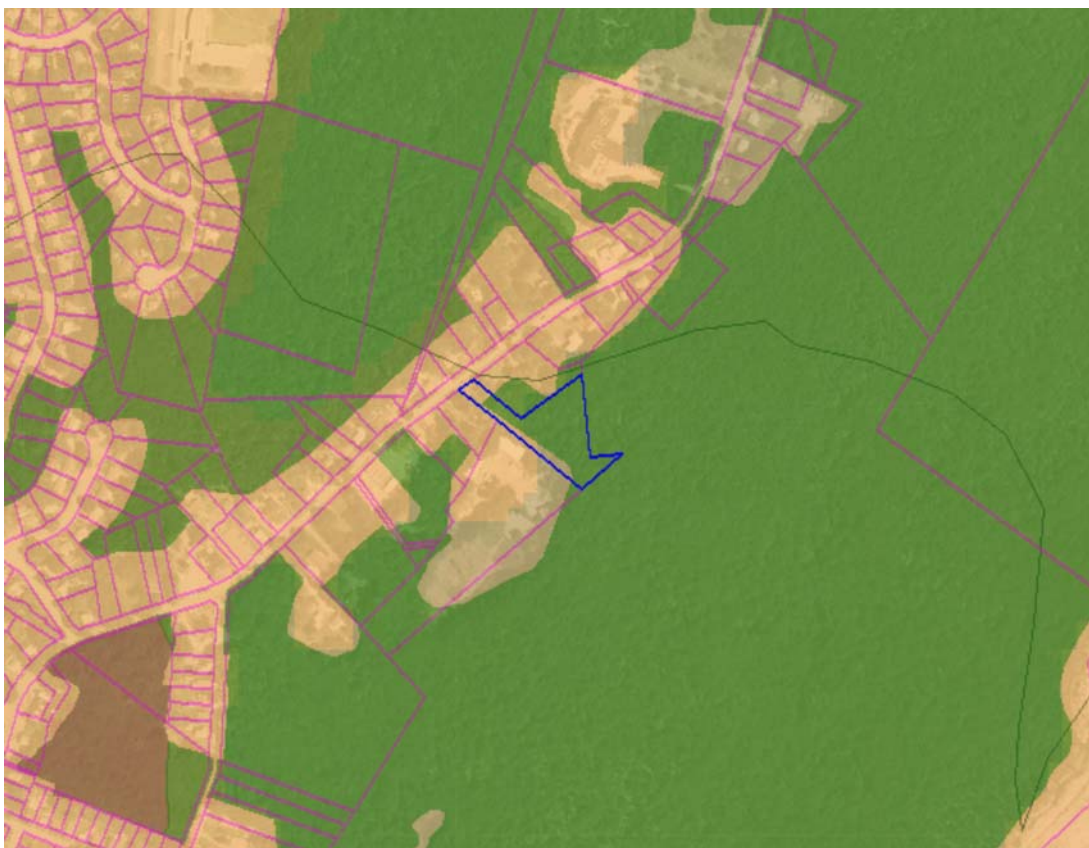
**Policy 1B2:** To limit through local development review and Highlands Project Review human development of forests to low impact residential development in the Protection Zone and the Conservation Zone in the Planning Area.



# Forest in High Integrity Forest Subwatershed and Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02

12/23/2009



Forest Outside of Forest Resource Area: ■

Forest within Forest Resource Area: ■

Land Use Capability:

■ Protection Zone	■ Conservation Zone
■ Existing Community Zone	■ Lake Community Subzone
■ Conservation Environmentally Constrained Subzone	
■ Existing Community Environmentally Constrained Subzone	
■ Wildlife Management	

Forest Integrity Value: ■ HIGH ■ MEDIUM ■ LOW

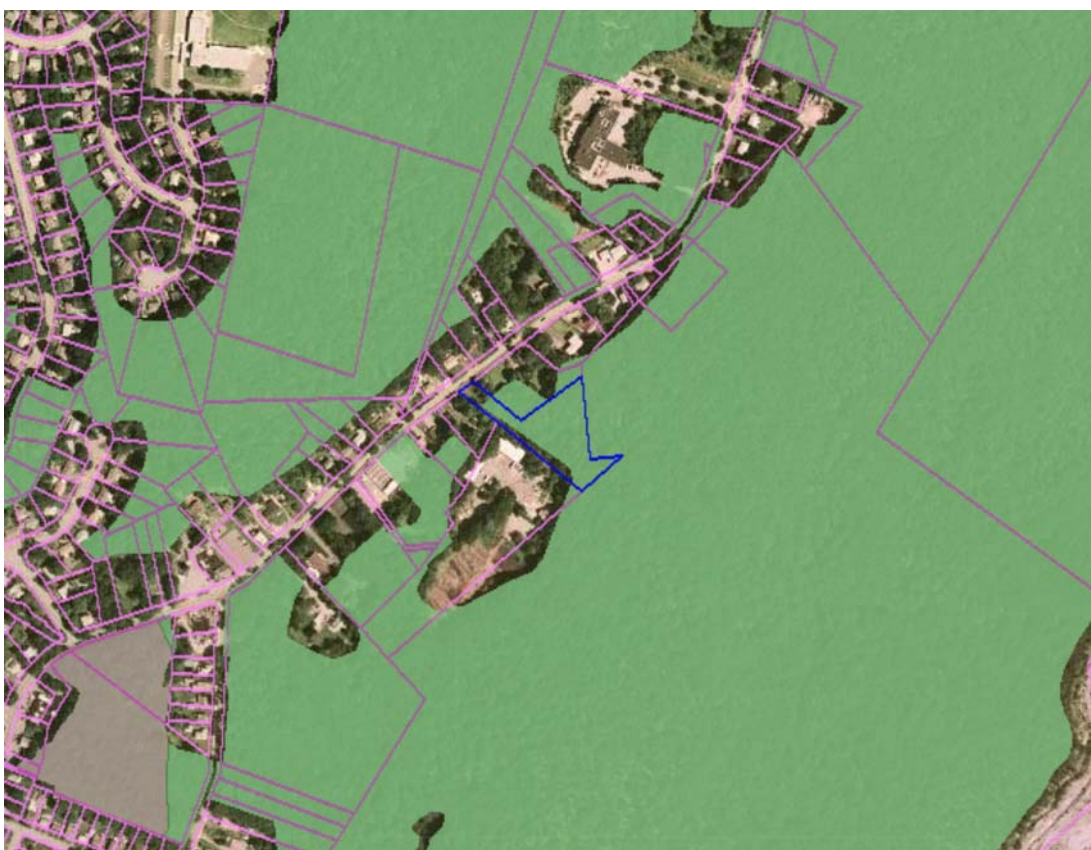
Forest in High Integrity Forest Subwatershed and Existing Community Zone data layer illustrates the intersection of High Integrity Forest Subwatershed and Existing Community Zones. The Regional Master Plans provides for the protection of these high quality forested lands by limiting deforestation.

**Policy 1B3:** To limit through local development review and Highlands Project Review deforestation in the Forest Resource Area and forested lands within High Integrity Forest Subwatersheds within the Existing Community Zone to maximum extent practicable.



# Forest Resources

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02  
12/23/2009



Forest Outside of Forest Resource Area: ■  
Forest within Forest Resource Area: ■

Forest Resources represents the Total Forest Area data layer that was extracted from the NJDEP 2002 draft Land Use Land Cover data. This data layer illustrates all upland and wetland forest and scrub/shrub categories (excluding old field) and represents all forested lands within the Region. The Regional Master Plan includes policies that limit clearing of trees within Forest Resources and that seek to protect overall forest resources integrity.

**Objective 1B3a:** Implementation through Plan Conformance of regulations, which limit the clearing of trees in conjunction with human development to circumstances where the clearing will not diminish the integrity of forest resources.

**Policy 1B5:** To ensure that forest resources are protected on a site specific basis during local development review and Highlands Project Review.

**Objective 1B5a:** Applications for local development review and Highlands Project Review require identification of any forest area on and adjacent to a site in accordance with the Highlands Councils Method for Identifying Upland Forest Areas in the Highlands Region.

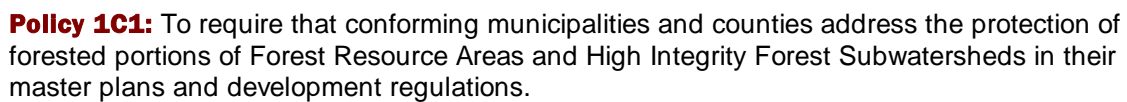
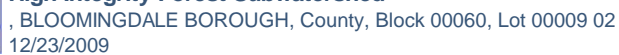
**Policy 1B7:** To prohibit clear-cutting of forest lands except pursuant to an approved Forest Management Plan approved by the State Forester.

**Policy 1C3:** To require that conforming municipalities adopt a tree clearing ordinance consistent with an approved community forestry plan under the New Jersey Forest Service Community Forestry Program as part of the municipal master plan and local development regulations.

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.









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. Riparian Areas serve as an interface between surface water bodies and terrestrial ecosystems and play a critical role in maintaining the quality and ecological integrity of Highlands Open Waters.

**Objective 211b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall



**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

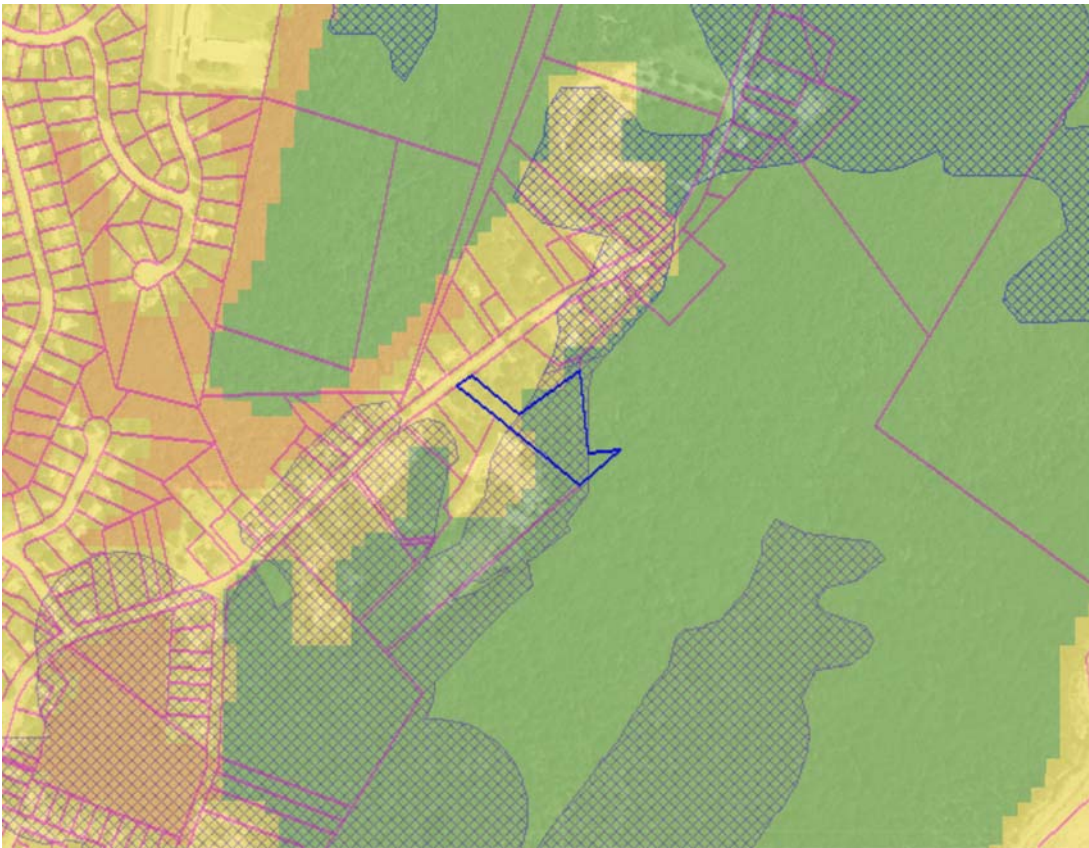
**Objective 2K3c:** Prohibit new, expanded or extended public wastewater collection and treatment systems and community on-site treatment facilities within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.



### Riparian Area in Protection Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Riparian Corridor Integrity Score: HIGH MODERATE LOW

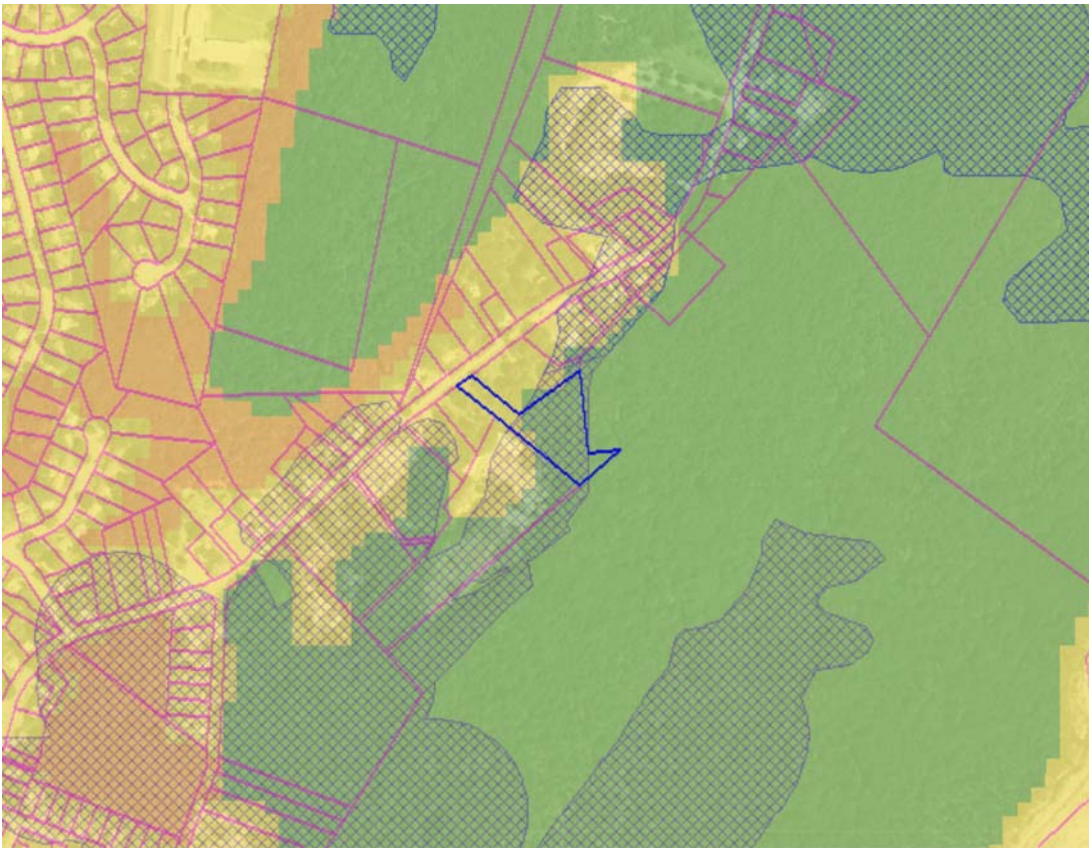
Includes all Riparian Areas within the Protection Zone.

**Objective 1D5c:** Prohibit modifications to Riparian Areas in the Protection Zone except where a waiver is approved by the NJDEP or the Highlands Council under Policy 7G1 or 7G2.



### Riparian Area in Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02  
12/23/2009



Land Use Capability:

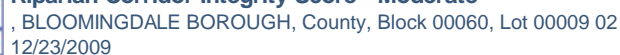
Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Riparian Corridor Integrity Score: HIGH MODERATE LOW

Includes all Riparian Areas within the Existing Community Zone.

**Objective 1D5d:** Restrict modifications to Riparian Areas in the Existing Community Zone, other than those addressed by Objective 1D5b, that would alter or be detrimental to the water quality and habitat value of a Riparian Area.





These areas include watersheds with Riparian Areas that contain a higher incidence of impervious area, agricultural uses and/or road crossings (as compared to High Score) and a reduced proportion of natural vegetation including high quality habitat for rare, threatened, and endangered water/wetland dependent species.

**Objective 1D5b:** 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.



### Steep Slope Protection Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02  
12/23/2009



Steep Slope Protection Area: ■

Slope is a measurement of the steepness of terrain and is defined as the vertical change in elevation over a given horizontal distance. Disturbance of areas containing steep slopes can trigger erosion and sedimentation, resulting in the loss of topsoil. It can also result in the disturbance of habitats, degradation of surface water quality, silting of wetlands, and alteration of drainage patterns. The Highlands Council examined areas of slope in the Highlands Region that exhibited one of the following grade classifications and these grades were established as Steep Slope Protection Areas: 1) grades of slopes of 20% or greater; 2) grades of slope between 15 - 20%; and 3) grades of slope between 10 - 15% that occur within the Riparian Area.

**Policy 1E6:** To require through local development review and Highlands Project Review that applications for development include topographic information identifying the location of any Steep Slope Protection Areas located on the parcel proposed for development.

**Policy 1E7:** To require through local development review and Highlands Project Review that applications for development involving parcels of land with slopes of 10% or greater include identification of forested lands, areas which are highly susceptible to erosion, depth to bedrock and Soil Capability Classes.

**Policy 1E10:** To require that conforming municipalities and counties implement the steep slope protection provisions of Policies 1E2 through 1E9 through master plans and development regulations.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.



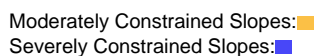
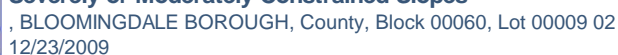
**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.





**Policy 1E8:** To prohibit through local development review and Highlands Project Review land disturbance within areas which are Severely Constrained Slopes and Moderately Constrained Slopes, except for linear development in both the Preservation and Planning Areas that meets the requirements of N.J.A.C. 7:38-3.8(c)1-4.

**Objective 2D4a:** 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 Steep Slopes.



Critical Wildlife Habitat data layer illustrates habitat areas that are critical for the survival of rare, threatened or endangered wildlife species of the Highlands Region. Critical Wildlife Habitat areas are lands within the NJDEPs Landscape Project Version 3 that are Landscape Rank 3 through 5 and Landscape Rank 2 with Highlands Conservation Rank of Critically Significant or Significant in the Planning Area.

**Objective 1F6b:** Prohibit indirect impacts from activity that is off-site, adjacent to, or within Critical Habitat that will jeopardize the continued existence of, or result in the likelihood of the destruction

**Objective 1F6c:** Waiver applications under Policy 7G2 for local development in a municipality with a Council-approved Critical Habitat Conservation and Management Plan shall be subject to the minimum standards and criteria for waiver provisions as set forth in the plan, to the maximum extent practicable.

**Objective 1F6f:** A Critical Wildlife Habitat area or Significant Natural Area delineation may be modified if an applicant can demonstrate, to the satisfaction of the Highlands Council in coordination with the NJDEPs Endangered and Nongame Species Program or Natural Heritage Program, that: 1. The nature of the site is such that it does not provide habitat for species of concern; 2. The species of concern are not present on the site during any critical part of their life cycle, do not depend upon the site for food, shelter or breeding, and the habitat; on the site is either unsuitable or not critical to species recovery in the Region; or 3. Existing land uses present a human, natural or development barrier to the use of the site by species of concern. Requirements for demonstrating the above criteria shall be included in the Critical Habitat Conservation and Management Plan.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas,



**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

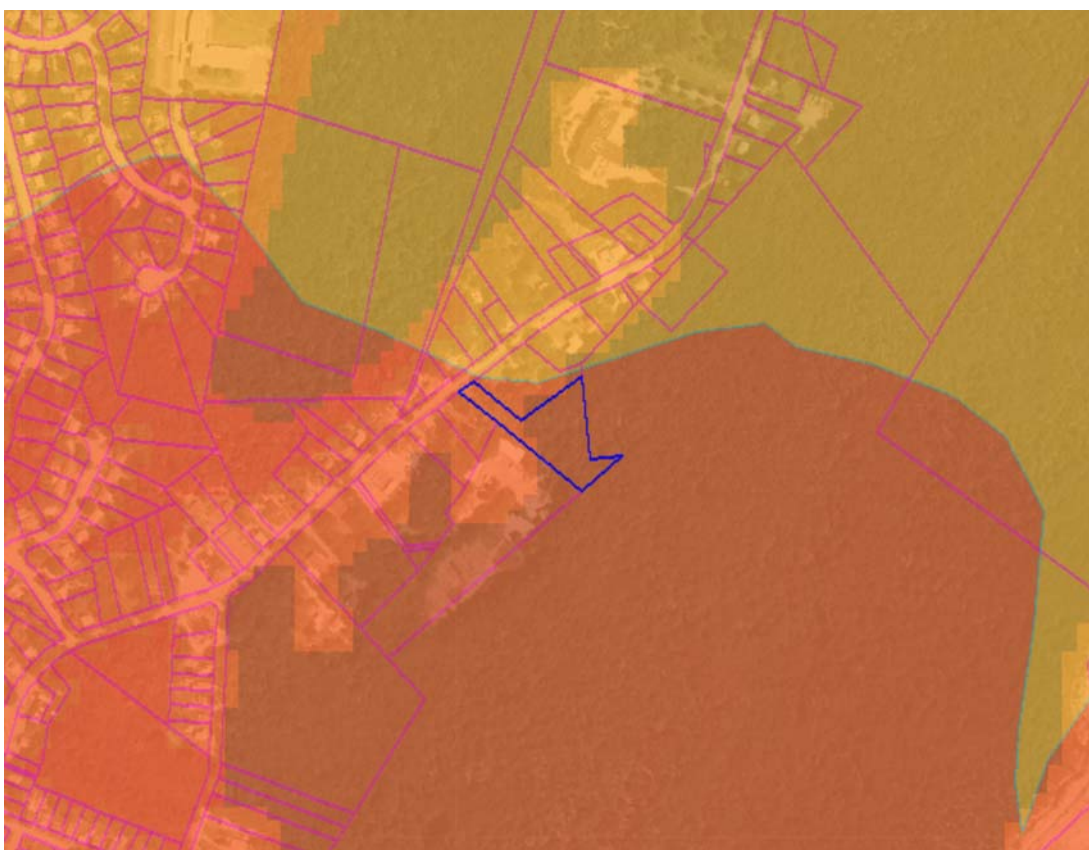
**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.



# Net Water Availability in Protection or Conservation Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02

12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Net Water Availability by HUC14:

Million Gallons Per Day (MGD)	
0.10-0.39	-0.09-0.00
0.05-0.09	-0.99-(-0.10)
0.00-0.04	-7.10-(-1.00)

Identifies the portion of a HUC14 subwatershed within the Protection or Conservation Zone.

**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

**Objective 2B4a:** Give highest priority for the use of non-agricultural Net Water Availability or Conditional Water Availability within Protection Zone and Conservation Zone subwatersheds, through a Water Use and Conservation Plan developed under Objective 2B8c, local development review, and Highlands Project review: 1. To address a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for Net Water Availability; 2. To serve a designated Highlands Redevelopment Area; 3. To serve a cluster development that complies with Objective 2J4b; and 4. To serve affordable housing projects where at least 10% of the units are affordable.

**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.



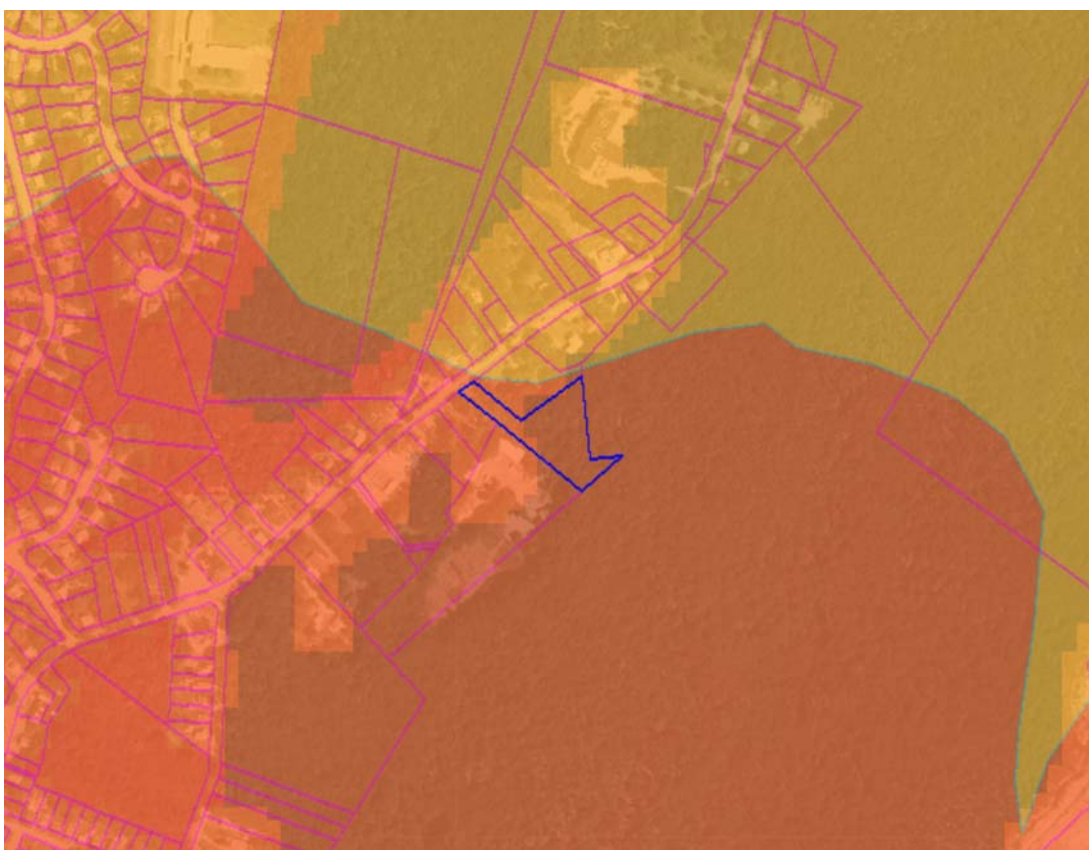




### Net Water Availability in Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02

12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Net Water Availability by HUC14:

Million Gallons Per Day (MGD)	
0.10-0.39	-0.09-0.00
0.05-0.09	-0.99-(-0.10)
0.00-0.04	-7.10-(-1.00)

Identifies the portion of a HUC14 subwatershed within the Existing Community Zone.

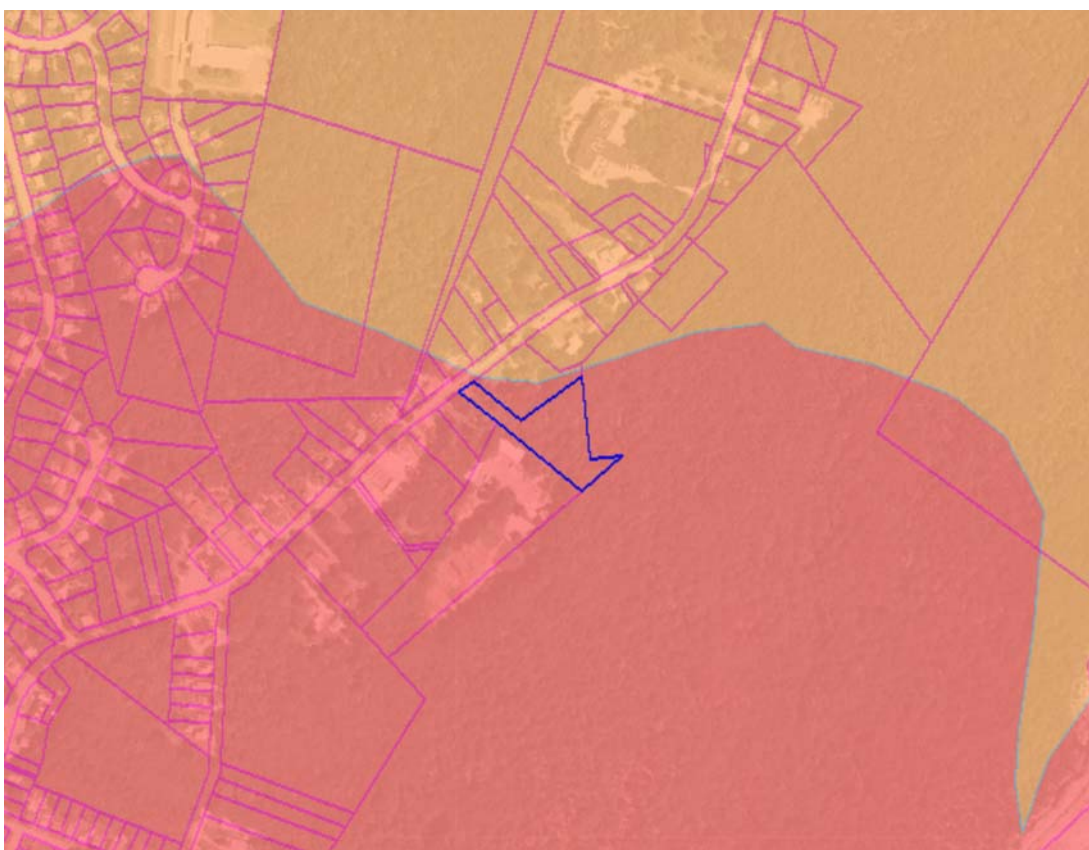
**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

**Objective 2B4b:** The highest priority for use of Net Water Availability or Conditional Water Availability within Existing Community Zone subwatersheds, through a Water Use and Conservation Plan developed under Objective 2B8c, local development review and Highlands Project review to serve documented 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% of the units are affordable, or new areas for development that meet all other requirements of the RMP.

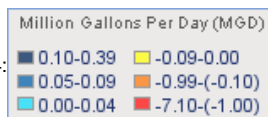
**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.

**Current Deficit Area**

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02  
12/23/2009



Net Water Availability by HUC14:



Identifies HUC14 subwatersheds that are in deficit of Net Water Availability.

**Policy 2B6:** To require through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, Highlands Project Review, and interagency coordination that proposed public water supply and wastewater service areas, new or increased water allocations and bulk water purchases will not directly or indirectly cause or contribute to a Net Water Availability deficit, and where feasible will help mitigate any existing deficit.

**Objective 2B6a:** Areawide Water Quality Management Plans, Wastewater Management Plans or their amendments shall ensure that the proposed service area will not directly or indirectly cause or contribute to a Net Water Availability deficit, and shall be in conformance with any Water Use and Conservation Plan developed under Objective 2B8c.

**Policy 2B8:** To require through Plan Conformance, local development review, and Highlands Project Review the efficient and effective use of water availability, the planning for future water needs, the reduction and elimination of water deficits, and the mitigation of new consumptive or depletive use in any Current Deficit Areas or subwatersheds that could become deficit areas based on projected development and water uses, to ensure sustainable water supply, water resource and ecological values in conformance with RMP policies and objectives.

**Objective 2B8a:** Prevent net increases in consumptive or depletive water uses in Current Water Deficit Areas to prevent exacerbation of and help reduce or eliminate the deficit to ensure sustainable water supply, water resource and ecological values, emphasizing techniques

including, but not limited to water reuse, recycling and conservation.

**Objective 2B8b:** Proposed new consumptive or depletive water uses within a Current Deficit Area shall only occur under the auspices of a Water Use and Conservation Management Plan approved under Objective 2B8c or through mitigation of the proposed consumptive or depletive use within the same HUC14 subwatershed through: a permanent reduction of existing consumptive and depletive water uses; ground water recharge in excess of the requirements of N.J.A.C. 7:8 (Stormwater Management Rules); or other permanent means. Where a Water Use and Conservation Management Plan has not been approved: 1. Each project shall achieve mitigation ranging from 125% to 200%, based on the severity of the Current Deficit and the amount of consumptive or depletive water use proposed; 2. Total consumptive and depletive water uses from any single project and all projects combined are not to exceed the Conditional Water Availability of Objectives 2B3a or 2B3b for any HUC14 subwatershed; 3. Mitigation shall be successfully completed prior to initiation of the water use, except as required by #4, below. Mitigation may be phased in keeping with project development; 4. For water uses where the combination of proposed consumptive and depletive water uses and current subwatershed deficit is high, according to a schedule established by the Highlands Council, off-site mitigation shall be successfully completed prior to any on-site construction. On-site mitigation shall be successfully completed prior to initiation of the water use but may be implemented concurrent with on-site construction. Mitigation may be phased in keeping with the level of consumptive or depletive water uses; and Mitigation plans for a project shall include: specific objectives for each mitigation component; monitoring and reporting requirements; methods by which shortfalls in meeting the mitigation objectives shall be addressed through additional action; and be guaranteed through performance bonds.

**Objective 2B8c:** Water Use and Conservation Management Plans shall be required through municipal Plan Conformance for all subwatersheds to meet the policies and objectives of Goal 2B, to ensure efficient use of water through water conservation and Low Impact Development Best Management Practices, and to avoid the creation of new deficits in Net Water Availability. Where developed for Current Deficit Areas, the plans shall include provisions to reduce or manage consumptive and depletive uses of ground and surface waters as necessary to reduce or eliminate deficits in Net Water Availability, or to ensure continued stream flows to downstream Current Deficit Areas from Existing Constrained Areas, to the maximum extent practicable within each HUC14 subwatershed. Water Use and Conservation Management Plans shall demonstrate through a detailed implementation plan and schedule how and when the current deficit will be resolved in a subwatershed prior to approval for new water uses in the subwatersheds with the most severe deficits (i.e., in excess of 0.25 million gallons per day), and the plan shall be implemented prior to initiation of new water uses.

**Objective 2B8d:** All water users within a Current Deficit Area shall seek funding and opportunities to meet the intent of Objective 2B4b.

**Objective 2J2a:** Limit future water system demand and reduce existing demand where feasible by water systems that are dependent on Current Deficit Areas or Existing Constrained Areas as a source of water.

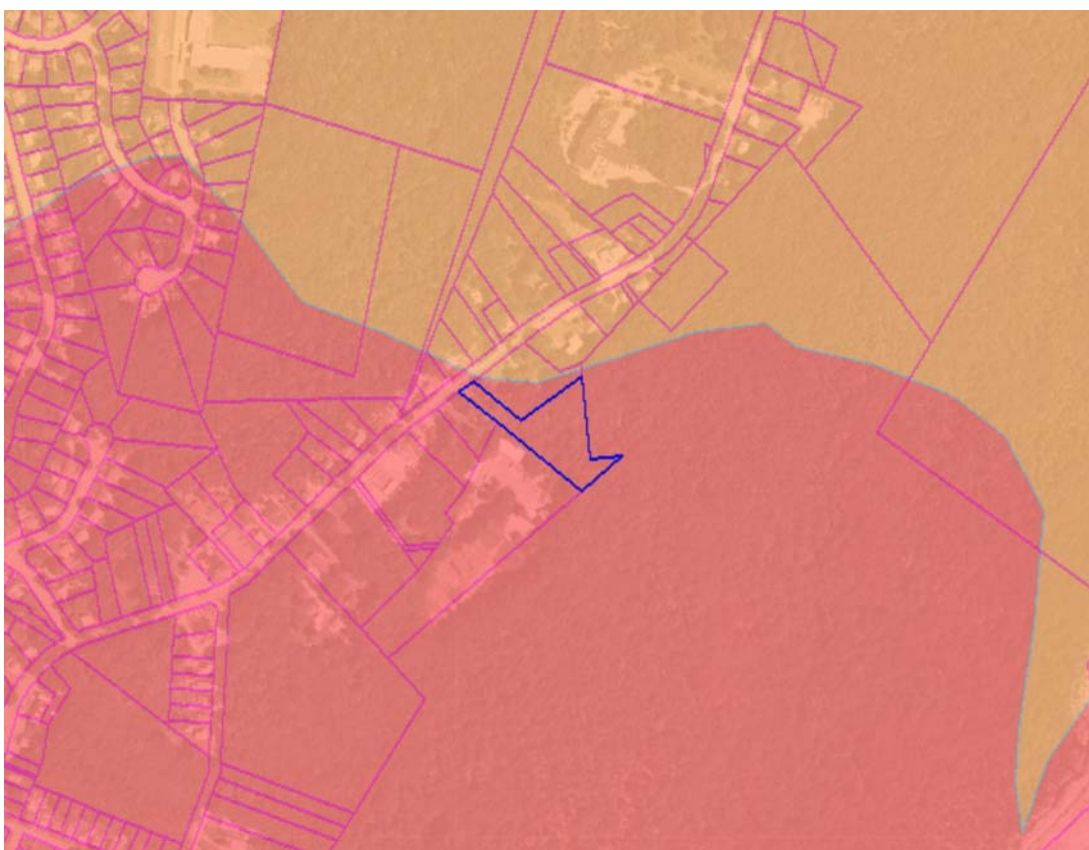
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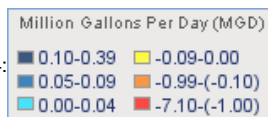


### Net Water Availability

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02  
12/23/2009



Net Water Availability by HUC14:



Net Water Availability is calculated for each HUC14 subwatershed by deducting consumptive and depletive water uses from Ground Water Availability. The Regional Master Plan incorporates Net Water Availability as a capacity threshold on future water uses. 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 in deficit and deemed to be a Current Deficit Area. In Current Deficit Areas where a Water Use and Conservation Management Plan has not yet been adopted, limited amounts of Conditional Water Availability are provided. The use of Net Water Availability or Conditional Water Availability is subject to Regional Master Plan policies.

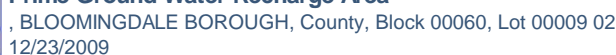
**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.

**Policy 2B7:** To ensure through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, and Highlands Project Review that the use of Net Water Availability and Conditional Water Availability within each subwatershed supports development patterns that are in conformance with RMP policies and objectives.

**Objective 2B8c:** Water Use and Conservation Management Plans shall be required through municipal Plan Conformance for all subwatersheds to meet the policies and objectives of Goal

**Objective 2J2b:** Limit future water system demands to levels that will not create a Current Deficit Area where one does not currently exist.



The layer displays the mapping of Prime Ground Water Recharge Areas. The Regional Master Plan defines Prime Ground Water Recharge Areas as those lands within a HUC14 subwatershed that most efficiently provide 40% of total drought recharge volume for that HUC14 subwatershed, using a GSR-32 analysis based upon land cover and the 1964-1966 drought of record precipitation.

**Objective 2D3c:** Implement master plans and development review ordinances through Plan Conformance that protect Prime Ground Water Recharge Areas and minimize the potential for disruption of recharge in such areas by development.

**Policy 2D4:** To apply standards through Plan Conformance, local development review and Highlands Project Review to protect, restore and enhance the functionality and the water resource value of Prime Ground Water Recharge Areas by restricting development and uses of land within a Prime Ground Water Recharge Area that reduce natural ground water recharge volumes or may directly or indirectly contribute to or result in water quality degradation.

29 of 44



**Objective 2D4b:** Any development activity approved to occur in a Prime Ground Water Recharge Area shall provide an equivalent of 125% of pre-construction recharge volumes for the affected Prime Ground Water Recharge Area of the site within the following areas, in order of priority: (1) the same development site where feasible; (2) the same HUC14 subwatershed, or (3) an interrelated HUC14 subwatershed as approved by the Highlands Council where no feasible option exists in the same HUC14 subwatershed. This requirement shall apply to all portions of the Prime Ground Water Recharge Area where the recharge is disrupted through impervious surfaces, routing of stormwater runoff and recharge from natural flow paths, and other similar changes.

**Objective 2D4d:** Require through Plan Conformance, local development review and Highlands Project Review that the disruption of Prime Ground Water Recharge Area, after conformance with Objectives 2D4a, 2D4b and 2D4c is achieved, shall be limited to no greater than 15% of the Prime Ground Water Recharge Area on the site and shall be preferentially be sited on that portion of the Prime Ground Water Recharge Area that has the lowest ground water recharge rates and the lowest potential for aquifer recharge.

**Objective 2D4f:** Prohibit through Plan Conformance, local development review and Highlands Project Review new land uses, including those identified through Objective 2D3d, that have a significant potential to result in the discharge of persistent organic chemicals sources (including but not limited to existing discharges of industrial or other non-sanitary wastewater effluent) to ground water or to the land surface within a Prime Ground Water Recharge Area, such that they may degrade or contribute to the degradation of ground water quality.

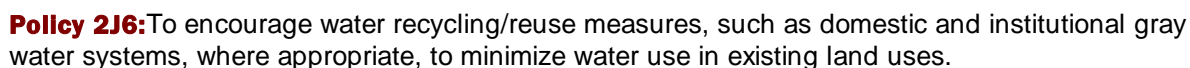
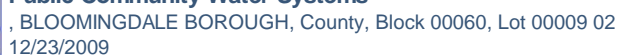
**Objective 2D4h:** Achieve a net improvement in ground water recharge volume and maintenance of water quality as required through compliance with and implementation of any related provisions of an adopted regional stormwater plan.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

30 of 44

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.

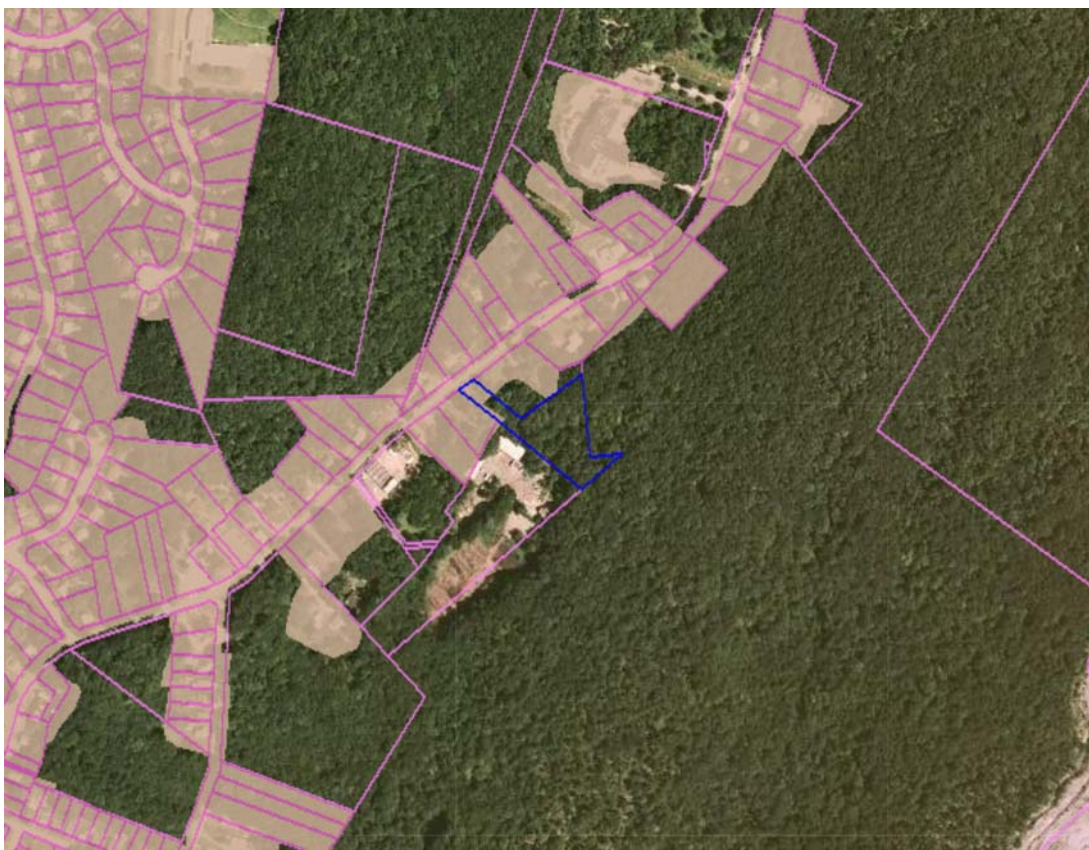






### Highlands Domestic Sewerage Facilities

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02  
12/23/2009



Highlands Domestic Sewerage Facilities: ■

Highlands Domestic Sewerage Facilities displays those areas served by public wastewater utilities. The map indicates areas that are actually connected into a public wastewater collection system, not simply located in a Sewer Service Area. Public sewer systems discharging less than 0.15 million gallons per day (MGD) to surface water or 0.075 MGD to ground water are not included. Private, on-site treatment facilities like a package treatment plant are also not included. The Regional Master Plan limits the creation or extension of public wastewater systems.

**Objective 2J4b:** Clustered development served by public water supply within the Protection Zone, the Conservation Zone, and the Environmentally-Constrained Sub-zones of the Planning Area shall be approved only if the following conditions are met: 1. The development impacts are otherwise consistent with the requirements of the RMP, including provisions for mandatory clustering in Agricultural Resource Areas pursuant to Policy 3A5; 2. Extension of an existing public water system will occur only where the cluster development is within or immediately adjacent to an Existing Area Served with available capacity; 3. Creation of a new public water system will occur only where such development is not within or immediately adjacent to an Existing Area Served with available capacity; 4. The clustered development preserves at least 80% of the cluster project area in perpetuity for environmental protection or agricultural purposes. To the maximum extent feasible the developed portion (i.e., not including wetlands, Highlands Open Waters buffers, and recreational lands) occupies no more than 10% of the cluster project area if served by a public or community on-site wastewater system; and 5. Where the preserved land in the cluster project area is dedicated to agricultural purposes, the cluster development ordinance and an Agriculture Retention/Farmland Preservation Plan supports continued agricultural viability of the agricultural land and requires the implementation of best management practices, including development and implementation of a Farm Conservation Plan that addresses the protection of water and soil resources prepared by the USDA Natural Resources Conservation Service (NRCS), Technical Service Provider (TSP), appropriate agent or NJDA staff, and approved by the local Soil Conservation District (SCD).

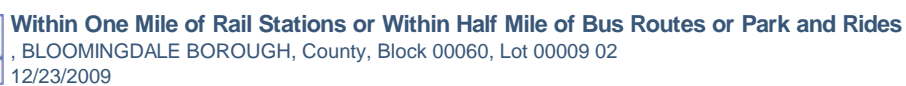
**Policy 2J6:** To encourage water recycling/reuse measures, such as domestic and institutional gray water systems, where appropriate, to minimize water use in existing land uses.

**Objective 211a:** Designated sewer service areas in the Preservation Area shall be restricted to the Existing Area Served as of August 10, 2004, except to serve development that is approved through a HAD or a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1.

**Policy 2K2:** To base projected demand for current needs, appropriate economic revitalization and opportunities for designated TDR Receiving Zones within Existing Areas Served on existing maximum three month demands plus an estimate of redevelopment needs based on either Highlands Council regional analyses or more detailed local analyses, to assess whether there is adequate treatment capacity to encourage redevelopment.

**Objective 2K3d:** Clustered development served by a public wastewater collection and treatment system or community on-site treatment facility within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area shall be approved only if the following conditions are met: 1. The development impacts are otherwise consistent with the requirements of the RMP, including provisions for mandatory clustering in Agricultural Resource Areas; 2. Extension of an existing public wastewater collection and treatment system will occur only where the cluster development is within or immediately adjacent to an Existing Area Served with available capacity; 3. Creation of a community on-site treatment facility will occur only where such development is not within or immediately adjacent to an Existing Area Served with available capacity, where the proposed system is designed, permitted, and constructed at a capacity limited to the needs of the clustered development, and where the system does not create the potential for future expansion into areas that are not the subject of cluster developments immediately adjacent to the initial cluster served; 4. The cluster development preserves at least 80% of the cluster project area in perpetuity for environmental protection or agriculture purposes. To the maximum extent feasible the developed portion of the project area (e.g., not including wetlands, Highlands Open Waters buffers, and recreational lands) occupies no more than 10% of the cluster project area if served by a public or community on-site wastewater system; and 5. Where the preserved land in the cluster project area is dedicated to agricultural purposes, the cluster development ordinance and an Agriculture Retention/Farmland Preservation Plan supports continued agricultural viability of the agricultural land and requires the implementation of best management practices, including development and implementation of a Farm Conservation Plan that addresses the protection of water and soil resources prepared by the USDA Natural Resources Conservation Service (NRCS), Technical Service Provider (TSP), appropriate agent or NJDA staff, and approved by the local Soil Conservation District (SCD).

**Objective 2K3e:** Allow the expansion or creation of wastewater collection systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to those provided at Objective 2K3c within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. The highest priority for allocation of excess or additional wastewater treatment capacity is to areas where there are clusters of failed septic systems that are located within or adjacent to Existing Areas Served. TDR Receiving Areas, where designated, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than other developments requiring expansion of sewer service areas.



Private Bus Routes:

- Bergen + Main Line
- Montclair Boonton Line

Rail Stations:

- Morris + Essex Line - Gladstone Branch
- Morris + Essex Line - Morristown Branch
- Raritan Valley Line

Park & Ride Sites: 

Includes all developed lands within a 1/2 mile buffer from all park and ride locations, rail stations, and NJ Transit public and major private bus routes in or within 1/2 mile of the Highlands Region.

**Objective 5E1b:** Development and redevelopment in close proximity to rail stations and along bus routes.





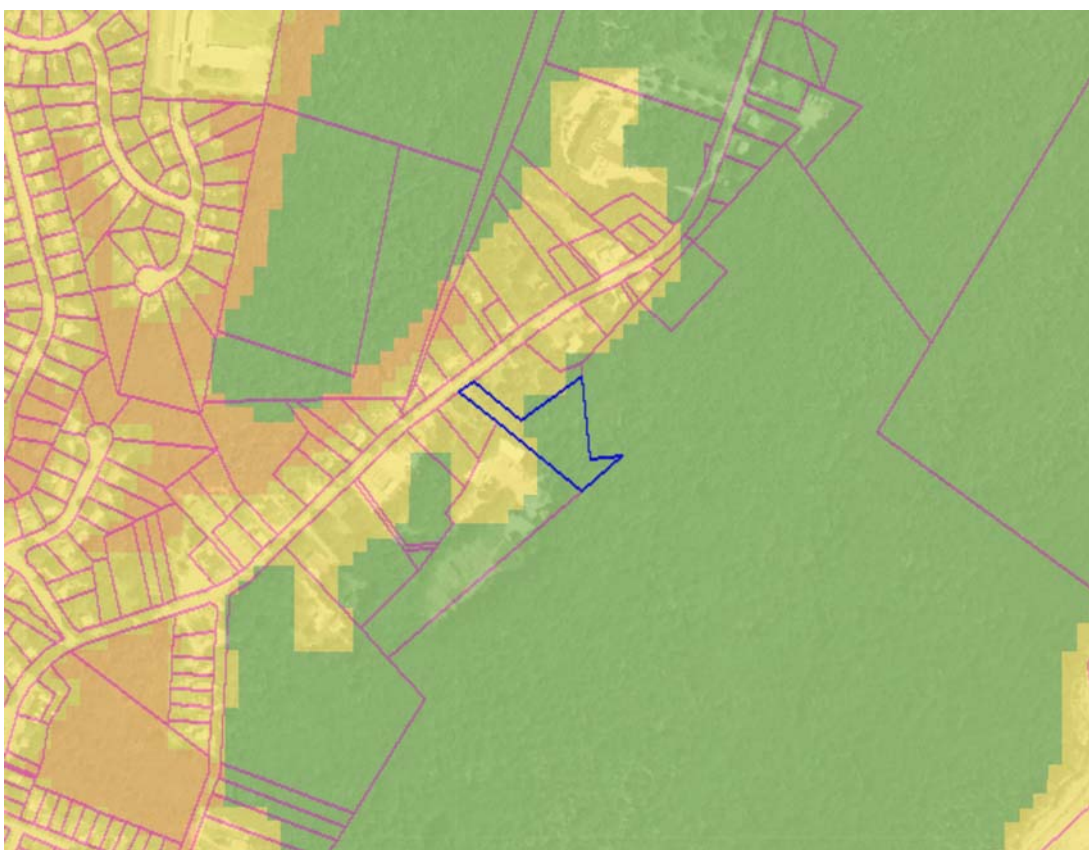
Means lands within the Highlands Region which are not within the Preservation Area.

**Objective 7F1d:** Planning Area exemptions, issued by the Highlands Council, shall be required, where appropriate, prior to consideration of a local development review or a Highlands Project Review. Guidance shall specify the exceptions where a review may proceed absent such an exemption determination. Applications for exemptions submitted to the Highlands Council shall be based upon the application requirements exemptions codified in N.J.A.C. 7:38.



### Protection Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Consists of high natural resource value lands that are important to maintaining water quality, water quantity and sensitive ecological resources and processes.

**Policy 6C1:** To limit new human development in the Protection Zone to redevelopment, exempt activities, and environmentally-compatible low density new land uses, in accordance with RMP resource protection needs and water quality and quantity capacity constraints and to ensure that the impacts of development using exemptions under the Highlands Act (see Policy 7F1) are considered in regional protection measures.

**Objective 6C1a:** Centers in the Protection Zone, potentially including clustered development, shall be at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan, and the use of septic systems or community wastewater systems.

**Policy 6C2:** To ensure through Plan Conformance, local development review and Highlands Project Review that any future development or redevelopment which does occur in a Protection Zone is subject to standards and criteria which protect the land and water resources of the Protection Zone from any potential adverse impact to the maximum extent possible.

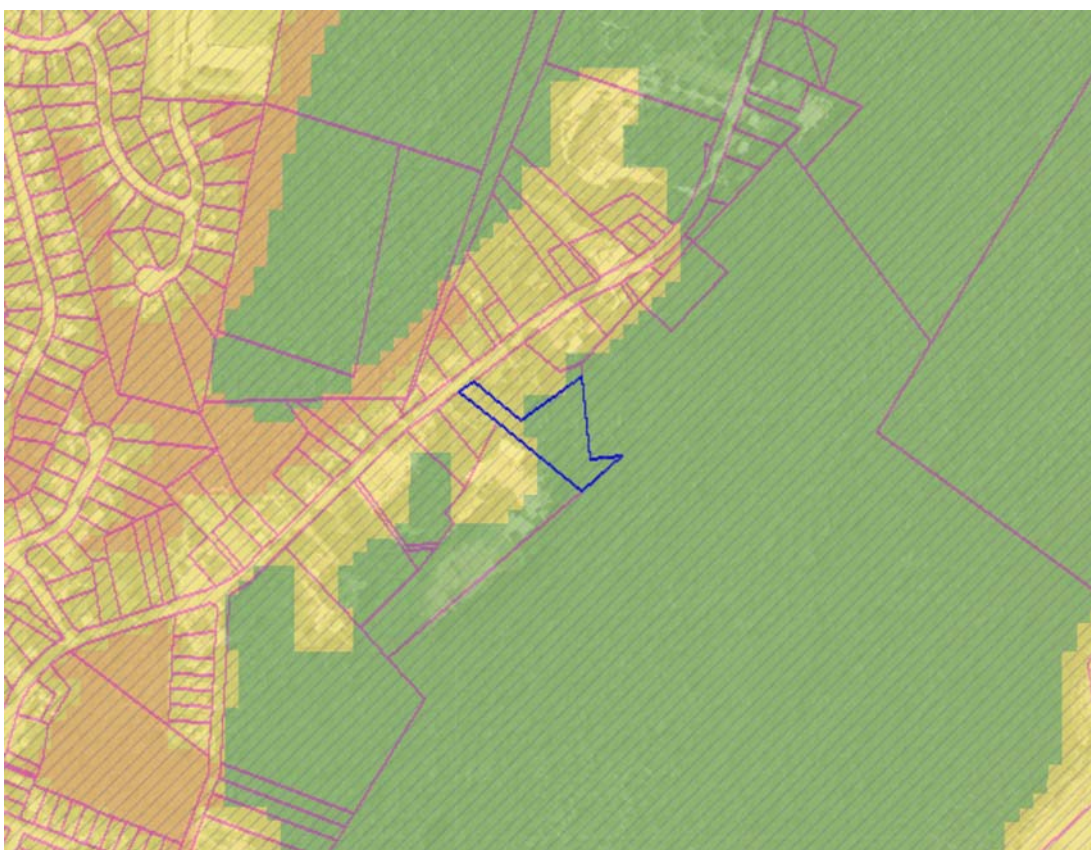




### Protection Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02

12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

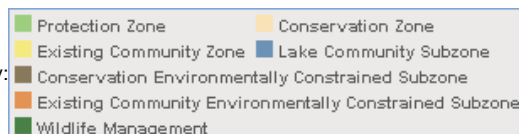
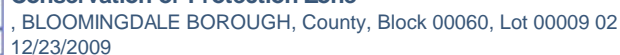
Planning Area / Preservation Area: Planning Area / Preservation Area

Includes the Protection Zone within the Planning Area.

**Objective 2L2a:** Use the median concentrations of nitrate in ground water for Planning Area HUC14 subwatersheds where the Protection Zone is predominant as the nitrate target for new development reliant on septic systems within the Protection Zone. The median is 0.72 mg/L.

**Policy 6J3:** To encourage redevelopment in the Conservation and Protection Zones in the Planning Area of brownfields and grayfields that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields, as approved through Plan Conformance or the Highlands Redevelopment Area Designation process.



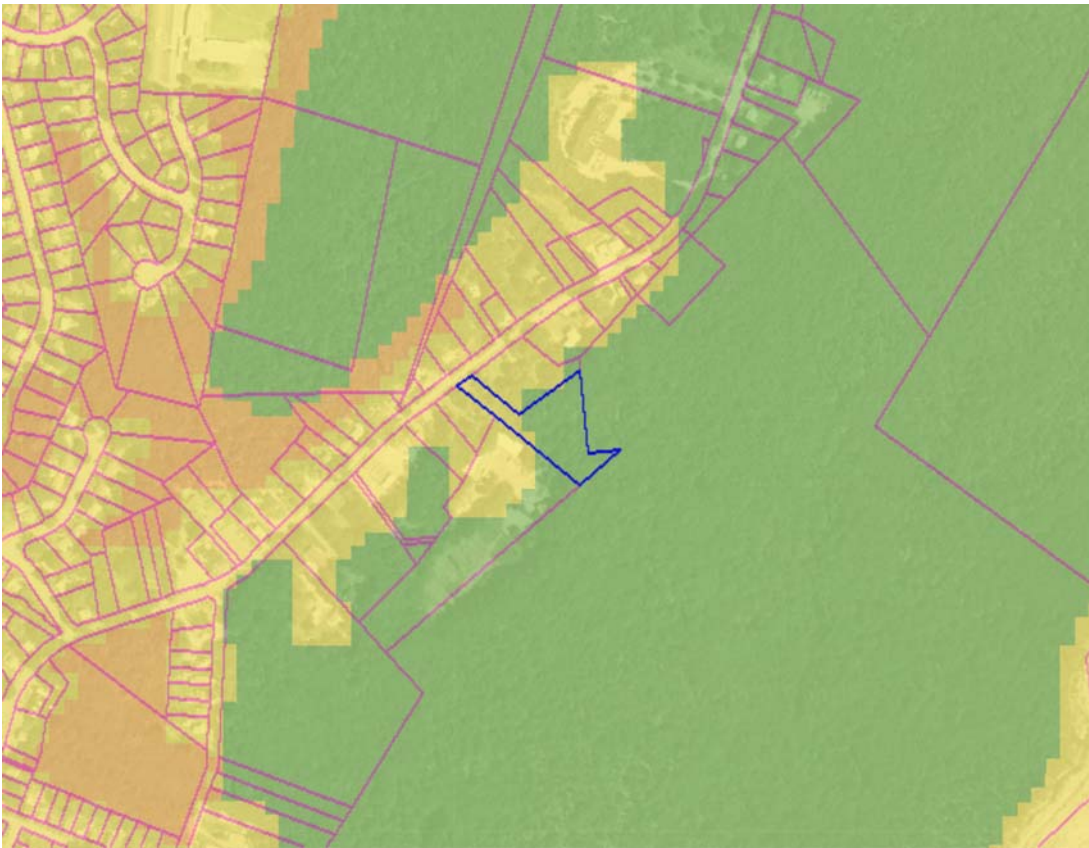


Includes both the Conservation Zone and the Protection Zone.



### Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Consists of areas with regionally significant concentrated development signifying existing communities.

**Objective 2J4c:** Allow the expansion or creation of public water systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to Objective 2J4a within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. TDR Receiving Zones, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than expansion of public water service areas within this Zone.

**Objective 2K3e:** Allow the expansion or creation of wastewater collection systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to those provided at Objective 2K3c within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. The highest priority for allocation of excess or additional wastewater treatment capacity is to areas where there are clusters of failed septic systems that are located within or adjacent to Existing Areas Served. TDR Receiving Areas, where designated, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than other developments requiring expansion of sewer service areas.

**Policy 6F3:** To ensure that development activities within the Existing Community Zone are subject

**Objective 6F6a:** Center based development initiatives shall be planned within the Existing Community Zone at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan. Densities of five dwelling units and above are encouraged, and are required in areas designated as voluntary TDR Receiving Zones where TDR benefits are sought under the Highlands Act.

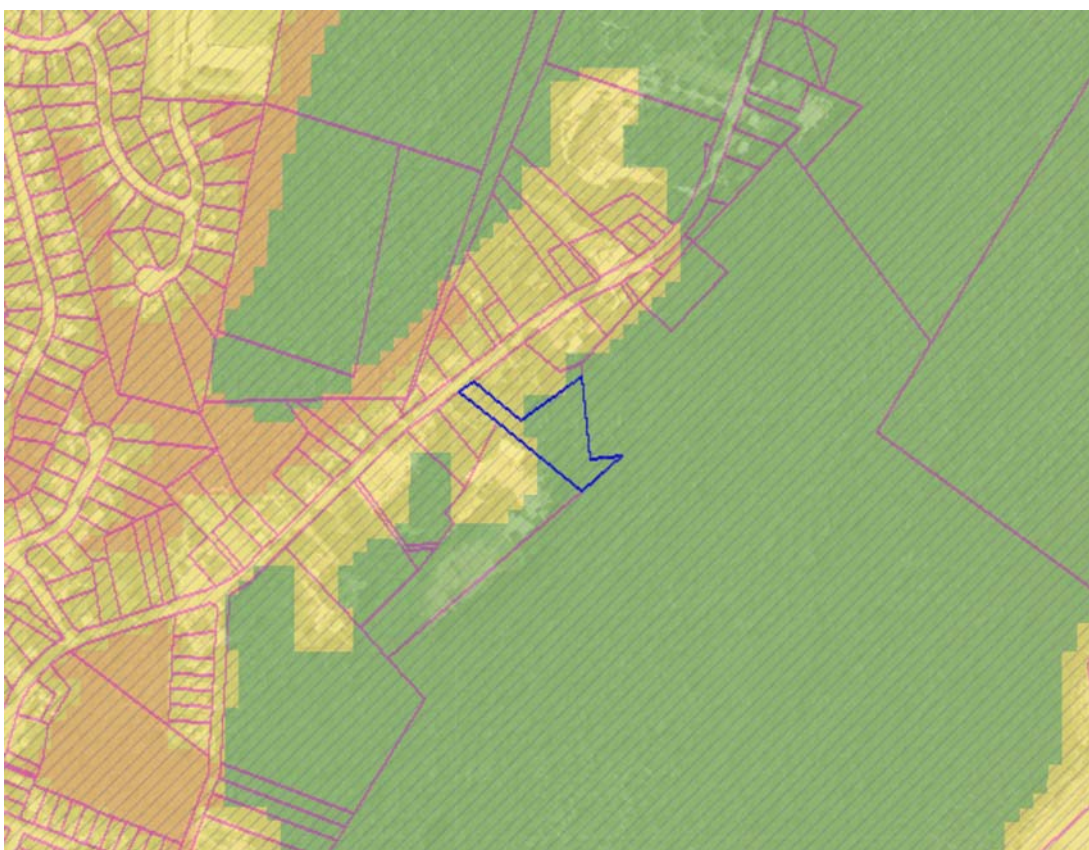




### Existing Community Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02

12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes the Existing Community Zone within the Planning Area.

**Objective 2L2d:** Use a nitrate target of 2 mg/L for the Existing Community Zone within Planning Area, on a project-by-project basis, where new development will rely on septic systems.

**Policy 6J2:** To encourage redevelopment in the Existing Community Zone in the Planning Area of brownfields, grayfields, and other previously developed areas that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields, as approved through Plan Conformance or the Highlands Redevelopment Area Designation process.



# Protection Zone or Conservation Zone or Environmentally Constrained Sub-Zones in Planning Area OR Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00009 02  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes the Protection Zone, Conservation Zone, Environmentally Constrained Sub-Zones and the Existing Community Zone within the Planning Area.

**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.



**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.



## Regional Master Plan Consistency Report

12/23/2009

Prepared by State of New Jersey Highlands Water Protection and Planning Council  
100 North Road (Route 513), Chester, NJ 07930  
Telephone: (908) 879-6737 Fax: (908) 879-4205

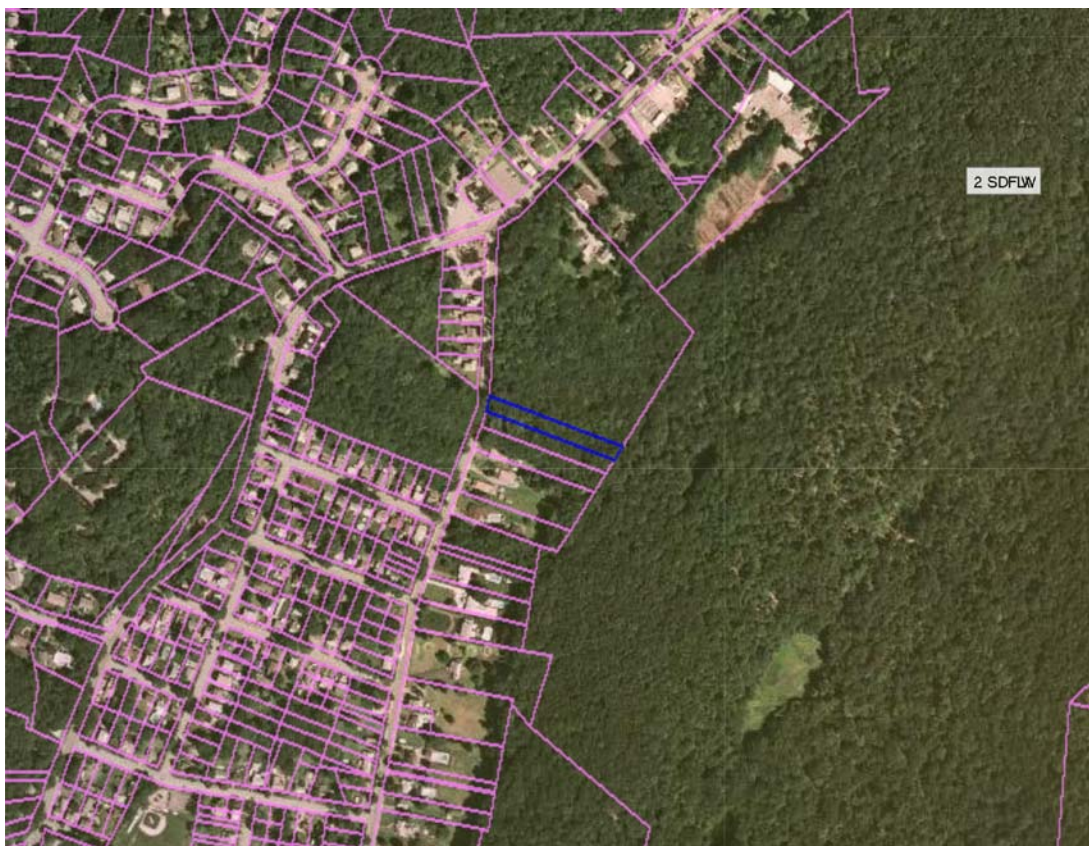


Please consider the environment before printing this report

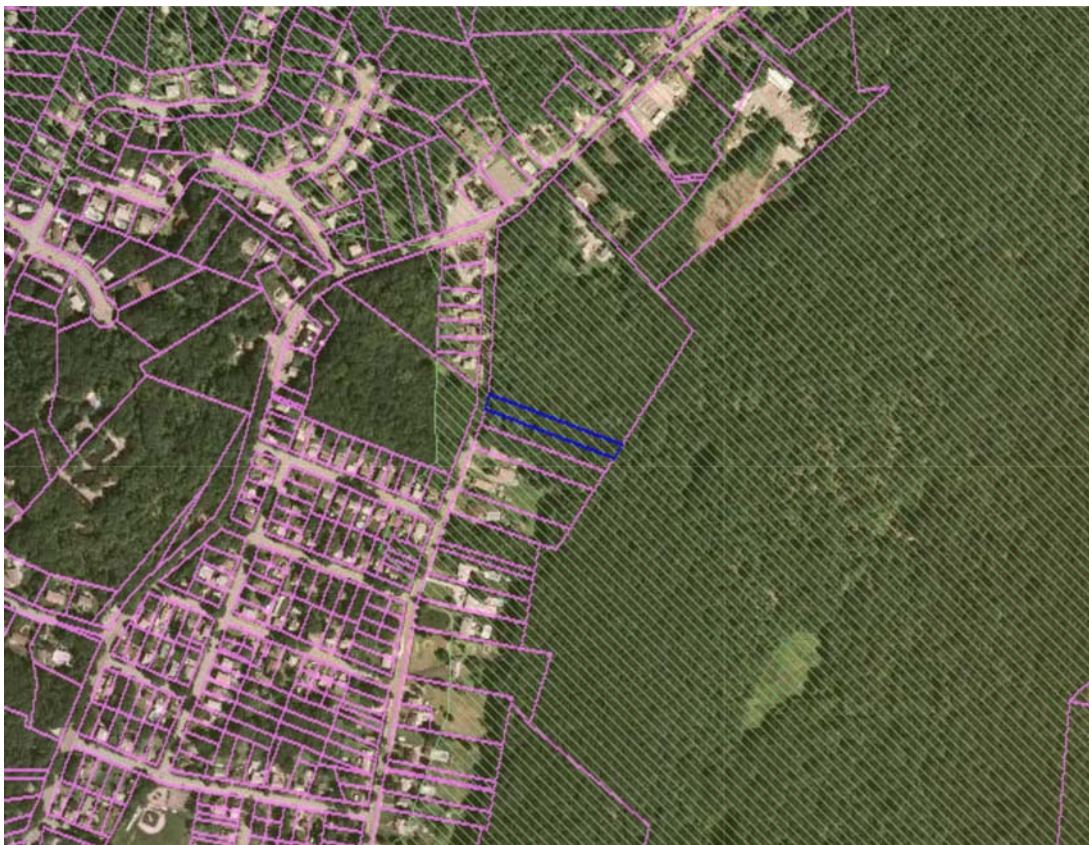
### Disclaimer

Please be advised that any reports generated from the online Consistency Review Application do not constitute a formal Consistency Determination from the Highlands Council. The information contained therein is provided solely for informational purposes and is not to be construed as providing advice, recommendations, endorsements, representations or warranties of any kind whatsoever.

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01



Powered by VERTICES Mapper™

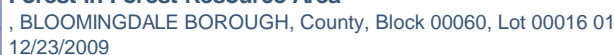


The Forest Resource Area data layer is an intensity indicator that captures high ecological value forest areas including those forested lands that exhibit the least fragmentation, which are vital for the maintenance of ecological processes.

**Policy 1A5:** To prohibit through local development review and Highlands Project Review forest clear-cutting within the Forest Resource Area except in accordance with a Forest Management Plan approved by the State Forester.

**Policy 1B3:** To limit through local development review and Highlands Project Review deforestation in the Forest Resource Area and forested lands within High Integrity Forest Subwatersheds within the Existing Community Zone to maximum extent practicable.





**Objective 1A2d:** To prohibit through Plan Conformance, local development review and Highlands Project Review the expansion or creation of public water supply systems or public wastewater collection and treatment systems or community-based on-site wastewater facilities into forested areas of the Forest Resource Area within the Planning Area except as provided for in Policy 2J4 with Objectives 2J4a through 2J4d, and Policy 2K3 with Objectives 2K3a through 2K3e, and within the Preservation Area except as provided for in Policy 2I1 and Objectives 2I1a and 2I1b.

**Policy 5C3:** To limit road improvements through local development review and Highlands Project Review where roads are constrained by topography, forested lands or the community character of land uses fronting on the road.

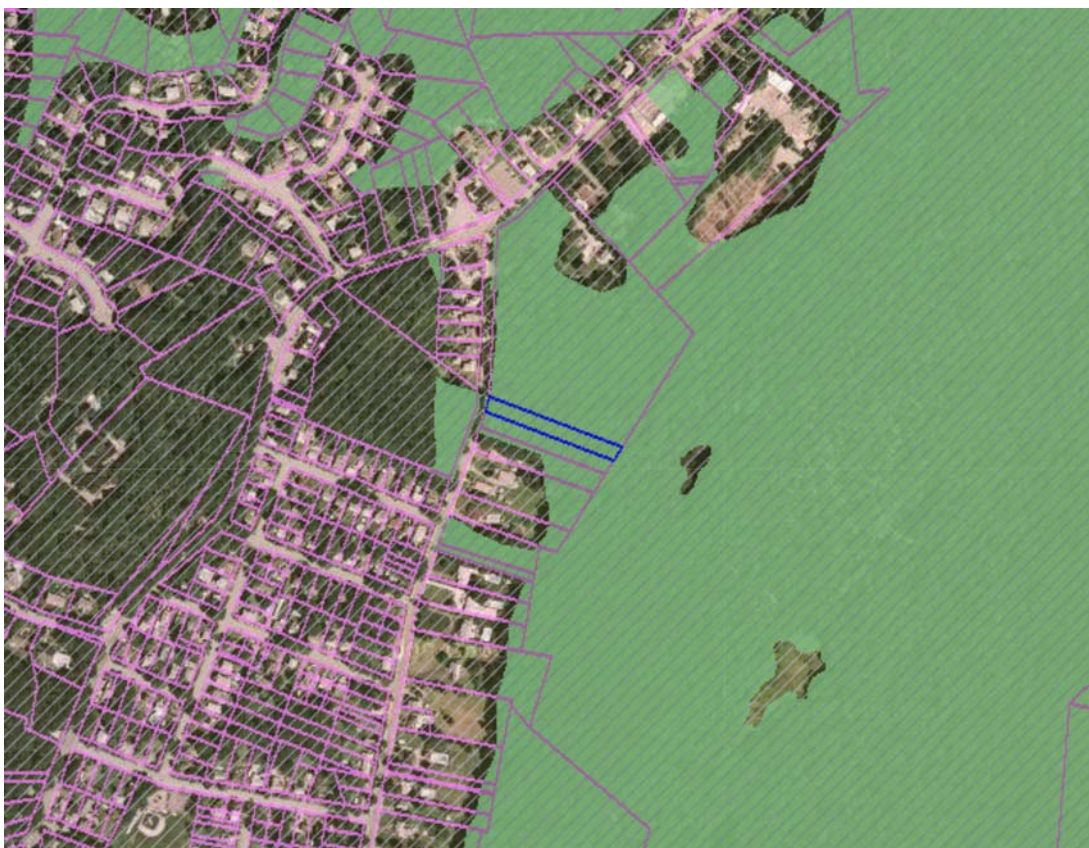




### Forest in Forest Resource Area in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01

12/23/2009



Forest within Forest Resource Area: ■

Planning Area / Preservation Area: ■ Planning Area ■ Preservation Area

The Forest in Forest Resource Area in Planning Area data layer illustrates the forested lands located within the spatially delineated Forest Resource Area of the legislatively delineated Highlands Planning Area. The Regional Master Plan includes protection policies specific to forested lands in the Forest Resource Area in the Planning Area.

**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.



**Planning Area Forest in Protection or Conservation Zone**  
 , BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01  
 12/23/2009



Forest Outside of Forest Resource Area: ■

Forest within Forest Resource Area: ■

Land Use Capability:

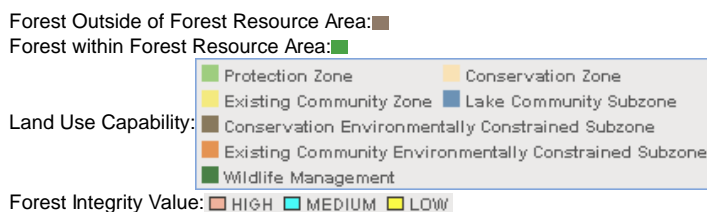
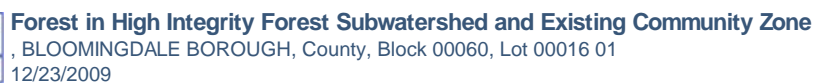
■ Protection Zone	■ Conservation Zone
■ Existing Community Zone	■ Lake Community Subzone
■ Conservation Environmentally Constrained Subzone	
■ Existing Community Environmentally Constrained Subzone	
■ Wildlife Management	

Planning Area / Preservation Area: ■ Planning Area / ■ Preservation Area

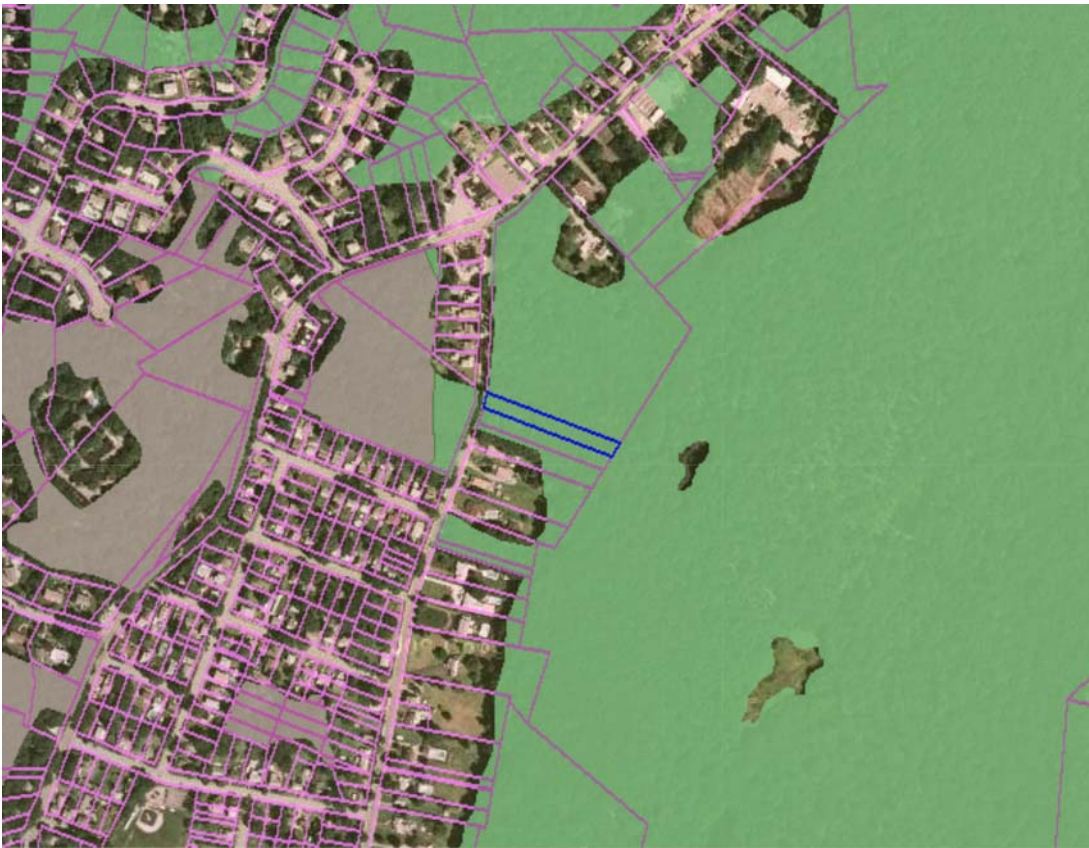
Planning Area Forest in Protection or Conservation Zone data layer represents all forested lands in the Protection Zone or Conservation Zone in the legislatively delineated Planning Area. Regional Master Plan protection policies limit development of these forests to low impact residential in an effort to maintain valuable forested lands within these two Zones in the Planning Area.


**Policy 1B2:** To limit through local development review and Highlands Project Review human development of forests to low impact residential development in the Protection Zone and the Conservation Zone in the Planning Area.





**Policy 1B3:** To limit through local development review and Highlands Project Review deforestation in the Forest Resource Area and forested lands within High Integrity Forest Subwatersheds within the Existing Community Zone to maximum extent practicable.



Forest Outside of Forest Resource Area:   
Forest within Forest Resource Area: 

Forest Resources represents the Total Forest Area data layer that was extracted from the NJDEP 2002 draft Land Use Land Cover data. This data layer illustrates all upland and wetland forest and scrub/shrub categories (excluding old field) and represents all forested lands within the Region. The Regional Master Plan includes policies that limit clearing of trees within Forest Resources and that seek to protect overall forest resources integrity.

**Objective 1B3a:** Implementation through Plan Conformance of regulations, which limit the clearing of trees in conjunction with human development to circumstances where the clearing will not diminish the integrity of forest resources.

**Policy 1B5:** To ensure that forest resources are protected on a site specific basis during local development review and Highlands Project Review.

**Objective 1B5a:** Applications for local development review and Highlands Project Review require identification of any forest area on and adjacent to a site in accordance with the Highlands Councils Method for Identifying Upland Forest Areas in the Highlands Region.

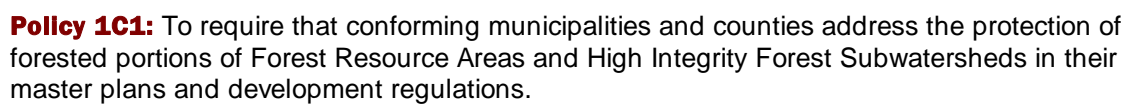
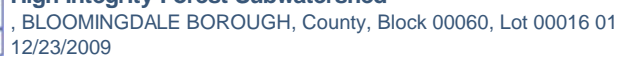
**Policy 1B7:** To prohibit clear-cutting of forest lands except pursuant to an approved Forest Management Plan approved by the State Forester.

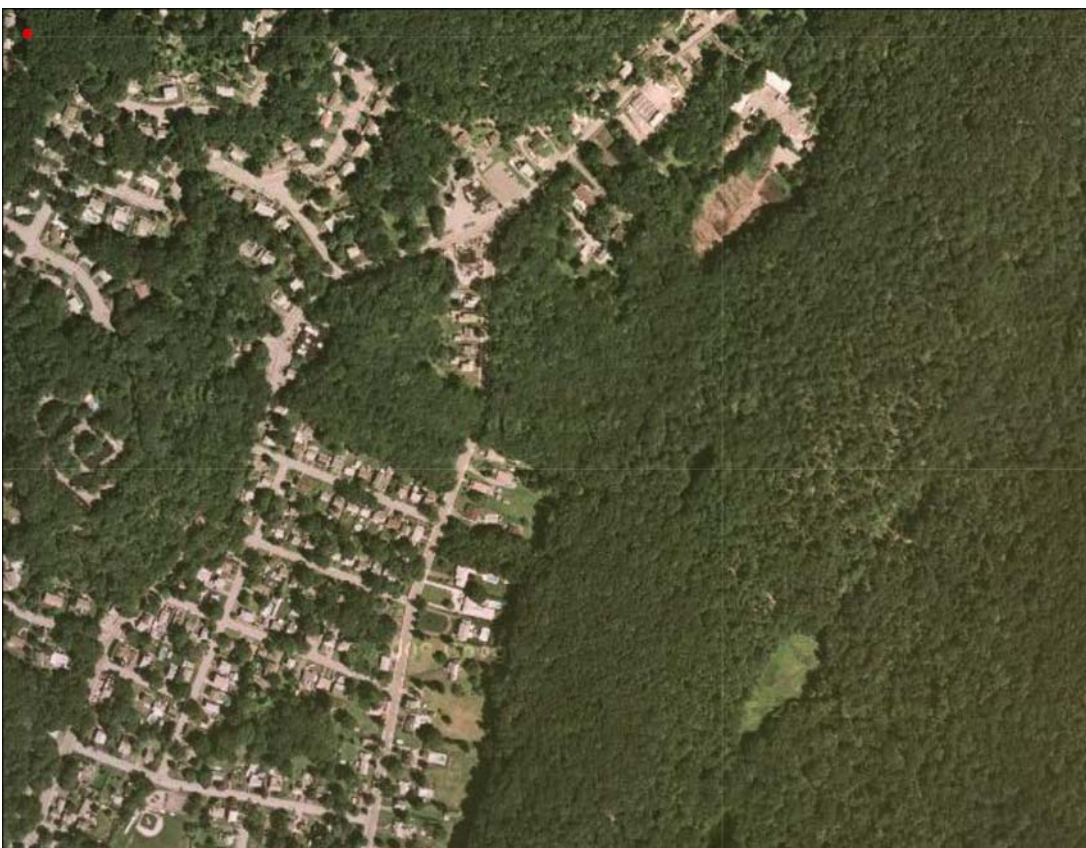
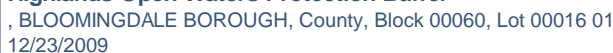
**Policy 1C3:** To require that conforming municipalities adopt a tree clearing ordinance consistent with an approved community forestry plan under the New Jersey Forest Service Community Forestry Program as part of the municipal master plan and local development regulations.

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.









Highlands Open Waters are defined by the Highlands Act as all springs, streams including intermittent streams, wetlands, and bodies of surface water, whether natural or artificial. The vegetated corridors adjacent to Highlands Open Waters are effective and important tools to protect water quality and aquatic habitat. Protection buffers safeguard Highlands Open Waters from the impacts of adjacent land use practices. The Regional Master Plan includes a protection buffer of 300 feet from the edge of the discernable bank of a Highlands Open Waters feature, or from the centerline where no discernable bank exists.

**Objective 1D4c:** Require that proposed development within all Highlands Open Waters buffers (Preservation and Planning Areas) conforms through local development review and Highlands

**Objective 1D4i:** Develop through Plan Conformance and implement stream corridor or subwatershed-based Stream Corridor Protection/Restoration Plans which shall include Steps 1, 2, and 3, and may include Steps 4 and 5: 1. Identify areas where existing development, land disturbances, or land uses are within Highlands Open Waters buffers have removed or substantially impaired natural vegetation communities, and have significantly reduced or impaired the functional values of Highlands Open Waters buffers. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland usesq; 2. Identify and require opportunities for restoration of areas identified in Step 1 as part of mitigation requirements under a Highlands Act waiver or Objectives 1D4e and 1D4f, and public or nongovernmental restoration/stabilization projects; 3. Identify the extent of stream corridor features that are critical to supporting the functions of a healthy Highlands Open Waters buffer and that extend beyond the buffers required by Objectives 1D4b and 1D4c. The 300 foot buffer in these areas may be expanded to be most protective of these features which may include, but are not limited to, Critical Habitat, pollutant source areas identified through scientific techniques, and steep slopes; 4. Where Highlands Open Waters buffers include areas identified in Step 1, regarding Category 2 surface waters in the Planning Area only, the Stream Corridor Protection/Restoration Plan may identify where, based on scientific analysis of site-specific conditions (e.g., topography, vegetation cover type, habitat, soil type, upstream land uses and pollution inputs, width of floodplain, rate and volume of run-off), a buffer of less than the full 300 feet (but including the undisturbed buffer area at a minimum) is sufficient to maintain or improve the protection of Highlands Open Waters and Riparian Areas. The plan must identify alternative buffers that provide functional buffer values at least equivalent to existing conditions and are no less than 150 feet or no less than the extent allowed in State or municipal regulation (including Objectives 1D4b and 1D4c), whichever is greater. Further, the plan shall include a functional value assessment to ensure that there is no net loss in the overall functional value of the subwatershedos stream buffers. Buffers established through this process shall be determined based on site conditions rather than fixed distances, reflecting findings of the scientific analysis, and shall be used in the site design and development review process regarding determinations of restoration, continued use, or increased use of the disturbed buffer area. Buffer averaging for the purpose of accommodating development proposals is deemed not to meet the requirements of this provision; and 5. Where a proposed Highlands Redevelopment Area would not meet, in full, Objectives 1D4b through 1D4h but affects an undisturbed buffer area determined to not be necessary for the protection of the functional values for Highlands Open Waters buffer (as determined through scientific analysis of site-specific conditions), modification of the undisturbed buffer may be allowed to no less than the extent allowed in State or municipal regulation. However the Council shall first determine that there is no alternative to the proposed reduction of the buffer, and require a showing of no impact to the functional values of the buffer and provision of alternative approaches to enhancing or protecting the Highlands Open Waters and resources of the buffer area. Restoration or enhancement of buffer functional values shall be provided on-site or within the same stream reach to achieve a net improvement of existing buffer functional values.

**Objective 1D5b:** 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.

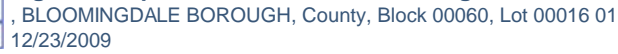


**Objective 211b:** The expansion or creation of public water supply systems, public wastewater collection and treatment systems and community on-site treatment facilities in the Preservation Area as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

13 of 50





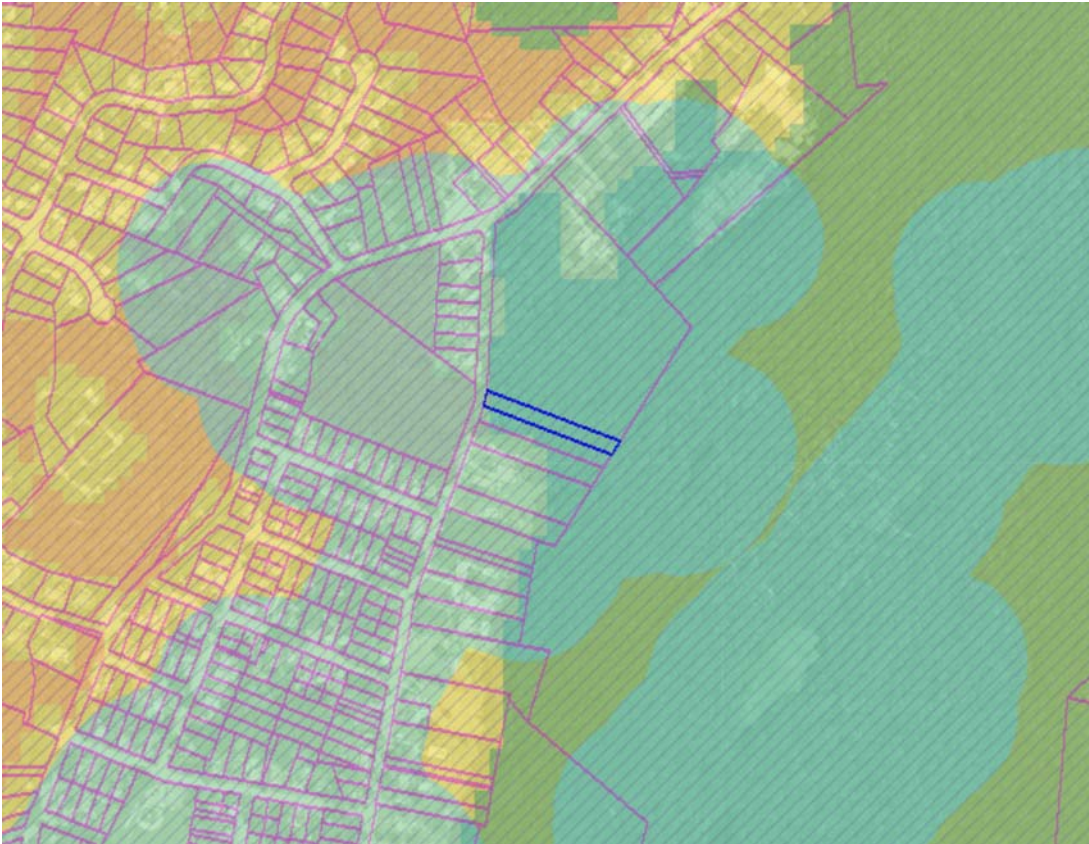
**Objective 1D4d:** Structures or other land improvements existing within a Highlands Open Waters buffer of the Planning Area on August 10, 2004 may remain, provided that the area of disturbance shall not be increased unless approved through local development review or Highlands Project Review in compliance with RMP policies and objectives. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q





## Highlands Open Waters Protection Buffers in Conservation or Protection Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01  
12/23/2009



Open Water Protection Area:  

Land Use Capability:

<span style="background-color: #90EE90; border: 1px solid black; padding: 0 5px;"> </span> Protection Zone	<span style="background-color: #FFD700; border: 1px solid black; padding: 0 5px;"> </span> Conservation Zone
<span style="background-color: #FFFF00; border: 1px solid black; padding: 0 5px;"> </span> Existing Community Zone	<span style="background-color: #0000FF; border: 1px solid black; padding: 0 5px;"> </span> Lake Community Subzone
<span style="background-color: #8B4513; border: 1px solid black; padding: 0 5px;"> </span> Conservation Environmentally Constrained Subzone	
<span style="background-color: #FF8C00; border: 1px solid black; padding: 0 5px;"> </span> Existing Community Environmentally Constrained Subzone	
<span style="background-color: #228B22; border: 1px solid black; padding: 0 5px;"> </span> Wildlife Management	

Planning Area / Preservation Area:   Planning Area /   Preservation Area

Includes all Highlands Open Waters protection buffers within the Protection and Conservation Zones of the Planning Area.

**Objective 1D4e:** In the Protection and Conservation Zones of the Planning Area, proposed disturbances of Highlands Open Waters buffers shall only occur in previously disturbed areas, unless a waiver is granted by the Highlands Council under Policy 7G2. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q Such proposed disturbances must demonstrate full utilization of the following performance standards in the listed order, to demonstrate the necessity of an encroachment into Highlands Open Waters buffers: 1) avoid the disturbance of Highlands Open Waters buffers; 2) minimize impacts to Highlands Open Waters buffers; and 3) mitigate all adverse impacts to Highlands Open Waters buffers so that there is no net loss of the functional value of the buffer, in compliance with Objective 1D4h. Minimization and mitigation opportunities shall be considered only upon a clear and convincing demonstration by the applicant that the protection buffer cannot be avoided and in no case shall the remaining buffer be reduced to less than 150 feet from the edge of Highlands Open Waters, unless a waiver is granted by the Highlands Council under Policy 7G2 and the proposed disturbance complies with Objective 1D4c.



# Highlands Open Waters Protection Buffers in Existing Community Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01

12/23/2009



Open Water Protection Area:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Land Use Capability:

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes all Highlands Open Waters protection buffers within the Existing Community Zone of the Planning Area.

**Objective 1D4f:** In the Existing Community Zone of the Planning Area, proposed disturbances of Highlands Open Waters buffers shall only occur in previously disturbed areas, unless a waiver is granted by the Highlands Council under Policy 7G2 and the proposed disturbance complies with Objective 1D4c. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q Such disturbances shall employ performance standards such that all proposed disturbances of Highlands Open Waters buffers shall employ Low Impact Development Best Management Practices to mitigate all adverse modification to Highlands Open Waters buffers so that there is no net loss of the functional value of the buffer, in compliance with Objective 1D4h.





# Riparian Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01

12/23/2009



Riparian Corridor Integrity Score: HIGH MODERATE LOW

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. Riparian Areas serve as an interface between surface water bodies and terrestrial ecosystems and play a critical role in maintaining the quality and ecological integrity of Highlands Open Waters.

**Objective 1D5b:** 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.

**Objective 1D5e:** 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, in compliance with Policies 6N3 and 6N4 and provide for mitigation through restoration of impaired Riparian Areas in the same HUC14 subwatershed.

**Objective 1D5f:** Require that development within Riparian Areas conforms through local development review and Highlands Project Review to any applicable requirements of a Regional Stormwater Plan adopted pursuant to N.J.A.C. 7:8 (Stormwater Management Rules).

**Objective 1D5g:** Require identification and implementation of opportunities where the restoration and enhancement of previously impaired Riparian Areas are feasible and appropriate as mitigation to any allowable modification to Riparian Area requirements.

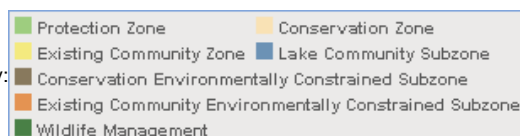
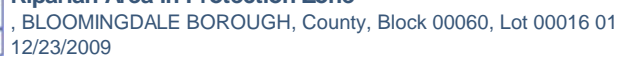
**Objective 2I1b:** The expansion or creation of public water supply systems, public wastewater collection and treatment systems and community on-site treatment facilities in the Preservation Area as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall



**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.



Riparian Corridor Integrity Score:  HIGH  MODERATE  LOW

**Objective 1D5c:** Prohibit modifications to Riparian Areas in the Protection Zone except where a waiver is approved by the NJDEP or the Highlands Council under Policy 7G1 or 7G2.



### Riparian Area in Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01  
12/23/2009



Land Use Capability:

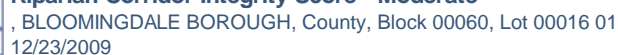
Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Riparian Corridor Integrity Score: HIGH MODERATE LOW

Includes all Riparian Areas within the Existing Community Zone.

**Objective 1D5d:** Restrict modifications to Riparian Areas in the Existing Community Zone, other than those addressed by Objective 1D5b, that would alter or be detrimental to the water quality and habitat value of a Riparian Area.





These areas include watersheds with Riparian Areas that contain a higher incidence of impervious area, agricultural uses and/or road crossings (as compared to High Score) and a reduced proportion of natural vegetation including high quality habitat for rare, threatened, and endangered water/wetland dependent species.

**Objective 1D5b:** 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.



### Steep Slope Protection Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01

12/23/2009



Steep Slope Protection Area: ■

Slope is a measurement of the steepness of terrain and is defined as the vertical change in elevation over a given horizontal distance. Disturbance of areas containing steep slopes can trigger erosion and sedimentation, resulting in the loss of topsoil. It can also result in the disturbance of habitats, degradation of surface water quality, silting of wetlands, and alteration of drainage patterns. The Highlands Council examined areas of slope in the Highlands Region that exhibited one of the following grade classifications and these grades were established as Steep Slope Protection Areas: 1) grades of slopes of 20% or greater; 2) grades of slope between 15 - 20%; and 3) grades of slope between 10 - 15% that occur within the Riparian Area.

**Policy 1E6:** To require through local development review and Highlands Project Review that applications for development include topographic information identifying the location of any Steep Slope Protection Areas located on the parcel proposed for development.

**Policy 1E7:** To require through local development review and Highlands Project Review that applications for development involving parcels of land with slopes of 10% or greater include identification of forested lands, areas which are highly susceptible to erosion, depth to bedrock and Soil Capability Classes.

**Policy 1E10:** To require that conforming municipalities and counties implement the steep slope protection provisions of Policies 1E2 through 1E9 through master plans and development regulations.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.



**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

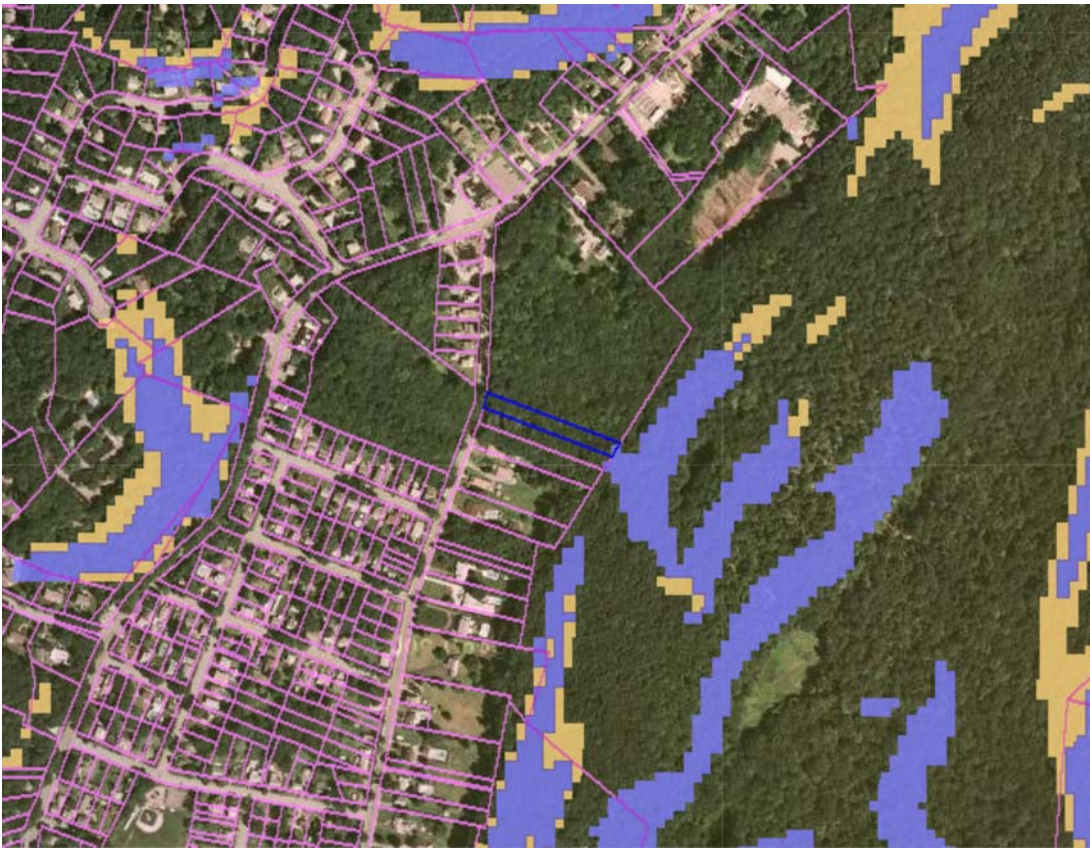
**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.



**Severely or Moderately Constrained Slopes**

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01  
12/23/2009



Moderately Constrained Slopes: ■

Severely Constrained Slopes: ■

Severely Constrained Slopes are all lands with slopes of 20% or greater and lands within Riparian Areas with slopes of 10% or greater. Moderately Constrained Slopes are all non-Riparian Area lands having a slope of 15% to less than 20% which are forested.

**Policy 1E8:** To prohibit through local development review and Highlands Project Review land disturbance within areas which are Severely Constrained Slopes and Moderately Constrained Slopes, except for linear development in both the Preservation and Planning Areas that meets the requirements of N.J.A.C. 7:38-3.8(c)1-4.

**Objective 2D4a:** 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 Steep Slopes.

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Critical Wildlife Habitat data layer illustrates habitat areas that are critical for the survival of rare, threatened or endangered wildlife species of the Highlands Region. Critical Wildlife Habitat areas are lands within the NJDEPs Landscape Project Version 3 that are Landscape Rank 3 through 5 and Landscape Rank 2 with Highlands Conservation Rank of Critically Significant or Significant in the Planning Area.

**Objective 1F6b:** Prohibit indirect impacts from activity that is off-site, adjacent to, or within Critical Habitat that will jeopardize the continued existence of, or result in the likelihood of the destruction



**Objective 1F6c:** Waiver applications under Policy 7G2 for local development in a municipality with a Council-approved Critical Habitat Conservation and Management Plan shall be subject to the minimum standards and criteria for waiver provisions as set forth in the plan, to the maximum extent practicable.

**Objective 1F6f:** A Critical Wildlife Habitat area or Significant Natural Area delineation may be modified if an applicant can demonstrate, to the satisfaction of the Highlands Council in coordination with the NJDEPs Endangered and Nongame Species Program or Natural Heritage Program, that: 1. The nature of the site is such that it does not provide habitat for species of concern; 2. The species of concern are not present on the site during any critical part of their life cycle, do not depend upon the site for food, shelter or breeding, and the habitat; on the site is either unsuitable or not critical to species recovery in the Region; or 3. Existing land uses present a human, natural or development barrier to the use of the site by species of concern. Requirements for demonstrating the above criteria shall be included in the Critical Habitat Conservation and Management Plan.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas,



**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

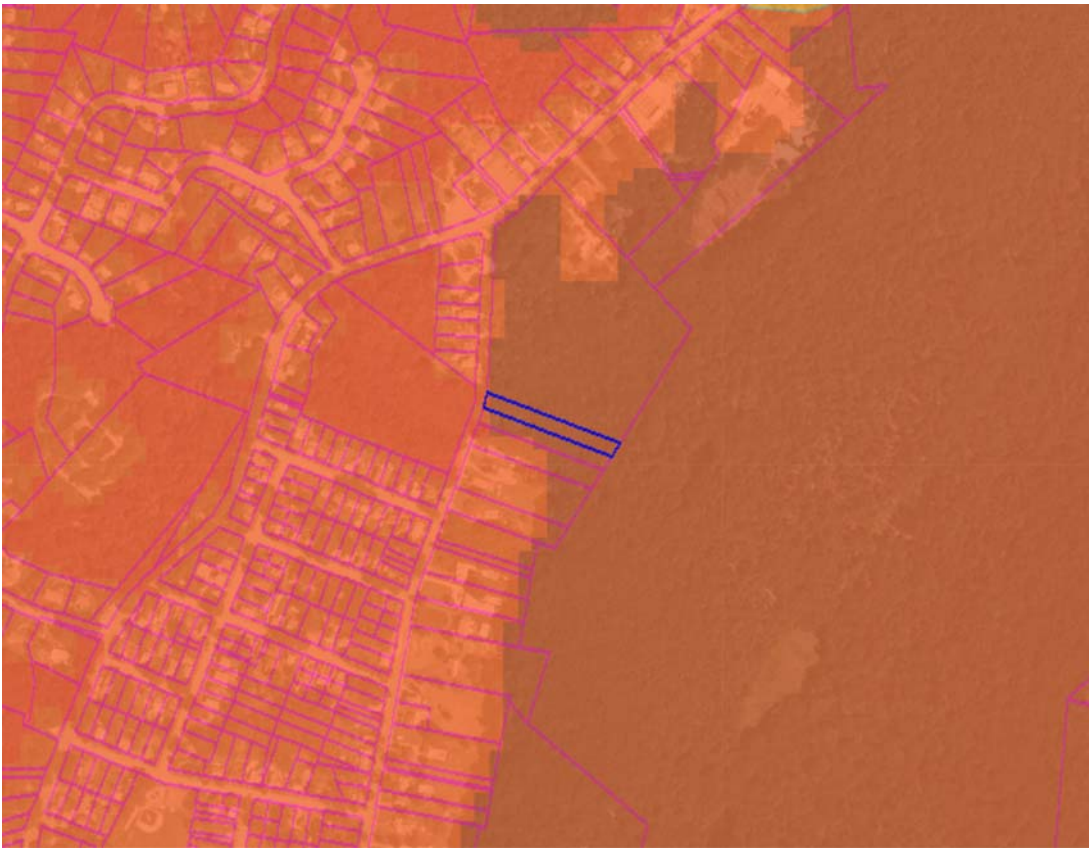
**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.



# Net Water Availability in Protection or Conservation Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01

12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Net Water Availability by HUC14:

Million Gallons Per Day (MGD)	
0.10-0.39	-0.09-0.00
0.05-0.09	-0.99-(-0.10)
0.00-0.04	-7.10-(-1.00)

Identifies the portion of a HUC14 subwatershed within the Protection or Conservation Zone.

**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

**Objective 2B4a:** Give highest priority for the use of non-agricultural Net Water Availability or Conditional Water Availability within Protection Zone and Conservation Zone subwatersheds, through a Water Use and Conservation Plan developed under Objective 2B8c, local development review, and Highlands Project review: 1. To address a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for Net Water Availability; 2. To serve a designated Highlands Redevelopment Area; 3. To serve a cluster development that complies with Objective 2J4b; and 4. To serve affordable housing projects where at least 10% of the units are affordable.

**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.

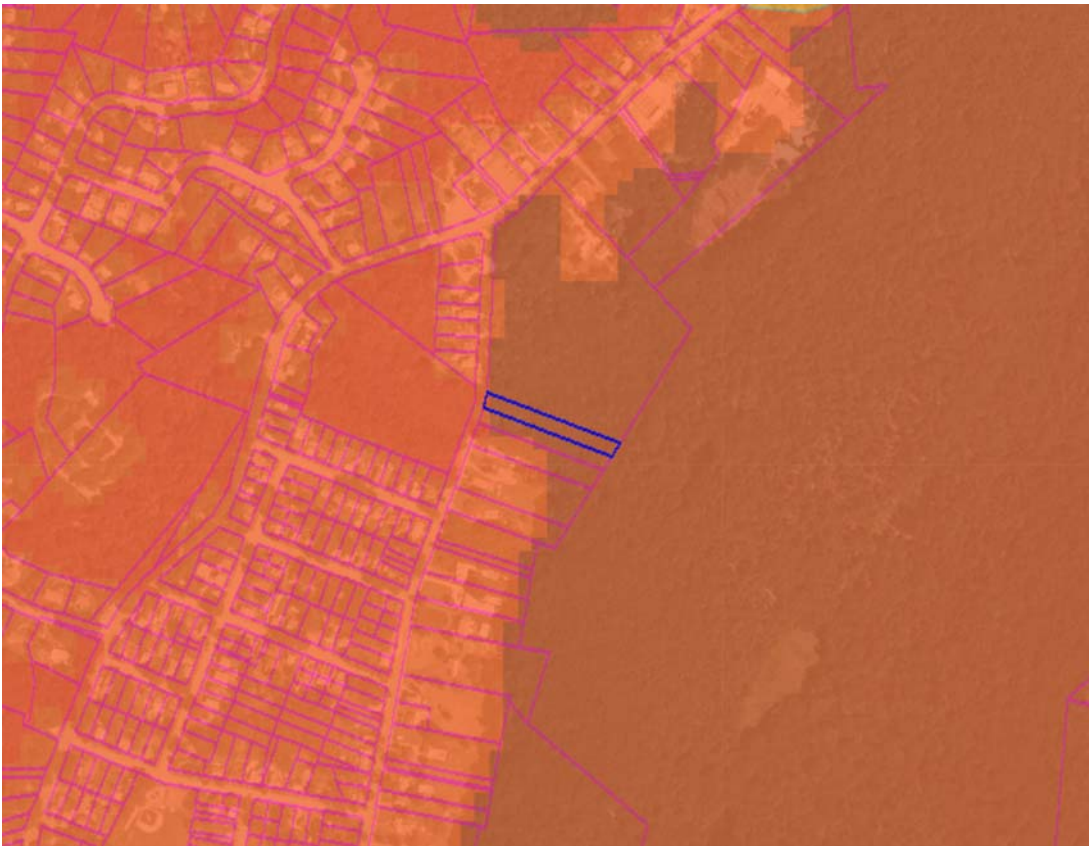




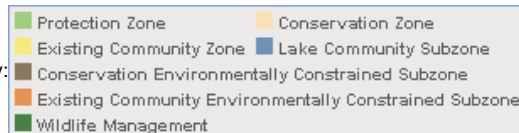


### Net Water Availability in Existing Community Zone

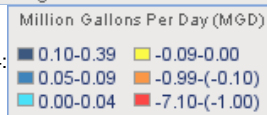
, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01  
12/23/2009



Land Use Capability:



Net Water Availability by HUC14:



Identifies the portion of a HUC14 subwatershed within the Existing Community Zone.

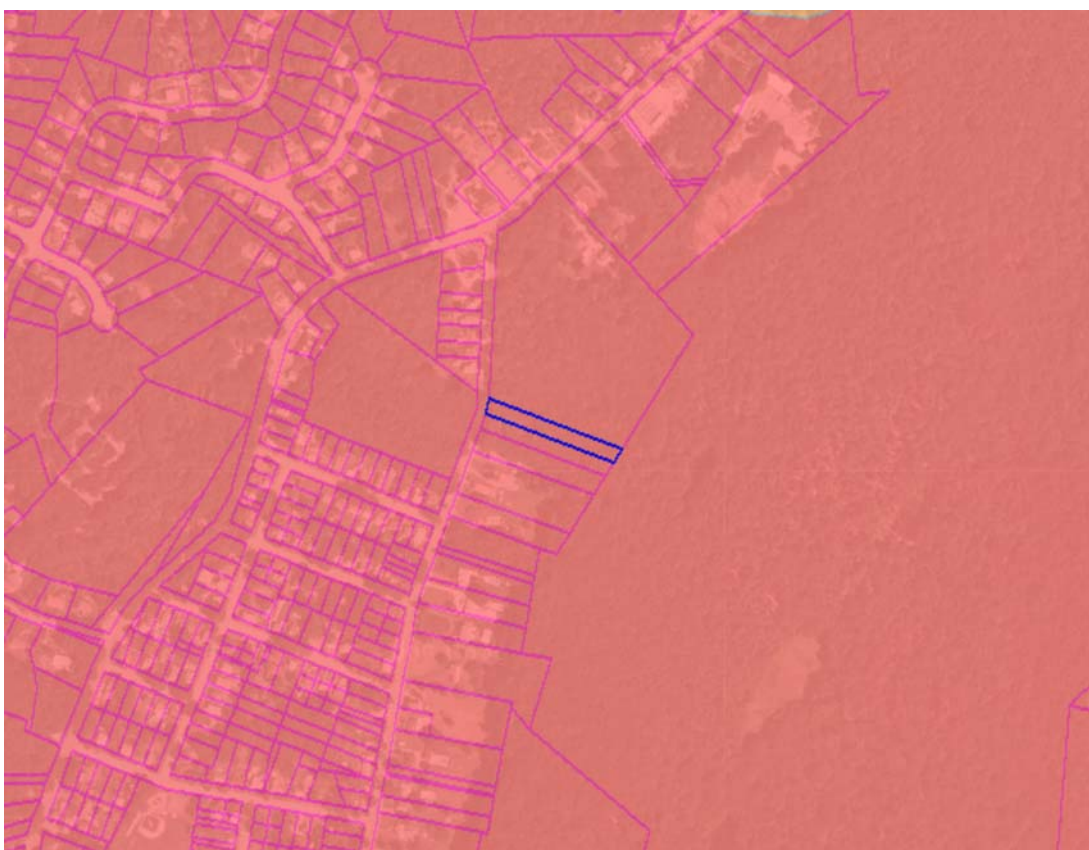
**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

**Objective 2B4b:** The highest priority for use of Net Water Availability or Conditional Water Availability within Existing Community Zone subwatersheds, through a Water Use and Conservation Plan developed under Objective 2B8c, local development review and Highlands Project review to serve documented 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% of the units are affordable, or new areas for development that meet all other requirements of the RMP.

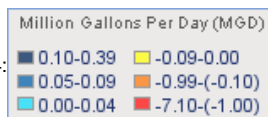
**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.

**Current Deficit Area**

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01  
12/23/2009



Net Water Availability by HUC14:



Identifies HUC14 subwatersheds that are in deficit of Net Water Availability.

**Policy 2B6:** To require through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, Highlands Project Review, and interagency coordination that proposed public water supply and wastewater service areas, new or increased water allocations and bulk water purchases will not directly or indirectly cause or contribute to a Net Water Availability deficit, and where feasible will help mitigate any existing deficit.

**Objective 2B6a:** Areawide Water Quality Management Plans, Wastewater Management Plans or their amendments shall ensure that the proposed service area will not directly or indirectly cause or contribute to a Net Water Availability deficit, and shall be in conformance with any Water Use and Conservation Plan developed under Objective 2B8c.

**Policy 2B8:** To require through Plan Conformance, local development review, and Highlands Project Review the efficient and effective use of water availability, the planning for future water needs, the reduction and elimination of water deficits, and the mitigation of new consumptive or depletive use in any Current Deficit Areas or subwatersheds that could become deficit areas based on projected development and water uses, to ensure sustainable water supply, water resource and ecological values in conformance with RMP policies and objectives.

**Objective 2B8a:** Prevent net increases in consumptive or depletive water uses in Current Water Deficit Areas to prevent exacerbation of and help reduce or eliminate the deficit to ensure sustainable water supply, water resource and ecological values, emphasizing techniques

**Objective 2B8b:** Proposed new consumptive or depletive water uses within a Current Deficit Area shall only occur under the auspices of a Water Use and Conservation Management Plan approved under Objective 2B8c or through mitigation of the proposed consumptive or depletive use within the same HUC14 subwatershed through: a permanent reduction of existing consumptive and depletive water uses; ground water recharge in excess of the requirements of N.J.A.C. 7:8 (Stormwater Management Rules); or other permanent means. Where a Water Use and Conservation Management Plan has not been approved: 1. Each project shall achieve mitigation ranging from 125% to 200%, based on the severity of the Current Deficit and the amount of consumptive or depletive water use proposed; 2. Total consumptive and depletive water uses from any single project and all projects combined are not to exceed the Conditional Water Availability of Objectives 2B3a or 2B3b for any HUC14 subwatershed; 3. Mitigation shall be successfully completed prior to initiation of the water use, except as required by #4, below. Mitigation may be phased in keeping with project development; 4. For water uses where the combination of proposed consumptive and depletive water uses and current subwatershed deficit is high, according to a schedule established by the Highlands Council, off-site mitigation shall be successfully completed prior to any on-site construction. On-site mitigation shall be successfully completed prior to initiation of the water use but may be implemented concurrent with on-site construction. Mitigation may be phased in keeping with the level of consumptive or depletive water uses; and Mitigation plans for a project shall include: specific objectives for each mitigation component; monitoring and reporting requirements; methods by which shortfalls in meeting the mitigation objectives shall be addressed through additional action; and be guaranteed through performance bonds.

**Objective 2B8d:** All water users within a Current Deficit Area shall seek funding and opportunities to meet the intent of Objective 2B4b.

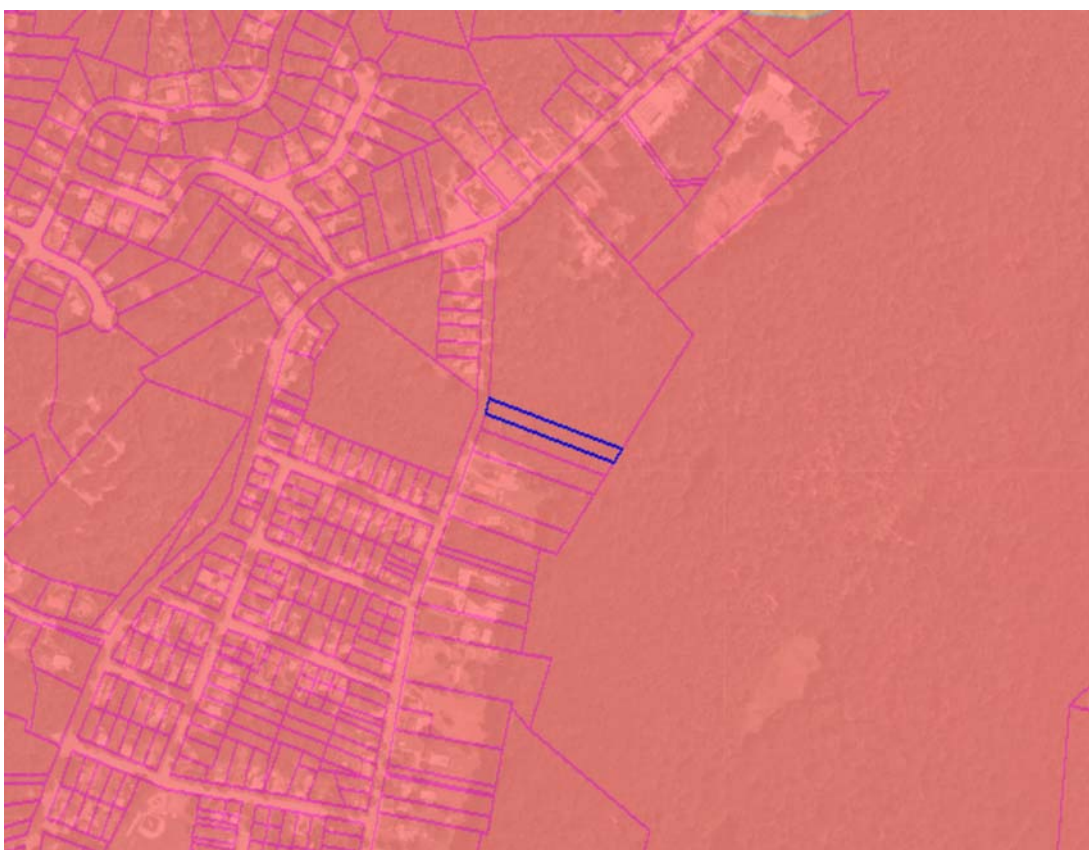
**Objective 2J2a:** Limit future water system demand and reduce existing demand where feasible by water systems that are dependent on Current Deficit Areas or Existing Constrained Areas as a source of water.



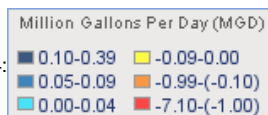


### Net Water Availability

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01  
12/23/2009



Net Water Availability by HUC14:



Net Water Availability is calculated for each HUC14 subwatershed by deducting consumptive and depletive water uses from Ground Water Availability. The Regional Master Plan incorporates Net Water Availability as a capacity threshold on future water uses. 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 in deficit and deemed to be a Current Deficit Area. In Current Deficit Areas where a Water Use and Conservation Management Plan has not yet been adopted, limited amounts of Conditional Water Availability are provided. The use of Net Water Availability or Conditional Water Availability is subject to Regional Master Plan policies.

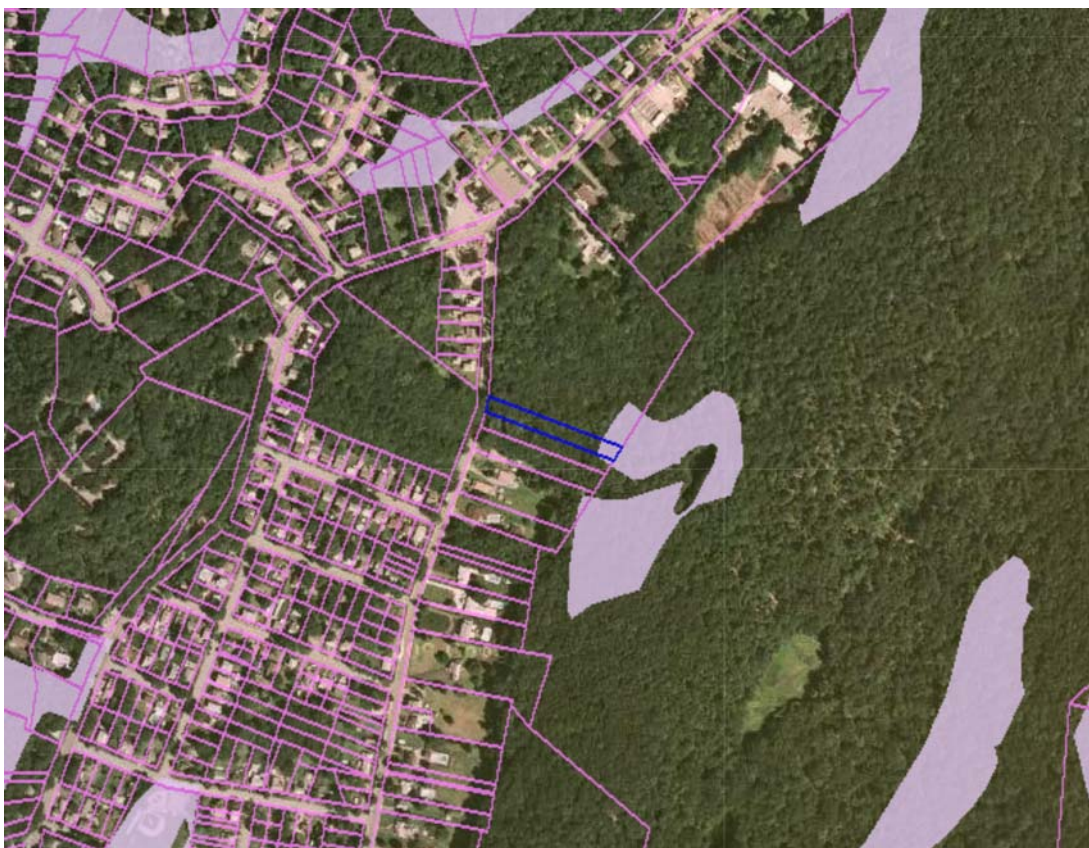
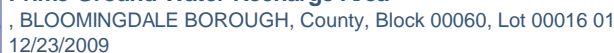
**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.

**Policy 2B7:** To ensure through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, and Highlands Project Review that the use of Net Water Availability and Conditional Water Availability within each subwatershed supports development patterns that are in conformance with RMP policies and objectives.

**Objective 2B8c:** Water Use and Conservation Management Plans shall be required through municipal Plan Conformance for all subwatersheds to meet the policies and objectives of Goal

**Objective 2J2b:** Limit future water system demands to levels that will not create a Current Deficit Area where one does not currently exist.



The layer displays the mapping of Prime Ground Water Recharge Areas. The Regional Master Plan defines Prime Ground Water Recharge Areas as those lands within a HUC14 subwatershed that most efficiently provide 40% of total drought recharge volume for that HUC14 subwatershed, using a GSR-32 analysis based upon land cover and the 1964-1966 drought of record precipitation.

**Objective 2D3c:** Implement master plans and development review ordinances through Plan Conformance that protect Prime Ground Water Recharge Areas and minimize the potential for disruption of recharge in such areas by development.

**Policy 2D4:** To apply standards through Plan Conformance, local development review and Highlands Project Review to protect, restore and enhance the functionality and the water resource value of Prime Ground Water Recharge Areas by restricting development and uses of land within a Prime Ground Water Recharge Area that reduce natural ground water recharge volumes or may directly or indirectly contribute to or result in water quality degradation.

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**Objective 2D4b:** Any development activity approved to occur in a Prime Ground Water Recharge Area shall provide an equivalent of 125% of pre-construction recharge volumes for the affected Prime Ground Water Recharge Area of the site within the following areas, in order of priority: (1) the same development site where feasible; (2) the same HUC14 subwatershed, or (3) an interrelated HUC14 subwatershed as approved by the Highlands Council where no feasible option exists in the same HUC14 subwatershed. This requirement shall apply to all portions of the Prime Ground Water Recharge Area where the recharge is disrupted through impervious surfaces, routing of stormwater runoff and recharge from natural flow paths, and other similar changes.

**Objective 2D4d:** Require through Plan Conformance, local development review and Highlands Project Review that the disruption of Prime Ground Water Recharge Area, after conformance with Objectives 2D4a, 2D4b and 2D4c is achieved, shall be limited to no greater than 15% of the Prime Ground Water Recharge Area on the site and shall be preferentially be sited on that portion of the Prime Ground Water Recharge Area that has the lowest ground water recharge rates and the lowest potential for aquifer recharge.

**Objective 2D4f:** Prohibit through Plan Conformance, local development review and Highlands Project Review new land uses, including those identified through Objective 2D3d, that have a significant potential to result in the discharge of persistent organic chemicals sources (including but not limited to existing discharges of industrial or other non-sanitary wastewater effluent) to ground water or to the land surface within a Prime Ground Water Recharge Area, such that they may degrade or contribute to the degradation of ground water quality.

**Objective 2D4h:** Achieve a net improvement in ground water recharge volume and maintenance of water quality as required through compliance with and implementation of any related provisions of an adopted regional stormwater plan.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

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**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.



### Highlands Domestic Sewerage Facilities

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01  
12/23/2009



Highlands Domestic Sewerage Facilities: ■

Highlands Domestic Sewerage Facilities displays those areas served by public wastewater utilities. The map indicates areas that are actually connected into a public wastewater collection system, not simply located in a Sewer Service Area. Public sewer systems discharging less than 0.15 million gallons per day (MGD) to surface water or 0.075 MGD to ground water are not included. Private, on-site treatment facilities like a package treatment plant are also not included. The Regional Master Plan limits the creation or extension of public wastewater systems.

**Objective 2J4b:** Clustered development served by public water supply within the Protection Zone, the Conservation Zone, and the Environmentally-Constrained Sub-zones of the Planning Area shall be approved only if the following conditions are met: 1. The development impacts are otherwise consistent with the requirements of the RMP, including provisions for mandatory clustering in Agricultural Resource Areas pursuant to Policy 3A5; 2. Extension of an existing public water system will occur only where the cluster development is within or immediately adjacent to an Existing Area Served with available capacity; 3. Creation of a new public water system will occur only where such development is not within or immediately adjacent to an Existing Area Served with available capacity; 4. The clustered development preserves at least 80% of the cluster project area in perpetuity for environmental protection or agricultural purposes. To the maximum extent feasible the developed portion (i.e., not including wetlands, Highlands Open Waters buffers, and recreational lands) occupies no more than 10% of the cluster project area if served by a public or community on-site wastewater system; and 5. Where the preserved land in the cluster project area is dedicated to agricultural purposes, the cluster development ordinance and an Agriculture Retention/Farmland Preservation Plan supports continued agricultural viability of the agricultural land and requires the implementation of best management practices, including development and implementation of a Farm Conservation Plan that addresses the protection of water and soil resources prepared by the USDA Natural Resources Conservation Service (NRCS), Technical Service Provider (TSP), appropriate agent or NJDA staff, and approved by the local Soil Conservation District (SCD).



**Policy 2J6:** To encourage water recycling/reuse measures, such as domestic and institutional gray water systems, where appropriate, to minimize water use in existing land uses.

**Objective 211a:** Designated sewer service areas in the Preservation Area shall be restricted to the Existing Area Served as of August 10, 2004, except to serve development that is approved through a HAD or a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1.

**Policy 2K2:** To base projected demand for current needs, appropriate economic revitalization and opportunities for designated TDR Receiving Zones within Existing Areas Served on existing maximum three month demands plus an estimate of redevelopment needs based on either Highlands Council regional analyses or more detailed local analyses, to assess whether there is adequate treatment capacity to encourage redevelopment.

**Objective 2K3d:** Clustered development served by a public wastewater collection and treatment system or community on-site treatment facility within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area shall be approved only if the following conditions are met: 1. The development impacts are otherwise consistent with the requirements of the RMP, including provisions for mandatory clustering in Agricultural Resource Areas; 2. Extension of an existing public wastewater collection and treatment system will occur only where the cluster development is within or immediately adjacent to an Existing Area Served with available capacity; 3. Creation of a community on-site treatment facility will occur only where such development is not within or immediately adjacent to an Existing Area Served with available capacity, where the proposed system is designed, permitted, and constructed at a capacity limited to the needs of the clustered development, and where the system does not create the potential for future expansion into areas that are not the subject of cluster developments immediately adjacent to the initial cluster served; 4. The cluster development preserves at least 80% of the cluster project area in perpetuity for environmental protection or agriculture purposes. To the maximum extent feasible the developed portion of the project area (e.g., not including wetlands, Highlands Open Waters buffers, and recreational lands) occupies no more than 10% of the cluster project area if served by a public or community on-site wastewater system; and 5. Where the preserved land in the cluster project area is dedicated to agricultural purposes, the cluster development ordinance and an Agriculture Retention/Farmland Preservation Plan supports continued agricultural viability of the agricultural land and requires the implementation of best management practices, including development and implementation of a Farm Conservation Plan that addresses the protection of water and soil resources prepared by the USDA Natural Resources Conservation Service (NRCS), Technical Service Provider (TSP), appropriate agent or NJDA staff, and approved by the local Soil Conservation District (SCD).

**Objective 2K3e:** Allow the expansion or creation of wastewater collection systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to those provided at Objective 2K3c within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. The highest priority for allocation of excess or additional wastewater treatment capacity is to areas where there are clusters of failed septic systems that are located within or adjacent to Existing Areas Served. TDR Receiving Areas, where designated, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than other developments requiring expansion of sewer service areas.



**Within One Mile of Rail Stations or Within Half Mile of Bus Routes or Park and Rides**  
BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01  
12/23/2009



New Jersey Transit Bus Routes:—

Private Bus Routes:---

- Bergen + Main Line
- Montclair Boonton Line
- Morris + Essex Line - Gladstone Branch
- Morris + Essex Line - Morristown Branch
- Raritan Valley Line

Rail Stations:

Park & Ride Sites:

Includes all developed lands within a 1/2 mile buffer from all park and ride locations, rail stations, and NJ Transit public and major private bus routes in or within 1/2 mile of the Highlands Region.

**Objective 5E1b:** Development and redevelopment in close proximity to rail stations and along bus routes.





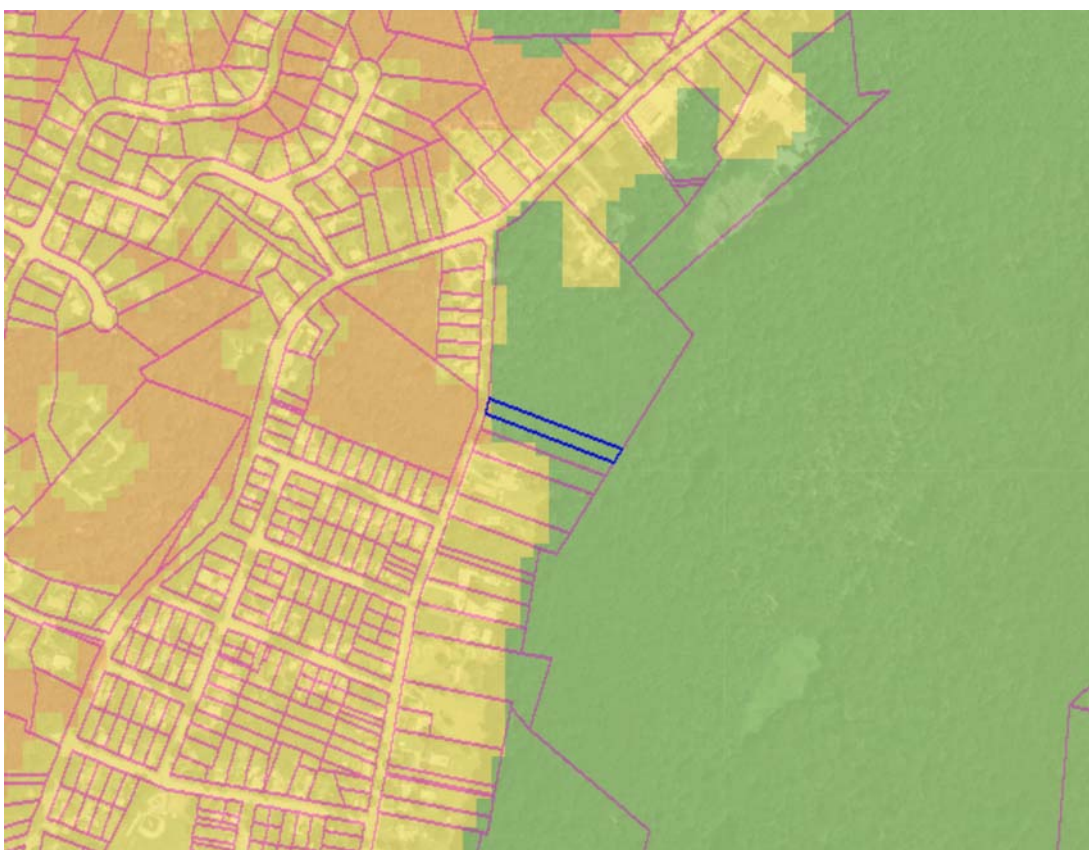
**Objective 7F1d:** Planning Area exemptions, issued by the Highlands Council, shall be required, where appropriate, prior to consideration of a local development review or a Highlands Project Review. Guidance shall specify the exceptions where a review may proceed absent such an exemption determination. Applications for exemptions submitted to the Highlands Council shall be based upon the application requirements exemptions codified in N.J.A.C. 7:38.





### Protection Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Consists of high natural resource value lands that are important to maintaining water quality, water quantity and sensitive ecological resources and processes.

**Policy 6C1:** To limit new human development in the Protection Zone to redevelopment, exempt activities, and environmentally-compatible low density new land uses, in accordance with RMP resource protection needs and water quality and quantity capacity constraints and to ensure that the impacts of development using exemptions under the Highlands Act (see Policy 7F1) are considered in regional protection measures.

**Objective 6C1a:** Centers in the Protection Zone, potentially including clustered development, shall be at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan, and the use of septic systems or community wastewater systems.

**Policy 6C2:** To ensure through Plan Conformance, local development review and Highlands Project Review that any future development or redevelopment which does occur in a Protection Zone is subject to standards and criteria which protect the land and water resources of the Protection Zone from any potential adverse impact to the maximum extent possible.



### Protection Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01  
12/23/2009



Land Use Capability:

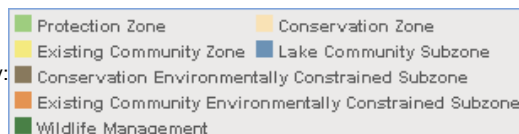
Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes the Protection Zone within the Planning Area.

**Objective 2L2a:** Use the median concentrations of nitrate in ground water for Planning Area HUC14 subwatersheds where the Protection Zone is predominant as the nitrate target for new development reliant on septic systems within the Protection Zone. The median is 0.72 mg/L.

**Policy 6J3:** To encourage redevelopment in the Conservation and Protection Zones in the Planning Area of brownfields and grayfields that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields, as approved through Plan Conformance or the Highlands Redevelopment Area Designation process.



Includes both the Conservation Zone and the Protection Zone.

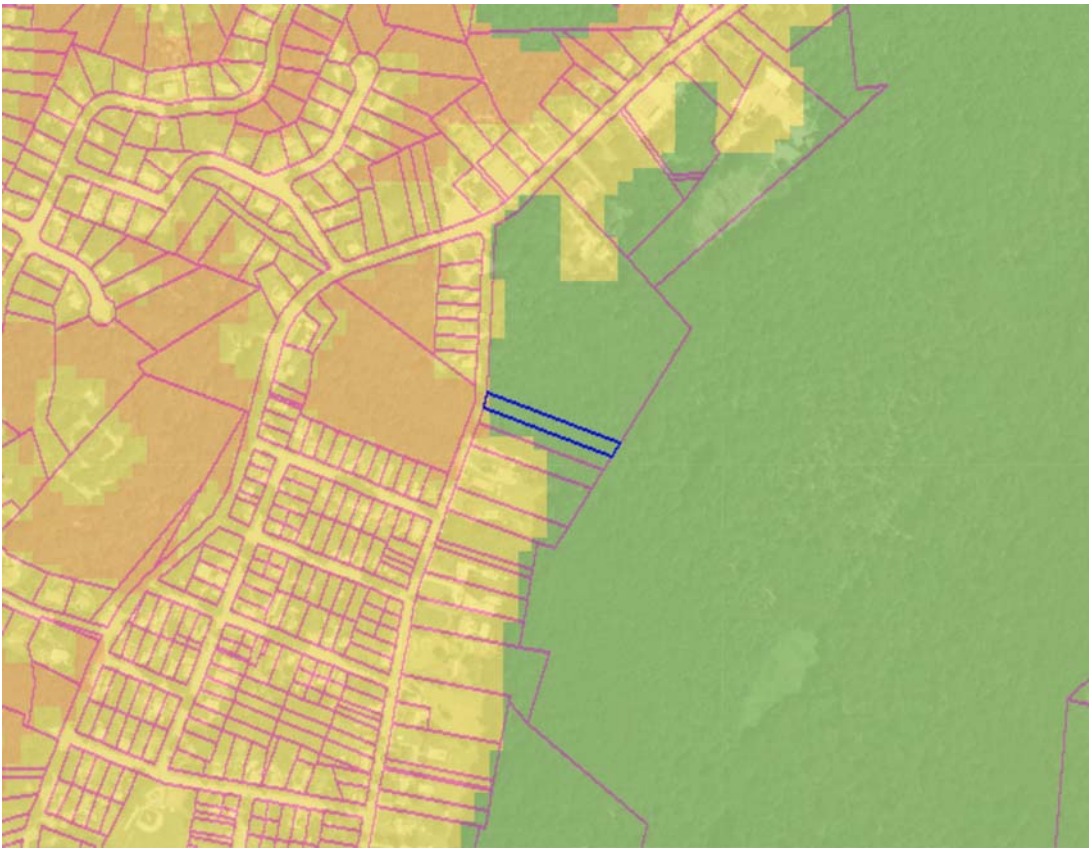
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### Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Consists of areas with regionally significant concentrated development signifying existing communities.

**Objective 2J4c:** Allow the expansion or creation of public water systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to Objective 2J4a within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. TDR Receiving Zones, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than expansion of public water service areas within this Zone.

**Objective 2K3e:** Allow the expansion or creation of wastewater collection systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to those provided at Objective 2K3c within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. The highest priority for allocation of excess or additional wastewater treatment capacity is to areas where there are clusters of failed septic systems that are located within or adjacent to Existing Areas Served. TDR Receiving Areas, where designated, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than other developments requiring expansion of sewer service areas.

**Policy 6F3:** To ensure that development activities within the Existing Community Zone are subject

**Objective 6F6a:** Center based development initiatives shall be planned within the Existing Community Zone at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan. Densities of five dwelling units and above are encouraged, and are required in areas designated as voluntary TDR Receiving Zones where TDR benefits are sought under the Highlands Act.



### Existing Community Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01

12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes the Existing Community Zone within the Planning Area.

**Objective 2L2d:** Use a nitrate target of 2 mg/L for the Existing Community Zone within Planning Area, on a project-by-project basis, where new development will rely on septic systems.

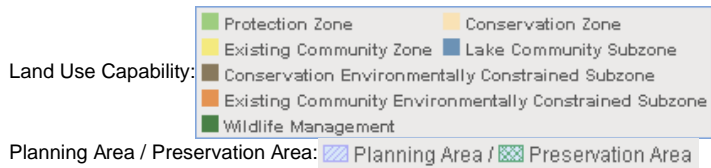
**Policy 6J2:** To encourage redevelopment in the Existing Community Zone in the Planning Area of brownfields, grayfields, and other previously developed areas that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields, as approved through Plan Conformance or the Highlands Redevelopment Area Designation process.





# Protection Zone or Conservation Zone or Environmentally Constrained Sub-Zones in Planning Area OR Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 01  
12/23/2009



Includes the Protection Zone, Conservation Zone, Environmentally Constrained Sub-Zones and the Existing Community Zone within the Planning Area.

**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.



**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.

## Regional Master Plan Consistency Report

12/23/2009

Prepared by State of New Jersey Highlands Water Protection and Planning Council  
100 North Road (Route 513), Chester, NJ 07930  
Telephone: (908) 879-6737 Fax: (908) 879-4205



Please consider the environment before printing this report

### Disclaimer

Please be advised that any reports generated from the online Consistency Review Application do not constitute a formal Consistency Determination from the Highlands Council. The information contained therein is provided solely for informational purposes and is not to be construed as providing advice, recommendations, endorsements, representations or warranties of any kind whatsoever.

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02



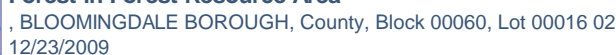
Powered by VERTICES Mapper™





The Forest Resource Area data layer is an intensity indicator that captures high ecological value forest areas including those forested lands that exhibit the least fragmentation, which are vital for the maintenance of ecological processes.

**Policy 1B3:** To limit through local development review and Highlands Project Review deforestation in the Forest Resource Area and forested lands within High Integrity Forest Subwatersheds within the Existing Community Zone to maximum extent practicable.



The Forest in Forest Resource Area data layer illustrates the forested lands located within the spatially delineated Forest Resource Area. The Regional Master plan provides for the protection of the integrity of these forested lands in order to maintain forest ecological function within the Forest Resource Area.

**Objective 1A2d:** To prohibit through Plan Conformance, local development review and Highlands Project Review the expansion or creation of public water supply systems or public wastewater collection and treatment systems or community-based on-site wastewater facilities into forested areas of the Forest Resource Area within the Planning Area except as provided for in Policy 2J4 with Objectives 2J4a through 2J4d, and Policy 2K3 with Objectives 2K3a through 2K3e, and within the Preservation Area except as provided for in Policy 2I1 and Objectives 2I1a and 2I1b.

**Policy 1C1:** To require that conforming municipalities and counties address the protection of forested portions of Forest Resource Areas and High Integrity Forest Subwatersheds in their master plans and development regulations.

**Policy 5C3:** To limit road improvements through local development review and Highlands Project Review where roads are constrained by topography, forested lands or the community character of land uses fronting on the road.





### Forest in Forest Resource Area in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02  
12/23/2009



Forest within Forest Resource Area: ■

Planning Area / Preservation Area: ■ Planning Area ■ Preservation Area

The Forest in Forest Resource Area in Planning Area data layer illustrates the forested lands located within the spatially delineated Forest Resource Area of the legislatively delineated Highlands Planning Area. The Regional Master Plan includes protection policies specific to forested lands in the Forest Resource Area in the Planning Area.

**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.



**Planning Area Forest in Protection or Conservation Zone**  
 , BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02  
 12/23/2009



Forest Outside of Forest Resource Area: ■

Forest within Forest Resource Area: ■

Land Use Capability:

■ Protection Zone	■ Conservation Zone
■ Existing Community Zone	■ Lake Community Subzone
■ Conservation Environmentally Constrained Subzone	
■ Existing Community Environmentally Constrained Subzone	
■ Wildlife Management	

Planning Area / Preservation Area: ■ Planning Area / ■ Preservation Area

Planning Area Forest in Protection or Conservation Zone data layer represents all forested lands in the Protection Zone or Conservation Zone in the legislatively delineated Planning Area. Regional Master Plan protection policies limit development of these forests to low impact residential in an effort to maintain valuable forested lands within these two Zones in the Planning Area.

**Policy 1B2:** To limit through local development review and Highlands Project Review human development of forests to low impact residential development in the Protection Zone and the Conservation Zone in the Planning Area.



Forest within Forest Resource Area: ■

Land Use Capability:

- Protection Zone
  Conservation Zone
- Existing Community Zone
  Lake Community Subzone
- Conservation Environmentally Constrained Subzone
- Existing Community Environmentally Constrained Subzone
- Wildlife Management

Forest Integrity Value: ■ HIGH ■ MEDIUM ■ LOW

**Policy 1B3:** To limit through local development review and Highlands Project Review deforestation in the Forest Resource Area and forested lands within High Integrity Forest Subwatersheds within the Existing Community Zone to maximum extent practicable.





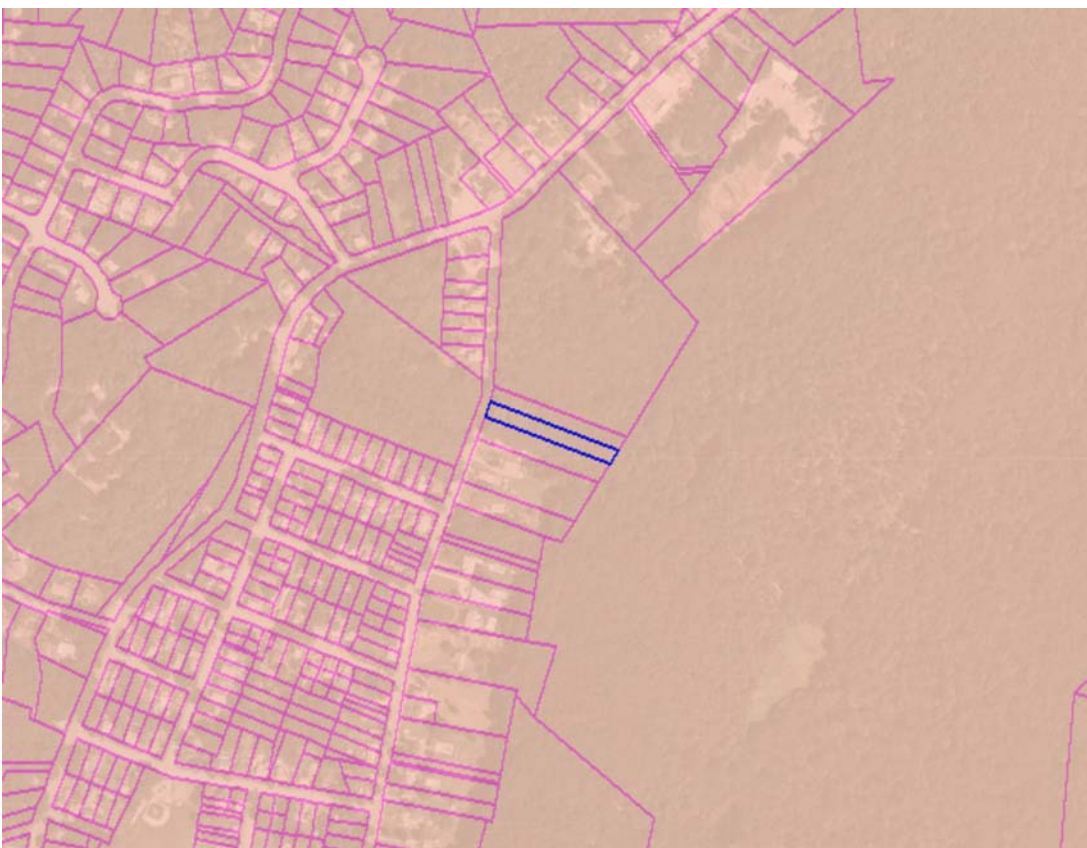
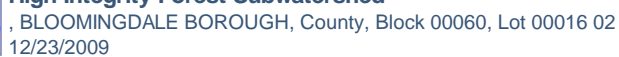
Forest within Forest Resource Area:  

**Objective 1B3a:** Implementation through Plan Conformance of regulations, which limit the clearing of trees in conjunction with human development to circumstances where the clearing will not diminish the integrity of forest resources.

**Objective 1B5a:** Applications for local development review and Highlands Project Review require identification of any forest area on and adjacent to a site in accordance with the Highlands Councils Method for Identifying Upland Forest Areas in the Highlands Region.

**Policy 1C3:** To require that conforming municipalities adopt a tree clearing ordinance consistent with an approved community forestry plan under the New Jersey Forest Service Community Forestry Program as part of the municipal master plan and local development regulations.





High Integrity Forest Subwatershed is a component of the Forest Integrity Value data layer. This data layer represents forest cover integrity in the Region at the watershed level because forests are important for the protection of water quality and quantity.

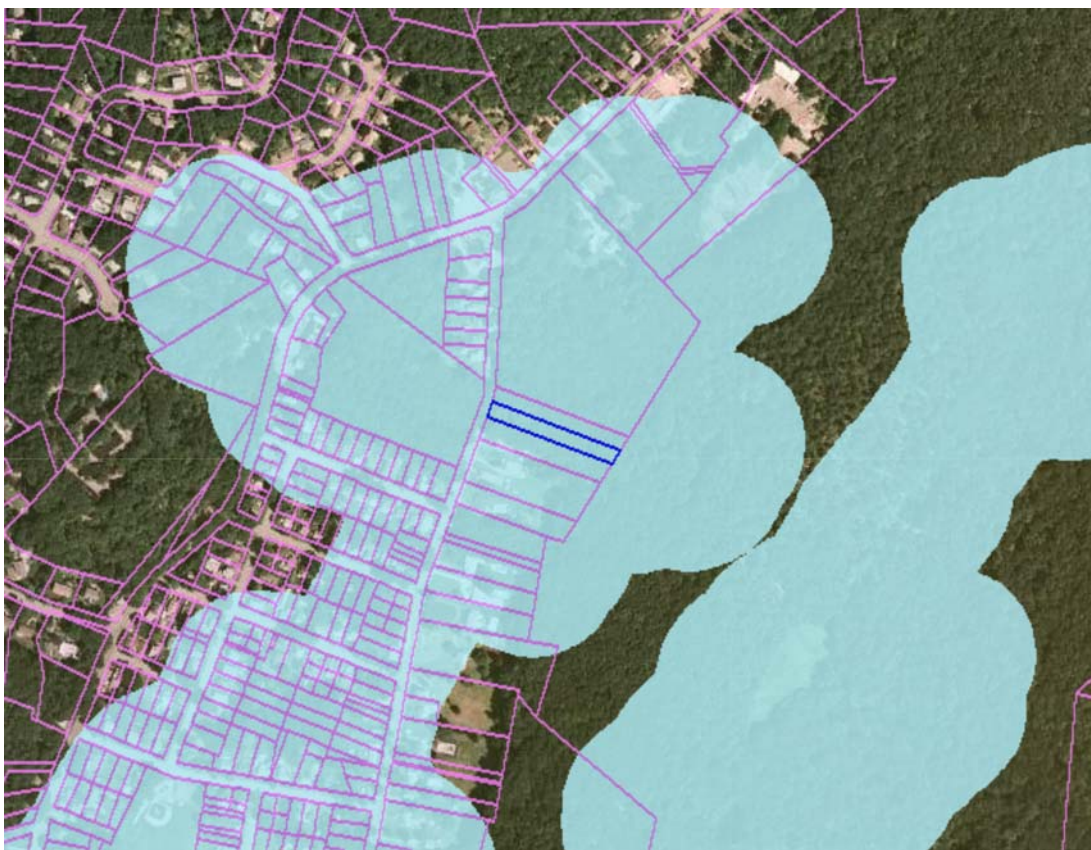
**Policy 1C1:** To require that conforming municipalities and counties address the protection of forested portions of Forest Resource Areas and High Integrity Forest Subwatersheds in their master plans and development regulations.





### Highlands Open Waters Protection Buffer

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02  
12/23/2009



Open Water Protection Area: ■

Highlands Open Waters are defined by the Highlands Act as all springs, streams including intermittent streams, wetlands, and bodies of surface water, whether natural or artificial. The vegetated corridors adjacent to Highlands Open Waters are effective and important tools to protect water quality and aquatic habitat. Protection buffers safeguard Highlands Open Waters from the impacts of adjacent land use practices. The Regional Master Plan includes a protection buffer of 300 feet from the edge of the discernable bank of a Highlands Open Waters feature, or from the centerline where no discernable bank exists.

**Policy 1D4:** Highlands Open Waters shall include a protection buffer of 300 feet from the edge of the discernable bank of the Highlands Open Waters feature, or from the centerline where no discernable bank exists. With respect to wetlands and other Highlands Open Waters features (e.g., seeps, springs, etc.), the feature shall include a protection buffer of 300 feet from the delineated Letter of Interpretation (LOI) line issued by the NJDEP for wetlands, or from a field-delineated boundary for other features. In areas where existing development or land uses within the protection buffers have reduced or impaired the functional values of the buffers, the Council will seek opportunities to restore the buffer and its functions. Any proposed disturbance shall, through local development review and Highlands Project Review, comply with Highlands Open Waters buffer standards. The protection buffer width for Category 2 streams in the Planning Area may be modified through a Stream Corridor Protection/Restoration Plan, as specified in Objective 1D4i. In approved Redevelopment Areas, the Council may, at its discretion, modify the required buffer, upon a showing of no alternatives, no impact to the functional value of the buffer, and provision of alternative approaches to enhancing or protecting Highlands Open Waters and resources of the buffer area.

**Objective 1D4a:** Require that all applications for approval through local development review and Highlands Project Review include the identification and mapping of Highlands Open Waters.

**Objective 1D4c:** Require that proposed development within all Highlands Open Waters buffers (Preservation and Planning Areas) conforms through local development review and Highlands

**Objective 1D4i:** Develop through Plan Conformance and implement stream corridor or subwatershed-based Stream Corridor Protection/Restoration Plans which shall include Steps 1, 2, and 3, and may include Steps 4 and 5: 1. Identify areas where existing development, land disturbances, or land uses are within Highlands Open Waters buffers have removed or substantially impaired natural vegetation communities, and have significantly reduced or impaired the functional values of Highlands Open Waters buffers. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland usesq; 2. Identify and require opportunities for restoration of areas identified in Step 1 as part of mitigation requirements under a Highlands Act waiver or Objectives 1D4e and 1D4f, and public or nongovernmental restoration/stabilization projects; 3. Identify the extent of stream corridor features that are critical to supporting the functions of a healthy Highlands Open Waters buffer and that extend beyond the buffers required by Objectives 1D4b and 1D4c. The 300 foot buffer in these areas may be expanded to be most protective of these features which may include, but are not limited to, Critical Habitat, pollutant source areas identified through scientific techniques, and steep slopes; 4. Where Highlands Open Waters buffers include areas identified in Step 1, regarding Category 2 surface waters in the Planning Area only, the Stream Corridor Protection/Restoration Plan may identify where, based on scientific analysis of site-specific conditions (e.g., topography, vegetation cover type, habitat, soil type, upstream land uses and pollution inputs, width of floodplain, rate and volume of run-off), a buffer of less than the full 300 feet (but including the undisturbed buffer area at a minimum) is sufficient to maintain or improve the protection of Highlands Open Waters and Riparian Areas. The plan must identify alternative buffers that provide functional buffer values at least equivalent to existing conditions and are no less than 150 feet or no less than the extent allowed in State or municipal regulation (including Objectives 1D4b and 1D4c), whichever is greater. Further, the plan shall include a functional value assessment to ensure that there is no net loss in the overall functional value of the subwatershedos stream buffers. Buffers established through this process shall be determined based on site conditions rather than fixed distances, reflecting findings of the scientific analysis, and shall be used in the site design and development review process regarding determinations of restoration, continued use, or increased use of the disturbed buffer area. Buffer averaging for the purpose of accommodating development proposals is deemed not to meet the requirements of this provision; and 5. Where a proposed Highlands Redevelopment Area would not meet, in full, Objectives 1D4b through 1D4h but affects an undisturbed buffer area determined to not be necessary for the protection of the functional values for Highlands Open Waters buffer (as determined through scientific analysis of site-specific conditions), modification of the undisturbed buffer may be allowed to no less than the extent allowed in State or municipal regulation. However the Council shall first determine that there is no alternative to the proposed reduction of the buffer, and require a showing of no impact to the functional values of the buffer and provision of alternative approaches to enhancing or protecting the Highlands Open Waters and resources of the buffer area. Restoration or enhancement of buffer functional values shall be provided on-site or within the same stream reach to achieve a net improvement of existing buffer functional values.

**Objective 1D5b:** 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.

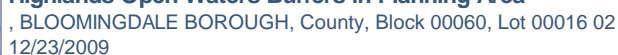
**Objective 211b:** The expansion or creation of public water supply systems, public wastewater collection and treatment systems and community on-site treatment facilities in the Preservation Area as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

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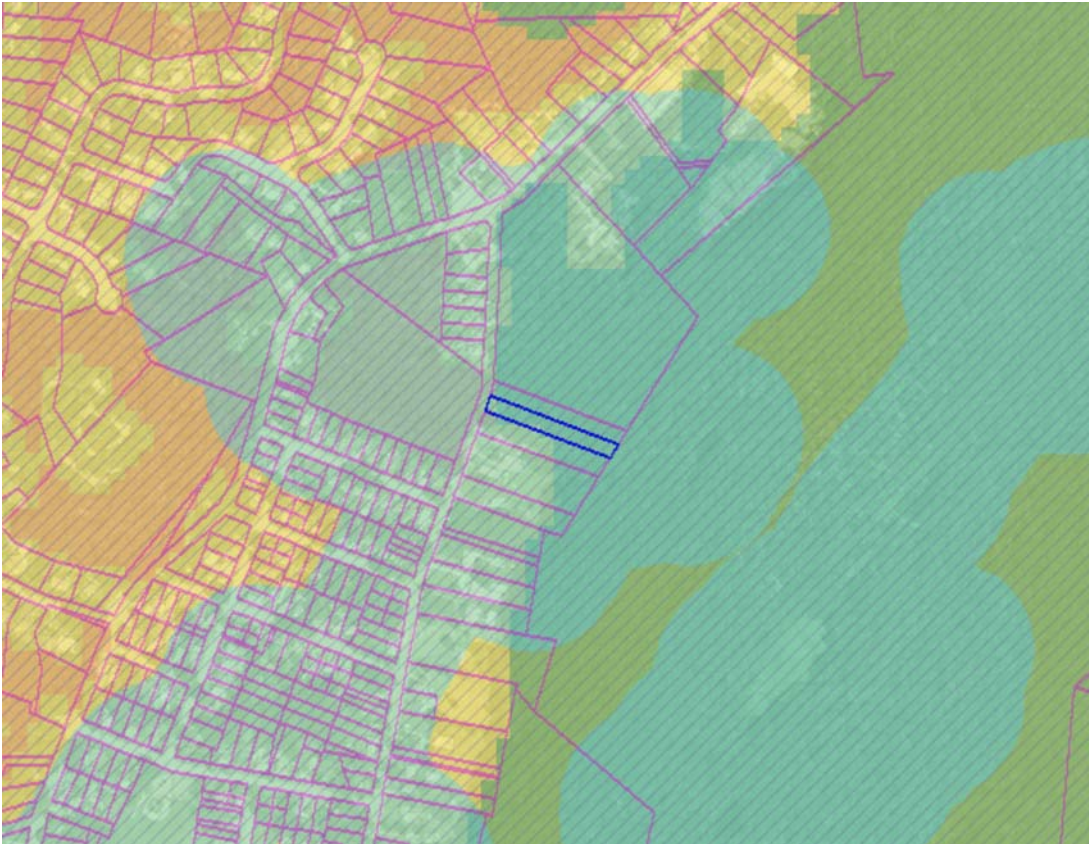
Planning Area / Preservation Area:  Planning Area /  Preservation Area

**Objective 1D4d:** Structures or other land improvements existing within a Highlands Open Waters buffer of the Planning Area on August 10, 2004 may remain, provided that the area of disturbance shall not be increased unless approved through local development review or Highlands Project Review in compliance with RMP policies and objectives. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q



## Highlands Open Waters Protection Buffers in Conservation or Protection Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02  
12/23/2009



Open Water Protection Area:  

Land Use Capability:

<span style="background-color: lightgreen; border: 1px solid black; padding: 0 5px;"> </span> Protection Zone	<span style="background-color: yellow; border: 1px solid black; padding: 0 5px;"> </span> Conservation Zone
<span style="background-color: orange; border: 1px solid black; padding: 0 5px;"> </span> Existing Community Zone	<span style="background-color: blue; border: 1px solid black; padding: 0 5px;"> </span> Lake Community Subzone
<span style="background-color: brown; border: 1px solid black; padding: 0 5px;"> </span> Conservation Environmentally Constrained Subzone	
<span style="background-color: darkorange; border: 1px solid black; padding: 0 5px;"> </span> Existing Community Environmentally Constrained Subzone	
<span style="background-color: darkgreen; border: 1px solid black; padding: 0 5px;"> </span> Wildlife Management	

Planning Area / Preservation Area:   Planning Area /   Preservation Area

Includes all Highlands Open Waters protection buffers within the Protection and Conservation Zones of the Planning Area.

**Objective 1D4e:** In the Protection and Conservation Zones of the Planning Area, proposed disturbances of Highlands Open Waters buffers shall only occur in previously disturbed areas, unless a waiver is granted by the Highlands Council under Policy 7G2. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q Such proposed disturbances must demonstrate full utilization of the following performance standards in the listed order, to demonstrate the necessity of an encroachment into Highlands Open Waters buffers: 1) avoid the disturbance of Highlands Open Waters buffers; 2) minimize impacts to Highlands Open Waters buffers; and 3) mitigate all adverse impacts to Highlands Open Waters buffers so that there is no net loss of the functional value of the buffer, in compliance with Objective 1D4h. Minimization and mitigation opportunities shall be considered only upon a clear and convincing demonstration by the applicant that the protection buffer cannot be avoided and in no case shall the remaining buffer be reduced to less than 150 feet from the edge of Highlands Open Waters, unless a waiver is granted by the Highlands Council under Policy 7G2 and the proposed disturbance complies with Objective 1D4c.

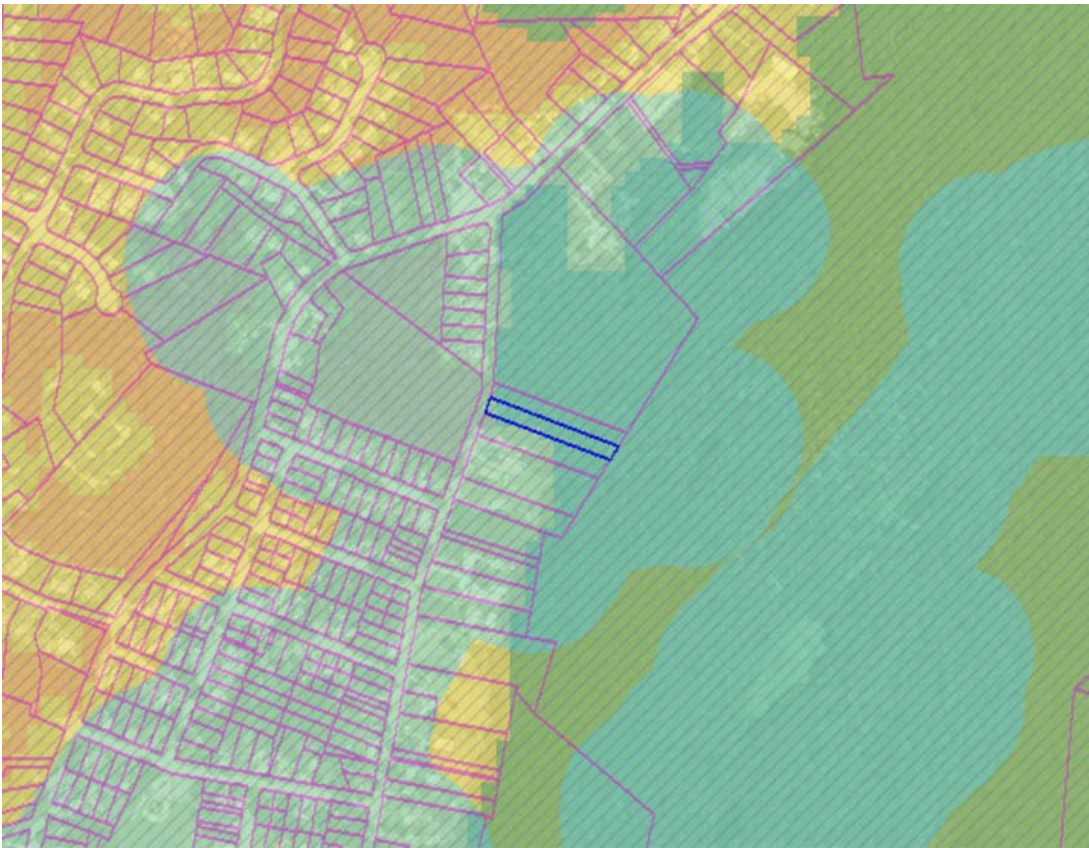




# Highlands Open Waters Protection Buffers in Existing Community Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02

12/23/2009



Open Water Protection Area:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Land Use Capability:

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes all Highlands Open Waters protection buffers within the Existing Community Zone of the Planning Area.

**Objective 1D4f:** In the Existing Community Zone of the Planning Area, proposed disturbances of Highlands Open Waters buffers shall only occur in previously disturbed areas, unless a waiver is granted by the Highlands Council under Policy 7G2 and the proposed disturbance complies with Objective 1D4c. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q Such disturbances shall employ performance standards such that all proposed disturbances of Highlands Open Waters buffers shall employ Low Impact Development Best Management Practices to mitigate all adverse modification to Highlands Open Waters buffers so that there is no net loss of the functional value of the buffer, in compliance with Objective 1D4h.



# Riparian Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02

12/23/2009



Riparian Corridor Integrity Score: HIGH MODERATE LOW

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. Riparian Areas serve as an interface between surface water bodies and terrestrial ecosystems and play a critical role in maintaining the quality and ecological integrity of Highlands Open Waters.

**Objective 1D5b:** 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.

**Objective 1D5e:** 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, in compliance with Policies 6N3 and 6N4 and provide for mitigation through restoration of impaired Riparian Areas in the same HUC14 subwatershed.

**Objective 1D5f:** Require that development within Riparian Areas conforms through local development review and Highlands Project Review to any applicable requirements of a Regional Stormwater Plan adopted pursuant to N.J.A.C. 7:8 (Stormwater Management Rules).

**Objective 1D5g:** Require identification and implementation of opportunities where the restoration and enhancement of previously impaired Riparian Areas are feasible and appropriate as mitigation to any allowable modification to Riparian Area requirements.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall



**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

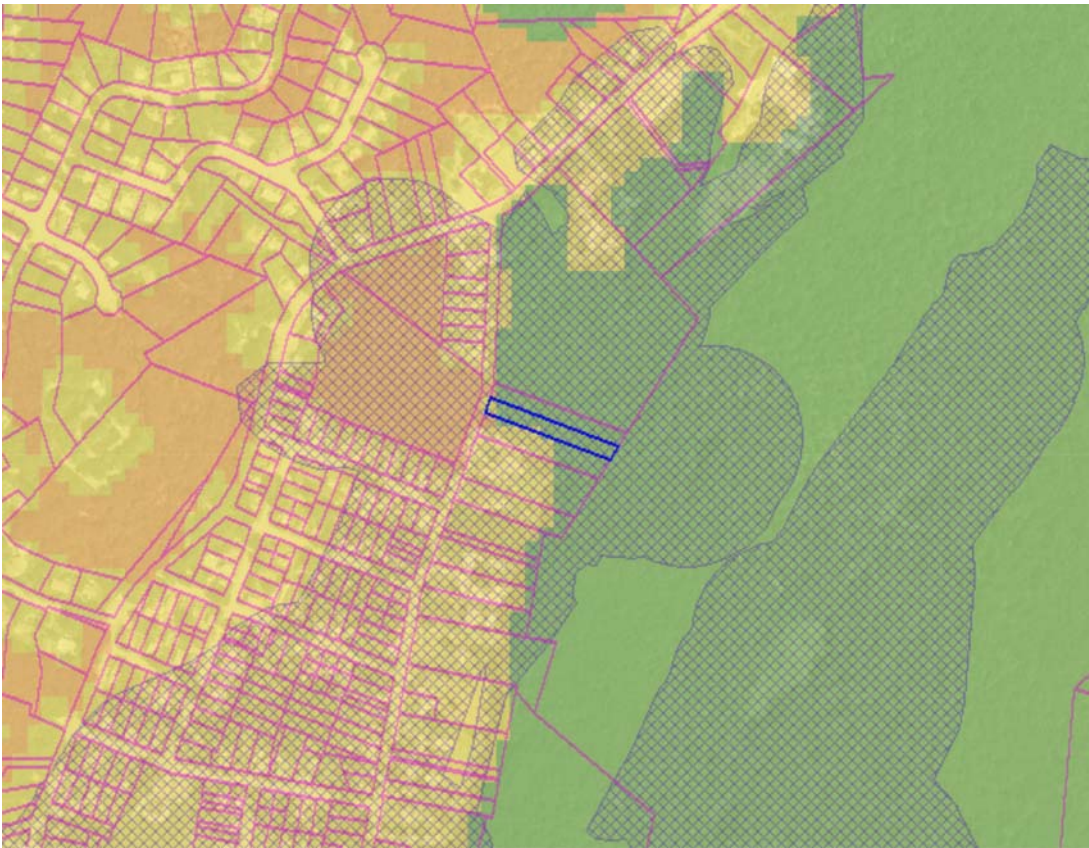
**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.





### Riparian Area in Protection Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Riparian Corridor Integrity Score: HIGH MODERATE LOW

Includes all Riparian Areas within the Protection Zone.

**Objective 1D5c:** Prohibit modifications to Riparian Areas in the Protection Zone except where a waiver is approved by the NJDEP or the Highlands Council under Policy 7G1 or 7G2.



### Riparian Area in Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02  
12/23/2009



Land Use Capability:

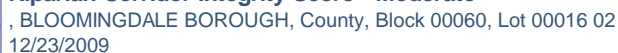
Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Riparian Corridor Integrity Score: HIGH MODERATE LOW

Includes all Riparian Areas within the Existing Community Zone.

**Objective 1D5d:** Restrict modifications to Riparian Areas in the Existing Community Zone, other than those addressed by Objective 1D5b, that would alter or be detrimental to the water quality and habitat value of a Riparian Area.





These areas include watersheds with Riparian Areas that contain a higher incidence of impervious area, agricultural uses and/or road crossings (as compared to High Score) and a reduced proportion of natural vegetation including high quality habitat for rare, threatened, and endangered water/wetland dependent species.

**Objective 1D5b:** 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.





### Steep Slope Protection Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02  
12/23/2009



Steep Slope Protection Area: ■

Slope is a measurement of the steepness of terrain and is defined as the vertical change in elevation over a given horizontal distance. Disturbance of areas containing steep slopes can trigger erosion and sedimentation, resulting in the loss of topsoil. It can also result in the disturbance of habitats, degradation of surface water quality, silting of wetlands, and alteration of drainage patterns. The Highlands Council examined areas of slope in the Highlands Region that exhibited one of the following grade classifications and these grades were established as Steep Slope Protection Areas: 1) grades of slopes of 20% or greater; 2) grades of slope between 15 - 20%; and 3) grades of slope between 10 - 15% that occur within the Riparian Area.

**Policy 1E6:** To require through local development review and Highlands Project Review that applications for development include topographic information identifying the location of any Steep Slope Protection Areas located on the parcel proposed for development.

**Policy 1E7:** To require through local development review and Highlands Project Review that applications for development involving parcels of land with slopes of 10% or greater include identification of forested lands, areas which are highly susceptible to erosion, depth to bedrock and Soil Capability Classes.

**Policy 1E10:** To require that conforming municipalities and counties implement the steep slope protection provisions of Policies 1E2 through 1E9 through master plans and development regulations.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

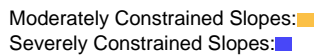
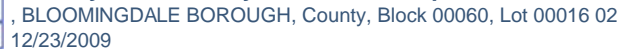
**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.





**Objective 2D4a:** 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 Steep Slopes.





**Objective 1F6b:** Prohibit indirect impacts from activity that is off-site, adjacent to, or within Critical Habitat that will jeopardize the continued existence of, or result in the likelihood of the destruction

**Objective 1F6c:** Waiver applications under Policy 7G2 for local development in a municipality with a Council-approved Critical Habitat Conservation and Management Plan shall be subject to the minimum standards and criteria for waiver provisions as set forth in the plan, to the maximum extent practicable.

**Objective 1F6f:** A Critical Wildlife Habitat area or Significant Natural Area delineation may be modified if an applicant can demonstrate, to the satisfaction of the Highlands Council in coordination with the NJDEPs Endangered and Nongame Species Program or Natural Heritage Program, that: 1. The nature of the site is such that it does not provide habitat for species of concern; 2. The species of concern are not present on the site during any critical part of their life cycle, do not depend upon the site for food, shelter or breeding, and the habitat; on the site is either unsuitable or not critical to species recovery in the Region; or 3. Existing land uses present a human, natural or development barrier to the use of the site by species of concern. Requirements for demonstrating the above criteria shall be included in the Critical Habitat Conservation and Management Plan.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas,

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.

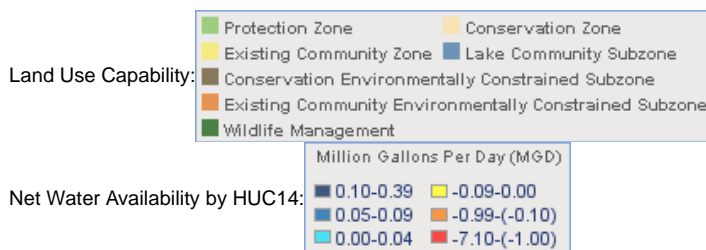
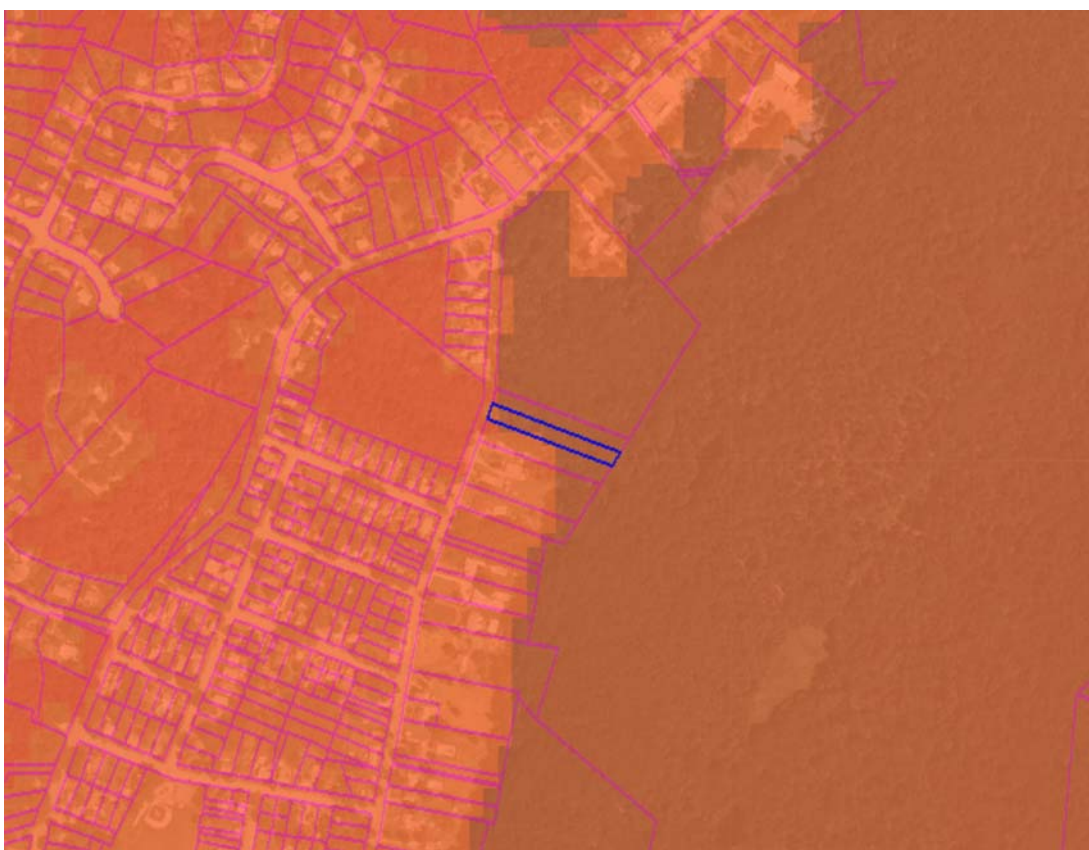




### Net Water Availability in Protection or Conservation Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02

12/23/2009



Identifies the portion of a HUC14 subwatershed within the Protection or Conservation Zone.

**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

**Objective 2B4a:** Give highest priority for the use of non-agricultural Net Water Availability or Conditional Water Availability within Protection Zone and Conservation Zone subwatersheds, through a Water Use and Conservation Plan developed under Objective 2B8c, local development review, and Highlands Project review: 1. To address a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for Net Water Availability; 2. To serve a designated Highlands Redevelopment Area; 3. To serve a cluster development that complies with Objective 2J4b; and 4. To serve affordable housing projects where at least 10% of the units are affordable.

**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the

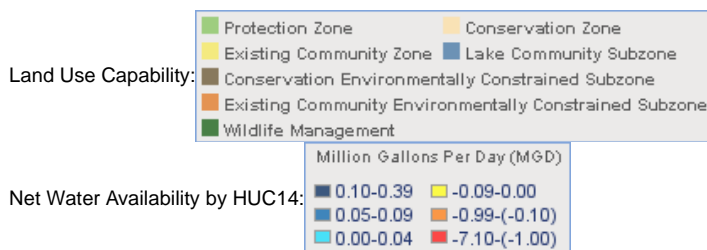
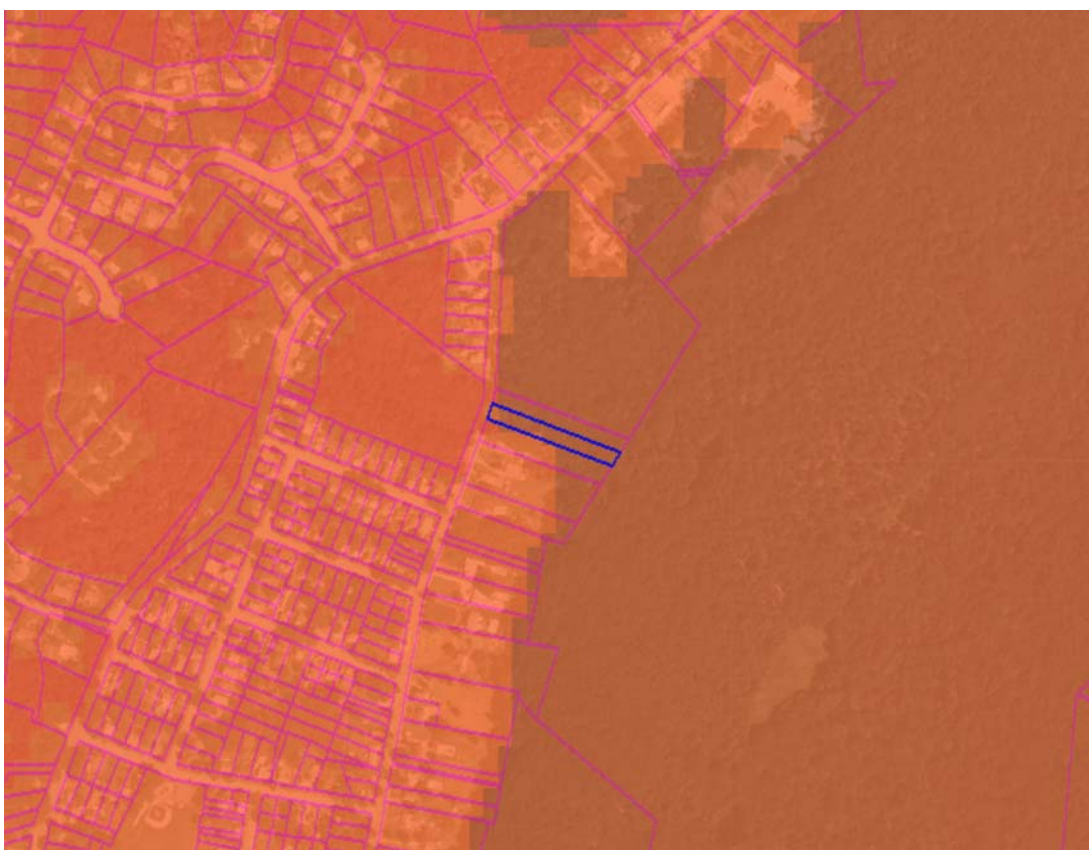




### Net Water Availability in Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02

12/23/2009



Identifies the portion of a HUC14 subwatershed within the Existing Community Zone.

**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

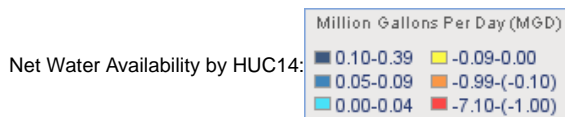
**Objective 2B4b:** The highest priority for use of Net Water Availability or Conditional Water Availability within Existing Community Zone subwatersheds, through a Water Use and Conservation Plan developed under Objective 2B8c, local development review and Highlands Project review to serve documented 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% of the units are affordable, or new areas for development that meet all other requirements of the RMP.

**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.



**Current Deficit Area**

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02  
12/23/2009



Identifies HUC14 subwatersheds that are in deficit of Net Water Availability.

**Policy 2B6:** To require through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, Highlands Project Review, and interagency coordination that proposed public water supply and wastewater service areas, new or increased water allocations and bulk water purchases will not directly or indirectly cause or contribute to a Net Water Availability deficit, and where feasible will help mitigate any existing deficit.

**Objective 2B6a:** Areawide Water Quality Management Plans, Wastewater Management Plans or their amendments shall ensure that the proposed service area will not directly or indirectly cause or contribute to a Net Water Availability deficit, and shall be in conformance with any Water Use and Conservation Plan developed under Objective 2B8c.

**Policy 2B8:** To require through Plan Conformance, local development review, and Highlands Project Review the efficient and effective use of water availability, the planning for future water needs, the reduction and elimination of water deficits, and the mitigation of new consumptive or depletive use in any Current Deficit Areas or subwatersheds that could become deficit areas based on projected development and water uses, to ensure sustainable water supply, water resource and ecological values in conformance with RMP policies and objectives.

**Objective 2B8a:** Prevent net increases in consumptive or depletive water uses in Current Water Deficit Areas to prevent exacerbation of and help reduce or eliminate the deficit to ensure sustainable water supply, water resource and ecological values, emphasizing techniques

including, but not limited to water reuse, recycling and conservation.

**Objective 2B8b:** Proposed new consumptive or depletive water uses within a Current Deficit Area shall only occur under the auspices of a Water Use and Conservation Management Plan approved under Objective 2B8c or through mitigation of the proposed consumptive or depletive use within the same HUC14 subwatershed through: a permanent reduction of existing consumptive and depletive water uses; ground water recharge in excess of the requirements of N.J.A.C. 7:8 (Stormwater Management Rules); or other permanent means. Where a Water Use and Conservation Management Plan has not been approved: 1. Each project shall achieve mitigation ranging from 125% to 200%, based on the severity of the Current Deficit and the amount of consumptive or depletive water use proposed; 2. Total consumptive and depletive water uses from any single project and all projects combined are not to exceed the Conditional Water Availability of Objectives 2B3a or 2B3b for any HUC14 subwatershed; 3. Mitigation shall be successfully completed prior to initiation of the water use, except as required by #4, below. Mitigation may be phased in keeping with project development; 4. For water uses where the combination of proposed consumptive and depletive water uses and current subwatershed deficit is high, according to a schedule established by the Highlands Council, off-site mitigation shall be successfully completed prior to any on-site construction. On-site mitigation shall be successfully completed prior to initiation of the water use but may be implemented concurrent with on-site construction. Mitigation may be phased in keeping with the level of consumptive or depletive water uses; and Mitigation plans for a project shall include: specific objectives for each mitigation component; monitoring and reporting requirements; methods by which shortfalls in meeting the mitigation objectives shall be addressed through additional action; and be guaranteed through performance bonds.

**Objective 2B8c:** Water Use and Conservation Management Plans shall be required through municipal Plan Conformance for all subwatersheds to meet the policies and objectives of Goal 2B, to ensure efficient use of water through water conservation and Low Impact Development Best Management Practices, and to avoid the creation of new deficits in Net Water Availability. Where developed for Current Deficit Areas, the plans shall include provisions to reduce or manage consumptive and depletive uses of ground and surface waters as necessary to reduce or eliminate deficits in Net Water Availability, or to ensure continued stream flows to downstream Current Deficit Areas from Existing Constrained Areas, to the maximum extent practicable within each HUC14 subwatershed. Water Use and Conservation Management Plans shall demonstrate through a detailed implementation plan and schedule how and when the current deficit will be resolved in a subwatershed prior to approval for new water uses in the subwatersheds with the most severe deficits (i.e., in excess of 0.25 million gallons per day), and the plan shall be implemented prior to initiation of new water uses.

**Objective 2B8d:** All water users within a Current Deficit Area shall seek funding and opportunities to meet the intent of Objective 2B4b.

**Objective 2J2a:** Limit future water system demand and reduce existing demand where feasible by water systems that are dependent on Current Deficit Areas or Existing Constrained Areas as a source of water.

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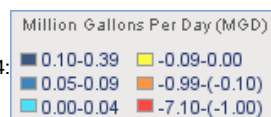


### Net Water Availability

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02  
12/23/2009



Net Water Availability by HUC14:



Net Water Availability is calculated for each HUC14 subwatershed by deducting consumptive and depletive water uses from Ground Water Availability. The Regional Master Plan incorporates Net Water Availability as a capacity threshold on future water uses. 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 in deficit and deemed to be a Current Deficit Area. In Current Deficit Areas where a Water Use and Conservation Management Plan has not yet been adopted, limited amounts of Conditional Water Availability are provided. The use of Net Water Availability or Conditional Water Availability is subject to Regional Master Plan policies.

**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

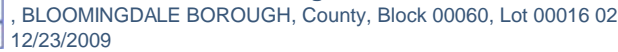
**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.

**Policy 2B7:** To ensure through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, and Highlands Project Review that the use of Net Water Availability and Conditional Water Availability within each subwatershed supports development patterns that are in conformance with RMP policies and objectives.

**Objective 2B8c:** Water Use and Conservation Management Plans shall be required through municipal Plan Conformance for all subwatersheds to meet the policies and objectives of Goal



**Objective 2J2b:** Limit future water system demands to levels that will not create a Current Deficit Area where one does not currently exist.



The layer displays the mapping of Prime Ground Water Recharge Areas. The Regional Master Plan defines Prime Ground Water Recharge Areas as those lands within a HUC14 subwatershed that most efficiently provide 40% of total drought recharge volume for that HUC14 subwatershed, using a GSR-32 analysis based upon land cover and the 1964-1966 drought of record precipitation.

**Objective 2D3c:** Implement master plans and development review ordinances through Plan Conformance that protect Prime Ground Water Recharge Areas and minimize the potential for disruption of recharge in such areas by development.

**Policy 2D4:** To apply standards through Plan Conformance, local development review and Highlands Project Review to protect, restore and enhance the functionality and the water resource value of Prime Ground Water Recharge Areas by restricting development and uses of land within a Prime Ground Water Recharge Area that reduce natural ground water recharge volumes or may directly or indirectly contribute to or result in water quality degradation.

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**Objective 2D4b:** Any development activity approved to occur in a Prime Ground Water Recharge Area shall provide an equivalent of 125% of pre-construction recharge volumes for the affected Prime Ground Water Recharge Area of the site within the following areas, in order of priority: (1) the same development site where feasible; (2) the same HUC14 subwatershed, or (3) an interrelated HUC14 subwatershed as approved by the Highlands Council where no feasible option exists in the same HUC14 subwatershed. This requirement shall apply to all portions of the Prime Ground Water Recharge Area where the recharge is disrupted through impervious surfaces, routing of stormwater runoff and recharge from natural flow paths, and other similar changes.

**Objective 2D4d:** Require through Plan Conformance, local development review and Highlands Project Review that the disruption of Prime Ground Water Recharge Area, after conformance with Objectives 2D4a, 2D4b and 2D4c is achieved, shall be limited to no greater than 15% of the Prime Ground Water Recharge Area on the site and shall be preferentially be sited on that portion of the Prime Ground Water Recharge Area that has the lowest ground water recharge rates and the lowest potential for aquifer recharge.

**Objective 2D4f:** Prohibit through Plan Conformance, local development review and Highlands Project Review new land uses, including those identified through Objective 2D3d, that have a significant potential to result in the discharge of persistent organic chemicals sources (including but not limited to existing discharges of industrial or other non-sanitary wastewater effluent) to ground water or to the land surface within a Prime Ground Water Recharge Area, such that they may degrade or contribute to the degradation of ground water quality.

**Objective 2D4h:** Achieve a net improvement in ground water recharge volume and maintenance of water quality as required through compliance with and implementation of any related provisions of an adopted regional stormwater plan.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

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**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.



### Highlands Domestic Sewerage Facilities

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02  
12/23/2009



Highlands Domestic Sewerage Facilities: ■

Highlands Domestic Sewerage Facilities displays those areas served by public wastewater utilities. The map indicates areas that are actually connected into a public wastewater collection system, not simply located in a Sewer Service Area. Public sewer systems discharging less than 0.15 million gallons per day (MGD) to surface water or 0.075 MGD to ground water are not included. Private, on-site treatment facilities like a package treatment plant are also not included. The Regional Master Plan limits the creation or extension of public wastewater systems.

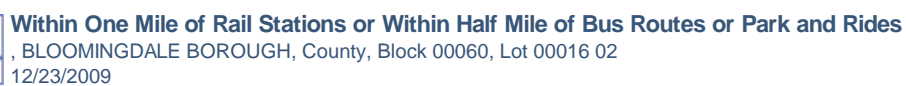
**Objective 2J4b:** Clustered development served by public water supply within the Protection Zone, the Conservation Zone, and the Environmentally-Constrained Sub-zones of the Planning Area shall be approved only if the following conditions are met: 1. The development impacts are otherwise consistent with the requirements of the RMP, including provisions for mandatory clustering in Agricultural Resource Areas pursuant to Policy 3A5; 2. Extension of an existing public water system will occur only where the cluster development is within or immediately adjacent to an Existing Area Served with available capacity; 3. Creation of a new public water system will occur only where such development is not within or immediately adjacent to an Existing Area Served with available capacity; 4. The clustered development preserves at least 80% of the cluster project area in perpetuity for environmental protection or agricultural purposes. To the maximum extent feasible the developed portion (i.e., not including wetlands, Highlands Open Waters buffers, and recreational lands) occupies no more than 10% of the cluster project area if served by a public or community on-site wastewater system; and 5. Where the preserved land in the cluster project area is dedicated to agricultural purposes, the cluster development ordinance and an Agriculture Retention/Farmland Preservation Plan supports continued agricultural viability of the agricultural land and requires the implementation of best management practices, including development and implementation of a Farm Conservation Plan that addresses the protection of water and soil resources prepared by the USDA Natural Resources Conservation Service (NRCS), Technical Service Provider (TSP), appropriate agent or NJDA staff, and approved by the local Soil Conservation District (SCD).

**Objective 211a:** Designated sewer service areas in the Preservation Area shall be restricted to the Existing Area Served as of August 10, 2004, except to serve development that is approved through a HAD or a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1.

**Objective 2K3d:** Clustered development served by a public wastewater collection and treatment system or community on-site treatment facility within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area shall be approved only if the following conditions are met: 1. The development impacts are otherwise consistent with the requirements of the RMP, including provisions for mandatory clustering in Agricultural Resource Areas; 2. Extension of an existing public wastewater collection and treatment system will occur only where the cluster development is within or immediately adjacent to an Existing Area Served with available capacity; 3. Creation of a community on-site treatment facility will occur only where such development is not within or immediately adjacent to an Existing Area Served with available capacity, where the proposed system is designed, permitted, and constructed at a capacity limited to the needs of the clustered development, and where the system does not create the potential for future expansion into areas that are not the subject of cluster developments immediately adjacent to the initial cluster served; 4. The cluster development preserves at least 80% of the cluster project area in perpetuity for environmental protection or agriculture purposes. To the maximum extent feasible the developed portion of the project area (e.g., not including wetlands, Highlands Open Waters buffers, and recreational lands) occupies no more than 10% of the cluster project area if served by a public or community on-site wastewater system; and 5. Where the preserved land in the cluster project area is dedicated to agricultural purposes, the cluster development ordinance and an Agriculture Retention/Farmland Preservation Plan supports continued agricultural viability of the agricultural land and requires the implementation of best management practices, including development and implementation of a Farm Conservation Plan that addresses the protection of water and soil resources prepared by the USDA Natural Resources Conservation Service (NRCS), Technical Service Provider (TSP), appropriate agent or NJDA staff, and approved by the local Soil Conservation District (SCD).

**Objective 2K3e:** Allow the expansion or creation of wastewater collection systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to those provided at Objective 2K3c within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. The highest priority for allocation of excess or additional wastewater treatment capacity is to areas where there are clusters of failed septic systems that are located within or adjacent to Existing Areas Served. TDR Receiving Areas, where designated, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than other developments requiring expansion of sewer service areas.





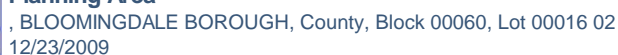
Private Bus Routes:

- Bergen + Main Line
- Montclair Boonton Line
- Morris + Essex Line - Gladstone Branch
- Morris + Essex Line - Morristown Branch
- Raritan Valley Line

Park & Ride Sites: 

Includes all developed lands within a 1/2 mile buffer from all park and ride locations, rail stations, and NJ Transit public and major private bus routes in or within 1/2 mile of the Highlands Region.

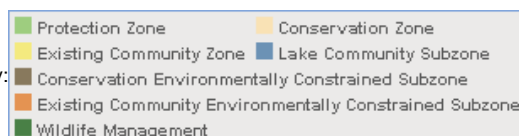
**Objective 5E1b:** Development and redevelopment in close proximity to rail stations and along bus routes.



Means lands within the Highlands Region which are not within the Preservation Area.

**Objective 7F1d:** Planning Area exemptions, issued by the Highlands Council, shall be required, where appropriate, prior to consideration of a local development review or a Highlands Project Review. Guidance shall specify the exceptions where a review may proceed absent such an exemption determination. Applications for exemptions submitted to the Highlands Council shall be based upon the application requirements exemptions codified in N.J.A.C. 7:38.





Consists of high natural resource value lands that are important to maintaining water quality, water quantity and sensitive ecological resources and processes.

**Policy 6C1:** To limit new human development in the Protection Zone to redevelopment, exempt activities, and environmentally-compatible low density new land uses, in accordance with RMP resource protection needs and water quality and quantity capacity constraints and to ensure that the impacts of development using exemptions under the Highlands Act (see Policy 7F1) are considered in regional protection measures.

**Objective 6C1a:** Centers in the Protection Zone, potentially including clustered development, shall be at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan, and the use of septic systems or community wastewater systems.

**Policy 6C2:** To ensure through Plan Conformance, local development review and Highlands Project Review that any future development or redevelopment which does occur in a Protection Zone is subject to standards and criteria which protect the land and water resources of the Protection Zone from any potential adverse impact to the maximum extent possible.





### Protection Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02  
12/23/2009



Land Use Capability:

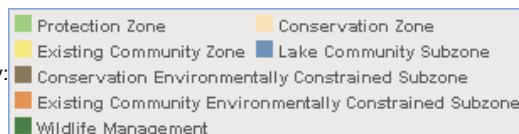
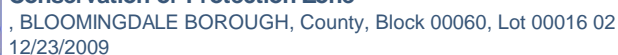
Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes the Protection Zone within the Planning Area.

**Objective 2L2a:** Use the median concentrations of nitrate in ground water for Planning Area HUC14 subwatersheds where the Protection Zone is predominant as the nitrate target for new development reliant on septic systems within the Protection Zone. The median is 0.72 mg/L.

**Policy 6J3:** To encourage redevelopment in the Conservation and Protection Zones in the Planning Area of brownfields and grayfields that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields, as approved through Plan Conformance or the Highlands Redevelopment Area Designation process.



- Conservation Environmentally Constrained Subzone
- Existing Community Environmentally Constrained Subzone
- Wildlife Management

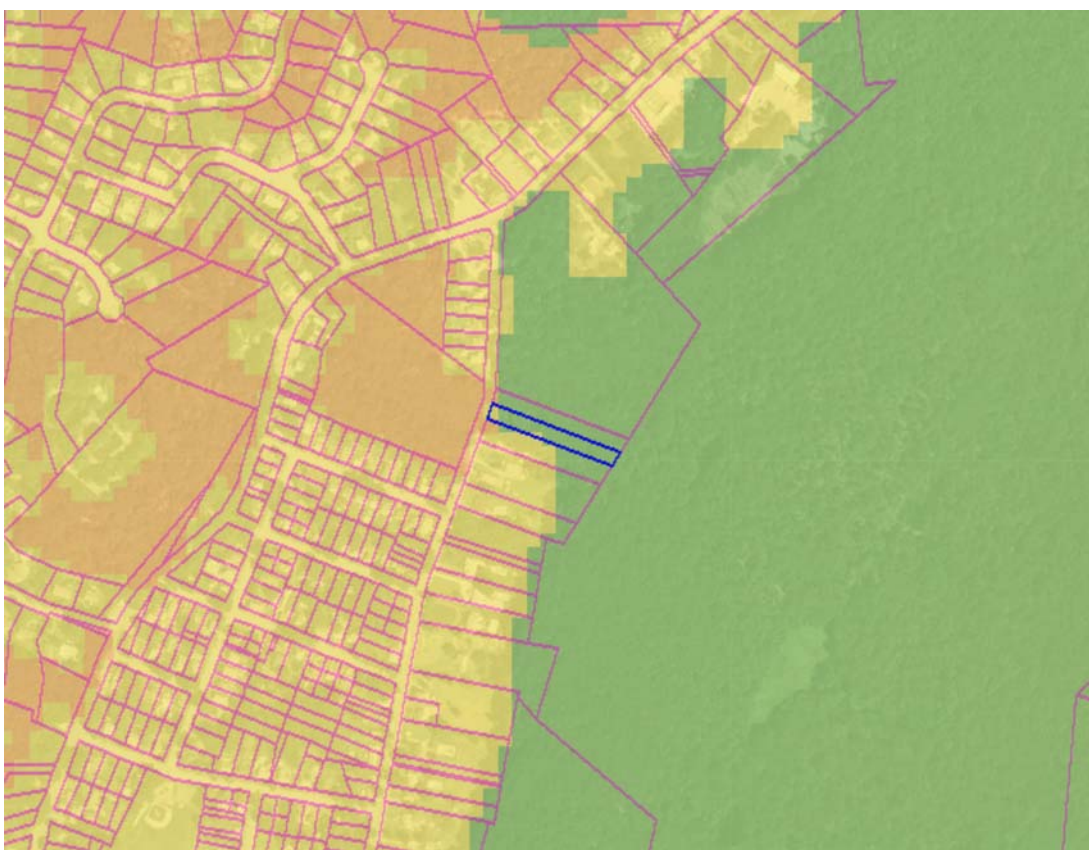
**Objective 2L3f:** Carrying capacity shall be documented through the Land Use Capability Septic System Yield Map as the number of allowable septic systems per Conservation and Protection Zone for each HUC14 subwatershed, taking into account the nitrate target, the HUC14 subwatershed drought ground water recharge, and the acreage that is privately owned, undeveloped or underdeveloped, and not preserved.





### Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Consists of areas with regionally significant concentrated development signifying existing communities.

**Objective 2J4c:** Allow the expansion or creation of public water systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to Objective 2J4a within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. TDR Receiving Zones, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than expansion of public water service areas within this Zone.

**Objective 2K3e:** Allow the expansion or creation of wastewater collection systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to those provided at Objective 2K3c within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. The highest priority for allocation of excess or additional wastewater treatment capacity is to areas where there are clusters of failed septic systems that are located within or adjacent to Existing Areas Served. TDR Receiving Areas, where designated, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than other developments requiring expansion of sewer service areas.

**Policy 6F3:** To ensure that development activities within the Existing Community Zone are subject



**Objective 6F6a:** Center based development initiatives shall be planned within the Existing Community Zone at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan. Densities of five dwelling units and above are encouraged, and are required in areas designated as voluntary TDR Receiving Zones where TDR benefits are sought under the Highlands Act.



### Existing Community Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes the Existing Community Zone within the Planning Area.

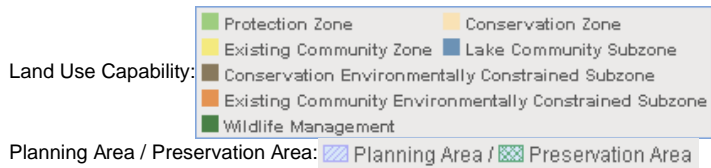
**Objective 2L2d:** Use a nitrate target of 2 mg/L for the Existing Community Zone within Planning Area, on a project-by-project basis, where new development will rely on septic systems.

**Policy 6J2:** To encourage redevelopment in the Existing Community Zone in the Planning Area of brownfields, grayfields, and other previously developed areas that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields, as approved through Plan Conformance or the Highlands Redevelopment Area Designation process.



# Protection Zone or Conservation Zone or Environmentally Constrained Sub-Zones in Planning Area OR Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00016 02  
12/23/2009



Includes the Protection Zone, Conservation Zone, Environmentally Constrained Sub-Zones and the Existing Community Zone within the Planning Area.

**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.





**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.

## Regional Master Plan Consistency Report

12/23/2009

Prepared by State of New Jersey Highlands Water Protection and Planning Council  
100 North Road (Route 513), Chester, NJ 07930  
Telephone: (908) 879-6737 Fax: (908) 879-4205

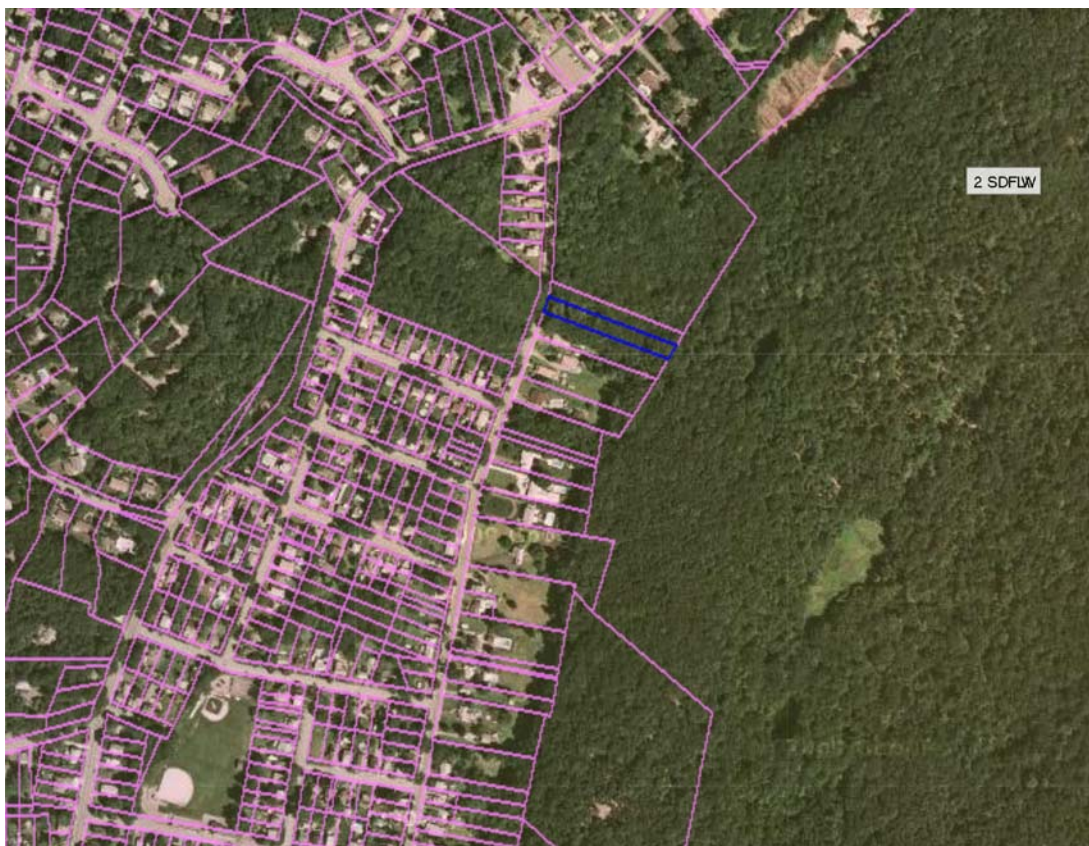


Please consider the environment before printing this report

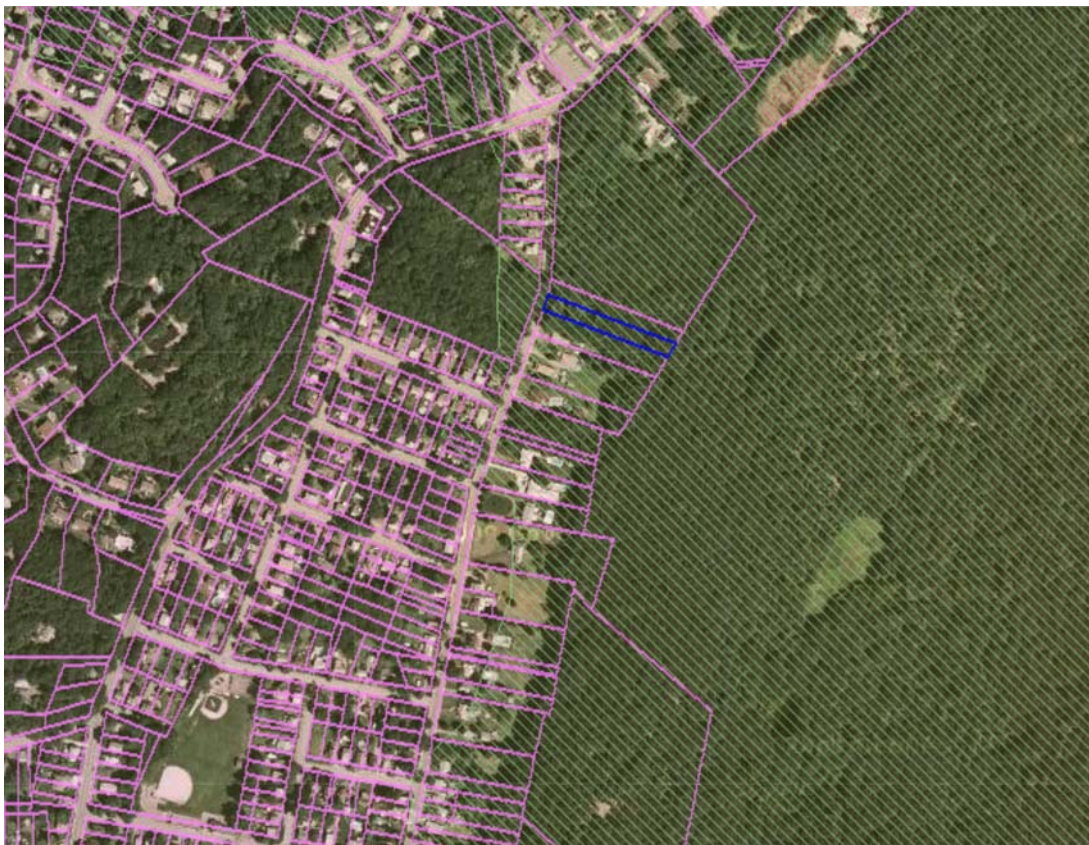
### Disclaimer

Please be advised that any reports generated from the online Consistency Review Application do not constitute a formal Consistency Determination from the Highlands Council. The information contained therein is provided solely for informational purposes and is not to be construed as providing advice, recommendations, endorsements, representations or warranties of any kind whatsoever.

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 02



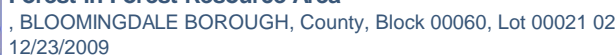
Powered by VERTICES Mapper™



The Forest Resource Area data layer is an intensity indicator that captures high ecological value forest areas including those forested lands that exhibit the least fragmentation, which are vital for the maintenance of ecological processes.

**Policy 1B3:** To limit through local development review and Highlands Project Review deforestation in the Forest Resource Area and forested lands within High Integrity Forest Subwatersheds within the Existing Community Zone to maximum extent practicable.





The Forest in Forest Resource Area data layer illustrates the forested lands located within the spatially delineated Forest Resource Area. The Regional Master plan provides for the protection of the integrity of these forested lands in order to maintain forest ecological function within the Forest Resource Area.

**Objective 1A2d:** To prohibit through Plan Conformance, local development review and Highlands Project Review the expansion or creation of public water supply systems or public wastewater collection and treatment systems or community-based on-site wastewater facilities into forested areas of the Forest Resource Area within the Planning Area except as provided for in Policy 2J4 with Objectives 2J4a through 2J4d, and Policy 2K3 with Objectives 2K3a through 2K3e, and within the Preservation Area except as provided for in Policy 2I1 and Objectives 2I1a and 2I1b.

**Policy 1C1:** To require that conforming municipalities and counties address the protection of forested portions of Forest Resource Areas and High Integrity Forest Subwatersheds in their master plans and development regulations.

**Policy 5C3:** To limit road improvements through local development review and Highlands Project Review where roads are constrained by topography, forested lands or the community character of land uses fronting on the road.



### Forest in Forest Resource Area in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 02  
12/23/2009



Forest within Forest Resource Area: ■

Planning Area / Preservation Area: ■ Planning Area ■ Preservation Area

The Forest in Forest Resource Area in Planning Area data layer illustrates the forested lands located within the spatially delineated Forest Resource Area of the legislatively delineated Highlands Planning Area. The Regional Master Plan includes protection policies specific to forested lands in the Forest Resource Area in the Planning Area.

**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.



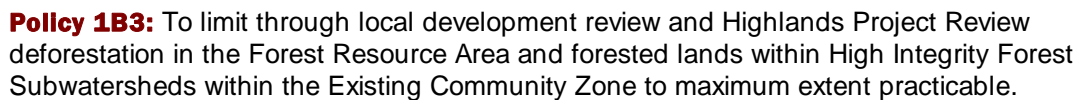


Forest within Forest Resource Area: ■

Protection Zone
  Conservation Zone
  Existing Community Zone
  Lake Community Subzone
  Conservation Environmentally Constrained Subzone
  Existing Community Environmentally Constrained Subzone
  Wildlife Management

Planning Area / Preservation Area:  Planning Area /  Preservation Area

**Policy 1B2:** To limit through local development review and Highlands Project Review human development of forests to low impact residential development in the Protection Zone and the Conservation Zone in the Planning Area.







### Forest Resources

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 02  
12/23/2009



Forest Outside of Forest Resource Area: ■

Forest within Forest Resource Area: ■

Forest Resources represents the Total Forest Area data layer that was extracted from the NJDEP 2002 draft Land Use Land Cover data. This data layer illustrates all upland and wetland forest and scrub/shrub categories (excluding old field) and represents all forested lands within the Region. The Regional Master Plan includes policies that limit clearing of trees within Forest Resources and that seek to protect overall forest resources integrity.

**Objective 1B3a:** Implementation through Plan Conformance of regulations, which limit the clearing of trees in conjunction with human development to circumstances where the clearing will not diminish the integrity of forest resources.

**Policy 1B5:** To ensure that forest resources are protected on a site specific basis during local development review and Highlands Project Review.

**Objective 1B5a:** Applications for local development review and Highlands Project Review require identification of any forest area on and adjacent to a site in accordance with the Highlands Councils Method for Identifying Upland Forest Areas in the Highlands Region.

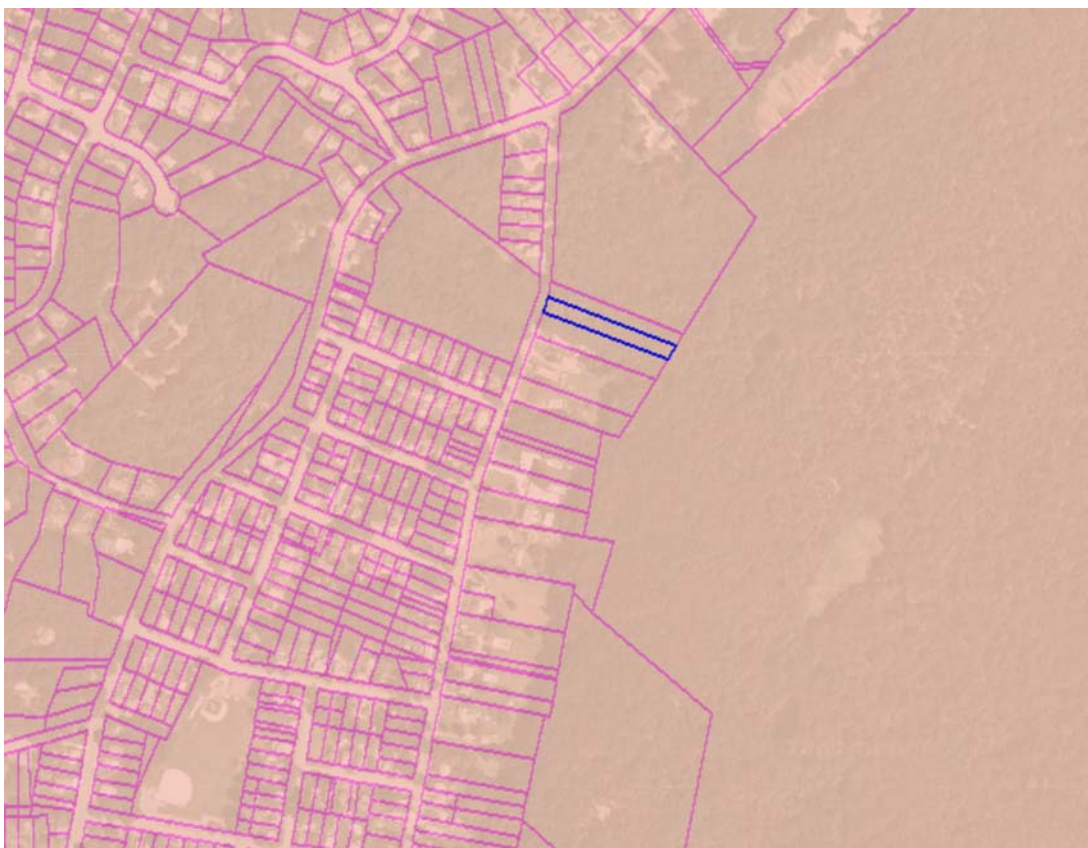
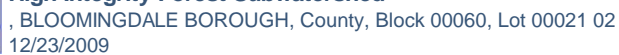
**Policy 1B7:** To prohibit clear-cutting of forest lands except pursuant to an approved Forest Management Plan approved by the State Forester.

**Policy 1C3:** To require that conforming municipalities adopt a tree clearing ordinance consistent with an approved community forestry plan under the New Jersey Forest Service Community Forestry Program as part of the municipal master plan and local development regulations.

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

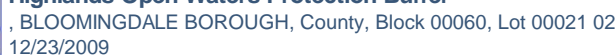






High Integrity Forest Subwatershed is a component of the Forest Integrity Value data layer. This data layer represents forest cover integrity in the Region at the watershed level because forests are important for the protection of water quality and quantity.

**Policy 1C1:** To require that conforming municipalities and counties address the protection of forested portions of Forest Resource Areas and High Integrity Forest Subwatersheds in their master plans and development regulations.



**Policy 1D4:** Highlands Open Waters shall include a protection buffer of 300 feet from the edge of the discernable bank of the Highlands Open Waters feature, or from the centerline where no discernable bank exists. With respect to wetlands and other Highlands Open Waters features (e.g., seeps, springs, etc.), the feature shall include a protection buffer of 300 feet from the delineated Letter of Interpretation (LOI) line issued by the NJDEP for wetlands, or from a field-delineated boundary for other features. In areas where existing development or land uses within the protection buffers have reduced or impaired the functional values of the buffers, the Council will seek opportunities to restore the buffer and its functions. Any proposed disturbance shall, through local development review and Highlands Project Review, comply with Highlands Open Waters buffer standards. The protection buffer width for Category 2 streams in the Planning Area may be modified through a Stream Corridor Protection/Restoration Plan, as specified in Objective 1D4i. In approved Redevelopment Areas, the Council may, at its discretion, modify the required buffer, upon a showing of no alternatives, no impact to the functional value of the buffer, and provision of alternative approaches to enhancing or protecting Highlands Open Waters and resources of the buffer area.

**Objective 1D4c:** Require that proposed development within all Highlands Open Waters buffers (Preservation and Planning Areas) conforms through local development review and Highlands



**Objective 1D4i:** Develop through Plan Conformance and implement stream corridor or subwatershed-based Stream Corridor Protection/Restoration Plans which shall include Steps 1, 2, and 3, and may include Steps 4 and 5: 1. Identify areas where existing development, land disturbances, or land uses are within Highlands Open Waters buffers have removed or substantially impaired natural vegetation communities, and have significantly reduced or impaired the functional values of Highlands Open Waters buffers. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland usesq; 2. Identify and require opportunities for restoration of areas identified in Step 1 as part of mitigation requirements under a Highlands Act waiver or Objectives 1D4e and 1D4f, and public or nongovernmental restoration/stabilization projects; 3. Identify the extent of stream corridor features that are critical to supporting the functions of a healthy Highlands Open Waters buffer and that extend beyond the buffers required by Objectives 1D4b and 1D4c. The 300 foot buffer in these areas may be expanded to be most protective of these features which may include, but are not limited to, Critical Habitat, pollutant source areas identified through scientific techniques, and steep slopes; 4. Where Highlands Open Waters buffers include areas identified in Step 1, regarding Category 2 surface waters in the Planning Area only, the Stream Corridor Protection/Restoration Plan may identify where, based on scientific analysis of site-specific conditions (e.g., topography, vegetation cover type, habitat, soil type, upstream land uses and pollution inputs, width of floodplain, rate and volume of run-off), a buffer of less than the full 300 feet (but including the undisturbed buffer area at a minimum) is sufficient to maintain or improve the protection of Highlands Open Waters and Riparian Areas. The plan must identify alternative buffers that provide functional buffer values at least equivalent to existing conditions and are no less than 150 feet or no less than the extent allowed in State or municipal regulation (including Objectives 1D4b and 1D4c), whichever is greater. Further, the plan shall include a functional value assessment to ensure that there is no net loss in the overall functional value of the subwatershedos stream buffers. Buffers established through this process shall be determined based on site conditions rather than fixed distances, reflecting findings of the scientific analysis, and shall be used in the site design and development review process regarding determinations of restoration, continued use, or increased use of the disturbed buffer area. Buffer averaging for the purpose of accommodating development proposals is deemed not to meet the requirements of this provision; and 5. Where a proposed Highlands Redevelopment Area would not meet, in full, Objectives 1D4b through 1D4h but affects an undisturbed buffer area determined to not be necessary for the protection of the functional values for Highlands Open Waters buffer (as determined through scientific analysis of site-specific conditions), modification of the undisturbed buffer may be allowed to no less than the extent allowed in State or municipal regulation. However the Council shall first determine that there is no alternative to the proposed reduction of the buffer, and require a showing of no impact to the functional values of the buffer and provision of alternative approaches to enhancing or protecting the Highlands Open Waters and resources of the buffer area. Restoration or enhancement of buffer functional values shall be provided on-site or within the same stream reach to achieve a net improvement of existing buffer functional values.

**Objective 1D5b:** 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.

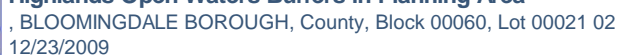
**Objective 211b:** The expansion or creation of public water supply systems, public wastewater collection and treatment systems and community on-site treatment facilities in the Preservation Area as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

13 of 50







Planning Area / Preservation Area:  Planning Area /  Preservation Area

**Objective 1D4d:** Structures or other land improvements existing within a Highlands Open Waters buffer of the Planning Area on August 10, 2004 may remain, provided that the area of disturbance shall not be increased unless approved through local development review or Highlands Project Review in compliance with RMP policies and objectives. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q



## Highlands Open Waters Protection Buffers in Conservation or Protection Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 02  
12/23/2009



Open Water Protection Area:

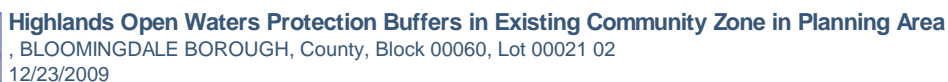
Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes all Highlands Open Waters protection buffers within the Protection and Conservation Zones of the Planning Area.

**Objective 1D4e:** In the Protection and Conservation Zones of the Planning Area, proposed disturbances of Highlands Open Waters buffers shall only occur in previously disturbed areas, unless a waiver is granted by the Highlands Council under Policy 7G2. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q Such proposed disturbances must demonstrate full utilization of the following performance standards in the listed order, to demonstrate the necessity of an encroachment into Highlands Open Waters buffers: 1) avoid the disturbance of Highlands Open Waters buffers; 2) minimize impacts to Highlands Open Waters buffers; and 3) mitigate all adverse impacts to Highlands Open Waters buffers so that there is no net loss of the functional value of the buffer, in compliance with Objective 1D4h. Minimization and mitigation opportunities shall be considered only upon a clear and convincing demonstration by the applicant that the protection buffer cannot be avoided and in no case shall the remaining buffer be reduced to less than 150 feet from the edge of Highlands Open Waters, unless a waiver is granted by the Highlands Council under Policy 7G2 and the proposed disturbance complies with Objective 1D4c.







Protection Zone
  Conservation Zone
  Existing Community Zone
  Lake Community Subzone

Conservation Environmentally Constrained Subzone
  Existing Community Environmentally Constrained Subzone

Wildlife Management

Land Use Capability:

Planning Area / Preservation Area:  Planning Area /  Preservation Area

Includes all Highlands Open Waters protection buffers within the Existing Community Zone of the Planning Area.

**Objective 1D4f:** In the Existing Community Zone of the Planning Area, proposed disturbances of Highlands Open Waters buffers shall only occur in previously disturbed areas, unless a waiver is granted by the Highlands Council under Policy 7G2 and the proposed disturbance complies with Objective 1D4c. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q Such disturbances shall employ performance standards such that all proposed disturbances of Highlands Open Waters buffers shall employ Low Impact Development Best Management Practices to mitigate all adverse modification to Highlands Open Waters buffers so that there is no net loss of the functional value of the buffer, in compliance with Objective 1D4h.





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. Riparian Areas serve as an interface between surface water bodies and terrestrial ecosystems and play a critical role in maintaining the quality and ecological integrity of Highlands Open Waters.

**Objective 211b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall

**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

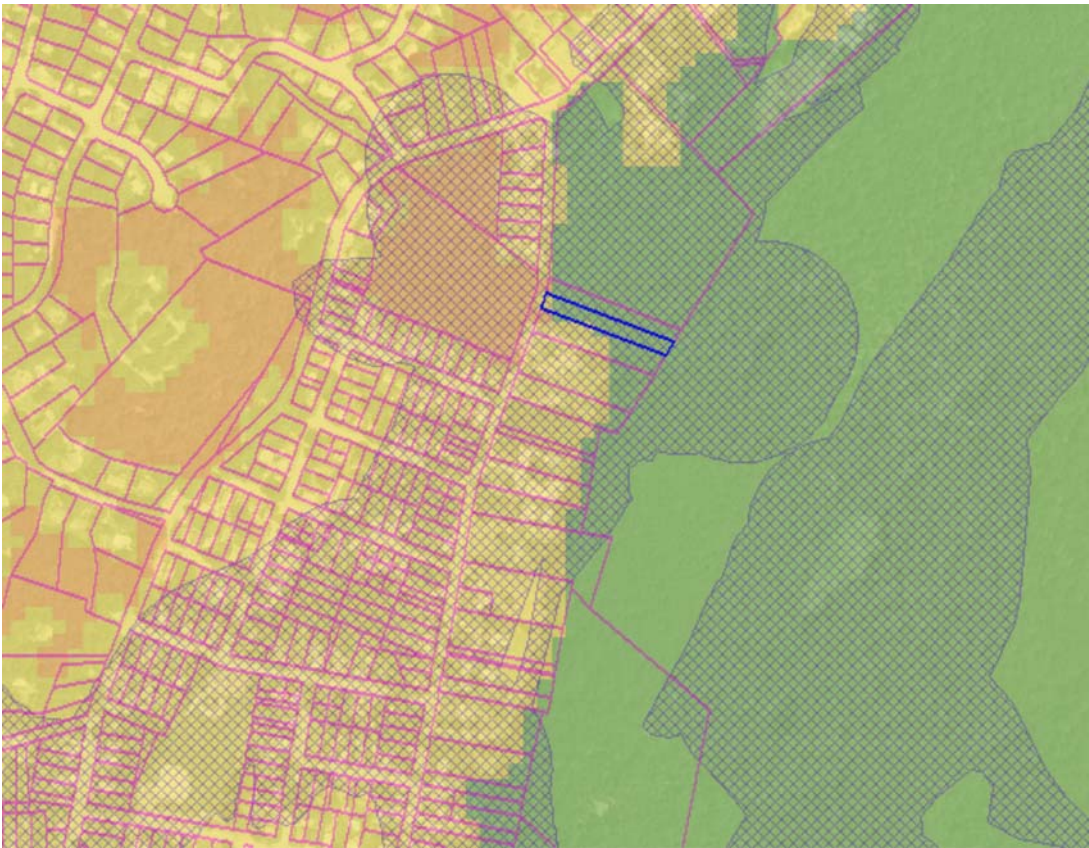
**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.





### Riparian Area in Protection Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 02  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Riparian Corridor Integrity Score: HIGH MODERATE LOW

Includes all Riparian Areas within the Protection Zone.

**Objective 1D5c:** Prohibit modifications to Riparian Areas in the Protection Zone except where a waiver is approved by the NJDEP or the Highlands Council under Policy 7G1 or 7G2.

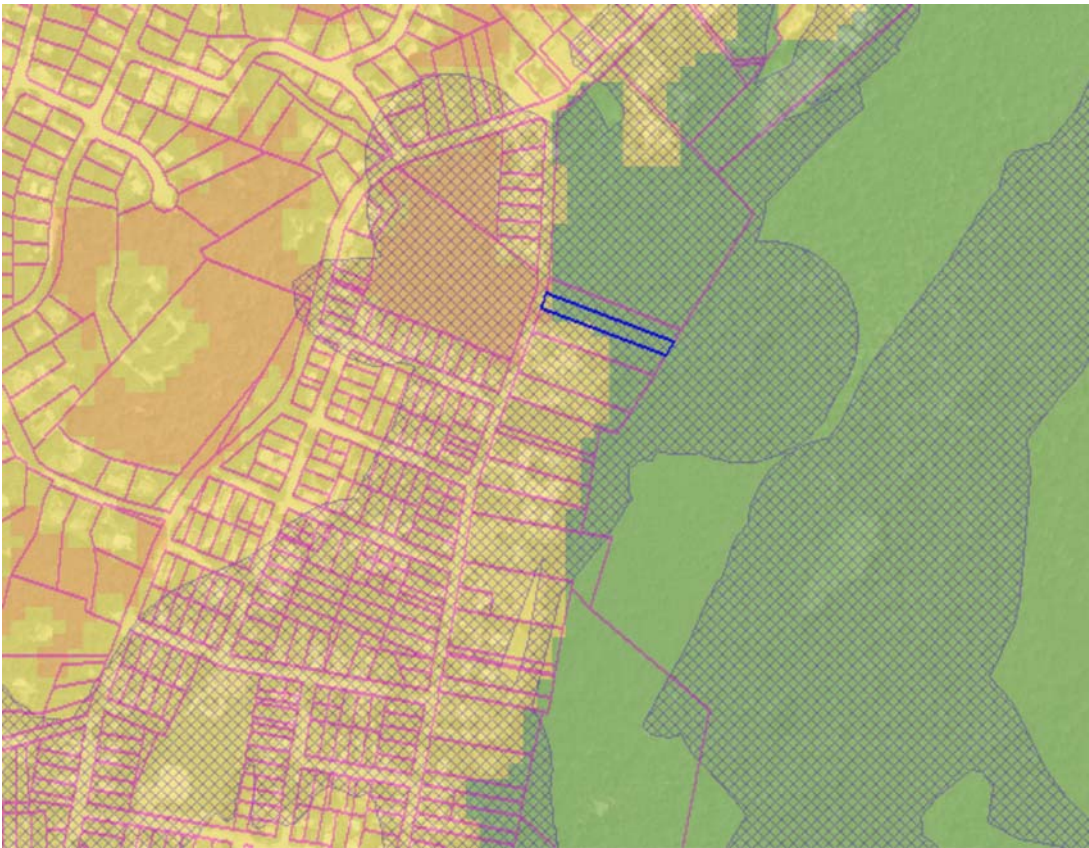




### Riparian Area in Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 02

12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Riparian Corridor Integrity Score: HIGH MODERATE LOW




Includes all Riparian Areas within the Existing Community Zone.

**Objective 1D5d:** Restrict modifications to Riparian Areas in the Existing Community Zone, other than those addressed by Objective 1D5b, that would alter or be detrimental to the water quality and habitat value of a Riparian Area.

**Riparian Corridor Integrity Score - Moderate**

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 02

12/23/2009

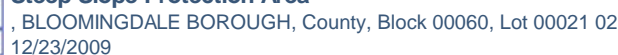
Riparian Corridor Integrity Score:  HIGH  MODERATE  LOW

These areas include watersheds with Riparian Areas that contain a higher incidence of impervious area, agricultural uses and/or road crossings (as compared to High Score) and a reduced proportion of natural vegetation including high quality habitat for rare, threatened, and endangered water/wetland dependent species.

**Objective 1D5b:** 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.

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Slope is a measurement of the steepness of terrain and is defined as the vertical change in elevation over a given horizontal distance. Disturbance of areas containing steep slopes can trigger erosion and sedimentation, resulting in the loss of topsoil. It can also result in the disturbance of habitats, degradation of surface water quality, silting of wetlands, and alteration of drainage patterns. The Highlands Council examined areas of slope in the Highlands Region that exhibited one of the following grade classifications and these grades were established as Steep Slope Protection Areas: 1) grades of slopes of 20% or greater; 2) grades of slope between 15 - 20%; and 3) grades of slope between 10 - 15% that occur within the Riparian Area.

**Policy 1E7:** To require through local development review and Highlands Project Review that applications for development involving parcels of land with slopes of 10% or greater include identification of forested lands, areas which are highly susceptible to erosion, depth to bedrock and Soil Capability Classes.

**Objective 211b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

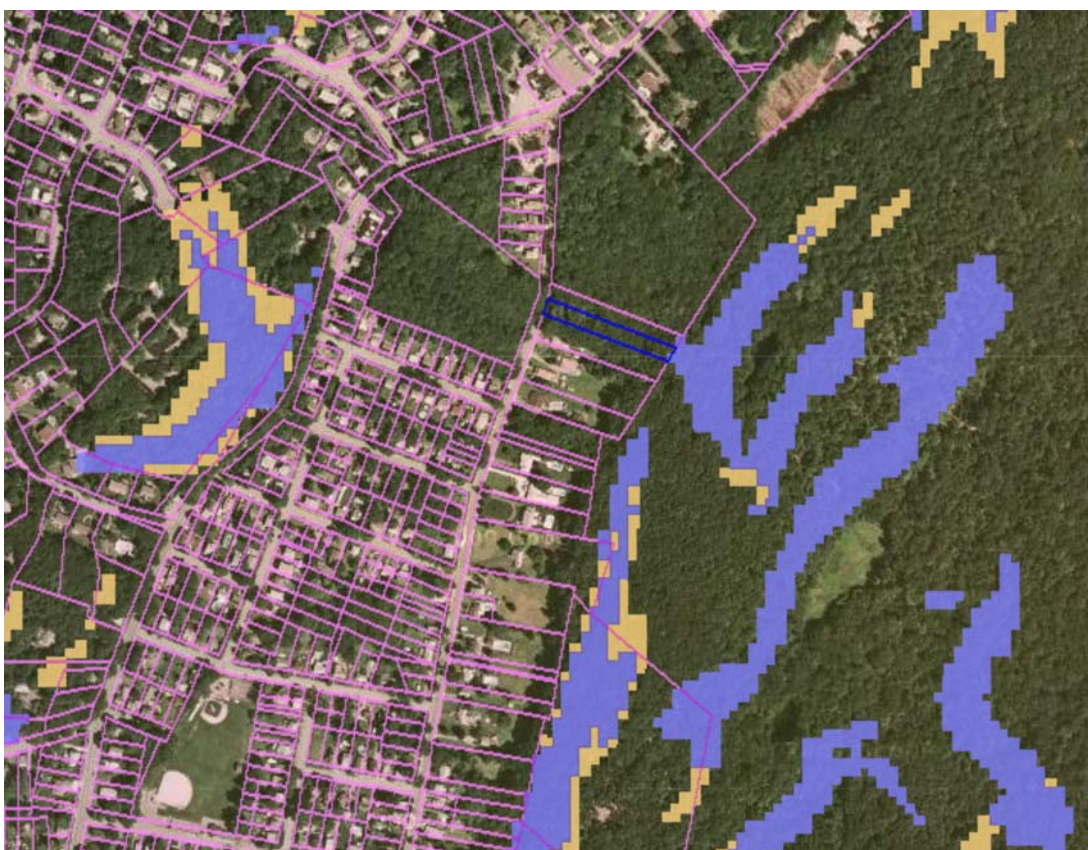
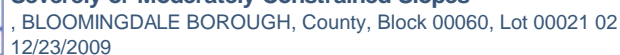


**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.

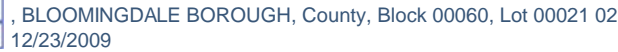


Severely Constrained Slopes: 

**Policy 1E8:** To prohibit through local development review and Highlands Project Review land disturbance within areas which are Severely Constrained Slopes and Moderately Constrained Slopes, except for linear development in both the Preservation and Planning Areas that meets the requirements of N.J.A.C. 7:38-3.8(c)1-4.

**Objective 2D4a:** 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 Steep Slopes.





**Objective 1F6b:** Prohibit indirect impacts from activity that is off-site, adjacent to, or within Critical Habitat that will jeopardize the continued existence of, or result in the likelihood of the destruction



**Objective 1F6c:** Waiver applications under Policy 7G2 for local development in a municipality with a Council-approved Critical Habitat Conservation and Management Plan shall be subject to the minimum standards and criteria for waiver provisions as set forth in the plan, to the maximum extent practicable.

**Objective 1F6f:** A Critical Wildlife Habitat area or Significant Natural Area delineation may be modified if an applicant can demonstrate, to the satisfaction of the Highlands Council in coordination with the NJDEPs Endangered and Nongame Species Program or Natural Heritage Program, that: 1. The nature of the site is such that it does not provide habitat for species of concern; 2. The species of concern are not present on the site during any critical part of their life cycle, do not depend upon the site for food, shelter or breeding, and the habitat; on the site is either unsuitable or not critical to species recovery in the Region; or 3. Existing land uses present a human, natural or development barrier to the use of the site by species of concern. Requirements for demonstrating the above criteria shall be included in the Critical Habitat Conservation and Management Plan.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas,

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

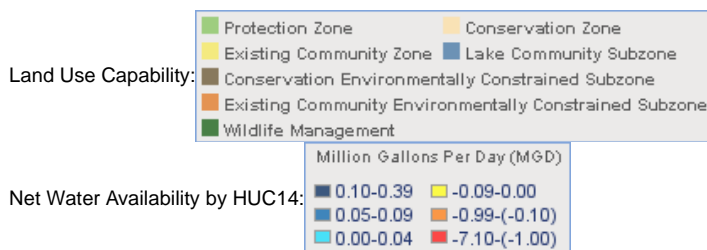
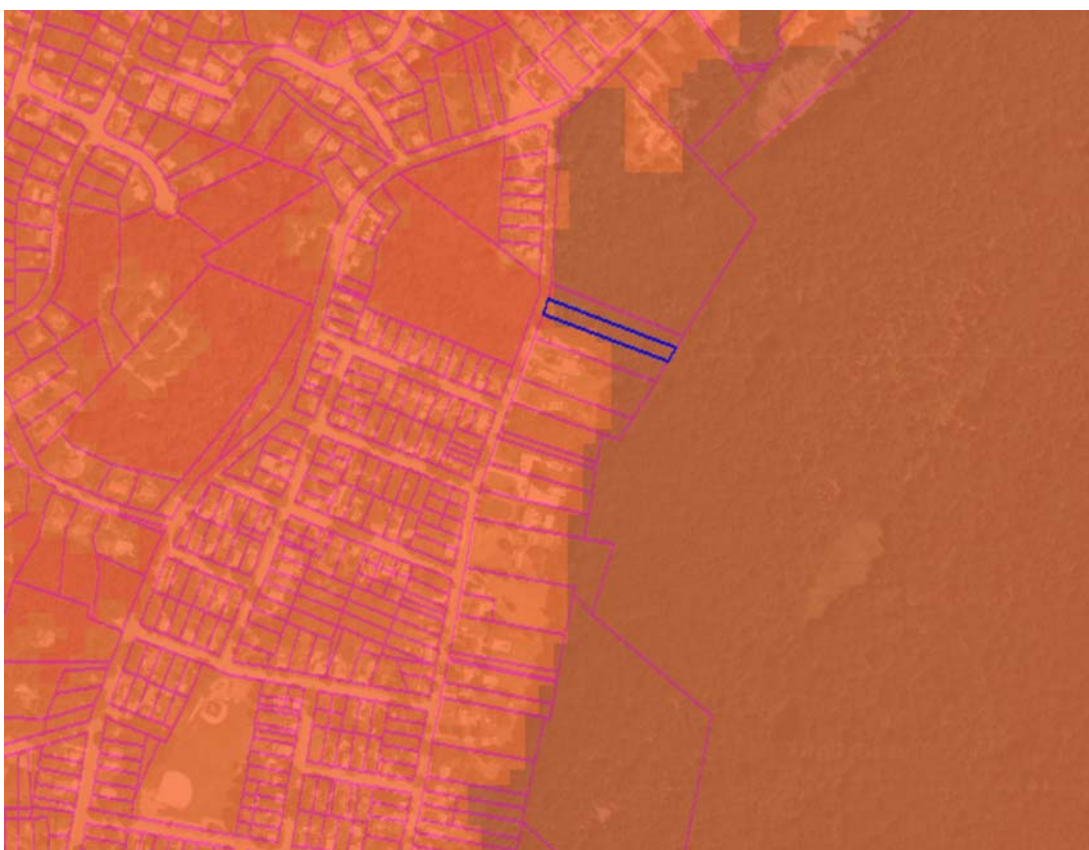
**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.



# Net Water Availability in Protection or Conservation Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 02

12/23/2009



Identifies the portion of a HUC14 subwatershed within the Protection or Conservation Zone.

**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

**Objective 2B4a:** Give highest priority for the use of non-agricultural Net Water Availability or Conditional Water Availability within Protection Zone and Conservation Zone subwatersheds, through a Water Use and Conservation Plan developed under Objective 2B8c, local development review, and Highlands Project review: 1. To address a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for Net Water Availability; 2. To serve a designated Highlands Redevelopment Area; 3. To serve a cluster development that complies with Objective 2J4b; and 4. To serve affordable housing projects where at least 10% of the units are affordable.

**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.



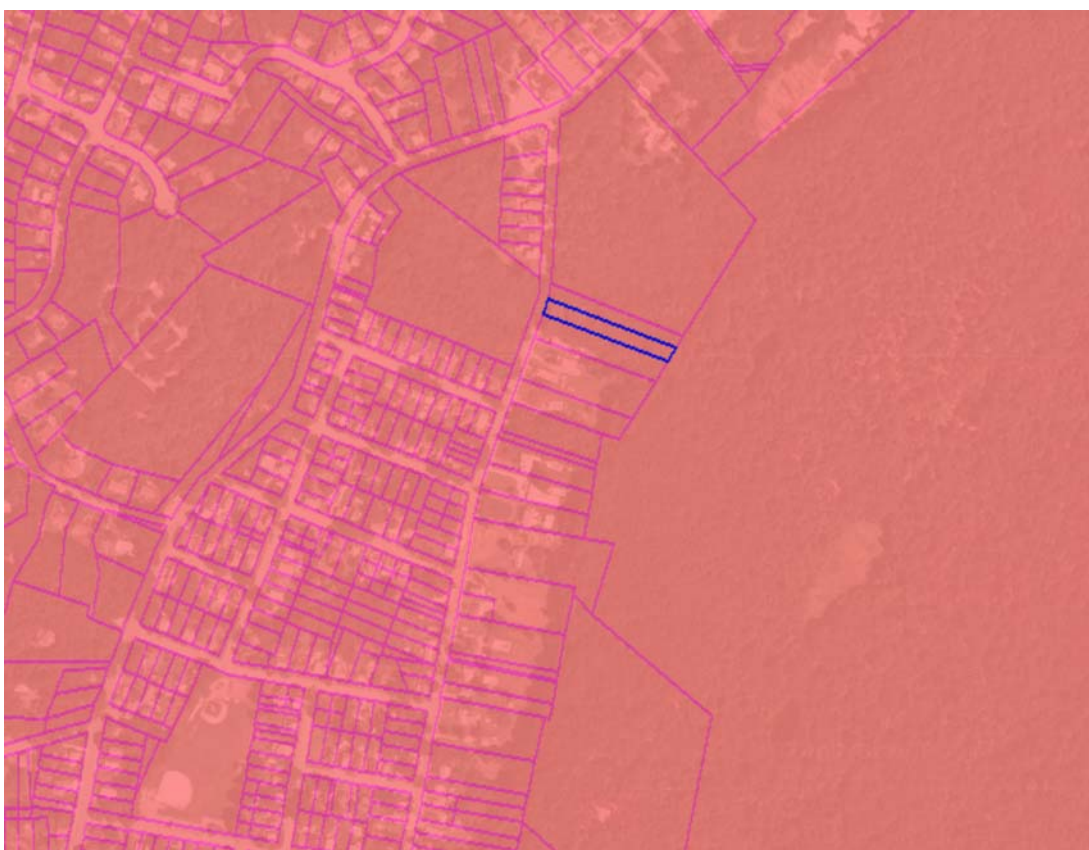




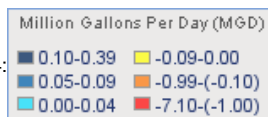
**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.

**Current Deficit Area**

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 02  
12/23/2009



Net Water Availability by HUC14:



Identifies HUC14 subwatersheds that are in deficit of Net Water Availability.

**Policy 2B6:** To require through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, Highlands Project Review, and interagency coordination that proposed public water supply and wastewater service areas, new or increased water allocations and bulk water purchases will not directly or indirectly cause or contribute to a Net Water Availability deficit, and where feasible will help mitigate any existing deficit.

**Objective 2B6a:** Areawide Water Quality Management Plans, Wastewater Management Plans or their amendments shall ensure that the proposed service area will not directly or indirectly cause or contribute to a Net Water Availability deficit, and shall be in conformance with any Water Use and Conservation Plan developed under Objective 2B8c.

**Policy 2B8:** To require through Plan Conformance, local development review, and Highlands Project Review the efficient and effective use of water availability, the planning for future water needs, the reduction and elimination of water deficits, and the mitigation of new consumptive or depletive use in any Current Deficit Areas or subwatersheds that could become deficit areas based on projected development and water uses, to ensure sustainable water supply, water resource and ecological values in conformance with RMP policies and objectives.

**Objective 2B8a:** Prevent net increases in consumptive or depletive water uses in Current Water Deficit Areas to prevent exacerbation of and help reduce or eliminate the deficit to ensure sustainable water supply, water resource and ecological values, emphasizing techniques



including, but not limited to water reuse, recycling and conservation.

**Objective 2B8b:** Proposed new consumptive or depletive water uses within a Current Deficit Area shall only occur under the auspices of a Water Use and Conservation Management Plan approved under Objective 2B8c or through mitigation of the proposed consumptive or depletive use within the same HUC14 subwatershed through: a permanent reduction of existing consumptive and depletive water uses; ground water recharge in excess of the requirements of N.J.A.C. 7:8 (Stormwater Management Rules); or other permanent means. Where a Water Use and Conservation Management Plan has not been approved: 1. Each project shall achieve mitigation ranging from 125% to 200%, based on the severity of the Current Deficit and the amount of consumptive or depletive water use proposed; 2. Total consumptive and depletive water uses from any single project and all projects combined are not to exceed the Conditional Water Availability of Objectives 2B3a or 2B3b for any HUC14 subwatershed; 3. Mitigation shall be successfully completed prior to initiation of the water use, except as required by #4, below. Mitigation may be phased in keeping with project development; 4. For water uses where the combination of proposed consumptive and depletive water uses and current subwatershed deficit is high, according to a schedule established by the Highlands Council, off-site mitigation shall be successfully completed prior to any on-site construction. On-site mitigation shall be successfully completed prior to initiation of the water use but may be implemented concurrent with on-site construction. Mitigation may be phased in keeping with the level of consumptive or depletive water uses; and Mitigation plans for a project shall include: specific objectives for each mitigation component; monitoring and reporting requirements; methods by which shortfalls in meeting the mitigation objectives shall be addressed through additional action; and be guaranteed through performance bonds.

**Objective 2B8c:** Water Use and Conservation Management Plans shall be required through municipal Plan Conformance for all subwatersheds to meet the policies and objectives of Goal 2B, to ensure efficient use of water through water conservation and Low Impact Development Best Management Practices, and to avoid the creation of new deficits in Net Water Availability. Where developed for Current Deficit Areas, the plans shall include provisions to reduce or manage consumptive and depletive uses of ground and surface waters as necessary to reduce or eliminate deficits in Net Water Availability, or to ensure continued stream flows to downstream Current Deficit Areas from Existing Constrained Areas, to the maximum extent practicable within each HUC14 subwatershed. Water Use and Conservation Management Plans shall demonstrate through a detailed implementation plan and schedule how and when the current deficit will be resolved in a subwatershed prior to approval for new water uses in the subwatersheds with the most severe deficits (i.e., in excess of 0.25 million gallons per day), and the plan shall be implemented prior to initiation of new water uses.

**Objective 2B8d:** All water users within a Current Deficit Area shall seek funding and opportunities to meet the intent of Objective 2B4b.

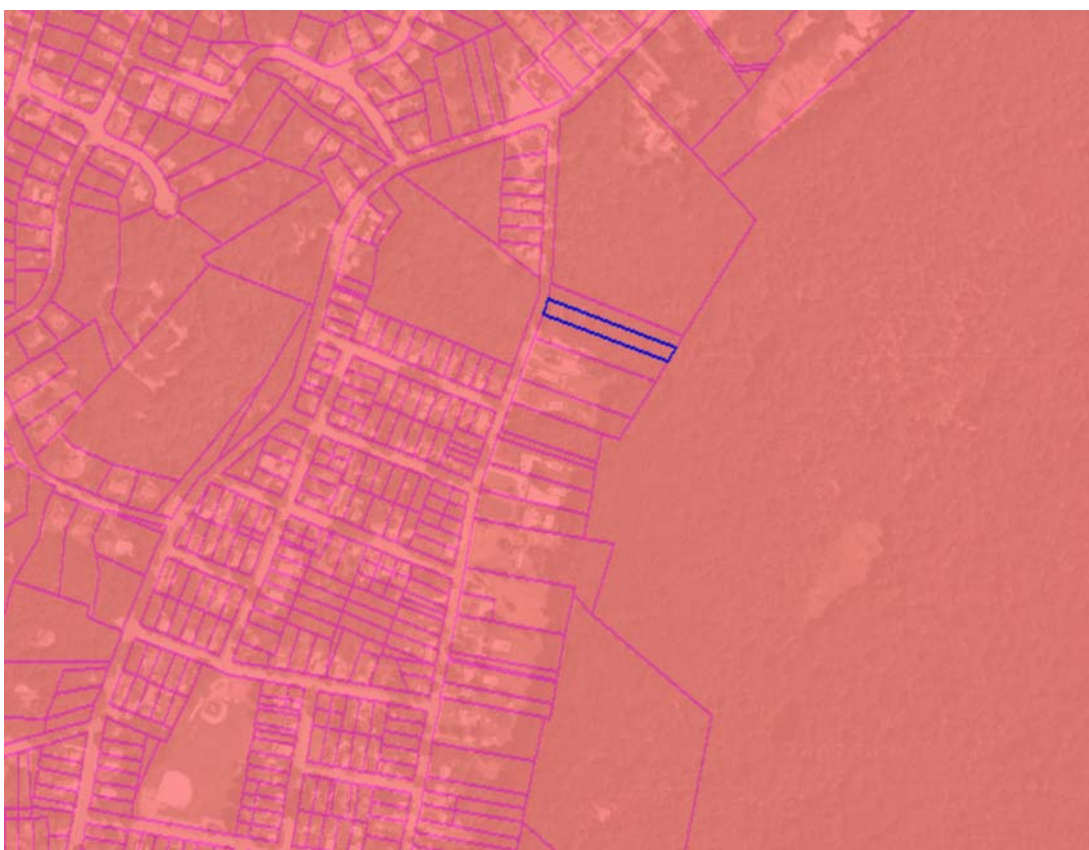
**Objective 2J2a:** Limit future water system demand and reduce existing demand where feasible by water systems that are dependent on Current Deficit Areas or Existing Constrained Areas as a source of water.

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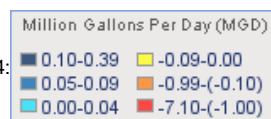


### Net Water Availability

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 02  
12/23/2009



Net Water Availability by HUC14:



Net Water Availability is calculated for each HUC14 subwatershed by deducting consumptive and depletive water uses from Ground Water Availability. The Regional Master Plan incorporates Net Water Availability as a capacity threshold on future water uses. 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 in deficit and deemed to be a Current Deficit Area. In Current Deficit Areas where a Water Use and Conservation Management Plan has not yet been adopted, limited amounts of Conditional Water Availability are provided. The use of Net Water Availability or Conditional Water Availability is subject to Regional Master Plan policies.

**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

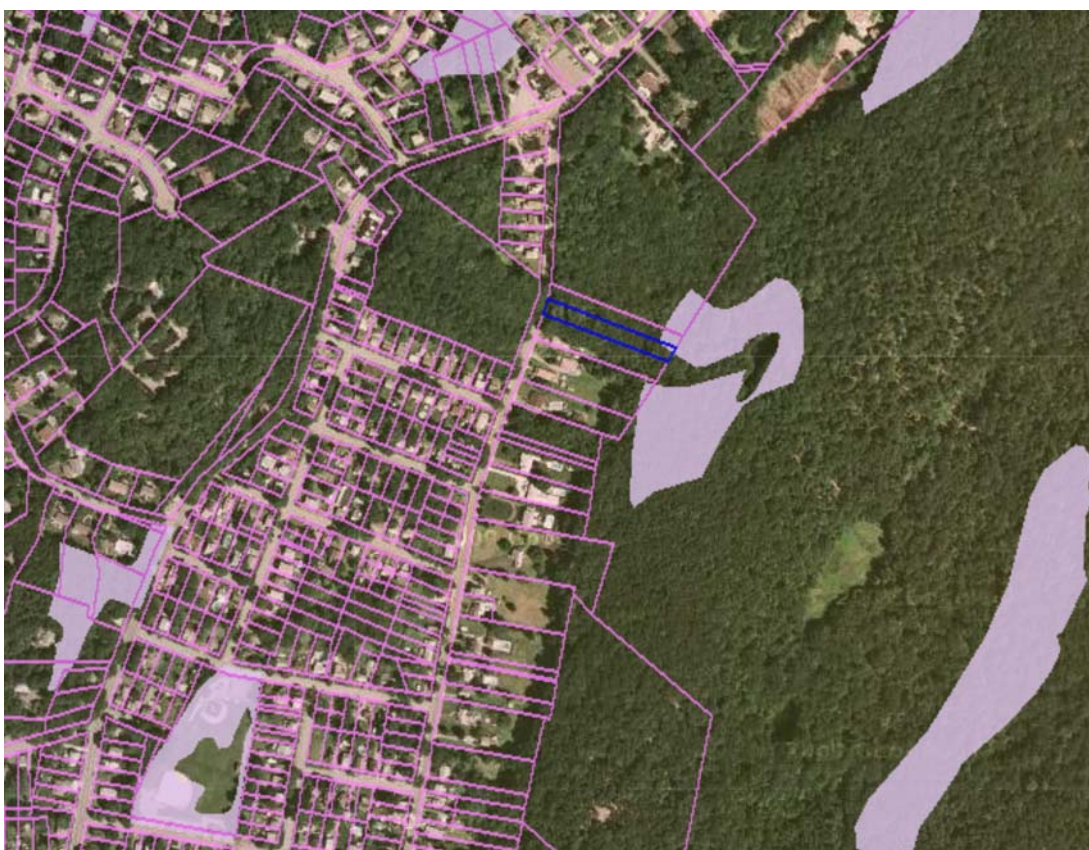
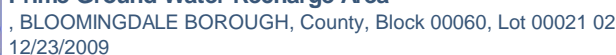
**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.

**Policy 2B7:** To ensure through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, and Highlands Project Review that the use of Net Water Availability and Conditional Water Availability within each subwatershed supports development patterns that are in conformance with RMP policies and objectives.

**Objective 2B8c:** Water Use and Conservation Management Plans shall be required through municipal Plan Conformance for all subwatersheds to meet the policies and objectives of Goal

**Objective 2J2b:** Limit future water system demands to levels that will not create a Current Deficit Area where one does not currently exist.





The layer displays the mapping of Prime Ground Water Recharge Areas. The Regional Master Plan defines Prime Ground Water Recharge Areas as those lands within a HUC14 subwatershed that most efficiently provide 40% of total drought recharge volume for that HUC14 subwatershed, using a GSR-32 analysis based upon land cover and the 1964-1966 drought of record precipitation.

**Objective 2D3c:** Implement master plans and development review ordinances through Plan Conformance that protect Prime Ground Water Recharge Areas and minimize the potential for disruption of recharge in such areas by development.

**Policy 2D4:** To apply standards through Plan Conformance, local development review and Highlands Project Review to protect, restore and enhance the functionality and the water resource value of Prime Ground Water Recharge Areas by restricting development and uses of land within a Prime Ground Water Recharge Area that reduce natural ground water recharge volumes or may directly or indirectly contribute to or result in water quality degradation.

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**Objective 2D4b:** Any development activity approved to occur in a Prime Ground Water Recharge Area shall provide an equivalent of 125% of pre-construction recharge volumes for the affected Prime Ground Water Recharge Area of the site within the following areas, in order of priority: (1) the same development site where feasible; (2) the same HUC14 subwatershed, or (3) an interrelated HUC14 subwatershed as approved by the Highlands Council where no feasible option exists in the same HUC14 subwatershed. This requirement shall apply to all portions of the Prime Ground Water Recharge Area where the recharge is disrupted through impervious surfaces, routing of stormwater runoff and recharge from natural flow paths, and other similar changes.

**Objective 2D4d:** Require through Plan Conformance, local development review and Highlands Project Review that the disruption of Prime Ground Water Recharge Area, after conformance with Objectives 2D4a, 2D4b and 2D4c is achieved, shall be limited to no greater than 15% of the Prime Ground Water Recharge Area on the site and shall be preferentially be sited on that portion of the Prime Ground Water Recharge Area that has the lowest ground water recharge rates and the lowest potential for aquifer recharge.

**Objective 2D4f:** Prohibit through Plan Conformance, local development review and Highlands Project Review new land uses, including those identified through Objective 2D3d, that have a significant potential to result in the discharge of persistent organic chemicals sources (including but not limited to existing discharges of industrial or other non-sanitary wastewater effluent) to ground water or to the land surface within a Prime Ground Water Recharge Area, such that they may degrade or contribute to the degradation of ground water quality.

**Objective 2D4h:** Achieve a net improvement in ground water recharge volume and maintenance of water quality as required through compliance with and implementation of any related provisions of an adopted regional stormwater plan.

**Objective 211b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

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**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.





### Highlands Domestic Sewerage Facilities

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 02  
12/23/2009



Highlands Domestic Sewerage Facilities: ■

Highlands Domestic Sewerage Facilities displays those areas served by public wastewater utilities. The map indicates areas that are actually connected into a public wastewater collection system, not simply located in a Sewer Service Area. Public sewer systems discharging less than 0.15 million gallons per day (MGD) to surface water or 0.075 MGD to ground water are not included. Private, on-site treatment facilities like a package treatment plant are also not included. The Regional Master Plan limits the creation or extension of public wastewater systems.

**Objective 2J4b:** Clustered development served by public water supply within the Protection Zone, the Conservation Zone, and the Environmentally-Constrained Sub-zones of the Planning Area shall be approved only if the following conditions are met: 1. The development impacts are otherwise consistent with the requirements of the RMP, including provisions for mandatory clustering in Agricultural Resource Areas pursuant to Policy 3A5; 2. Extension of an existing public water system will occur only where the cluster development is within or immediately adjacent to an Existing Area Served with available capacity; 3. Creation of a new public water system will occur only where such development is not within or immediately adjacent to an Existing Area Served with available capacity; 4. The clustered development preserves at least 80% of the cluster project area in perpetuity for environmental protection or agricultural purposes. To the maximum extent feasible the developed portion (i.e., not including wetlands, Highlands Open Waters buffers, and recreational lands) occupies no more than 10% of the cluster project area if served by a public or community on-site wastewater system; and 5. Where the preserved land in the cluster project area is dedicated to agricultural purposes, the cluster development ordinance and an Agriculture Retention/Farmland Preservation Plan supports continued agricultural viability of the agricultural land and requires the implementation of best management practices, including development and implementation of a Farm Conservation Plan that addresses the protection of water and soil resources prepared by the USDA Natural Resources Conservation Service (NRCS), Technical Service Provider (TSP), appropriate agent or NJDA staff, and approved by the local Soil Conservation District (SCD).

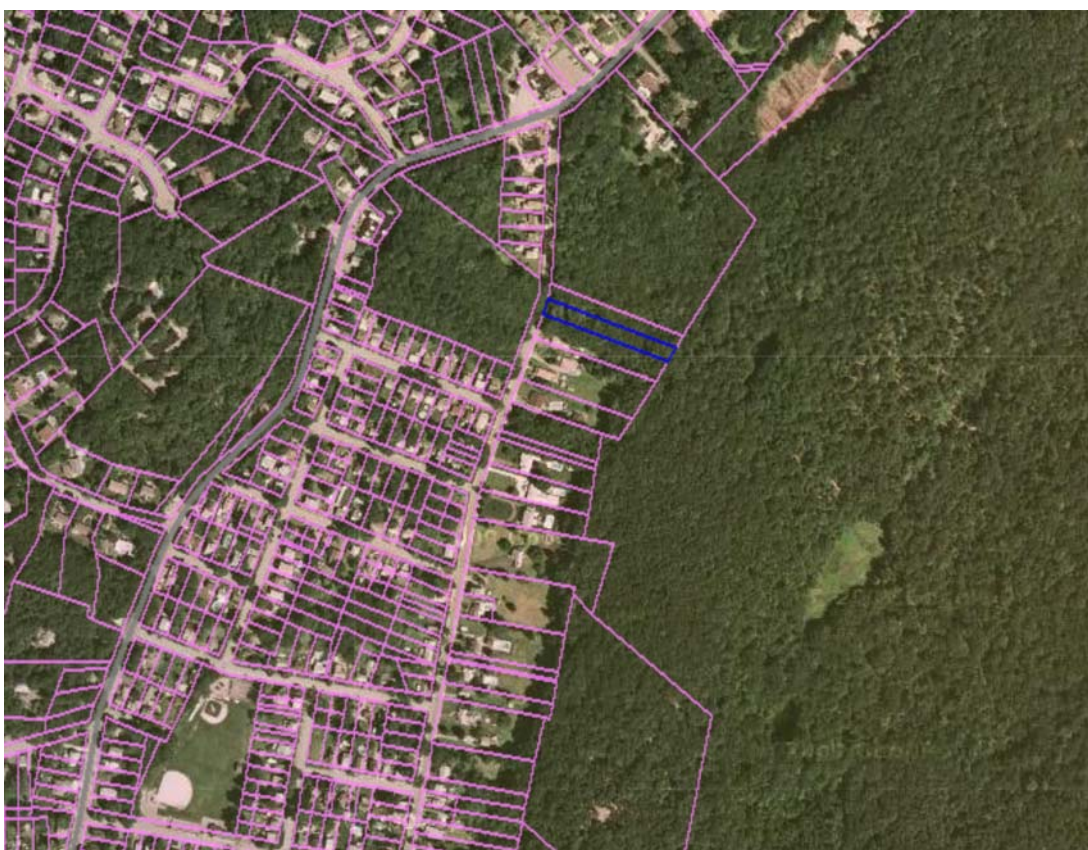
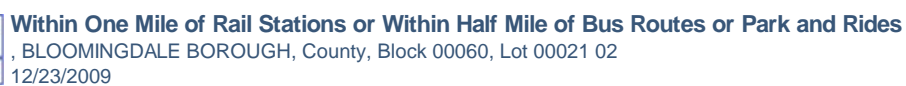
**Policy 2J6:** To encourage water recycling/reuse measures, such as domestic and institutional gray water systems, where appropriate, to minimize water use in existing land uses.

**Objective 211a:** Designated sewer service areas in the Preservation Area shall be restricted to the Existing Area Served as of August 10, 2004, except to serve development that is approved through a HAD or a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1.

**Policy 2K2:** To base projected demand for current needs, appropriate economic revitalization and opportunities for designated TDR Receiving Zones within Existing Areas Served on existing maximum three month demands plus an estimate of redevelopment needs based on either Highlands Council regional analyses or more detailed local analyses, to assess whether there is adequate treatment capacity to encourage redevelopment.

**Objective 2K3d:** Clustered development served by a public wastewater collection and treatment system or community on-site treatment facility within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area shall be approved only if the following conditions are met: 1. The development impacts are otherwise consistent with the requirements of the RMP, including provisions for mandatory clustering in Agricultural Resource Areas; 2. Extension of an existing public wastewater collection and treatment system will occur only where the cluster development is within or immediately adjacent to an Existing Area Served with available capacity; 3. Creation of a community on-site treatment facility will occur only where such development is not within or immediately adjacent to an Existing Area Served with available capacity, where the proposed system is designed, permitted, and constructed at a capacity limited to the needs of the clustered development, and where the system does not create the potential for future expansion into areas that are not the subject of cluster developments immediately adjacent to the initial cluster served; 4. The cluster development preserves at least 80% of the cluster project area in perpetuity for environmental protection or agriculture purposes. To the maximum extent feasible the developed portion of the project area (e.g., not including wetlands, Highlands Open Waters buffers, and recreational lands) occupies no more than 10% of the cluster project area if served by a public or community on-site wastewater system; and 5. Where the preserved land in the cluster project area is dedicated to agricultural purposes, the cluster development ordinance and an Agriculture Retention/Farmland Preservation Plan supports continued agricultural viability of the agricultural land and requires the implementation of best management practices, including development and implementation of a Farm Conservation Plan that addresses the protection of water and soil resources prepared by the USDA Natural Resources Conservation Service (NRCS), Technical Service Provider (TSP), appropriate agent or NJDA staff, and approved by the local Soil Conservation District (SCD).

**Objective 2K3e:** Allow the expansion or creation of wastewater collection systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to those provided at Objective 2K3c within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. The highest priority for allocation of excess or additional wastewater treatment capacity is to areas where there are clusters of failed septic systems that are located within or adjacent to Existing Areas Served. TDR Receiving Areas, where designated, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than other developments requiring expansion of sewer service areas.



Private Bus Routes:

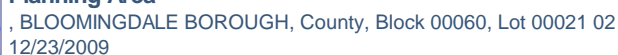
- Bergen + Main Line
- Montclair Boonton Line
- Morris + Essex Line - Gladstone Branch
- Morris + Essex Line - Morristown Branch
- Raritan Valley Line

Park & Ride Sites: 

Includes all developed lands within a 1/2 mile buffer from all park and ride locations, rail stations, and NJ Transit public and major private bus routes in or within 1/2 mile of the Highlands Region.

**Objective 5E1b:** Development and redevelopment in close proximity to rail stations and along bus routes.





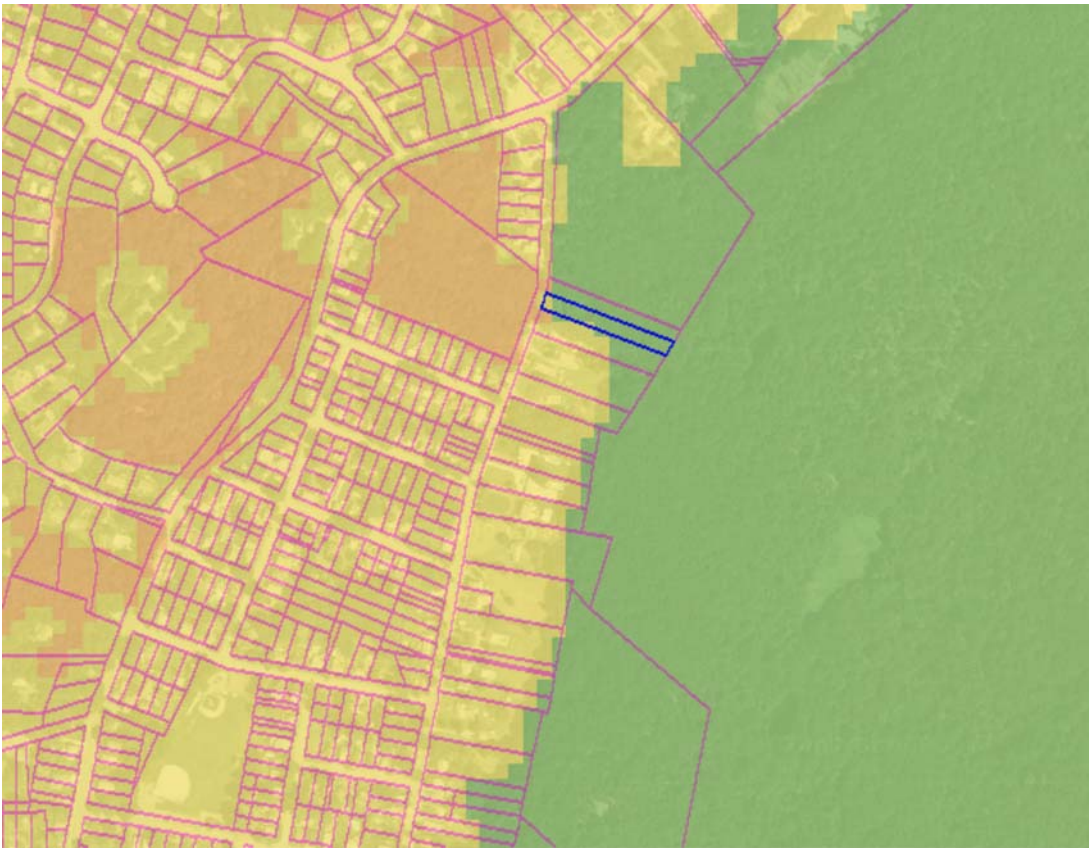
Means lands within the Highlands Region which are not within the Preservation Area.

**Objective 7F1d:** Planning Area exemptions, issued by the Highlands Council, shall be required, where appropriate, prior to consideration of a local development review or a Highlands Project Review. Guidance shall specify the exceptions where a review may proceed absent such an exemption determination. Applications for exemptions submitted to the Highlands Council shall be based upon the application requirements exemptions codified in N.J.A.C. 7:38.



### Protection Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 02  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Consists of high natural resource value lands that are important to maintaining water quality, water quantity and sensitive ecological resources and processes.

**Policy 6C1:** To limit new human development in the Protection Zone to redevelopment, exempt activities, and environmentally-compatible low density new land uses, in accordance with RMP resource protection needs and water quality and quantity capacity constraints and to ensure that the impacts of development using exemptions under the Highlands Act (see Policy 7F1) are considered in regional protection measures.

**Objective 6C1a:** Centers in the Protection Zone, potentially including clustered development, shall be at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan, and the use of septic systems or community wastewater systems.

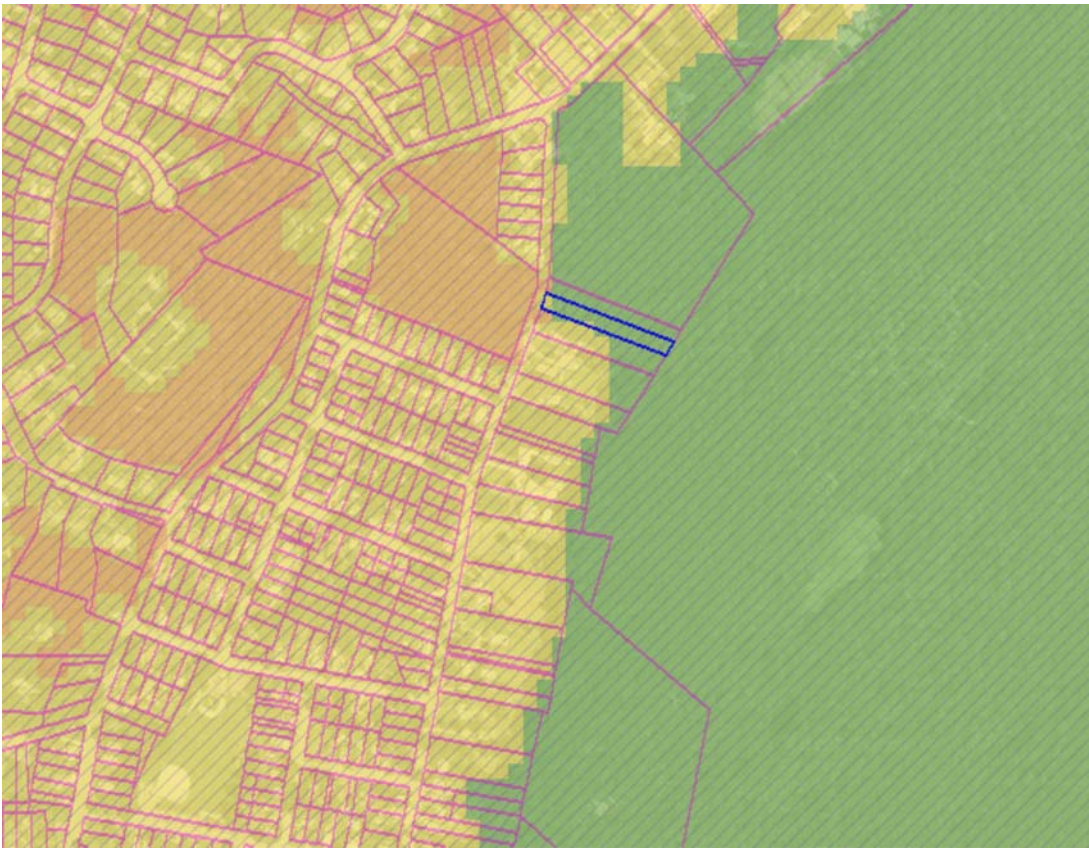
**Policy 6C2:** To ensure through Plan Conformance, local development review and Highlands Project Review that any future development or redevelopment which does occur in a Protection Zone is subject to standards and criteria which protect the land and water resources of the Protection Zone from any potential adverse impact to the maximum extent possible.





### Protection Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 02  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

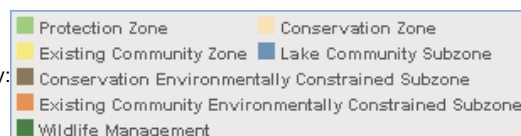
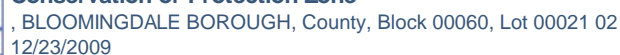
Planning Area / Preservation Area: Planning Area / Preservation Area

Includes the Protection Zone within the Planning Area.

**Objective 2L2a:** Use the median concentrations of nitrate in ground water for Planning Area HUC14 subwatersheds where the Protection Zone is predominant as the nitrate target for new development reliant on septic systems within the Protection Zone. The median is 0.72 mg/L.

**Policy 6J3:** To encourage redevelopment in the Conservation and Protection Zones in the Planning Area of brownfields and grayfields that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields, as approved through Plan Conformance or the Highlands Redevelopment Area Designation process.





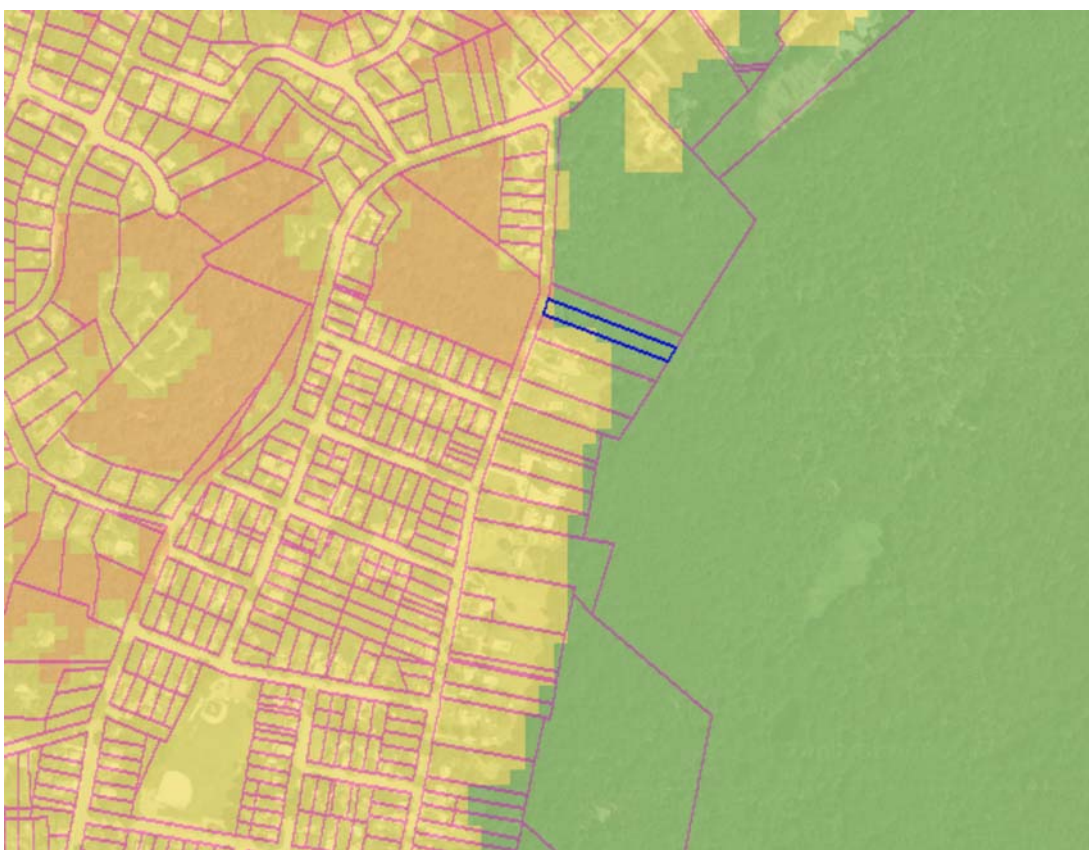
Includes both the Conservation Zone and the Protection Zone.

12/23/2009 4:22 PM



### Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 02  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Consists of areas with regionally significant concentrated development signifying existing communities.

**Objective 2J4c:** Allow the expansion or creation of public water systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to Objective 2J4a within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. TDR Receiving Zones, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than expansion of public water service areas within this Zone.

**Objective 2K3e:** Allow the expansion or creation of wastewater collection systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to those provided at Objective 2K3c within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. The highest priority for allocation of excess or additional wastewater treatment capacity is to areas where there are clusters of failed septic systems that are located within or adjacent to Existing Areas Served. TDR Receiving Areas, where designated, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than other developments requiring expansion of sewer service areas.

**Policy 6F3:** To ensure that development activities within the Existing Community Zone are subject

**Objective 6F6a:** Center based development initiatives shall be planned within the Existing Community Zone at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan. Densities of five dwelling units and above are encouraged, and are required in areas designated as voluntary TDR Receiving Zones where TDR benefits are sought under the Highlands Act.





### Existing Community Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 02

12/23/2009



Land Use Capability:

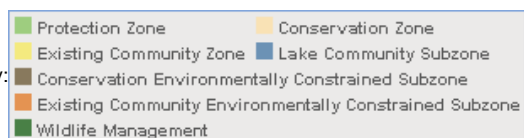
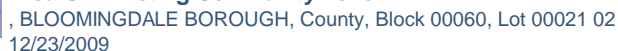
Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes the Existing Community Zone within the Planning Area.

**Objective 2L2d:** Use a nitrate target of 2 mg/L for the Existing Community Zone within Planning Area, on a project-by-project basis, where new development will rely on septic systems.

**Policy 6J2:** To encourage redevelopment in the Existing Community Zone in the Planning Area of brownfields, grayfields, and other previously developed areas that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields, as approved through Plan Conformance or the Highlands Redevelopment Area Designation process.



Planning Area / Preservation Area:  Planning Area /  Preservation Area

**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.



**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.



## Regional Master Plan Consistency Report

12/23/2009

Prepared by State of New Jersey Highlands Water Protection and Planning Council  
100 North Road (Route 513), Chester, NJ 07930  
Telephone: (908) 879-6737 Fax: (908) 879-4205

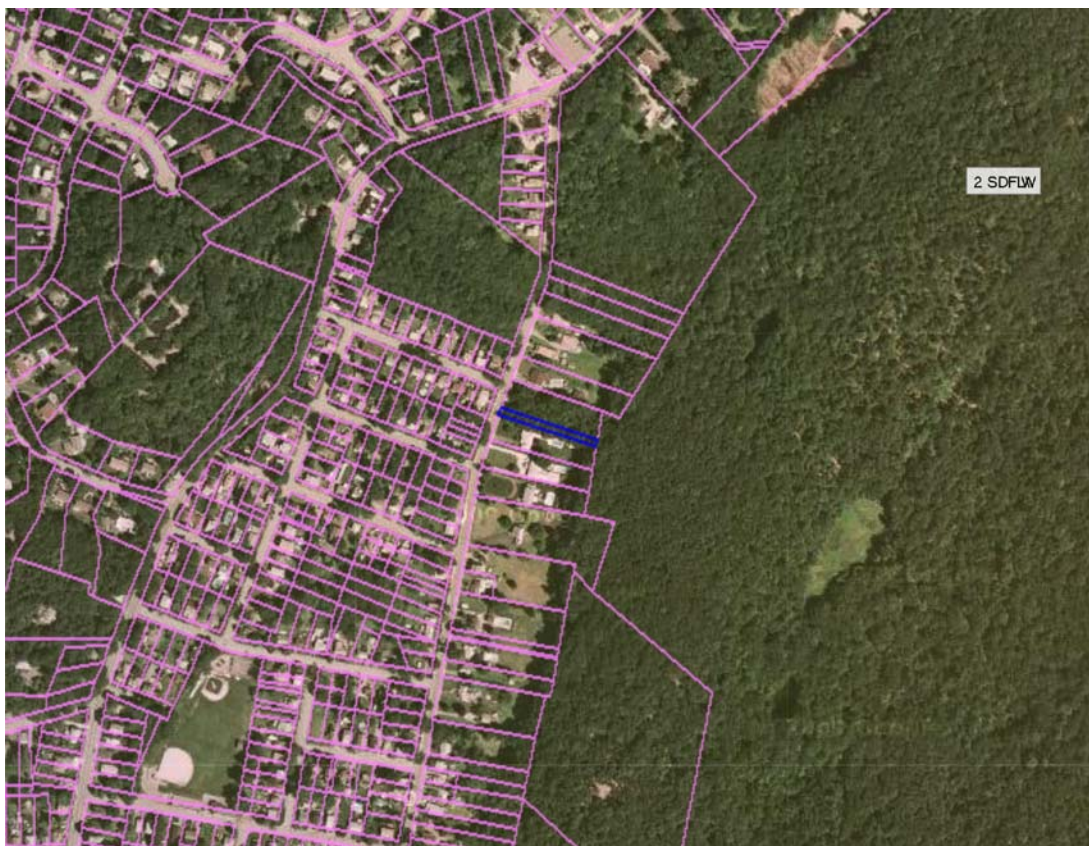


Please consider the environment before printing this report

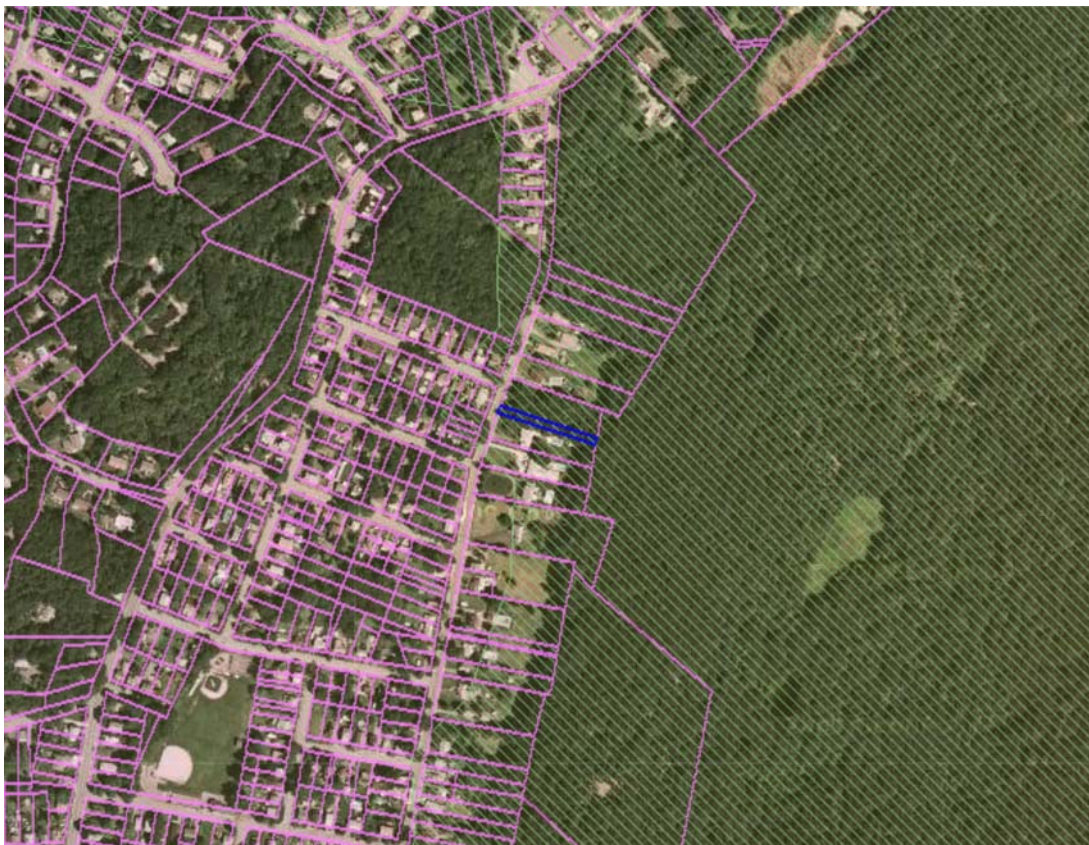
### Disclaimer

Please be advised that any reports generated from the online Consistency Review Application do not constitute a formal Consistency Determination from the Highlands Council. The information contained therein is provided solely for informational purposes and is not to be construed as providing advice, recommendations, endorsements, representations or warranties of any kind whatsoever.

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03



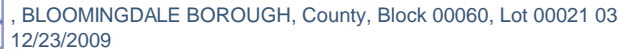
Powered by VERTICES Mapper™



The Forest Resource Area data layer is an intensity indicator that captures high ecological value forest areas including those forested lands that exhibit the least fragmentation, which are vital for the maintenance of ecological processes.

**Policy 1B3:** To limit through local development review and Highlands Project Review deforestation in the Forest Resource Area and forested lands within High Integrity Forest Subwatersheds within the Existing Community Zone to maximum extent practicable.





**Objective 1A2d:** To prohibit through Plan Conformance, local development review and Highlands Project Review the expansion or creation of public water supply systems or public wastewater collection and treatment systems or community-based on-site wastewater facilities into forested areas of the Forest Resource Area within the Planning Area except as provided for in Policy 2J4 with Objectives 2J4a through 2J4d, and Policy 2K3 with Objectives 2K3a through 2K3e, and within the Preservation Area except as provided for in Policy 2I1 and Objectives 2I1a and 2I1b.

**Policy 5C3:** To limit road improvements through local development review and Highlands Project Review where roads are constrained by topography, forested lands or the community character of land uses fronting on the road.





### Forest in Forest Resource Area in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03  
12/23/2009



Forest within Forest Resource Area: ■

Planning Area / Preservation Area: ■ Planning Area ■ Preservation Area

The Forest in Forest Resource Area in Planning Area data layer illustrates the forested lands located within the spatially delineated Forest Resource Area of the legislatively delineated Highlands Planning Area. The Regional Master Plan includes protection policies specific to forested lands in the Forest Resource Area in the Planning Area.

**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.



Forest within Forest Resource Area: ■

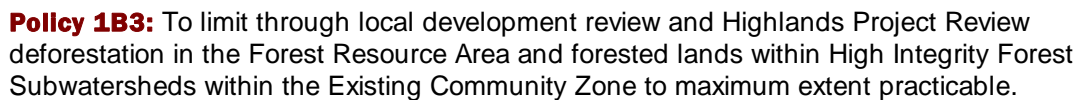
Protection Zone
  Conservation Zone
  Existing Community Zone
  Lake Community Subzone

Conservation Environmentally Constrained Subzone
  Existing Community Environmentally Constrained Subzone
  Wildlife Management

Planning Area / Preservation Area:  Planning Area /  Preservation Area

**Policy 1B2:** To limit through local development review and Highlands Project Review human development of forests to low impact residential development in the Protection Zone and the Conservation Zone in the Planning Area.







### Forest Resources

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03  
12/23/2009



Forest Outside of Forest Resource Area: ■

Forest within Forest Resource Area: ■

Forest Resources represents the Total Forest Area data layer that was extracted from the NJDEP 2002 draft Land Use Land Cover data. This data layer illustrates all upland and wetland forest and scrub/shrub categories (excluding old field) and represents all forested lands within the Region. The Regional Master Plan includes policies that limit clearing of trees within Forest Resources and that seek to protect overall forest resources integrity.

**Objective 1B3a:** Implementation through Plan Conformance of regulations, which limit the clearing of trees in conjunction with human development to circumstances where the clearing will not diminish the integrity of forest resources.

**Policy 1B5:** To ensure that forest resources are protected on a site specific basis during local development review and Highlands Project Review.

**Objective 1B5a:** Applications for local development review and Highlands Project Review require identification of any forest area on and adjacent to a site in accordance with the Highlands Councils Method for Identifying Upland Forest Areas in the Highlands Region.

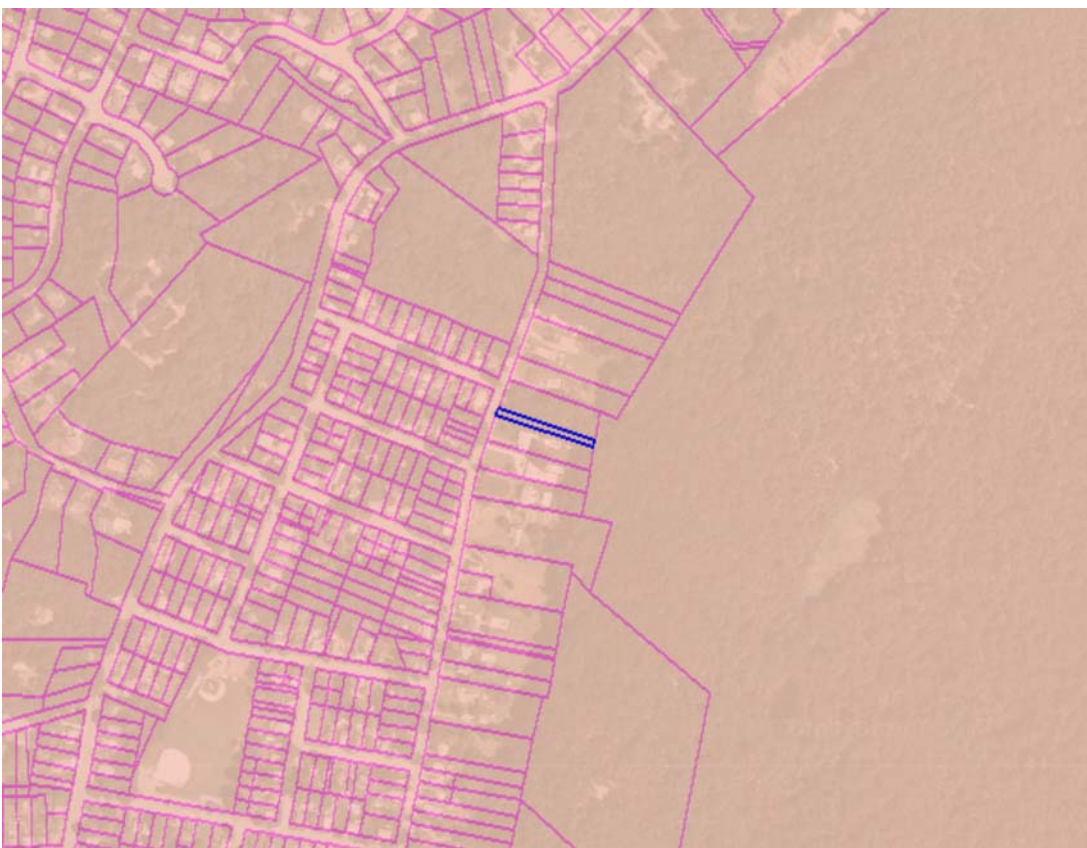
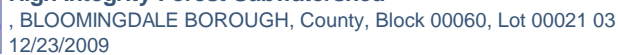
**Policy 1B7:** To prohibit clear-cutting of forest lands except pursuant to an approved Forest Management Plan approved by the State Forester.

**Policy 1C3:** To require that conforming municipalities adopt a tree clearing ordinance consistent with an approved community forestry plan under the New Jersey Forest Service Community Forestry Program as part of the municipal master plan and local development regulations.

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.







High Integrity Forest Subwatershed is a component of the Forest Integrity Value data layer. This data layer represents forest cover integrity in the Region at the watershed level because forests are important for the protection of water quality and quantity.

**Policy 1C1:** To require that conforming municipalities and counties address the protection of forested portions of Forest Resource Areas and High Integrity Forest Subwatersheds in their master plans and development regulations.



### Highlands Open Waters Protection Buffer

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03  
12/23/2009



Open Water Protection Area: ■

Highlands Open Waters are defined by the Highlands Act as all springs, streams including intermittent streams, wetlands, and bodies of surface water, whether natural or artificial. The vegetated corridors adjacent to Highlands Open Waters are effective and important tools to protect water quality and aquatic habitat. Protection buffers safeguard Highlands Open Waters from the impacts of adjacent land use practices. The Regional Master Plan includes a protection buffer of 300 feet from the edge of the discernable bank of a Highlands Open Waters feature, or from the centerline where no discernable bank exists.

**Policy 1D4:** Highlands Open Waters shall include a protection buffer of 300 feet from the edge of the discernable bank of the Highlands Open Waters feature, or from the centerline where no discernable bank exists. With respect to wetlands and other Highlands Open Waters features (e.g., seeps, springs, etc.), the feature shall include a protection buffer of 300 feet from the delineated Letter of Interpretation (LOI) line issued by the NJDEP for wetlands, or from a field-delineated boundary for other features. In areas where existing development or land uses within the protection buffers have reduced or impaired the functional values of the buffers, the Council will seek opportunities to restore the buffer and its functions. Any proposed disturbance shall, through local development review and Highlands Project Review, comply with Highlands Open Waters buffer standards. The protection buffer width for Category 2 streams in the Planning Area may be modified through a Stream Corridor Protection/Restoration Plan, as specified in Objective 1D4i. In approved Redevelopment Areas, the Council may, at its discretion, modify the required buffer, upon a showing of no alternatives, no impact to the functional value of the buffer, and provision of alternative approaches to enhancing or protecting Highlands Open Waters and resources of the buffer area.

**Objective 1D4a:** Require that all applications for approval through local development review and Highlands Project Review include the identification and mapping of Highlands Open Waters.

**Objective 1D4c:** Require that proposed development within all Highlands Open Waters buffers (Preservation and Planning Areas) conforms through local development review and Highlands

**Objective 1D4i:** Develop through Plan Conformance and implement stream corridor or subwatershed-based Stream Corridor Protection/Restoration Plans which shall include Steps 1, 2, and 3, and may include Steps 4 and 5: 1. Identify areas where existing development, land disturbances, or land uses are within Highlands Open Waters buffers have removed or substantially impaired natural vegetation communities, and have significantly reduced or impaired the functional values of Highlands Open Waters buffers. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland usesq; 2. Identify and require opportunities for restoration of areas identified in Step 1 as part of mitigation requirements under a Highlands Act waiver or Objectives 1D4e and 1D4f, and public or nongovernmental restoration/stabilization projects; 3. Identify the extent of stream corridor features that are critical to supporting the functions of a healthy Highlands Open Waters buffer and that extend beyond the buffers required by Objectives 1D4b and 1D4c. The 300 foot buffer in these areas may be expanded to be most protective of these features which may include, but are not limited to, Critical Habitat, pollutant source areas identified through scientific techniques, and steep slopes; 4. Where Highlands Open Waters buffers include areas identified in Step 1, regarding Category 2 surface waters in the Planning Area only, the Stream Corridor Protection/Restoration Plan may identify where, based on scientific analysis of site-specific conditions (e.g., topography, vegetation cover type, habitat, soil type, upstream land uses and pollution inputs, width of floodplain, rate and volume of run-off), a buffer of less than the full 300 feet (but including the undisturbed buffer area at a minimum) is sufficient to maintain or improve the protection of Highlands Open Waters and Riparian Areas. The plan must identify alternative buffers that provide functional buffer values at least equivalent to existing conditions and are no less than 150 feet or no less than the extent allowed in State or municipal regulation (including Objectives 1D4b and 1D4c), whichever is greater. Further, the plan shall include a functional value assessment to ensure that there is no net loss in the overall functional value of the subwatershedos stream buffers. Buffers established through this process shall be determined based on site conditions rather than fixed distances, reflecting findings of the scientific analysis, and shall be used in the site design and development review process regarding determinations of restoration, continued use, or increased use of the disturbed buffer area. Buffer averaging for the purpose of accommodating development proposals is deemed not to meet the requirements of this provision; and 5. Where a proposed Highlands Redevelopment Area would not meet, in full, Objectives 1D4b through 1D4h but affects an undisturbed buffer area determined to not be necessary for the protection of the functional values for Highlands Open Waters buffer (as determined through scientific analysis of site-specific conditions), modification of the undisturbed buffer may be allowed to no less than the extent allowed in State or municipal regulation. However the Council shall first determine that there is no alternative to the proposed reduction of the buffer, and require a showing of no impact to the functional values of the buffer and provision of alternative approaches to enhancing or protecting the Highlands Open Waters and resources of the buffer area. Restoration or enhancement of buffer functional values shall be provided on-site or within the same stream reach to achieve a net improvement of existing buffer functional values.

**Objective 1D5b:** 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.

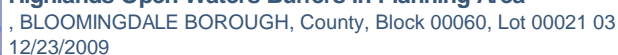


**Objective 211b:** The expansion or creation of public water supply systems, public wastewater collection and treatment systems and community on-site treatment facilities in the Preservation Area as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

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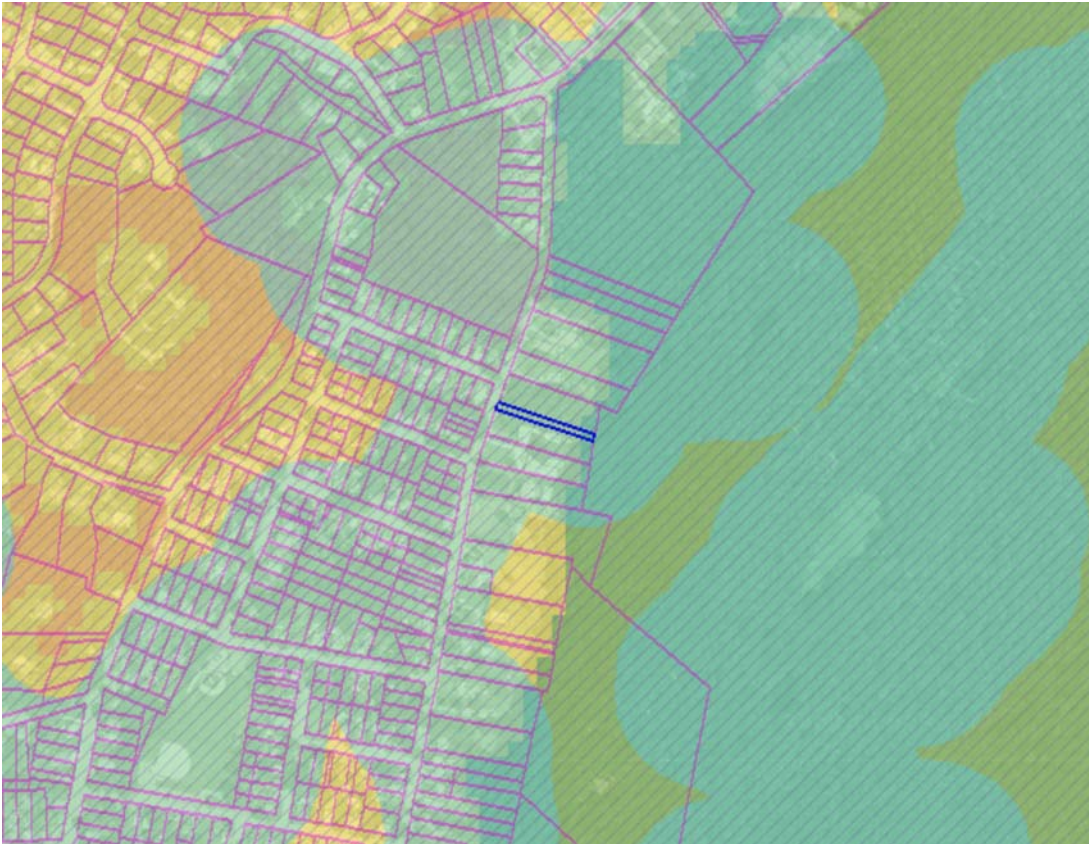
**Objective 1D4d:** Structures or other land improvements existing within a Highlands Open Waters buffer of the Planning Area on August 10, 2004 may remain, provided that the area of disturbance shall not be increased unless approved through local development review or Highlands Project Review in compliance with RMP policies and objectives. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q





## Highlands Open Waters Protection Buffers in Conservation or Protection Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03  
12/23/2009



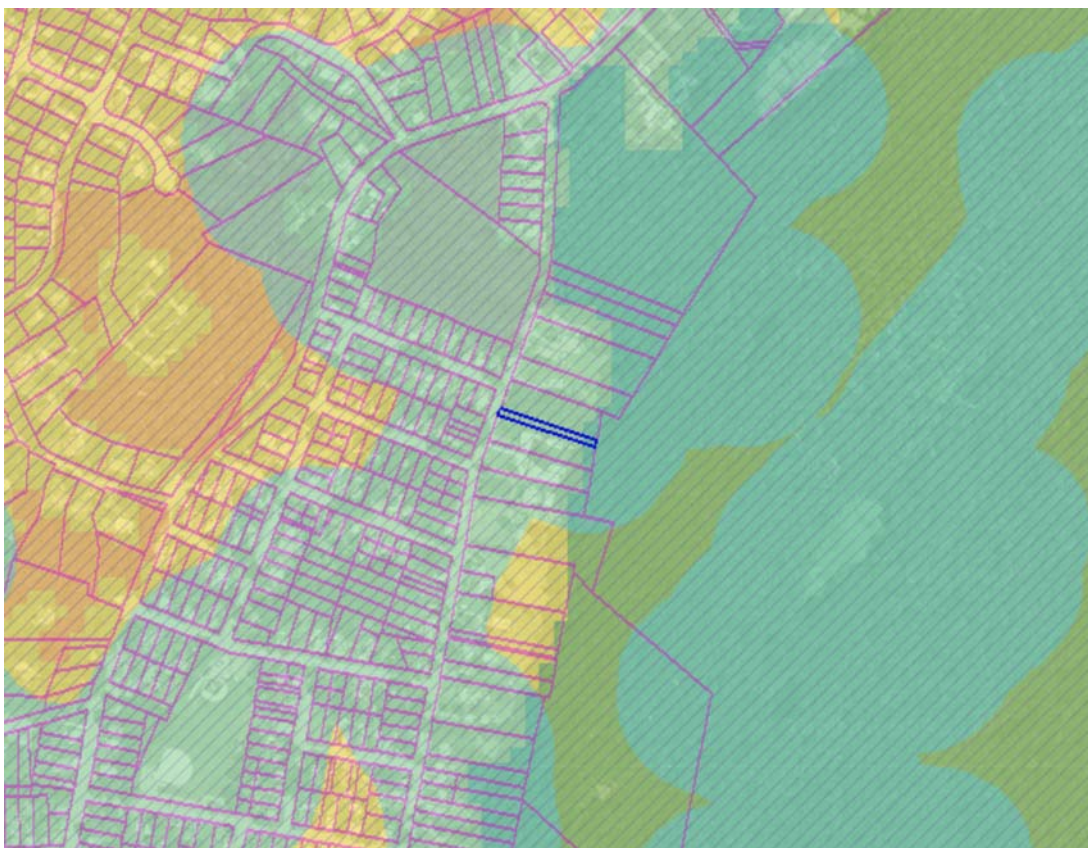
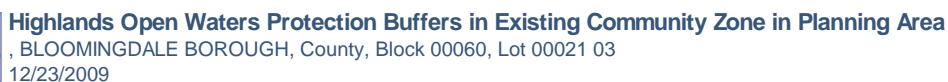
Open Water Protection Area:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes all Highlands Open Waters protection buffers within the Protection and Conservation Zones of the Planning Area.

**Objective 1D4e:** In the Protection and Conservation Zones of the Planning Area, proposed disturbances of Highlands Open Waters buffers shall only occur in previously disturbed areas, unless a waiver is granted by the Highlands Council under Policy 7G2. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q Such proposed disturbances must demonstrate full utilization of the following performance standards in the listed order, to demonstrate the necessity of an encroachment into Highlands Open Waters buffers: 1) avoid the disturbance of Highlands Open Waters buffers; 2) minimize impacts to Highlands Open Waters buffers; and 3) mitigate all adverse impacts to Highlands Open Waters buffers so that there is no net loss of the functional value of the buffer, in compliance with Objective 1D4h. Minimization and mitigation opportunities shall be considered only upon a clear and convincing demonstration by the applicant that the protection buffer cannot be avoided and in no case shall the remaining buffer be reduced to less than 150 feet from the edge of Highlands Open Waters, unless a waiver is granted by the Highlands Council under Policy 7G2 and the proposed disturbance complies with Objective 1D4c.




Protection Zone
  Conservation Zone
  Existing Community Zone
  Lake Community Subzone

Conservation Environmentally Constrained Subzone
  Existing Community Environmentally Constrained Subzone

Wildlife Management

Land Use Capability:

Planning Area / Preservation Area:  Planning Area /  Preservation Area

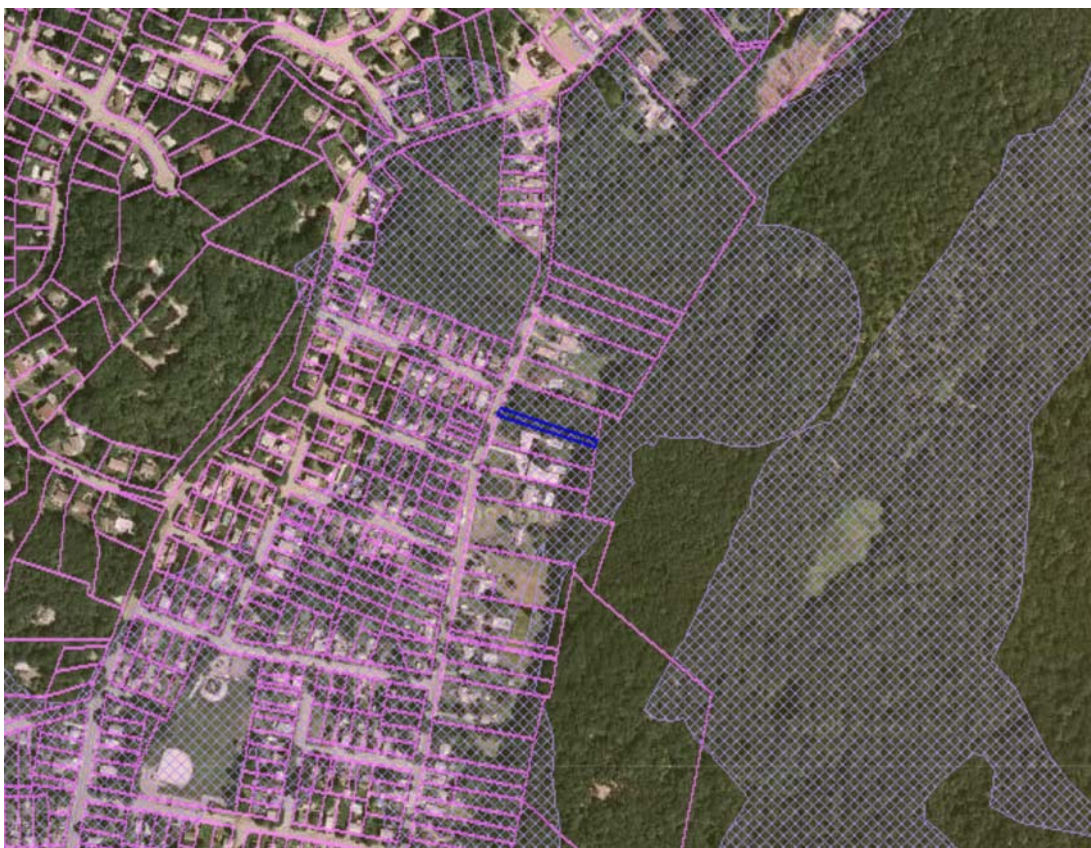
Includes all Highlands Open Waters protection buffers within the Existing Community Zone of the Planning Area.

**Objective 1D4f:** In the Existing Community Zone of the Planning Area, proposed disturbances of Highlands Open Waters buffers shall only occur in previously disturbed areas, unless a waiver is granted by the Highlands Council under Policy 7G2 and the proposed disturbance complies with Objective 1D4c. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q Such disturbances shall employ performance standards such that all proposed disturbances of Highlands Open Waters buffers shall employ Low Impact Development Best Management Practices to mitigate all adverse modification to Highlands Open Waters buffers so that there is no net loss of the functional value of the buffer, in compliance with Objective 1D4h.



**Riparian Area**

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03  
12/23/2009



Riparian Corridor Integrity Score: HIGH MODERATE LOW

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. Riparian Areas serve as an interface between surface water bodies and terrestrial ecosystems and play a critical role in maintaining the quality and ecological integrity of Highlands Open Waters.

**Objective 1D5b:** 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.

**Objective 1D5e:** 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, in compliance with Policies 6N3 and 6N4 and provide for mitigation through restoration of impaired Riparian Areas in the same HUC14 subwatershed.

**Objective 1D5f:** Require that development within Riparian Areas conforms through local development review and Highlands Project Review to any applicable requirements of a Regional Stormwater Plan adopted pursuant to N.J.A.C. 7:8 (Stormwater Management Rules).

**Objective 1D5g:** Require identification and implementation of opportunities where the restoration and enhancement of previously impaired Riparian Areas are feasible and appropriate as mitigation to any allowable modification to Riparian Area requirements.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall



**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.



### Riparian Area in Protection Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Riparian Corridor Integrity Score: HIGH MODERATE LOW

Includes all Riparian Areas within the Protection Zone.

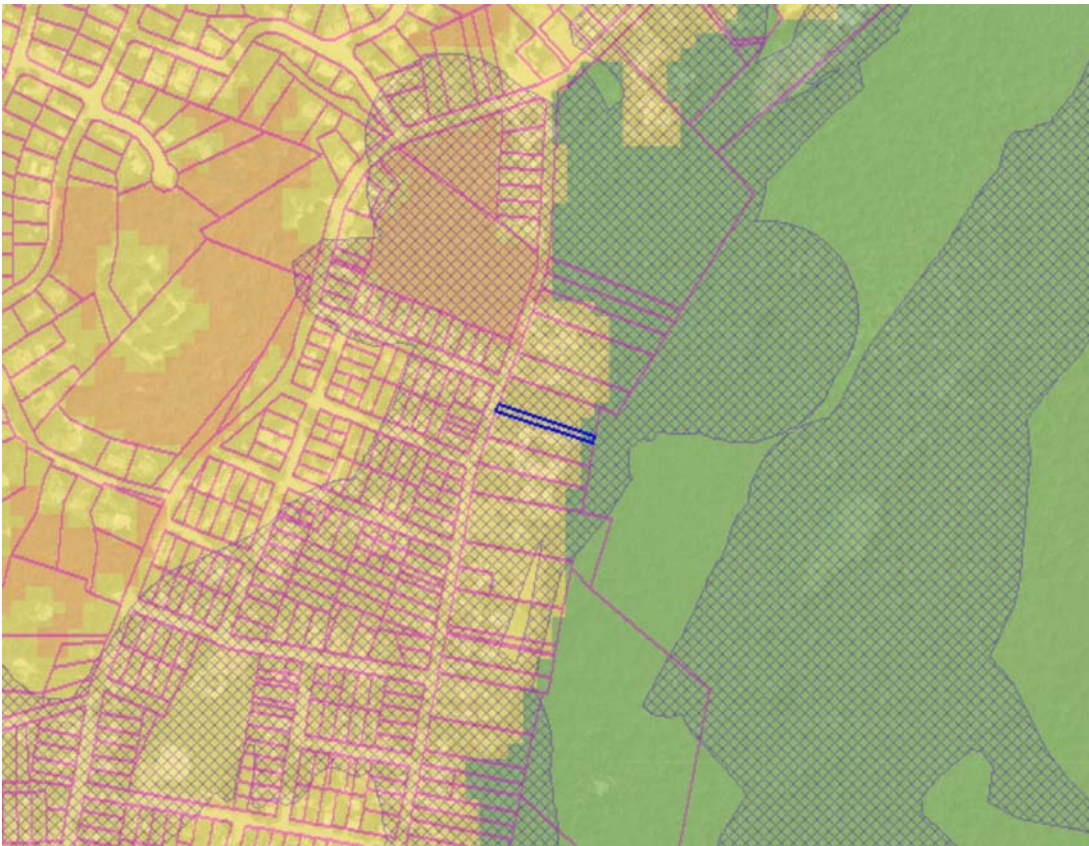
**Objective 1D5c:** Prohibit modifications to Riparian Areas in the Protection Zone except where a waiver is approved by the NJDEP or the Highlands Council under Policy 7G1 or 7G2.



### Riparian Area in Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03

12/23/2009



Land Use Capability:

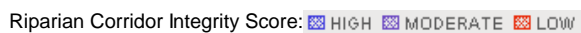
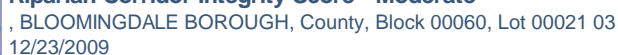
Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Riparian Corridor Integrity Score: HIGH MODERATE LOW

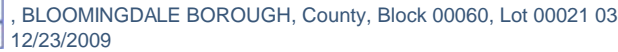
Includes all Riparian Areas within the Existing Community Zone.

**Objective 1D5d:** Restrict modifications to Riparian Areas in the Existing Community Zone, other than those addressed by Objective 1D5b, that would alter or be detrimental to the water quality and habitat value of a Riparian Area.





**Objective 1D5b:** 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.



**Objective 1F6b:** Prohibit indirect impacts from activity that is off-site, adjacent to, or within Critical Habitat that will jeopardize the continued existence of, or result in the likelihood of the destruction



**Objective 1F6c:** Waiver applications under Policy 7G2 for local development in a municipality with a Council-approved Critical Habitat Conservation and Management Plan shall be subject to the minimum standards and criteria for waiver provisions as set forth in the plan, to the maximum extent practicable.

**Objective 1F6f:** A Critical Wildlife Habitat area or Significant Natural Area delineation may be modified if an applicant can demonstrate, to the satisfaction of the Highlands Council in coordination with the NJDEPs Endangered and Nongame Species Program or Natural Heritage Program, that: 1. The nature of the site is such that it does not provide habitat for species of concern; 2. The species of concern are not present on the site during any critical part of their life cycle, do not depend upon the site for food, shelter or breeding, and the habitat; on the site is either unsuitable or not critical to species recovery in the Region; or 3. Existing land uses present a human, natural or development barrier to the use of the site by species of concern. Requirements for demonstrating the above criteria shall be included in the Critical Habitat Conservation and Management Plan.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas,

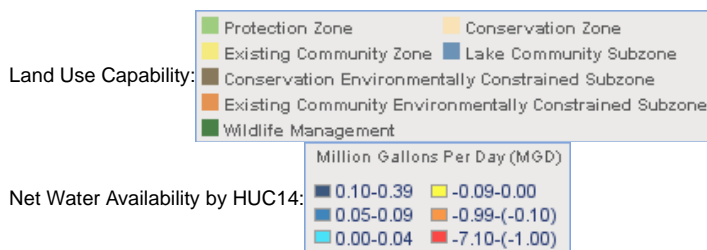
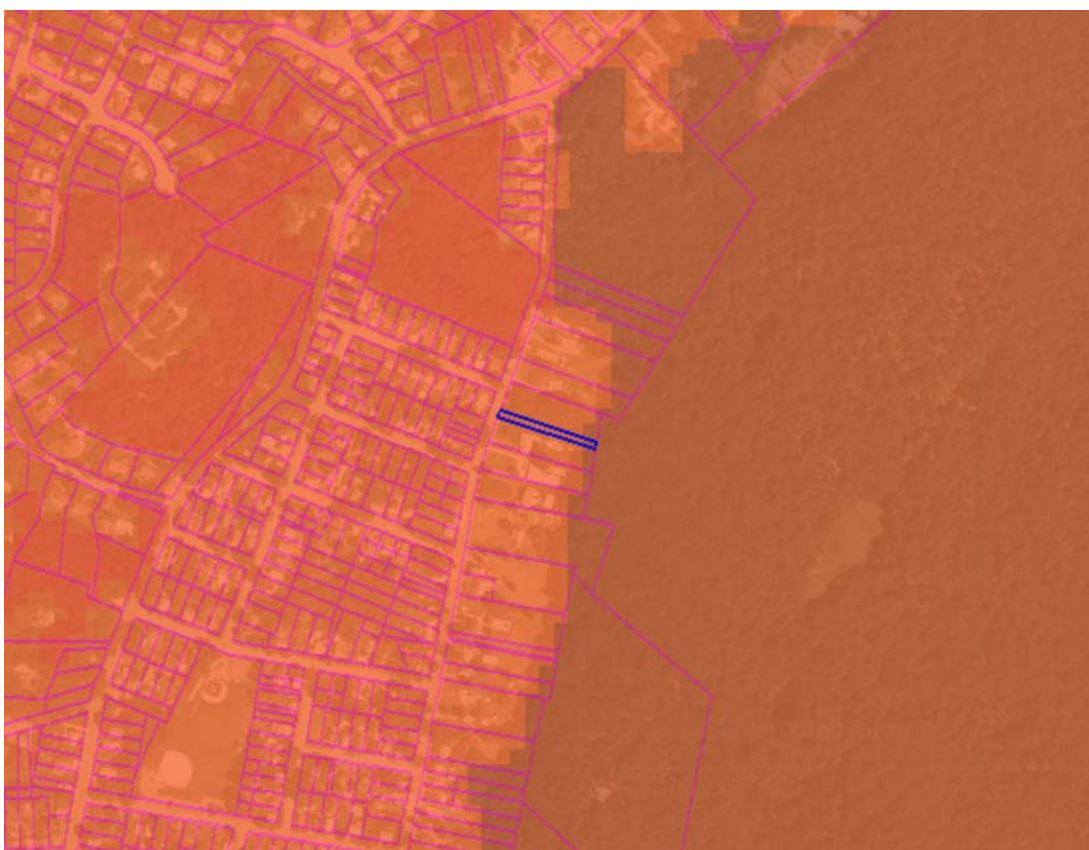


**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.



**Net Water Availability in Protection or Conservation Zone**  
 , BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03  
 12/23/2009



Identifies the portion of a HUC14 subwatershed within the Protection or Conservation Zone.

**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

**Objective 2B4a:** Give highest priority for the use of non-agricultural Net Water Availability or Conditional Water Availability within Protection Zone and Conservation Zone subwatersheds, through a Water Use and Conservation Plan developed under Objective 2B8c, local development review, and Highlands Project review: 1. To address a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for Net Water Availability; 2. To serve a designated Highlands Redevelopment Area; 3. To serve a cluster development that complies with Objective 2J4b; and 4. To serve affordable housing projects where at least 10% of the units are affordable.

**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the

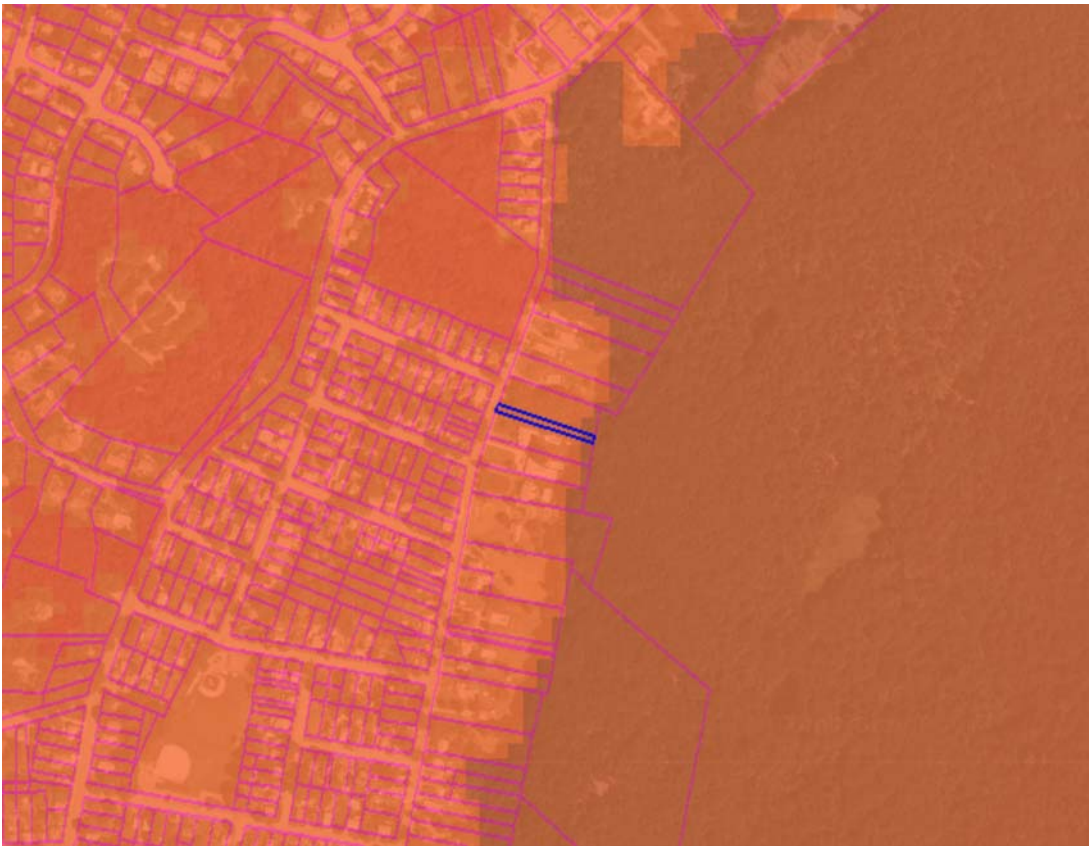






### Net Water Availability in Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Net Water Availability by HUC14:

Million Gallons Per Day (MGD)	
0.10-0.39	-0.09-0.00
0.05-0.09	-0.99-(-0.10)
0.00-0.04	-7.10-(-1.00)

Identifies the portion of a HUC14 subwatershed within the Existing Community Zone.

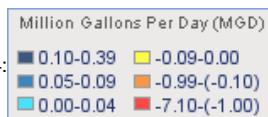
**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

**Objective 2B4b:** The highest priority for use of Net Water Availability or Conditional Water Availability within Existing Community Zone subwatersheds, through a Water Use and Conservation Plan developed under Objective 2B8c, local development review and Highlands Project review to serve documented 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% of the units are affordable, or new areas for development that meet all other requirements of the RMP.

**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.

**Current Deficit Area**

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03  
12/23/2009



Net Water Availability by HUC14:

Identifies HUC14 subwatersheds that are in deficit of Net Water Availability.

**Policy 2B6:** To require through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, Highlands Project Review, and interagency coordination that proposed public water supply and wastewater service areas, new or increased water allocations and bulk water purchases will not directly or indirectly cause or contribute to a Net Water Availability deficit, and where feasible will help mitigate any existing deficit.

**Objective 2B6a:** Areawide Water Quality Management Plans, Wastewater Management Plans or their amendments shall ensure that the proposed service area will not directly or indirectly cause or contribute to a Net Water Availability deficit, and shall be in conformance with any Water Use and Conservation Plan developed under Objective 2B8c.

**Policy 2B8:** To require through Plan Conformance, local development review, and Highlands Project Review the efficient and effective use of water availability, the planning for future water needs, the reduction and elimination of water deficits, and the mitigation of new consumptive or depletive use in any Current Deficit Areas or subwatersheds that could become deficit areas based on projected development and water uses, to ensure sustainable water supply, water resource and ecological values in conformance with RMP policies and objectives.

**Objective 2B8a:** Prevent net increases in consumptive or depletive water uses in Current Water Deficit Areas to prevent exacerbation of and help reduce or eliminate the deficit to ensure sustainable water supply, water resource and ecological values, emphasizing techniques

including, but not limited to water reuse, recycling and conservation.

**Objective 2B8b:** Proposed new consumptive or depletive water uses within a Current Deficit Area shall only occur under the auspices of a Water Use and Conservation Management Plan approved under Objective 2B8c or through mitigation of the proposed consumptive or depletive use within the same HUC14 subwatershed through: a permanent reduction of existing consumptive and depletive water uses; ground water recharge in excess of the requirements of N.J.A.C. 7:8 (Stormwater Management Rules); or other permanent means. Where a Water Use and Conservation Management Plan has not been approved: 1. Each project shall achieve mitigation ranging from 125% to 200%, based on the severity of the Current Deficit and the amount of consumptive or depletive water use proposed; 2. Total consumptive and depletive water uses from any single project and all projects combined are not to exceed the Conditional Water Availability of Objectives 2B3a or 2B3b for any HUC14 subwatershed; 3. Mitigation shall be successfully completed prior to initiation of the water use, except as required by #4, below. Mitigation may be phased in keeping with project development; 4. For water uses where the combination of proposed consumptive and depletive water uses and current subwatershed deficit is high, according to a schedule established by the Highlands Council, off-site mitigation shall be successfully completed prior to any on-site construction. On-site mitigation shall be successfully completed prior to initiation of the water use but may be implemented concurrent with on-site construction. Mitigation may be phased in keeping with the level of consumptive or depletive water uses; and Mitigation plans for a project shall include: specific objectives for each mitigation component; monitoring and reporting requirements; methods by which shortfalls in meeting the mitigation objectives shall be addressed through additional action; and be guaranteed through performance bonds.

**Objective 2B8c:** Water Use and Conservation Management Plans shall be required through municipal Plan Conformance for all subwatersheds to meet the policies and objectives of Goal 2B, to ensure efficient use of water through water conservation and Low Impact Development Best Management Practices, and to avoid the creation of new deficits in Net Water Availability. Where developed for Current Deficit Areas, the plans shall include provisions to reduce or manage consumptive and depletive uses of ground and surface waters as necessary to reduce or eliminate deficits in Net Water Availability, or to ensure continued stream flows to downstream Current Deficit Areas from Existing Constrained Areas, to the maximum extent practicable within each HUC14 subwatershed. Water Use and Conservation Management Plans shall demonstrate through a detailed implementation plan and schedule how and when the current deficit will be resolved in a subwatershed prior to approval for new water uses in the subwatersheds with the most severe deficits (i.e., in excess of 0.25 million gallons per day), and the plan shall be implemented prior to initiation of new water uses.

**Objective 2B8d:** All water users within a Current Deficit Area shall seek funding and opportunities to meet the intent of Objective 2B4b.

**Objective 2J2a:** Limit future water system demand and reduce existing demand where feasible by water systems that are dependent on Current Deficit Areas or Existing Constrained Areas as a source of water.

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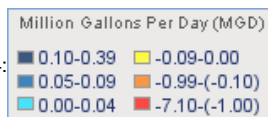


### Net Water Availability

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03  
12/23/2009



Net Water Availability by HUC14:



Net Water Availability is calculated for each HUC14 subwatershed by deducting consumptive and depletive water uses from Ground Water Availability. The Regional Master Plan incorporates Net Water Availability as a capacity threshold on future water uses. 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 in deficit and deemed to be a Current Deficit Area. In Current Deficit Areas where a Water Use and Conservation Management Plan has not yet been adopted, limited amounts of Conditional Water Availability are provided. The use of Net Water Availability or Conditional Water Availability is subject to Regional Master Plan policies.

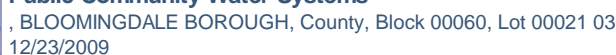
**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.

**Policy 2B7:** To ensure through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, and Highlands Project Review that the use of Net Water Availability and Conditional Water Availability within each subwatershed supports development patterns that are in conformance with RMP policies and objectives.

**Objective 2B8c:** Water Use and Conservation Management Plans shall be required through municipal Plan Conformance for all subwatersheds to meet the policies and objectives of Goal

**Objective 2J2b:** Limit future water system demands to levels that will not create a Current Deficit Area where one does not currently exist.



Public Community Water Systems displays those areas served by selected public water systems. The map indicates areas that are actually connected to a water distribution system, not simply located in a water utility's franchise area. Smaller, non-community water systems like those serving private developments or schools are not typically included. The Regional Master Plan limits the creation or extension of public water utilities.

**Objective 2J2a:** Limit future water system demand and reduce existing demand where feasible by water systems that are dependent on Current Deficit Areas or Existing Constrained Areas as a source of water.

**Policy 2J6:**To encourage water recycling/reuse measures, such as domestic and institutional gray water systems, where appropriate, to minimize water use in existing land uses.





### Highlands Domestic Sewerage Facilities

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03  
12/23/2009



Highlands Domestic Sewerage Facilities: ■

Highlands Domestic Sewerage Facilities displays those areas served by public wastewater utilities. The map indicates areas that are actually connected into a public wastewater collection system, not simply located in a Sewer Service Area. Public sewer systems discharging less than 0.15 million gallons per day (MGD) to surface water or 0.075 MGD to ground water are not included. Private, on-site treatment facilities like a package treatment plant are also not included. The Regional Master Plan limits the creation or extension of public wastewater systems.

**Objective 2J4b:** Clustered development served by public water supply within the Protection Zone, the Conservation Zone, and the Environmentally-Constrained Sub-zones of the Planning Area shall be approved only if the following conditions are met: 1. The development impacts are otherwise consistent with the requirements of the RMP, including provisions for mandatory clustering in Agricultural Resource Areas pursuant to Policy 3A5; 2. Extension of an existing public water system will occur only where the cluster development is within or immediately adjacent to an Existing Area Served with available capacity; 3. Creation of a new public water system will occur only where such development is not within or immediately adjacent to an Existing Area Served with available capacity; 4. The clustered development preserves at least 80% of the cluster project area in perpetuity for environmental protection or agricultural purposes. To the maximum extent feasible the developed portion (i.e., not including wetlands, Highlands Open Waters buffers, and recreational lands) occupies no more than 10% of the cluster project area if served by a public or community on-site wastewater system; and 5. Where the preserved land in the cluster project area is dedicated to agricultural purposes, the cluster development ordinance and an Agriculture Retention/Farmland Preservation Plan supports continued agricultural viability of the agricultural land and requires the implementation of best management practices, including development and implementation of a Farm Conservation Plan that addresses the protection of water and soil resources prepared by the USDA Natural Resources Conservation Service (NRCS), Technical Service Provider (TSP), appropriate agent or NJDA staff, and approved by the local Soil Conservation District (SCD).

**Policy 2J6:** To encourage water recycling/reuse measures, such as domestic and institutional gray water systems, where appropriate, to minimize water use in existing land uses.

**Objective 211a:** Designated sewer service areas in the Preservation Area shall be restricted to the Existing Area Served as of August 10, 2004, except to serve development that is approved through a HAD or a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1.

**Policy 2K2:** To base projected demand for current needs, appropriate economic revitalization and opportunities for designated TDR Receiving Zones within Existing Areas Served on existing maximum three month demands plus an estimate of redevelopment needs based on either Highlands Council regional analyses or more detailed local analyses, to assess whether there is adequate treatment capacity to encourage redevelopment.

**Objective 2K3d:** Clustered development served by a public wastewater collection and treatment system or community on-site treatment facility within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area shall be approved only if the following conditions are met: 1. The development impacts are otherwise consistent with the requirements of the RMP, including provisions for mandatory clustering in Agricultural Resource Areas; 2. Extension of an existing public wastewater collection and treatment system will occur only where the cluster development is within or immediately adjacent to an Existing Area Served with available capacity; 3. Creation of a community on-site treatment facility will occur only where such development is not within or immediately adjacent to an Existing Area Served with available capacity, where the proposed system is designed, permitted, and constructed at a capacity limited to the needs of the clustered development, and where the system does not create the potential for future expansion into areas that are not the subject of cluster developments immediately adjacent to the initial cluster served; 4. The cluster development preserves at least 80% of the cluster project area in perpetuity for environmental protection or agriculture purposes. To the maximum extent feasible the developed portion of the project area (e.g., not including wetlands, Highlands Open Waters buffers, and recreational lands) occupies no more than 10% of the cluster project area if served by a public or community on-site wastewater system; and 5. Where the preserved land in the cluster project area is dedicated to agricultural purposes, the cluster development ordinance and an Agriculture Retention/Farmland Preservation Plan supports continued agricultural viability of the agricultural land and requires the implementation of best management practices, including development and implementation of a Farm Conservation Plan that addresses the protection of water and soil resources prepared by the USDA Natural Resources Conservation Service (NRCS), Technical Service Provider (TSP), appropriate agent or NJDA staff, and approved by the local Soil Conservation District (SCD).

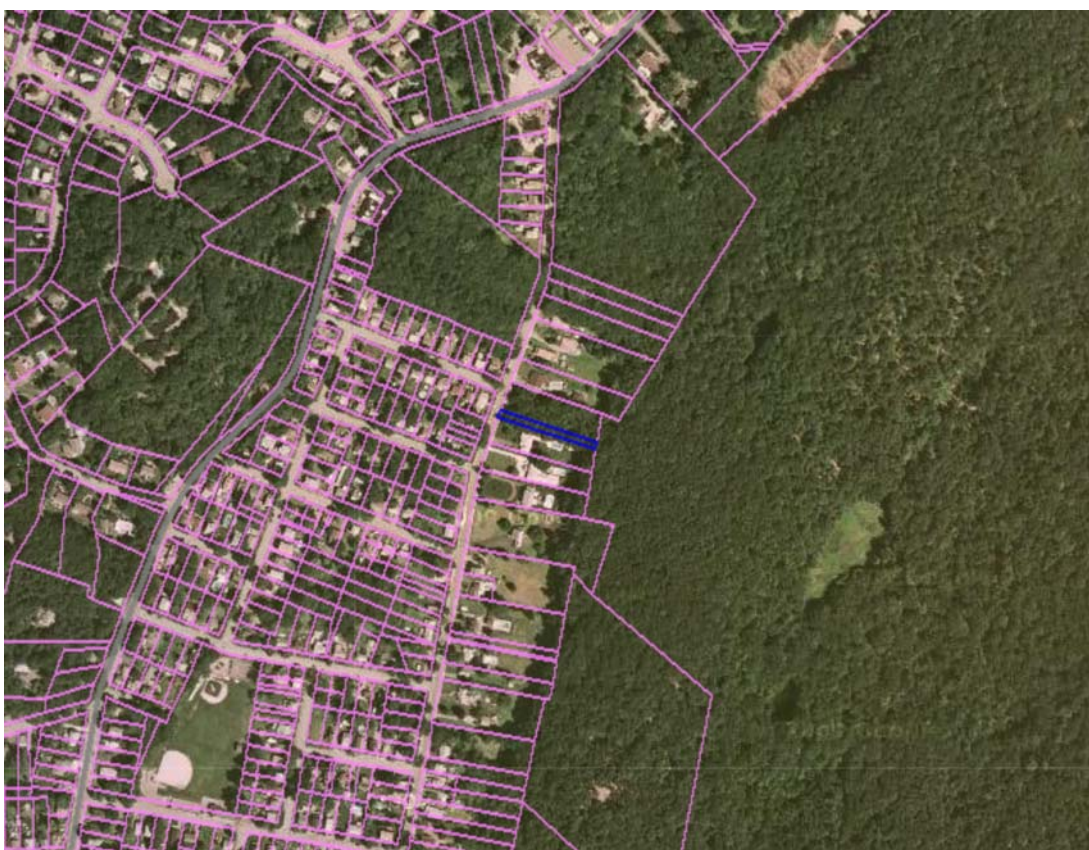
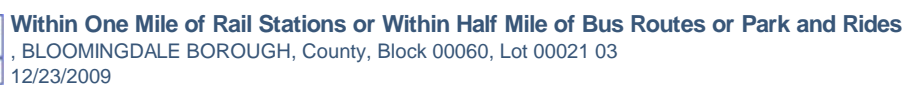
**Objective 2K3e:** Allow the expansion or creation of wastewater collection systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to those provided at Objective 2K3c within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. The highest priority for allocation of excess or additional wastewater treatment capacity is to areas where there are clusters of failed septic systems that are located within or adjacent to Existing Areas Served. TDR Receiving Areas, where designated, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than other developments requiring expansion of sewer service areas.



Includes all developed lands within a 1/2 mile buffer from all freight rail networks.

**Objective 5A2a:** Encourage the movement of goods from the roadway network to the freight rail network wherever possible.





Private Bus Routes:

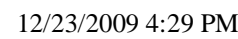
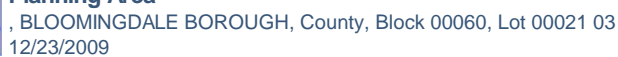
- Bergen + Main Line
- Montclair Boonton Line

- Morris + Essex Line - Gladstone Branch
- Morris + Essex Line - Morristown Branch
- Raritan Valley Line

Park & Ride Sites: 

Includes all developed lands within a 1/2 mile buffer from all park and ride locations, rail stations, and NJ Transit public and major private bus routes in or within 1/2 mile of the Highlands Region.

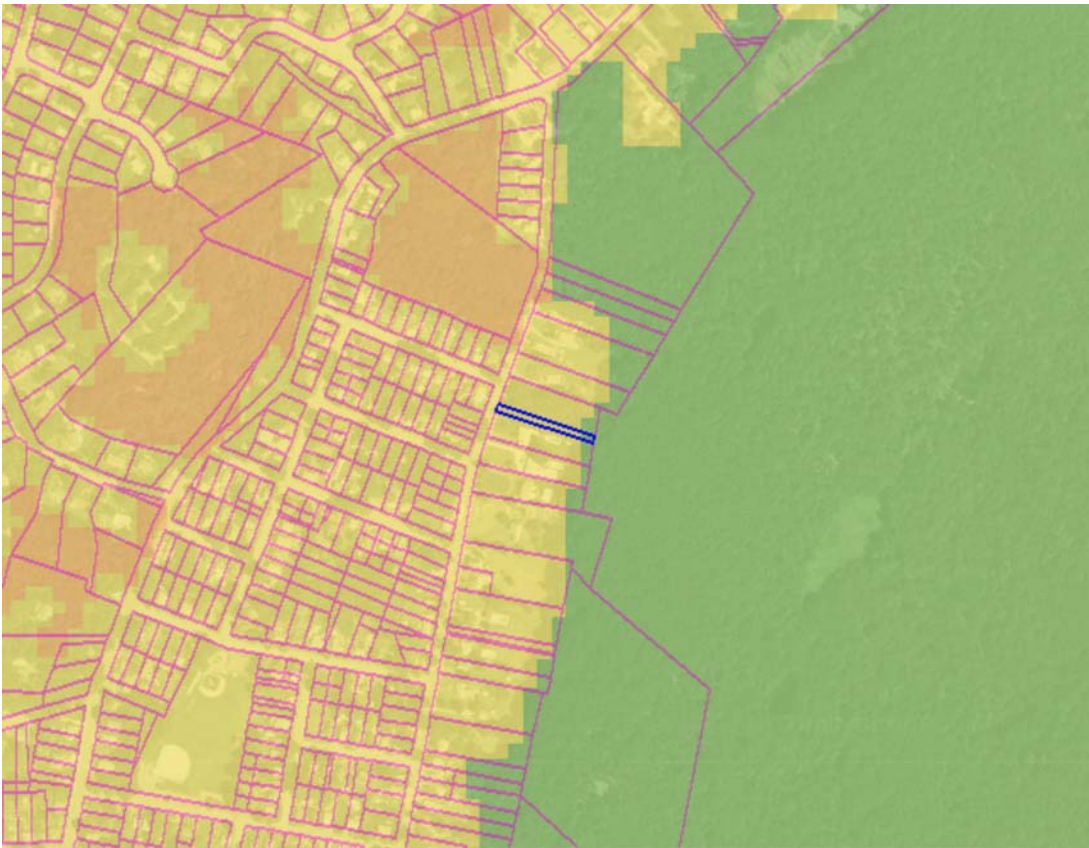
**Objective 5E1b:** Development and redevelopment in close proximity to rail stations and along bus routes.






**Protection Zone**

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Consists of high natural resource value lands that are important to maintaining water quality, water quantity and sensitive ecological resources and processes.

**Policy 6C1:** To limit new human development in the Protection Zone to redevelopment, exempt activities, and environmentally-compatible low density new land uses, in accordance with RMP resource protection needs and water quality and quantity capacity constraints and to ensure that the impacts of development using exemptions under the Highlands Act (see Policy 7F1) are considered in regional protection measures.

**Objective 6C1a:** Centers in the Protection Zone, potentially including clustered development, shall be at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan, and the use of septic systems or community wastewater systems.

**Policy 6C2:** To ensure through Plan Conformance, local development review and Highlands Project Review that any future development or redevelopment which does occur in a Protection Zone is subject to standards and criteria which protect the land and water resources of the Protection Zone from any potential adverse impact to the maximum extent possible.





### Protection Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes the Protection Zone within the Planning Area.

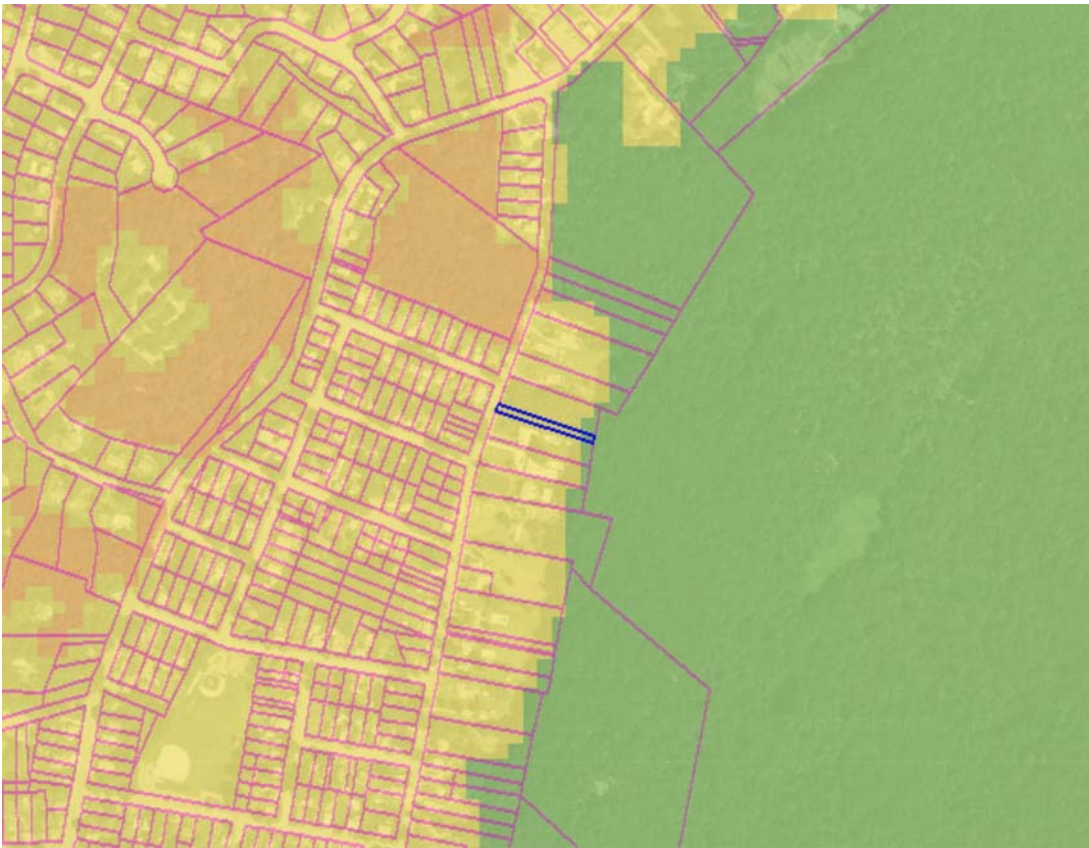
**Objective 2L2a:** Use the median concentrations of nitrate in ground water for Planning Area HUC14 subwatersheds where the Protection Zone is predominant as the nitrate target for new development reliant on septic systems within the Protection Zone. The median is 0.72 mg/L.

**Policy 6J3:** To encourage redevelopment in the Conservation and Protection Zones in the Planning Area of brownfields and grayfields that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields, as approved through Plan Conformance or the Highlands Redevelopment Area Designation process.



### Conservation or Protection Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Includes both the Conservation Zone and the Protection Zone.

**Objective 2L3f:** Carrying capacity shall be documented through the Land Use Capability Septic System Yield Map as the number of allowable septic systems per Conservation and Protection Zone for each HUC14 subwatershed, taking into account the nitrate target, the HUC14 subwatershed drought ground water recharge, and the acreage that is privately owned, undeveloped or underdeveloped, and not preserved.





### Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Consists of areas with regionally significant concentrated development signifying existing communities.

**Objective 2J4c:** Allow the expansion or creation of public water systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to Objective 2J4a within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. TDR Receiving Zones, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than expansion of public water service areas within this Zone.

**Objective 2K3e:** Allow the expansion or creation of wastewater collection systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to those provided at Objective 2K3c within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. The highest priority for allocation of excess or additional wastewater treatment capacity is to areas where there are clusters of failed septic systems that are located within or adjacent to Existing Areas Served. TDR Receiving Areas, where designated, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than other developments requiring expansion of sewer service areas.

**Policy 6F3:** To ensure that development activities within the Existing Community Zone are subject



**Objective 6F6a:** Center based development initiatives shall be planned within the Existing Community Zone at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan. Densities of five dwelling units and above are encouraged, and are required in areas designated as voluntary TDR Receiving Zones where TDR benefits are sought under the Highlands Act.



### Existing Community Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03

12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes the Existing Community Zone within the Planning Area.

**Objective 2L2d:** Use a nitrate target of 2 mg/L for the Existing Community Zone within Planning Area, on a project-by-project basis, where new development will rely on septic systems.

**Policy 6J2:** To encourage redevelopment in the Existing Community Zone in the Planning Area of brownfields, grayfields, and other previously developed areas that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields, as approved through Plan Conformance or the Highlands Redevelopment Area Designation process.



# Protection Zone or Conservation Zone or Environmentally Constrained Sub-Zones in Planning Area OR Existing Community Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00021 03  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes the Protection Zone, Conservation Zone, Environmentally Constrained Sub-Zones and the Existing Community Zone within the Planning Area.

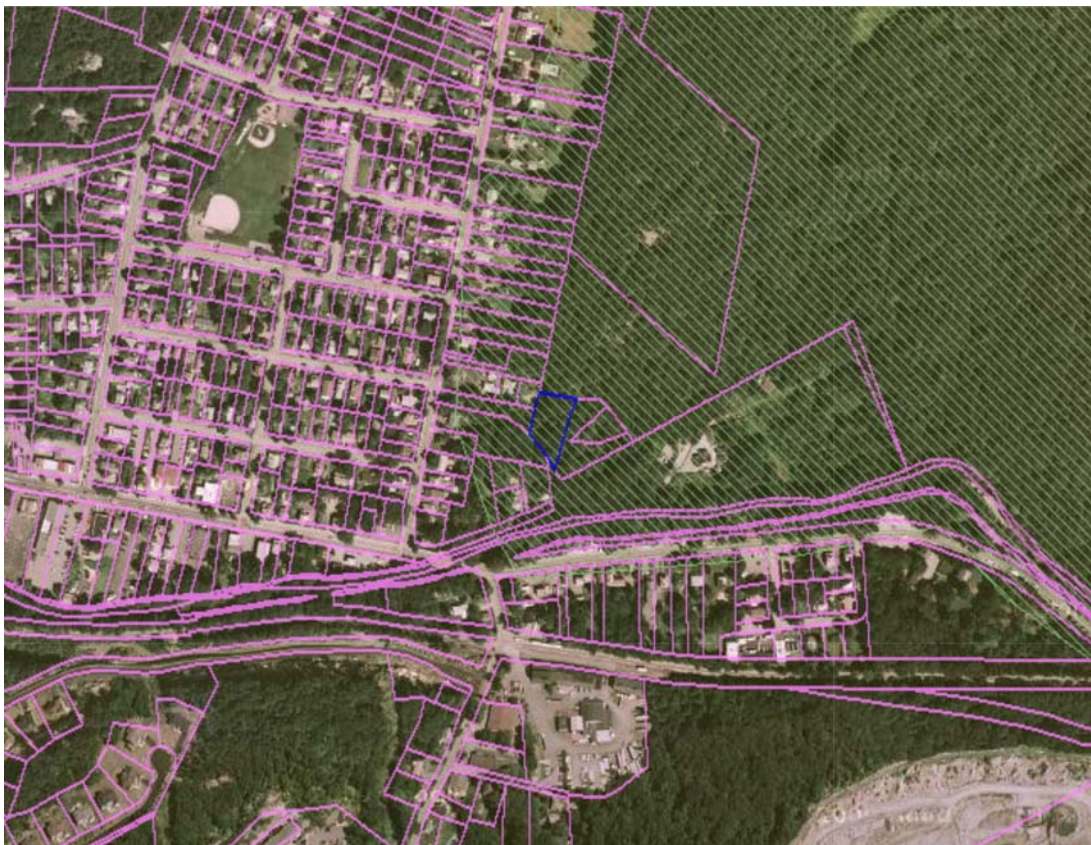
**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.





**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.





The Forest Resource Area data layer is an intensity indicator that captures high ecological value forest areas including those forested lands that exhibit the least fragmentation, which are vital for the maintenance of ecological processes.

**Policy 1A5:** To prohibit through local development review and Highlands Project Review forest clear-cutting within the Forest Resource Area except in accordance with a Forest Management Plan approved by the State Forester.

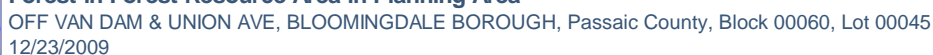
**Policy 1B3:** To limit through local development review and Highlands Project Review deforestation in the Forest Resource Area and forested lands within High Integrity Forest Subwatersheds within the Existing Community Zone to maximum extent practicable.





**Objective 1A2d:** To prohibit through Plan Conformance, local development review and Highlands Project Review the expansion or creation of public water supply systems or public wastewater collection and treatment systems or community-based on-site wastewater facilities into forested areas of the Forest Resource Area within the Planning Area except as provided for in Policy 2J4 with Objectives 2J4a through 2J4d, and Policy 2K3 with Objectives 2K3a through 2K3e, and within the Preservation Area except as provided for in Policy 2I1 and Objectives 2I1a and 2I1b.

**Policy 5C3:** To limit road improvements through local development review and Highlands Project Review where roads are constrained by topography, forested lands or the community character of land uses fronting on the road.



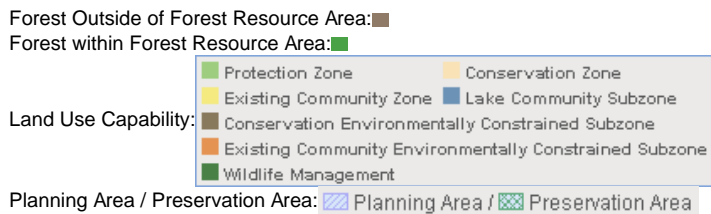
Planning Area / Preservation Area:  Planning Area /  Preservation Area

**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

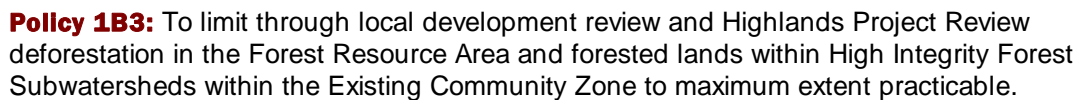
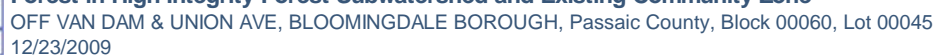
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Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.






**Policy 1B2:** To limit through local development review and Highlands Project Review human development of forests to low impact residential development in the Protection Zone and the Conservation Zone in the Planning Area.







Forest Outside of Forest Resource Area:   
Forest within Forest Resource Area: 

Forest Resources represents the Total Forest Area data layer that was extracted from the NJDEP 2002 draft Land Use Land Cover data. This data layer illustrates all upland and wetland forest and scrub/shrub categories (excluding old field) and represents all forested lands within the Region. The Regional Master Plan includes policies that limit clearing of trees within Forest Resources and that seek to protect overall forest resources integrity.

**Objective 1B3a:** Implementation through Plan Conformance of regulations, which limit the clearing of trees in conjunction with human development to circumstances where the clearing will not diminish the integrity of forest resources.

**Policy 1B5:** To ensure that forest resources are protected on a site specific basis during local development review and Highlands Project Review.

**Objective 1B5a:** Applications for local development review and Highlands Project Review require identification of any forest area on and adjacent to a site in accordance with the Highlands Councils Method for Identifying Upland Forest Areas in the Highlands Region.

**Policy 1B7:** To prohibit clear-cutting of forest lands except pursuant to an approved Forest Management Plan approved by the State Forester.

**Policy 1C3:** To require that conforming municipalities adopt a tree clearing ordinance consistent with an approved community forestry plan under the New Jersey Forest Service Community Forestry Program as part of the municipal master plan and local development regulations.

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.







**Policy 1C1:** To require that conforming municipalities and counties address the protection of forested portions of Forest Resource Areas and High Integrity Forest Subwatersheds in their master plans and development regulations.



**Policy 1D4:** Highlands Open Waters shall include a protection buffer of 300 feet from the edge of the discernable bank of the Highlands Open Waters feature, or from the centerline where no discernable bank exists. With respect to wetlands and other Highlands Open Waters features (e.g., seeps, springs, etc.), the feature shall include a protection buffer of 300 feet from the delineated Letter of Interpretation (LOI) line issued by the NJDEP for wetlands, or from a field-delineated boundary for other features. In areas where existing development or land uses within the protection buffers have reduced or impaired the functional values of the buffers, the Council will seek opportunities to restore the buffer and its functions. Any proposed disturbance shall, through local development review and Highlands Project Review, comply with Highlands Open Waters buffer standards. The protection buffer width for Category 2 streams in the Planning Area may be modified through a Stream Corridor Protection/Restoration Plan, as specified in Objective 1D4i. In approved Redevelopment Areas, the Council may, at its discretion, modify the required buffer, upon a showing of no alternatives, no impact to the functional value of the buffer, and provision of alternative approaches to enhancing or protecting Highlands Open Waters and resources of the buffer area.

**Objective 1D4c:** Require that proposed development within all Highlands Open Waters buffers (Preservation and Planning Areas) conforms through local development review and Highlands



**Objective 1D4i:** Develop through Plan Conformance and implement stream corridor or subwatershed-based Stream Corridor Protection/Restoration Plans which shall include Steps 1, 2, and 3, and may include Steps 4 and 5: 1. Identify areas where existing development, land disturbances, or land uses are within Highlands Open Waters buffers have removed or substantially impaired natural vegetation communities, and have significantly reduced or impaired the functional values of Highlands Open Waters buffers. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland usesq; 2. Identify and require opportunities for restoration of areas identified in Step 1 as part of mitigation requirements under a Highlands Act waiver or Objectives 1D4e and 1D4f, and public or nongovernmental restoration/stabilization projects; 3. Identify the extent of stream corridor features that are critical to supporting the functions of a healthy Highlands Open Waters buffer and that extend beyond the buffers required by Objectives 1D4b and 1D4c. The 300 foot buffer in these areas may be expanded to be most protective of these features which may include, but are not limited to, Critical Habitat, pollutant source areas identified through scientific techniques, and steep slopes; 4. Where Highlands Open Waters buffers include areas identified in Step 1, regarding Category 2 surface waters in the Planning Area only, the Stream Corridor Protection/Restoration Plan may identify where, based on scientific analysis of site-specific conditions (e.g., topography, vegetation cover type, habitat, soil type, upstream land uses and pollution inputs, width of floodplain, rate and volume of run-off), a buffer of less than the full 300 feet (but including the undisturbed buffer area at a minimum) is sufficient to maintain or improve the protection of Highlands Open Waters and Riparian Areas. The plan must identify alternative buffers that provide functional buffer values at least equivalent to existing conditions and are no less than 150 feet or no less than the extent allowed in State or municipal regulation (including Objectives 1D4b and 1D4c), whichever is greater. Further, the plan shall include a functional value assessment to ensure that there is no net loss in the overall functional value of the subwatershedos stream buffers. Buffers established through this process shall be determined based on site conditions rather than fixed distances, reflecting findings of the scientific analysis, and shall be used in the site design and development review process regarding determinations of restoration, continued use, or increased use of the disturbed buffer area. Buffer averaging for the purpose of accommodating development proposals is deemed not to meet the requirements of this provision; and 5. Where a proposed Highlands Redevelopment Area would not meet, in full, Objectives 1D4b through 1D4h but affects an undisturbed buffer area determined to not be necessary for the protection of the functional values for Highlands Open Waters buffer (as determined through scientific analysis of site-specific conditions), modification of the undisturbed buffer may be allowed to no less than the extent allowed in State or municipal regulation. However the Council shall first determine that there is no alternative to the proposed reduction of the buffer, and require a showing of no impact to the functional values of the buffer and provision of alternative approaches to enhancing or protecting the Highlands Open Waters and resources of the buffer area. Restoration or enhancement of buffer functional values shall be provided on-site or within the same stream reach to achieve a net improvement of existing buffer functional values.

**Objective 1D5b:** 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.

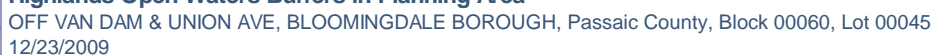
**Objective 211b:** The expansion or creation of public water supply systems, public wastewater collection and treatment systems and community on-site treatment facilities in the Preservation Area as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

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Planning Area / Preservation Area:  Planning Area /  Preservation Area

**Objective 1D4d:** Structures or other land improvements existing within a Highlands Open Waters buffer of the Planning Area on August 10, 2004 may remain, provided that the area of disturbance shall not be increased unless approved through local development review or Highlands Project Review in compliance with RMP policies and objectives. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q



## Highlands Open Waters Protection Buffers in Conservation or Protection Zone in Planning Area

OFF VAN DAM & UNION AVE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00045  
12/23/2009



Open Water Protection Area:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

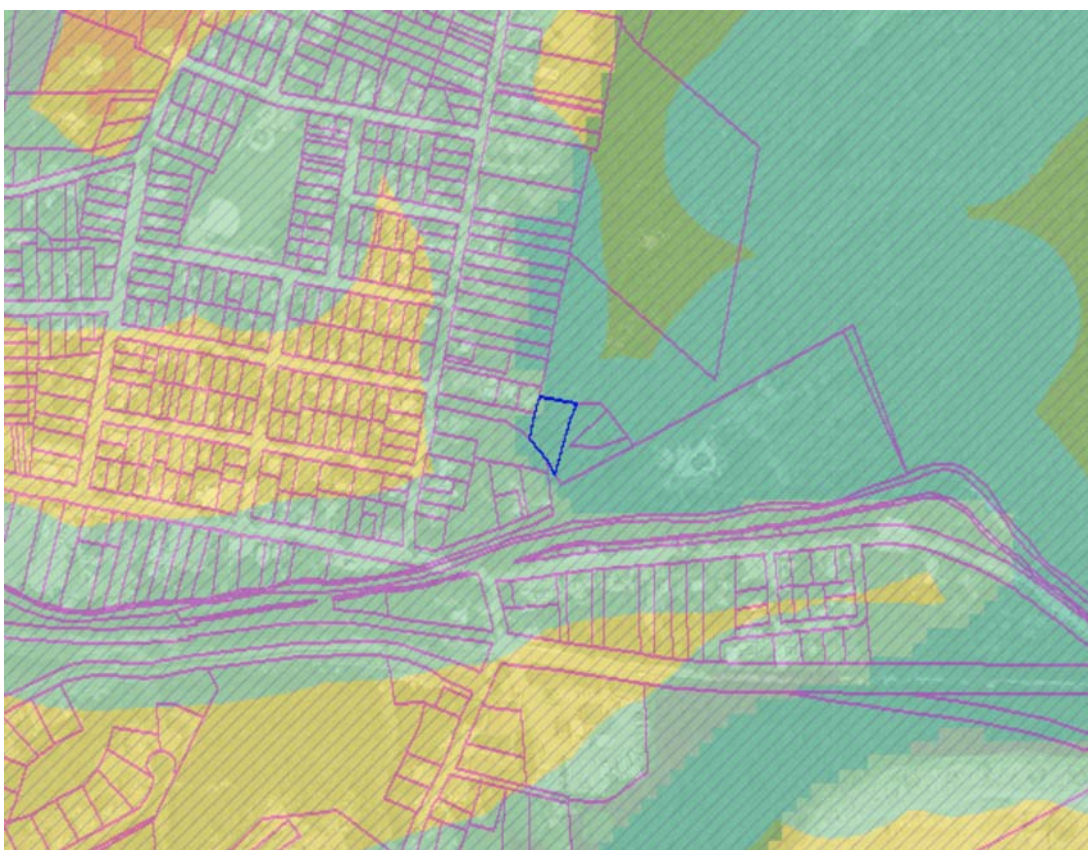
Land Use Capability:

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes all Highlands Open Waters protection buffers within the Protection and Conservation Zones of the Planning Area.

**Objective 1D4e:** In the Protection and Conservation Zones of the Planning Area, proposed disturbances of Highlands Open Waters buffers shall only occur in previously disturbed areas, unless a waiver is granted by the Highlands Council under Policy 7G2. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q Such proposed disturbances must demonstrate full utilization of the following performance standards in the listed order, to demonstrate the necessity of an encroachment into Highlands Open Waters buffers: 1) avoid the disturbance of Highlands Open Waters buffers; 2) minimize impacts to Highlands Open Waters buffers; and 3) mitigate all adverse impacts to Highlands Open Waters buffers so that there is no net loss of the functional value of the buffer, in compliance with Objective 1D4h. Minimization and mitigation opportunities shall be considered only upon a clear and convincing demonstration by the applicant that the protection buffer cannot be avoided and in no case shall the remaining buffer be reduced to less than 150 feet from the edge of Highlands Open Waters, unless a waiver is granted by the Highlands Council under Policy 7G2 and the proposed disturbance complies with Objective 1D4c.





Protection Zone
  Conservation Zone



Existing Community Zone
  Lake Community Subzone

Conservation Environmentally Constrained Subzone

Existing Community Environmentally Constrained Subzone

Wildlife Management

Land Use Capability:

Planning Area / Preservation Area:  Planning Area /  Preservation Area

Includes all Highlands Open Waters protection buffers within the Existing Community Zone of the Planning Area.

**Objective 1D4f:** In the Existing Community Zone of the Planning Area, proposed disturbances of Highlands Open Waters buffers shall only occur in previously disturbed areas, unless a waiver is granted by the Highlands Council under Policy 7G2 and the proposed disturbance complies with Objective 1D4c. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q Such disturbances shall employ performance standards such that all proposed disturbances of Highlands Open Waters buffers shall employ Low Impact Development Best Management Practices to mitigate all adverse modification to Highlands Open Waters buffers so that there is no net loss of the functional value of the buffer, in compliance with Objective 1D4h.





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. Riparian Areas serve as an interface between surface water bodies and terrestrial ecosystems and play a critical role in maintaining the quality and ecological integrity of Highlands Open Waters.

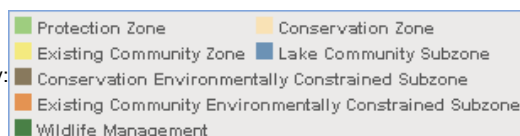
**Objective 211b:** The expansion or creation of public water supply systems, public wastewater collection and treatment systems and community on-site treatment facilities in the Preservation Area as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall

**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.





Riparian Corridor Integrity Score:  HIGH  MODERATE  LOW

Includes all Riparian Areas within the Protection Zone.

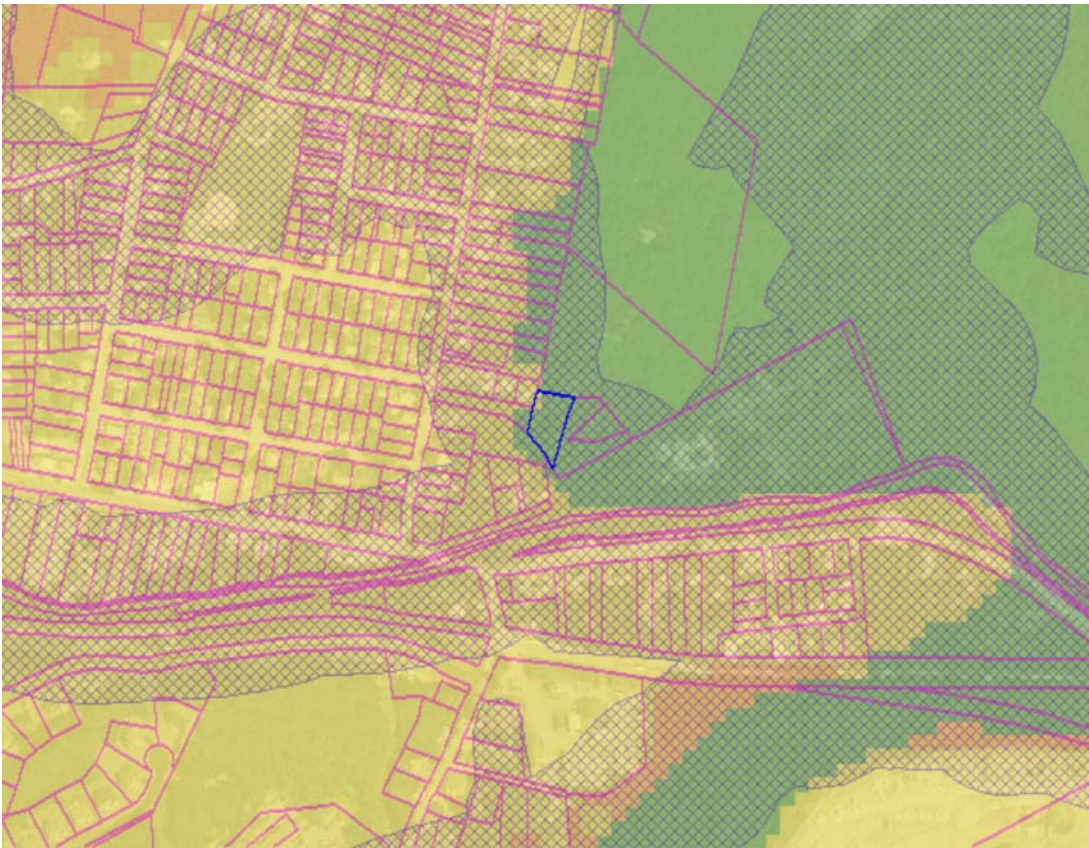
**Objective 1D5c:** Prohibit modifications to Riparian Areas in the Protection Zone except where a waiver is approved by the NJDEP or the Highlands Council under Policy 7G1 or 7G2.





### Riparian Area in Existing Community Zone

OFF VAN DAM & UNION AVE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00045  
12/23/2009



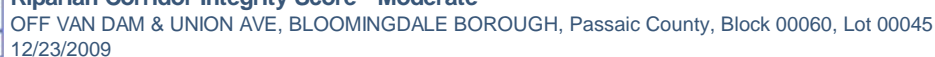
Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Riparian Corridor Integrity Score: HIGH MODERATE LOW

Includes all Riparian Areas within the Existing Community Zone.

**Objective 1D5d:** Restrict modifications to Riparian Areas in the Existing Community Zone, other than those addressed by Objective 1D5b, that would alter or be detrimental to the water quality and habitat value of a Riparian Area.



These areas include watersheds with Riparian Areas that contain a higher incidence of impervious area, agricultural uses and/or road crossings (as compared to High Score) and a reduced proportion of natural vegetation including high quality habitat for rare, threatened, and endangered water/wetland dependent species.

**Objective 1D5b:** 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.





### Steep Slope Protection Area

OFF VAN DAM & UNION AVE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00045  
12/23/2009



Steep Slope Protection Area: ■

Slope is a measurement of the steepness of terrain and is defined as the vertical change in elevation over a given horizontal distance. Disturbance of areas containing steep slopes can trigger erosion and sedimentation, resulting in the loss of topsoil. It can also result in the disturbance of habitats, degradation of surface water quality, silting of wetlands, and alteration of drainage patterns. The Highlands Council examined areas of slope in the Highlands Region that exhibited one of the following grade classifications and these grades were established as Steep Slope Protection Areas: 1) grades of slopes of 20% or greater; 2) grades of slope between 15 - 20%; and 3) grades of slope between 10 - 15% that occur within the Riparian Area.

**Policy 1E6:** To require through local development review and Highlands Project Review that applications for development include topographic information identifying the location of any Steep Slope Protection Areas located on the parcel proposed for development.

**Policy 1E7:** To require through local development review and Highlands Project Review that applications for development involving parcels of land with slopes of 10% or greater include identification of forested lands, areas which are highly susceptible to erosion, depth to bedrock and Soil Capability Classes.

**Policy 1E10:** To require that conforming municipalities and counties implement the steep slope protection provisions of Policies 1E2 through 1E9 through master plans and development regulations.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

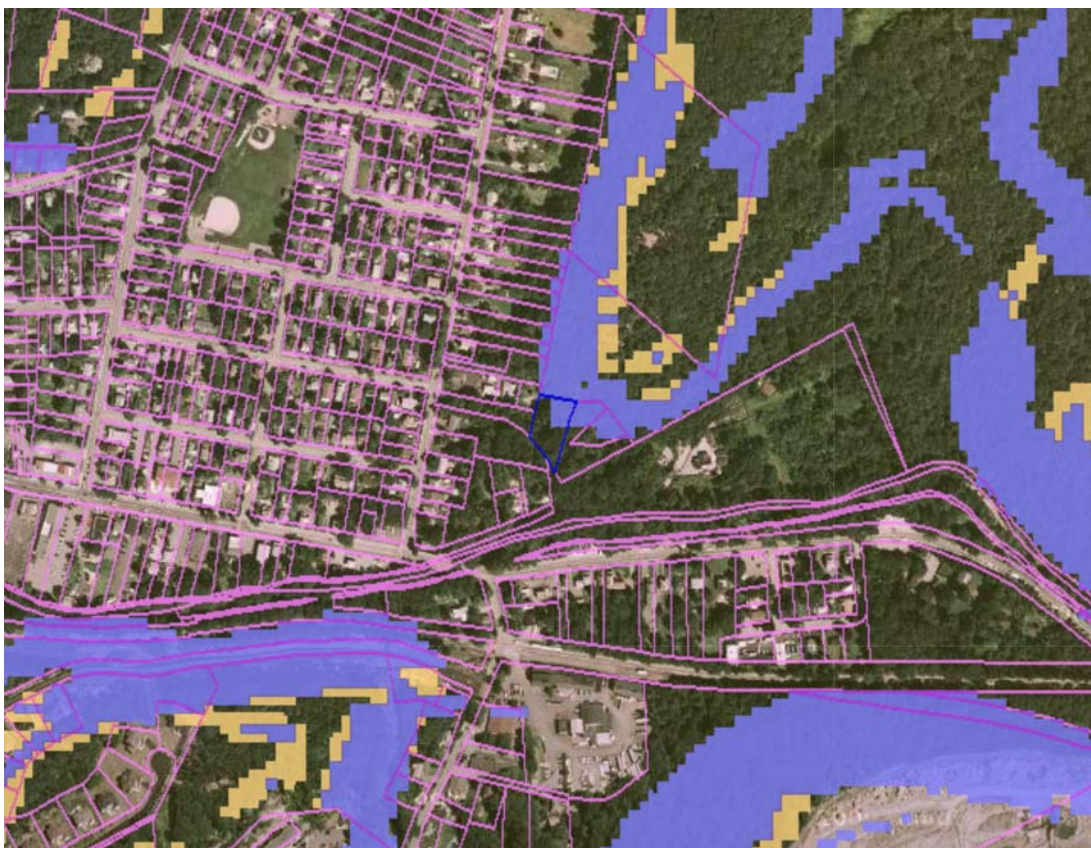
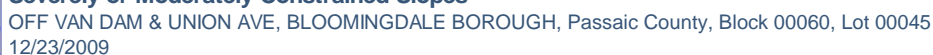



**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.



Severely Constrained Slopes: 

**Policy 1E8:** To prohibit through local development review and Highlands Project Review land disturbance within areas which are Severely Constrained Slopes and Moderately Constrained Slopes, except for linear development in both the Preservation and Planning Areas that meets the requirements of N.J.A.C. 7:38-3.8(c)1-4.

**Objective 2D4a:** 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 Steep Slopes.





**Policy 1A2:** To limit human development in the Forest Resource Area in the Preservation Area in order to protect and enhance forest resources, forest ecosystem integrity, Critical Habitat, and the quantity and quality of water resources.

**Policy 1F2:** To prohibit through Plan Conformance, local development review and Highlands Project Review the direct impact of new human development or expansion or increased intensity of existing development within Critical Habitat.

**Policy 1F5:** To establish a Habitat Conservation and Management Program, including minimum performance standards and criteria for the protection, enhancement, and restoration of lands within Critical Habitat.

**Policy 1F6:** To require that applications for any local development review and Highlands Project Review for Critical Habitat be subject to minimum standards and criteria outlined in the Habitat Conservation and Management Plan.

**Objective 1F6a:** Prohibit direct impacts from new development or expansion or increased intensity of existing development that will jeopardize the continued existence of, or result in the likelihood of the destruction or adverse modification of Critical Habitat, except as permitted through the issuance of a waiver under Policy 7G1 or 7G2.

**Objective 1F6b:** Prohibit indirect impacts from activity that is off-site, adjacent to, or within Critical Habitat that will jeopardize the continued existence of, or result in the likelihood of the destruction



**Objective 1F6c:** Waiver applications under Policy 7G2 for local development in a municipality with a Council-approved Critical Habitat Conservation and Management Plan shall be subject to the minimum standards and criteria for waiver provisions as set forth in the plan, to the maximum extent practicable.

**Objective 1F6f:** A Critical Wildlife Habitat area or Significant Natural Area delineation may be modified if an applicant can demonstrate, to the satisfaction of the Highlands Council in coordination with the NJDEPs Endangered and Nongame Species Program or Natural Heritage Program, that: 1. The nature of the site is such that it does not provide habitat for species of concern; 2. The species of concern are not present on the site during any critical part of their life cycle, do not depend upon the site for food, shelter or breeding, and the habitat; on the site is either unsuitable or not critical to species recovery in the Region; or 3. Existing land uses present a human, natural or development barrier to the use of the site by species of concern. Requirements for demonstrating the above criteria shall be included in the Critical Habitat Conservation and Management Plan.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas,

Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

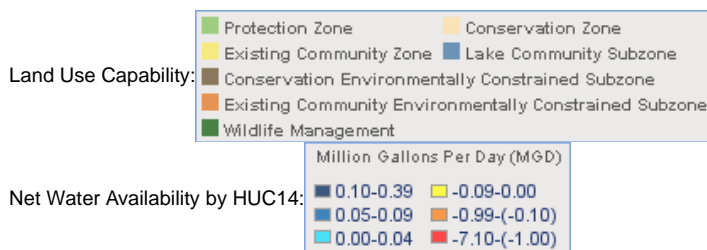
**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.



### Net Water Availability in Protection or Conservation Zone

OFF VAN DAM & UNION AVE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00045  
12/23/2009



Identifies the portion of a HUC14 subwatershed within the Protection or Conservation Zone.

**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

**Objective 2B4a:** Give highest priority for the use of non-agricultural Net Water Availability or Conditional Water Availability within Protection Zone and Conservation Zone subwatersheds, through a Water Use and Conservation Plan developed under Objective 2B8c, local development review, and Highlands Project review: 1. To address a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for Net Water Availability; 2. To serve a designated Highlands Redevelopment Area; 3. To serve a cluster development that complies with Objective 2J4b; and 4. To serve affordable housing projects where at least 10% of the units are affordable.

**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.

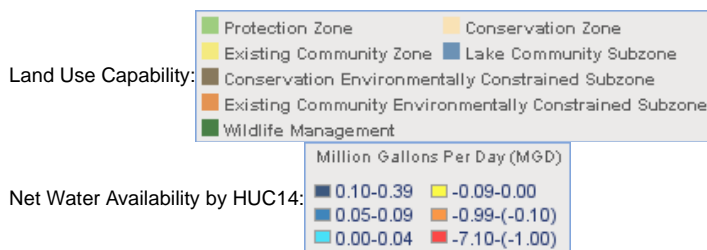






### Net Water Availability in Existing Community Zone

OFF VAN DAM & UNION AVE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00045  
12/23/2009



Identifies the portion of a HUC14 subwatershed within the Existing Community Zone.

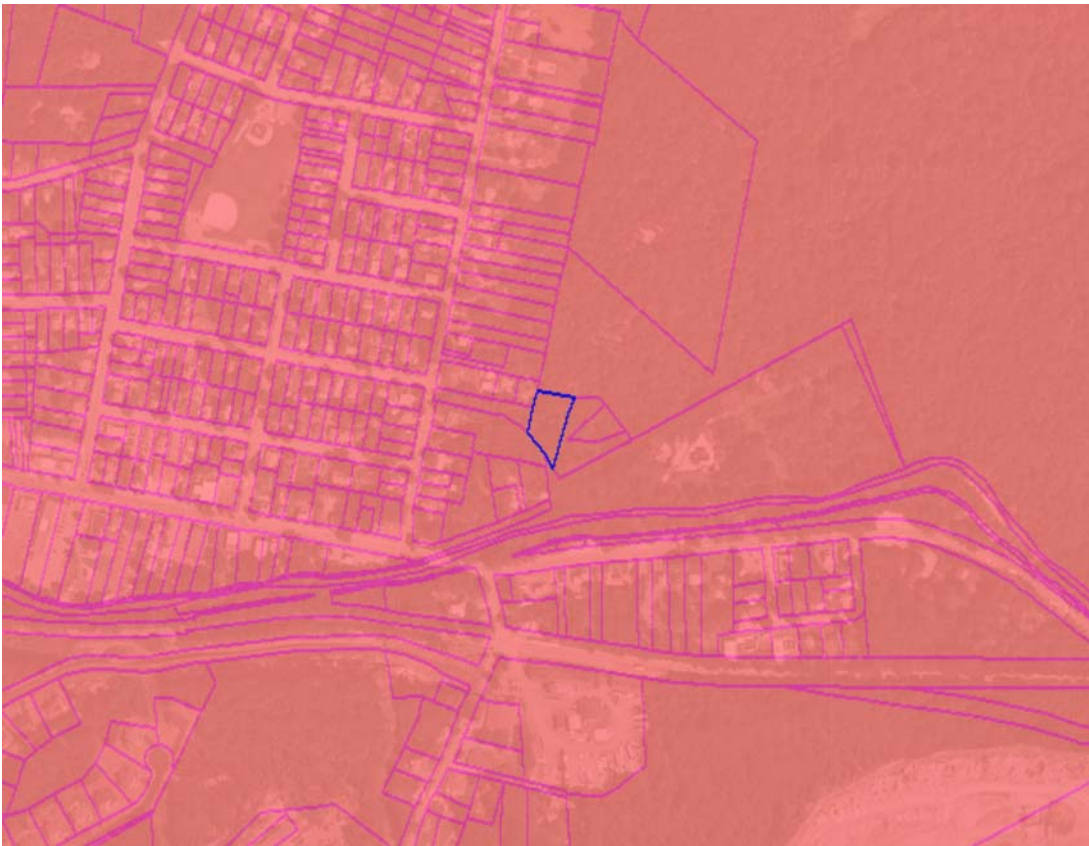
**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

**Objective 2B4b:** The highest priority for use of Net Water Availability or Conditional Water Availability within Existing Community Zone subwatersheds, through a Water Use and Conservation Plan developed under Objective 2B8c, local development review and Highlands Project review to serve documented 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% of the units are affordable, or new areas for development that meet all other requirements of the RMP.

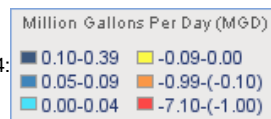
**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.

**Current Deficit Area**

OFF VAN DAM & UNION AVE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00045  
12/23/2009



Net Water Availability by HUC14:



Identifies HUC14 subwatersheds that are in deficit of Net Water Availability.

**Policy 2B6:** To require through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, Highlands Project Review, and interagency coordination that proposed public water supply and wastewater service areas, new or increased water allocations and bulk water purchases will not directly or indirectly cause or contribute to a Net Water Availability deficit, and where feasible will help mitigate any existing deficit.

**Objective 2B6a:** Areawide Water Quality Management Plans, Wastewater Management Plans or their amendments shall ensure that the proposed service area will not directly or indirectly cause or contribute to a Net Water Availability deficit, and shall be in conformance with any Water Use and Conservation Plan developed under Objective 2B8c.

**Policy 2B8:** To require through Plan Conformance, local development review, and Highlands Project Review the efficient and effective use of water availability, the planning for future water needs, the reduction and elimination of water deficits, and the mitigation of new consumptive or depletive use in any Current Deficit Areas or subwatersheds that could become deficit areas based on projected development and water uses, to ensure sustainable water supply, water resource and ecological values in conformance with RMP policies and objectives.

**Objective 2B8a:** Prevent net increases in consumptive or depletive water uses in Current Water Deficit Areas to prevent exacerbation of and help reduce or eliminate the deficit to ensure sustainable water supply, water resource and ecological values, emphasizing techniques



**Objective 2B8b:** Proposed new consumptive or depletive water uses within a Current Deficit Area shall only occur under the auspices of a Water Use and Conservation Management Plan approved under Objective 2B8c or through mitigation of the proposed consumptive or depletive use within the same HUC14 subwatershed through: a permanent reduction of existing consumptive and depletive water uses; ground water recharge in excess of the requirements of N.J.A.C. 7:8 (Stormwater Management Rules); or other permanent means. Where a Water Use and Conservation Management Plan has not been approved: 1. Each project shall achieve mitigation ranging from 125% to 200%, based on the severity of the Current Deficit and the amount of consumptive or depletive water use proposed; 2. Total consumptive and depletive water uses from any single project and all projects combined are not to exceed the Conditional Water Availability of Objectives 2B3a or 2B3b for any HUC14 subwatershed; 3. Mitigation shall be successfully completed prior to initiation of the water use, except as required by #4, below. Mitigation may be phased in keeping with project development; 4. For water uses where the combination of proposed consumptive and depletive water uses and current subwatershed deficit is high, according to a schedule established by the Highlands Council, off-site mitigation shall be successfully completed prior to any on-site construction. On-site mitigation shall be successfully completed prior to initiation of the water use but may be implemented concurrent with on-site construction. Mitigation may be phased in keeping with the level of consumptive or depletive water uses; and Mitigation plans for a project shall include: specific objectives for each mitigation component; monitoring and reporting requirements; methods by which shortfalls in meeting the mitigation objectives shall be addressed through additional action; and be guaranteed through performance bonds.

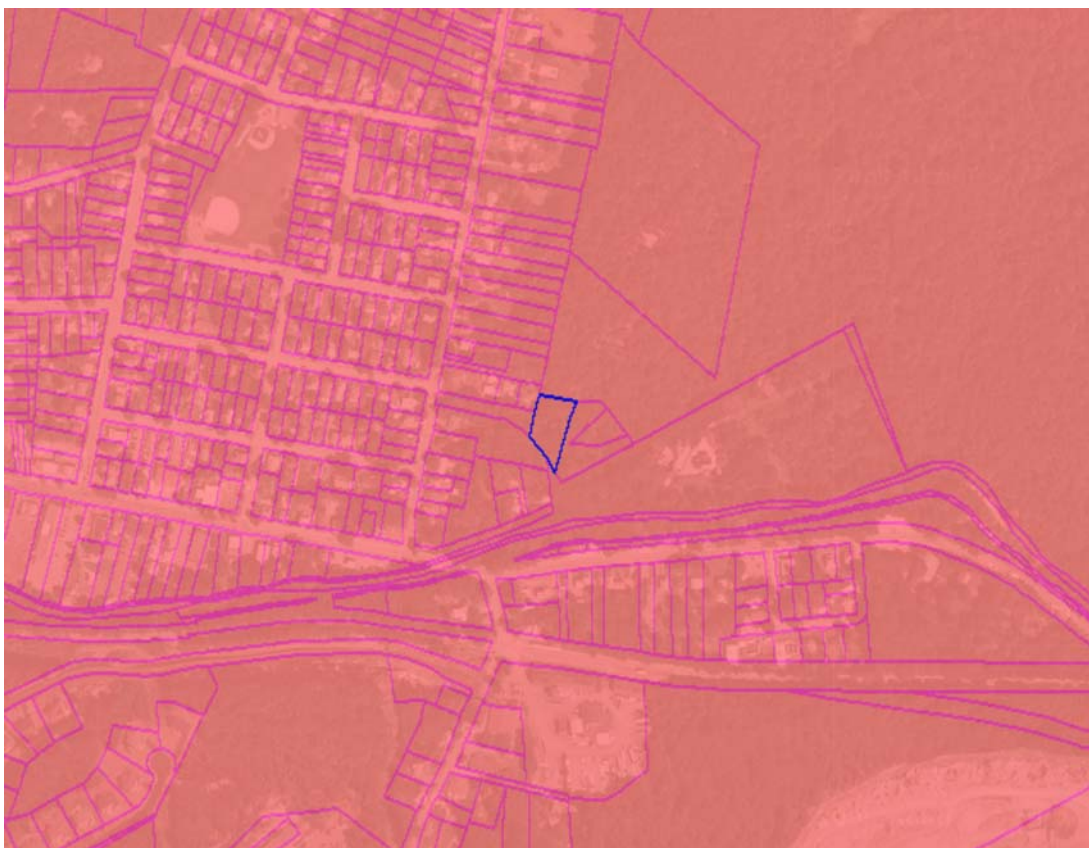
**Objective 2B8d:** All water users within a Current Deficit Area shall seek funding and opportunities to meet the intent of Objective 2B4b.

**Objective 2J2a:** Limit future water system demand and reduce existing demand where feasible by water systems that are dependent on Current Deficit Areas or Existing Constrained Areas as a source of water.

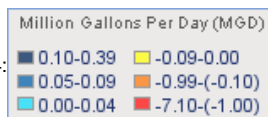


### Net Water Availability

OFF VAN DAM & UNION AVE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00045  
12/23/2009



Net Water Availability by HUC14:



Net Water Availability is calculated for each HUC14 subwatershed by deducting consumptive and depletive water uses from Ground Water Availability. The Regional Master Plan incorporates Net Water Availability as a capacity threshold on future water uses. 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 in deficit and deemed to be a Current Deficit Area. In Current Deficit Areas where a Water Use and Conservation Management Plan has not yet been adopted, limited amounts of Conditional Water Availability are provided. The use of Net Water Availability or Conditional Water Availability is subject to Regional Master Plan policies.

**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.

**Policy 2B7:** To ensure through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, and Highlands Project Review that the use of Net Water Availability and Conditional Water Availability within each subwatershed supports development patterns that are in conformance with RMP policies and objectives.

**Objective 2B8c:** Water Use and Conservation Management Plans shall be required through municipal Plan Conformance for all subwatersheds to meet the policies and objectives of Goal

**Objective 2J2b:** Limit future water system demands to levels that will not create a Current Deficit Area where one does not currently exist.

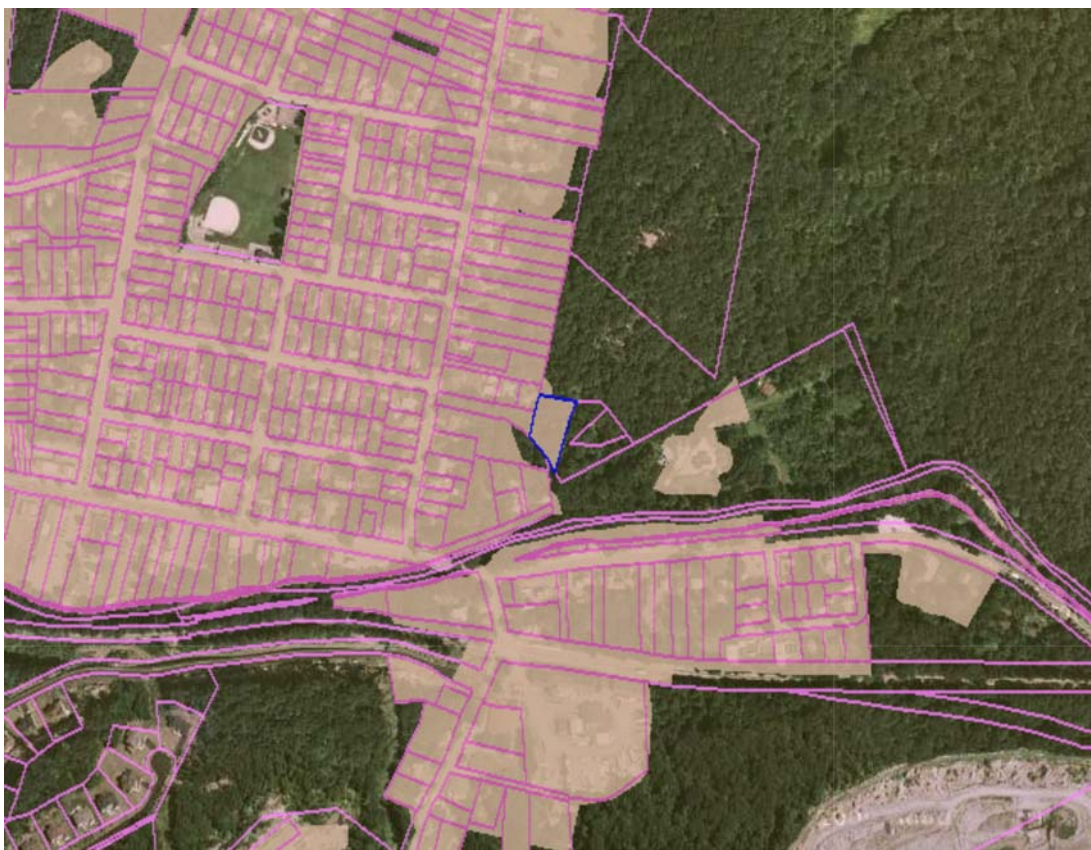






### Highlands Domestic Sewerage Facilities

OFF VAN DAM & UNION AVE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00045  
12/23/2009



Highlands Domestic Sewerage Facilities: ■

Highlands Domestic Sewerage Facilities displays those areas served by public wastewater utilities. The map indicates areas that are actually connected into a public wastewater collection system, not simply located in a Sewer Service Area. Public sewer systems discharging less than 0.15 million gallons per day (MGD) to surface water or 0.075 MGD to ground water are not included. Private, on-site treatment facilities like a package treatment plant are also not included. The Regional Master Plan limits the creation or extension of public wastewater systems.

**Objective 2J4b:** Clustered development served by public water supply within the Protection Zone, the Conservation Zone, and the Environmentally-Constrained Sub-zones of the Planning Area shall be approved only if the following conditions are met: 1. The development impacts are otherwise consistent with the requirements of the RMP, including provisions for mandatory clustering in Agricultural Resource Areas pursuant to Policy 3A5; 2. Extension of an existing public water system will occur only where the cluster development is within or immediately adjacent to an Existing Area Served with available capacity; 3. Creation of a new public water system will occur only where such development is not within or immediately adjacent to an Existing Area Served with available capacity; 4. The clustered development preserves at least 80% of the cluster project area in perpetuity for environmental protection or agricultural purposes. To the maximum extent feasible the developed portion (i.e., not including wetlands, Highlands Open Waters buffers, and recreational lands) occupies no more than 10% of the cluster project area if served by a public or community on-site wastewater system; and 5. Where the preserved land in the cluster project area is dedicated to agricultural purposes, the cluster development ordinance and an Agriculture Retention/Farmland Preservation Plan supports continued agricultural viability of the agricultural land and requires the implementation of best management practices, including development and implementation of a Farm Conservation Plan that addresses the protection of water and soil resources prepared by the USDA Natural Resources Conservation Service (NRCS), Technical Service Provider (TSP), appropriate agent or NJDA staff, and approved by the local Soil Conservation District (SCD).

**Policy 2J6:** To encourage water recycling/reuse measures, such as domestic and institutional gray water systems, where appropriate, to minimize water use in existing land uses.

**Objective 211a:** Designated sewer service areas in the Preservation Area shall be restricted to the Existing Area Served as of August 10, 2004, except to serve development that is approved through a HAD or a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1.

**Policy 2K2:** To base projected demand for current needs, appropriate economic revitalization and opportunities for designated TDR Receiving Zones within Existing Areas Served on existing maximum three month demands plus an estimate of redevelopment needs based on either Highlands Council regional analyses or more detailed local analyses, to assess whether there is adequate treatment capacity to encourage redevelopment.

**Objective 2K3d:** Clustered development served by a public wastewater collection and treatment system or community on-site treatment facility within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area shall be approved only if the following conditions are met: 1. The development impacts are otherwise consistent with the requirements of the RMP, including provisions for mandatory clustering in Agricultural Resource Areas; 2. Extension of an existing public wastewater collection and treatment system will occur only where the cluster development is within or immediately adjacent to an Existing Area Served with available capacity; 3. Creation of a community on-site treatment facility will occur only where such development is not within or immediately adjacent to an Existing Area Served with available capacity, where the proposed system is designed, permitted, and constructed at a capacity limited to the needs of the clustered development, and where the system does not create the potential for future expansion into areas that are not the subject of cluster developments immediately adjacent to the initial cluster served; 4. The cluster development preserves at least 80% of the cluster project area in perpetuity for environmental protection or agriculture purposes. To the maximum extent feasible the developed portion of the project area (e.g., not including wetlands, Highlands Open Waters buffers, and recreational lands) occupies no more than 10% of the cluster project area if served by a public or community on-site wastewater system; and 5. Where the preserved land in the cluster project area is dedicated to agricultural purposes, the cluster development ordinance and an Agriculture Retention/Farmland Preservation Plan supports continued agricultural viability of the agricultural land and requires the implementation of best management practices, including development and implementation of a Farm Conservation Plan that addresses the protection of water and soil resources prepared by the USDA Natural Resources Conservation Service (NRCS), Technical Service Provider (TSP), appropriate agent or NJDA staff, and approved by the local Soil Conservation District (SCD).

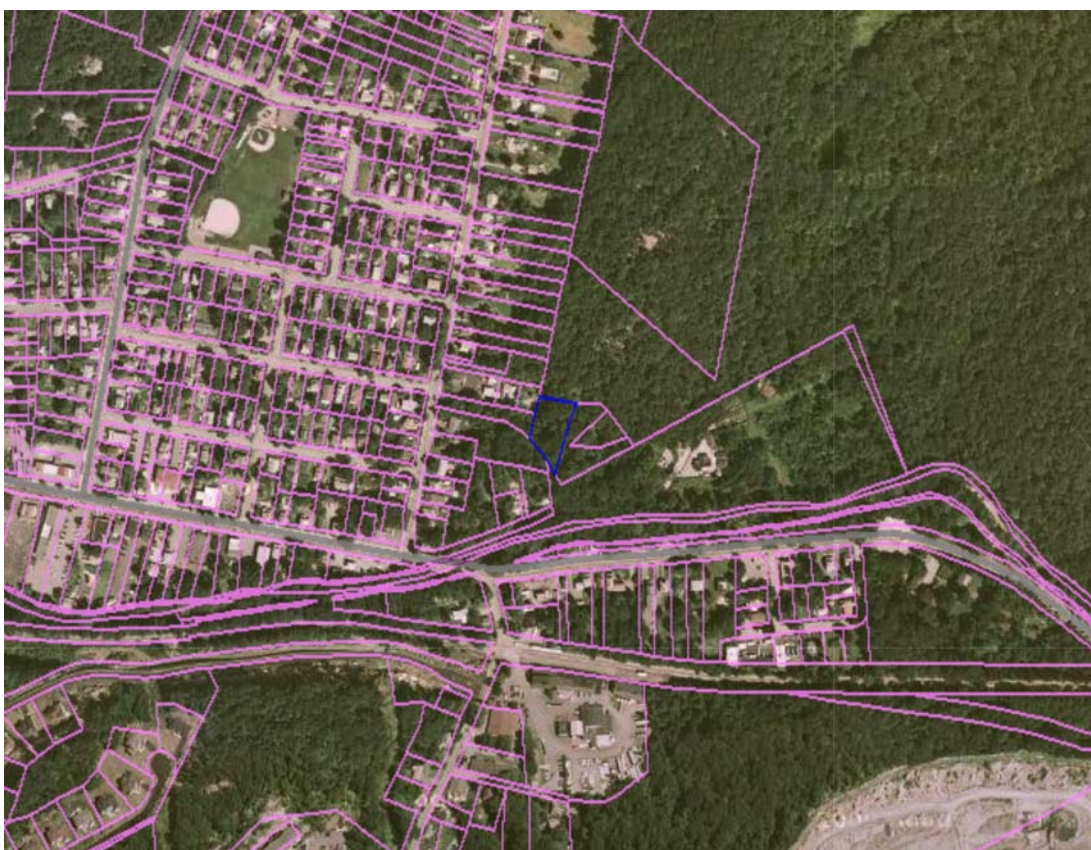
**Objective 2K3e:** Allow the expansion or creation of wastewater collection systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to those provided at Objective 2K3c within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. The highest priority for allocation of excess or additional wastewater treatment capacity is to areas where there are clusters of failed septic systems that are located within or adjacent to Existing Areas Served. TDR Receiving Areas, where designated, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than other developments requiring expansion of sewer service areas.





Includes all developed lands within a 1/2 mile buffer from all freight rail networks.

**Objective 5A2a:** Encourage the movement of goods from the roadway network to the freight rail network wherever possible.



Private Bus Routes:

Rail Stations:

- Bergen + Main Line
- Montclair Boonton Line
- Morris + Essex Line - Gladstone Branch
- Morris + Essex Line - Morristown Branch
- Raritan Valley Line

Park & Ride Sites: 

Includes all developed lands within a 1/2 mile buffer from all park and ride locations, rail stations, and NJ Transit public and major private bus routes in or within 1/2 mile of the Highlands Region.

**Objective 5E1b:** Development and redevelopment in close proximity to rail stations and along bus routes.





Means lands within the Highlands Region which are not within the Preservation Area.

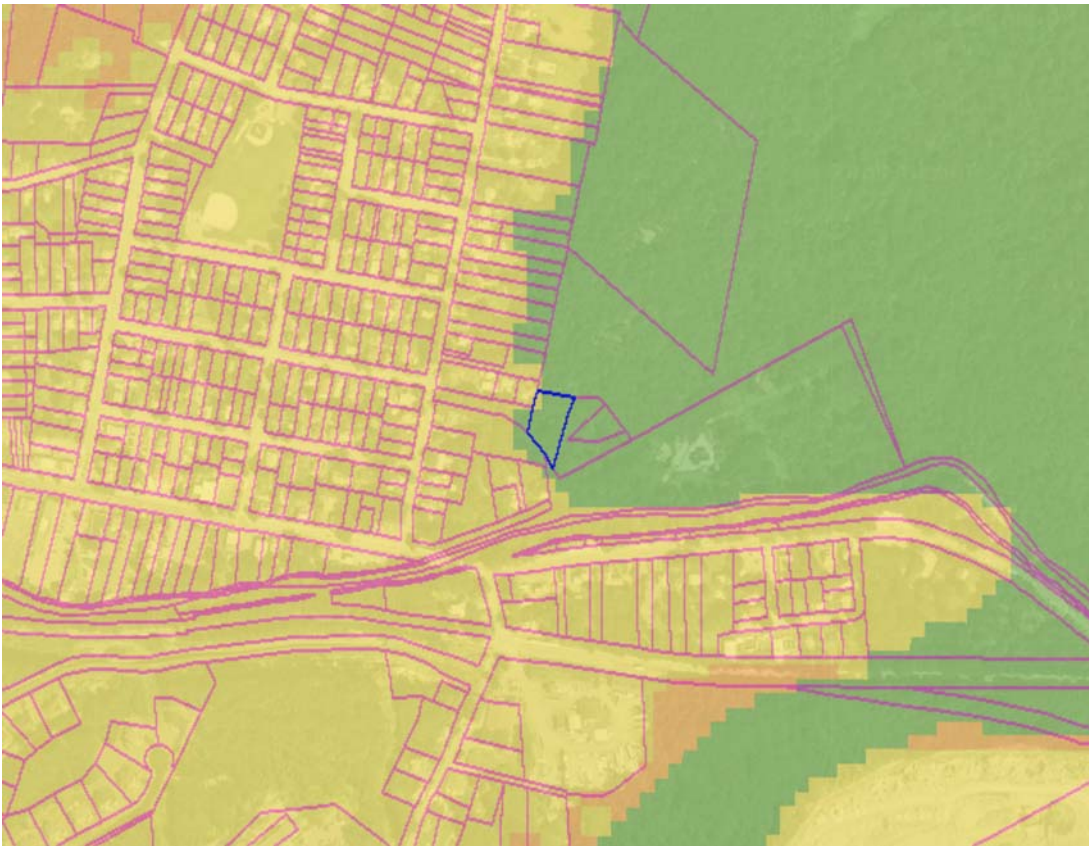
**Objective 7F1d:** Planning Area exemptions, issued by the Highlands Council, shall be required, where appropriate, prior to consideration of a local development review or a Highlands Project Review. Guidance shall specify the exceptions where a review may proceed absent such an exemption determination. Applications for exemptions submitted to the Highlands Council shall be based upon the application requirements exemptions codified in N.J.A.C. 7:38.





### Protection Zone

OFF VAN DAM & UNION AVE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00045  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Consists of high natural resource value lands that are important to maintaining water quality, water quantity and sensitive ecological resources and processes.

**Policy 6C1:** To limit new human development in the Protection Zone to redevelopment, exempt activities, and environmentally-compatible low density new land uses, in accordance with RMP resource protection needs and water quality and quantity capacity constraints and to ensure that the impacts of development using exemptions under the Highlands Act (see Policy 7F1) are considered in regional protection measures.

**Objective 6C1a:** Centers in the Protection Zone, potentially including clustered development, shall be at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan, and the use of septic systems or community wastewater systems.

**Policy 6C2:** To ensure through Plan Conformance, local development review and Highlands Project Review that any future development or redevelopment which does occur in a Protection Zone is subject to standards and criteria which protect the land and water resources of the Protection Zone from any potential adverse impact to the maximum extent possible.



### Protection Zone in Planning Area

OFF VAN DAM & UNION AVE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00045  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

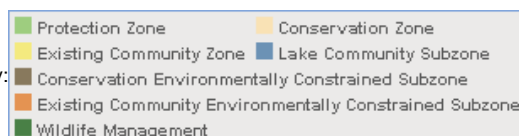
Planning Area / Preservation Area: Planning Area / Preservation Area

Includes the Protection Zone within the Planning Area.

**Objective 2L2a:** Use the median concentrations of nitrate in ground water for Planning Area HUC14 subwatersheds where the Protection Zone is predominant as the nitrate target for new development reliant on septic systems within the Protection Zone. The median is 0.72 mg/L.

**Policy 6J3:** To encourage redevelopment in the Conservation and Protection Zones in the Planning Area of brownfields and grayfields that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields, as approved through Plan Conformance or the Highlands Redevelopment Area Designation process.





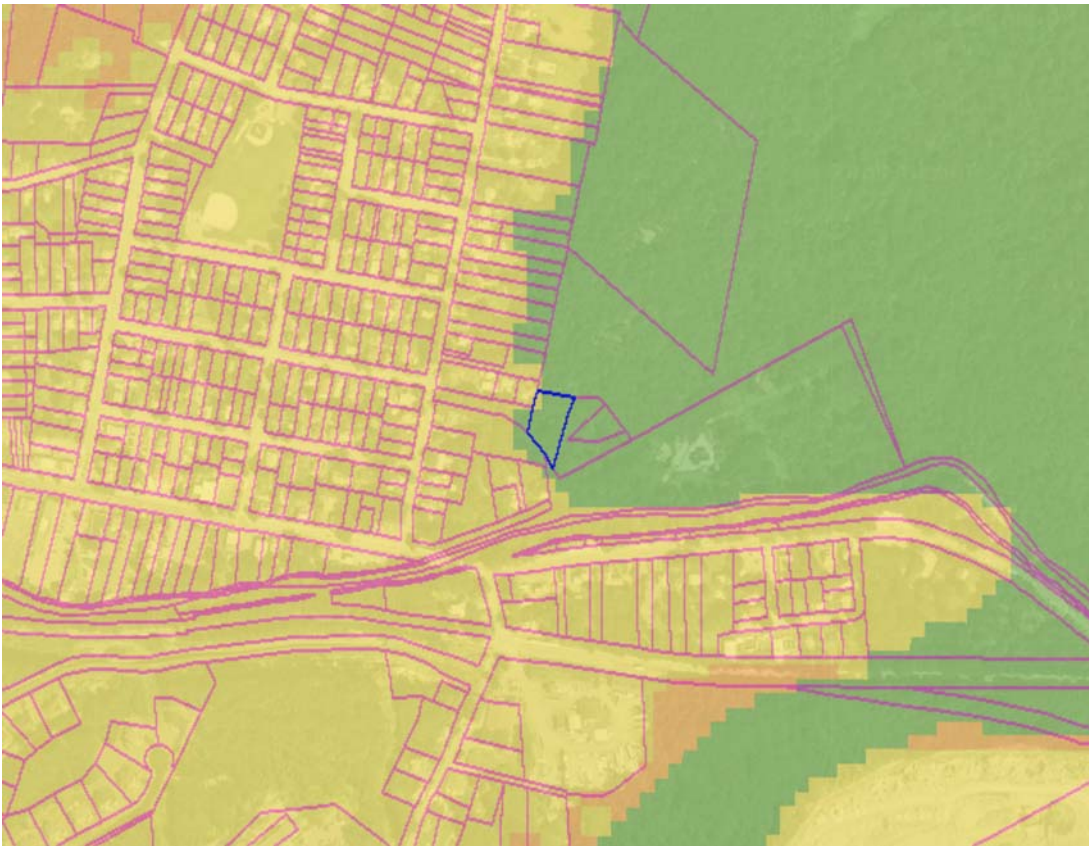
Includes both the Conservation Zone and the Protection Zone.





### Existing Community Zone

OFF VAN DAM & UNION AVE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00045  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Consists of areas with regionally significant concentrated development signifying existing communities.

**Objective 2J4c:** Allow the expansion or creation of public water systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to Objective 2J4a within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. TDR Receiving Zones, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than expansion of public water service areas within this Zone.

**Objective 2K3e:** Allow the expansion or creation of wastewater collection systems within the Existing Community Zone of the Planning Area, other than the Environmentally-Constrained Sub-zone, to serve lands which are appropriate for designated TDR Receiving Zones, infill or redevelopment, to meet needs and protection requirements equivalent to those provided at Objective 2K3c within the Existing Community Zone, or to serve new areas for development that meet all other requirements of the RMP. The highest priority for allocation of excess or additional wastewater treatment capacity is to areas where there are clusters of failed septic systems that are located within or adjacent to Existing Areas Served. TDR Receiving Areas, where designated, affordable housing projects (where the affordable units exceed 10% of the total units), infill and redevelopment shall have higher priority for capacity than other developments requiring expansion of sewer service areas.

**Policy 6F3:** To ensure that development activities within the Existing Community Zone are subject

**Objective 6F6a:** Center based development initiatives shall be planned within the Existing Community Zone at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan. Densities of five dwelling units and above are encouraged, and are required in areas designated as voluntary TDR Receiving Zones where TDR benefits are sought under the Highlands Act.



### Existing Community Zone in Planning Area

OFF VAN DAM & UNION AVE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00045  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes the Existing Community Zone within the Planning Area.

**Objective 2L2d:** Use a nitrate target of 2 mg/L for the Existing Community Zone within Planning Area, on a project-by-project basis, where new development will rely on septic systems.

**Policy 6J2:** To encourage redevelopment in the Existing Community Zone in the Planning Area of brownfields, grayfields, and other previously developed areas that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields, as approved through Plan Conformance or the Highlands Redevelopment Area Designation process.





Protection Zone
  Conservation Zone
  Existing Community Zone
  Lake Community Subzone

Conservation Environmentally Constrained Subzone
  Existing Community Environmentally Constrained Subzone

Wildlife Management

Planning Area / Preservation Area:  Planning Area /  Preservation Area

Includes the Protection Zone, Conservation Zone, Environmentally Constrained Sub-Zones and the Existing Community Zone within the Planning Area.

**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.



**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.

12/23/2009

Prepared by State of New Jersey Highlands Water Protection and Planning Council  
100 North Road (Route 513), Chester, NJ 07930  
Telephone: (908) 879-6737 Fax: (908) 879-4205

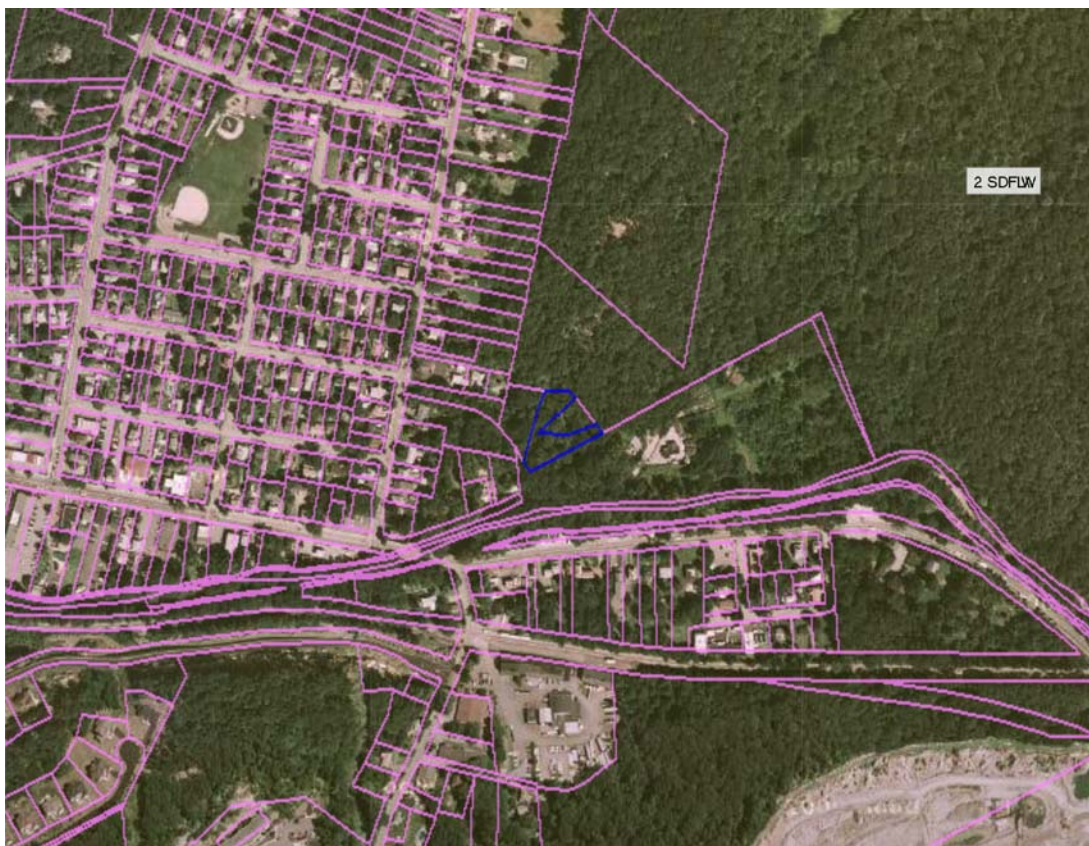


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## Disclaimer

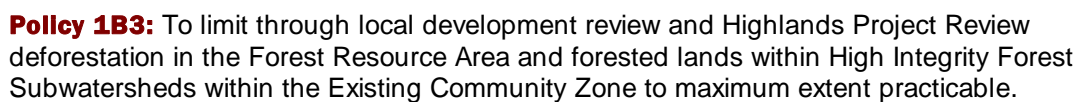
Please be advised that any reports generated from the online Consistency Review Application do not constitute a formal Consistency Determination from the Highlands Council. The information contained therein is provided solely for informational purposes and is not to be construed as providing advice, recommendations, endorsements, representations or warranties of any kind whatsoever.

40 BRANDT LANE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00046



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**Objective 1A2d:** To prohibit through Plan Conformance, local development review and Highlands Project Review the expansion or creation of public water supply systems or public wastewater collection and treatment systems or community-based on-site wastewater facilities into forested areas of the Forest Resource Area within the Planning Area except as provided for in Policy 2J4 with Objectives 2J4a through 2J4d, and Policy 2K3 with Objectives 2K3a through 2K3e, and within the Preservation Area except as provided for in Policy 2I1 and Objectives 2I1a and 2I1b.

**Policy 5C3:** To limit road improvements through local development review and Highlands Project Review where roads are constrained by topography, forested lands or the community character of land uses fronting on the road.





### Forest in Forest Resource Area in Planning Area

40 BRANDT LANE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00046

12/23/2009



Forest within Forest Resource Area:

Planning Area / Preservation Area: Planning Area / Preservation Area

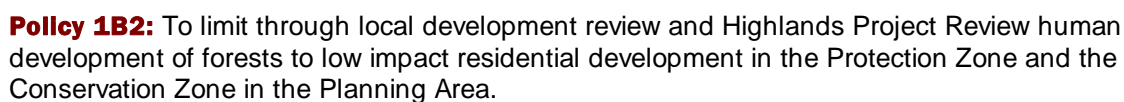
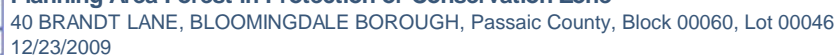
The Forest in Forest Resource Area in Planning Area data layer illustrates the forested lands located within the spatially delineated Forest Resource Area of the legislatively delineated Highlands Planning Area. The Regional Master Plan includes protection policies specific to forested lands in the Forest Resource Area in the Planning Area.

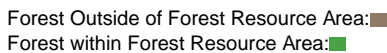
**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.





**Objective 1B3a:** Implementation through Plan Conformance of regulations, which limit the clearing of trees in conjunction with human development to circumstances where the clearing will not diminish the integrity of forest resources.

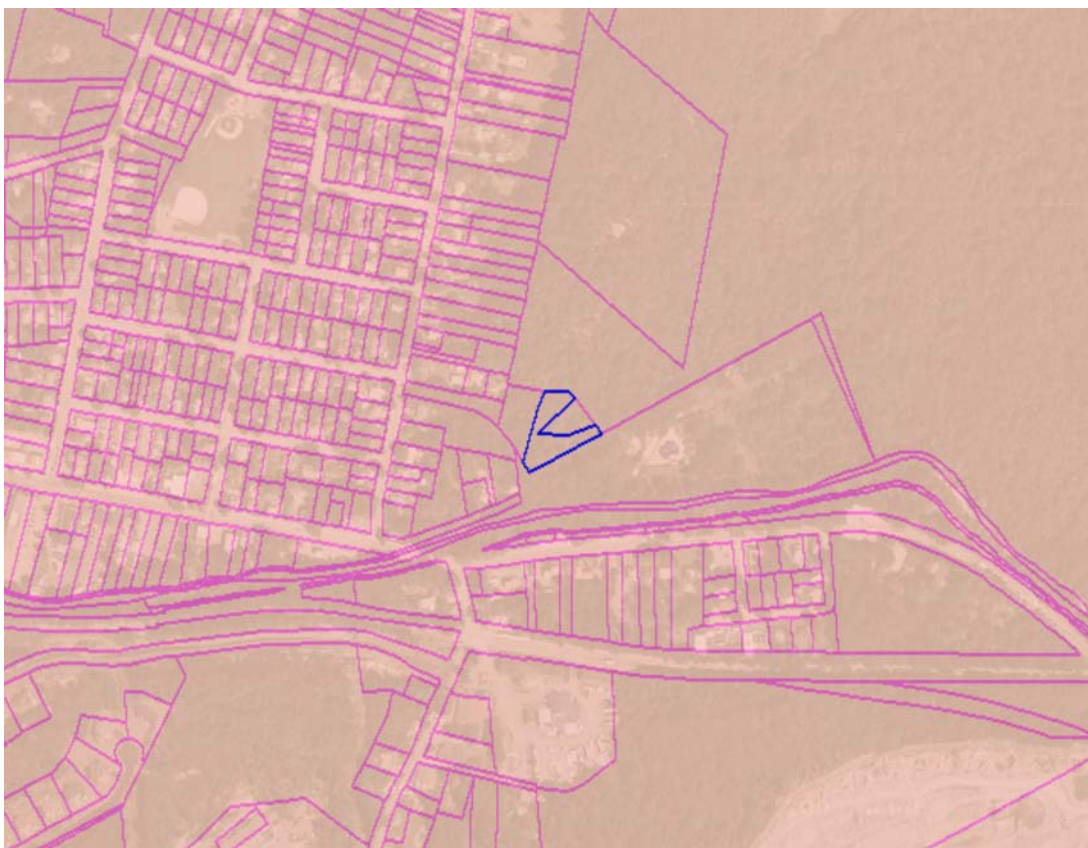
**Objective 1B5a:** Applications for local development review and Highlands Project Review require identification of any forest area on and adjacent to a site in accordance with the Highlands Councils Method for Identifying Upland Forest Areas in the Highlands Region.

**Policy 1C3:** To require that conforming municipalities adopt a tree clearing ordinance consistent with an approved community forestry plan under the New Jersey Forest Service Community Forestry Program as part of the municipal master plan and local development regulations.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID







High Integrity Forest Subwatershed is a component of the Forest Integrity Value data layer. This data layer represents forest cover integrity in the Region at the watershed level because forests are important for the protection of water quality and quantity.

**Policy 1C1:** To require that conforming municipalities and counties address the protection of forested portions of Forest Resource Areas and High Integrity Forest Subwatersheds in their master plans and development regulations.



**Policy 1D4:** Highlands Open Waters shall include a protection buffer of 300 feet from the edge of the discernable bank of the Highlands Open Waters feature, or from the centerline where no discernable bank exists. With respect to wetlands and other Highlands Open Waters features (e.g., seeps, springs, etc.), the feature shall include a protection buffer of 300 feet from the delineated Letter of Interpretation (LOI) line issued by the NJDEP for wetlands, or from a field-delineated boundary for other features. In areas where existing development or land uses within the protection buffers have reduced or impaired the functional values of the buffers, the Council will seek opportunities to restore the buffer and its functions. Any proposed disturbance shall, through local development review and Highlands Project Review, comply with Highlands Open Waters buffer standards. The protection buffer width for Category 2 streams in the Planning Area may be modified through a Stream Corridor Protection/Restoration Plan, as specified in Objective 1D4i. In approved Redevelopment Areas, the Council may, at its discretion, modify the required buffer, upon a showing of no alternatives, no impact to the functional value of the buffer, and provision of alternative approaches to enhancing or protecting Highlands Open Waters and resources of the buffer area.

**Objective 1D4c:** Require that proposed development within all Highlands Open Waters buffers (Preservation and Planning Areas) conforms through local development review and Highlands Project Review with the buffer requirements of N.J.A.C. 7:8 (Stormwater Management Rules),



**Objective 1D4i:** Develop through Plan Conformance and implement stream corridor or subwatershed-based Stream Corridor Protection/Restoration Plans which shall include Steps 1, 2, and 3, and may include Steps 4 and 5: 1. Identify areas where existing development, land disturbances, or land uses are within Highlands Open Waters buffers have removed or substantially impaired natural vegetation communities, and have significantly reduced or impaired the functional values of Highlands Open Waters buffers. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland usesq; 2. Identify and require opportunities for restoration of areas identified in Step 1 as part of mitigation requirements under a Highlands Act waiver or Objectives 1D4e and 1D4f, and public or nongovernmental restoration/stabilization projects; 3. Identify the extent of stream corridor features that are critical to supporting the functions of a healthy Highlands Open Waters buffer and that extend beyond the buffers required by Objectives 1D4b and 1D4c. The 300 foot buffer in these areas may be expanded to be most protective of these features which may include, but are not limited to, Critical Habitat, pollutant source areas identified through scientific techniques, and steep slopes; 4. Where Highlands Open Waters buffers include areas identified in Step 1, regarding Category 2 surface waters in the Planning Area only, the Stream Corridor Protection/Restoration Plan may identify where, based on scientific analysis of site-specific conditions (e.g., topography, vegetation cover type, habitat, soil type, upstream land uses and pollution inputs, width of floodplain, rate and volume of run-off), a buffer of less than the full 300 feet (but including the undisturbed buffer area at a minimum) is sufficient to maintain or improve the protection of Highlands Open Waters and Riparian Areas. The plan must identify alternative buffers that provide functional buffer values at least equivalent to existing conditions and are no less than 150 feet or no less than the extent allowed in State or municipal regulation (including Objectives 1D4b and 1D4c), whichever is greater. Further, the plan shall include a functional value assessment to ensure that there is no net loss in the overall functional value of the subwatershedos stream buffers. Buffers established through this process shall be determined based on site conditions rather than fixed distances, reflecting findings of the scientific analysis, and shall be used in the site design and development review process regarding determinations of restoration, continued use, or increased use of the disturbed buffer area. Buffer averaging for the purpose of accommodating development proposals is deemed not to meet the requirements of this provision; and 5. Where a proposed Highlands Redevelopment Area would not meet, in full, Objectives 1D4b through 1D4h but affects an undisturbed buffer area determined to not be necessary for the protection of the functional values for Highlands Open Waters buffer (as determined through scientific analysis of site-specific conditions), modification of the undisturbed buffer may be allowed to no less than the extent allowed in State or municipal regulation. However the Council shall first determine that there is no alternative to the proposed reduction of the buffer, and require a showing of no impact to the functional values of the buffer and provision of alternative approaches to enhancing or protecting the Highlands Open Waters and resources of the buffer area. Restoration or enhancement of buffer functional values shall be provided on-site or within the same stream reach to achieve a net improvement of existing buffer functional values.

**Objective 1D5b:** 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.

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**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

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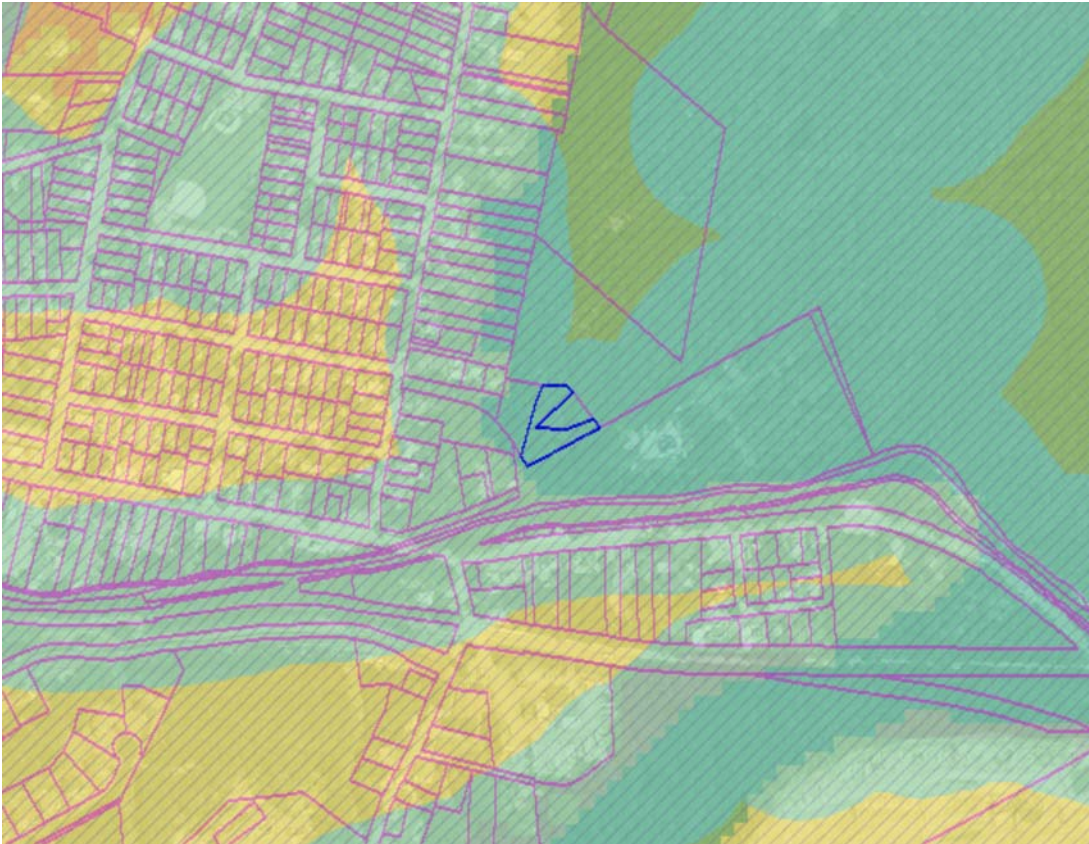


**Objective 1D4d:** Structures or other land improvements existing within a Highlands Open Waters buffer of the Planning Area on August 10, 2004 may remain, provided that the area of disturbance shall not be increased unless approved through local development review or Highlands Project Review in compliance with RMP policies and objectives. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q



## Highlands Open Waters Protection Buffers in Conservation or Protection Zone in Planning Area

40 BRANDT LANE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00046  
12/23/2009



Open Water Protection Area:  

Land Use Capability:

<span style="background-color: #90EE90; border: 1px solid black; padding: 0 5px;"> </span> Protection Zone	<span style="background-color: #FFD700; border: 1px solid black; padding: 0 5px;"> </span> Conservation Zone
<span style="background-color: #FFFF00; border: 1px solid black; padding: 0 5px;"> </span> Existing Community Zone	<span style="background-color: #4682B4; border: 1px solid black; padding: 0 5px;"> </span> Lake Community Subzone
<span style="background-color: #8B4513; border: 1px solid black; padding: 0 5px;"> </span> Conservation Environmentally Constrained Subzone	<span style="background-color: #FF8C00; border: 1px solid black; padding: 0 5px;"> </span> Existing Community Environmentally Constrained Subzone
<span style="background-color: #228B22; border: 1px solid black; padding: 0 5px;"> </span> Wildlife Management	

Planning Area / Preservation Area:   Planning Area /   Preservation Area

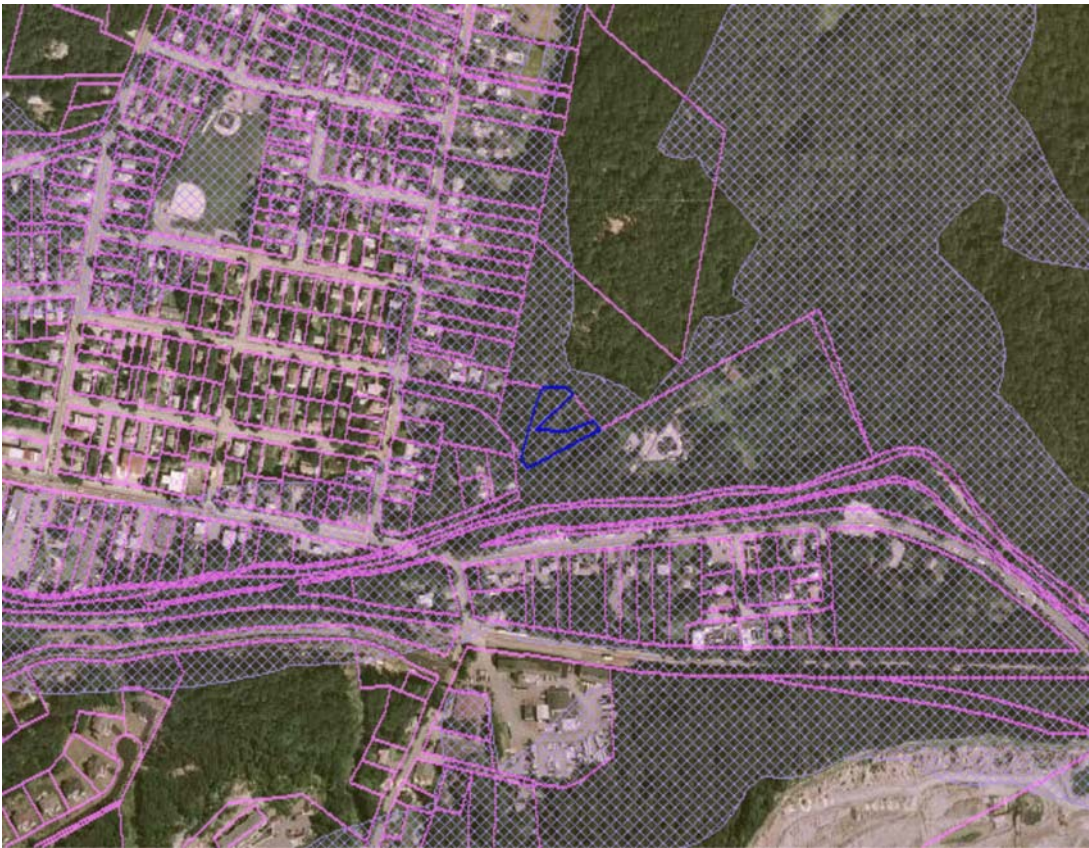
Includes all Highlands Open Waters protection buffers within the Protection and Conservation Zones of the Planning Area.

**Objective 1D4e:** In the Protection and Conservation Zones of the Planning Area, proposed disturbances of Highlands Open Waters buffers shall only occur in previously disturbed areas, unless a waiver is granted by the Highlands Council under Policy 7G2. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q Such proposed disturbances must demonstrate full utilization of the following performance standards in the listed order, to demonstrate the necessity of an encroachment into Highlands Open Waters buffers: 1) avoid the disturbance of Highlands Open Waters buffers; 2) minimize impacts to Highlands Open Waters buffers; and 3) mitigate all adverse impacts to Highlands Open Waters buffers so that there is no net loss of the functional value of the buffer, in compliance with Objective 1D4h. Minimization and mitigation opportunities shall be considered only upon a clear and convincing demonstration by the applicant that the protection buffer cannot be avoided and in no case shall the remaining buffer be reduced to less than 150 feet from the edge of Highlands Open Waters, unless a waiver is granted by the Highlands Council under Policy 7G2 and the proposed disturbance complies with Objective 1D4c.



**Riparian Area**

40 BRANDT LANE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00046  
12/23/2009



Riparian Corridor Integrity Score: HIGH MODERATE LOW

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. Riparian Areas serve as an interface between surface water bodies and terrestrial ecosystems and play a critical role in maintaining the quality and ecological integrity of Highlands Open Waters.

**Objective 1D5b:** 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.

**Objective 1D5e:** 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, in compliance with Policies 6N3 and 6N4 and provide for mitigation through restoration of impaired Riparian Areas in the same HUC14 subwatershed.

**Objective 1D5f:** Require that development within Riparian Areas conforms through local development review and Highlands Project Review to any applicable requirements of a Regional Stormwater Plan adopted pursuant to N.J.A.C. 7:8 (Stormwater Management Rules).

**Objective 1D5g:** Require identification and implementation of opportunities where the restoration and enhancement of previously impaired Riparian Areas are feasible and appropriate as mitigation to any allowable modification to Riparian Area requirements.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall



**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

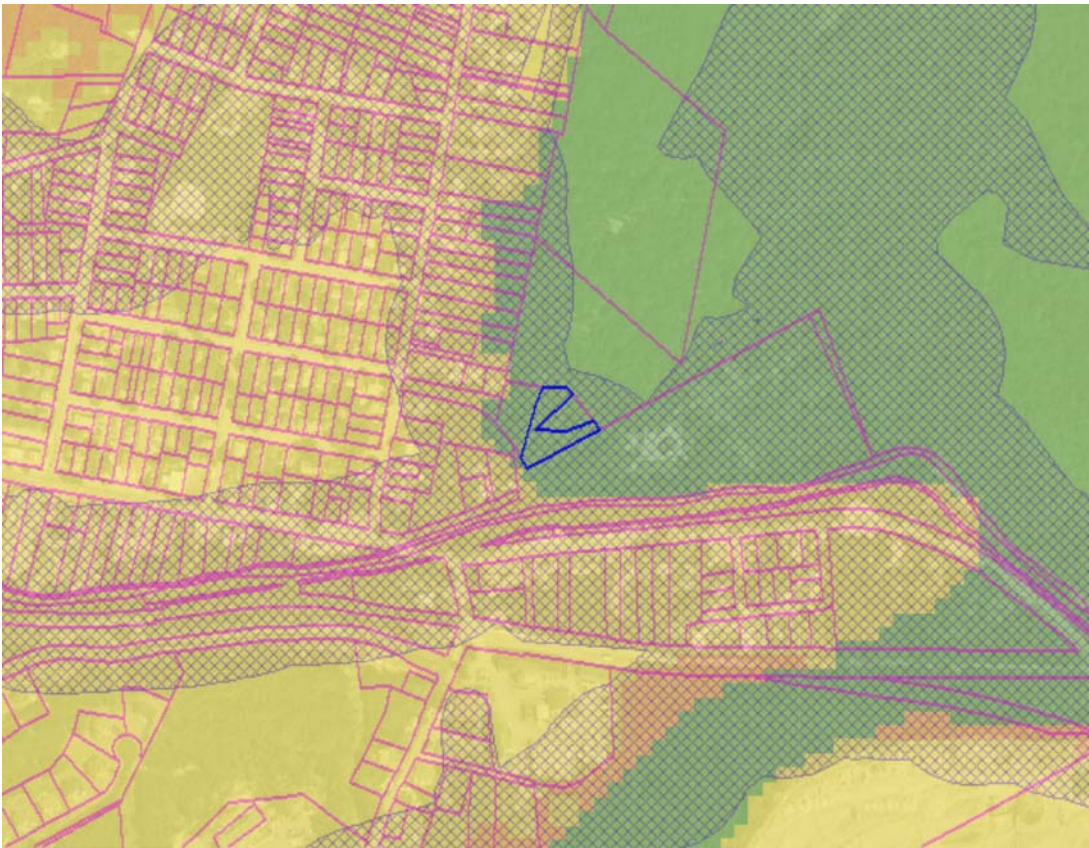
**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.



### Riparian Area in Protection Zone

40 BRANDT LANE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00046

12/23/2009



Land Use Capability:

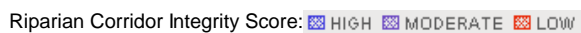
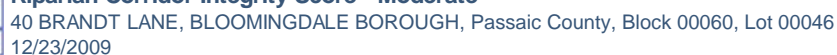
Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Riparian Corridor Integrity Score: HIGH MODERATE LOW

Includes all Riparian Areas within the Protection Zone.

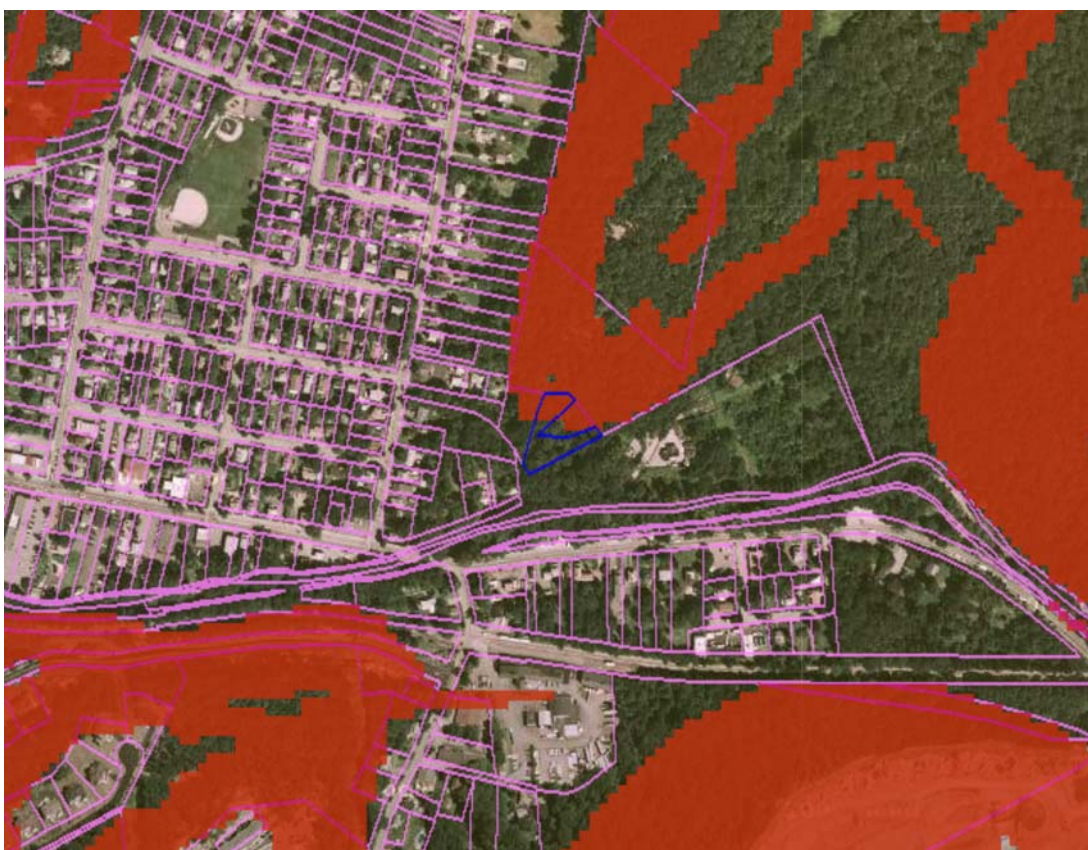
**Objective 1D5c:** Prohibit modifications to Riparian Areas in the Protection Zone except where a waiver is approved by the NJDEP or the Highlands Council under Policy 7G1 or 7G2.





**Objective 1D5b:** 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.





Slope is a measurement of the steepness of terrain and is defined as the vertical change in elevation over a given horizontal distance. Disturbance of areas containing steep slopes can trigger erosion and sedimentation, resulting in the loss of topsoil. It can also result in the disturbance of habitats, degradation of surface water quality, silting of wetlands, and alteration of drainage patterns. The Highlands Council examined areas of slope in the Highlands Region that exhibited one of the following grade classifications and these grades were established as Steep Slope Protection Areas: 1) grades of slopes of 20% or greater; 2) grades of slope between 15 - 20%; and 3) grades of slope between 10 - 15% that occur within the Riparian Area.

**Policy 1E7:** To require through local development review and Highlands Project Review that applications for development involving parcels of land with slopes of 10% or greater include identification of forested lands, areas which are highly susceptible to erosion, depth to bedrock and Soil Capability Classes.

**Objective 211b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

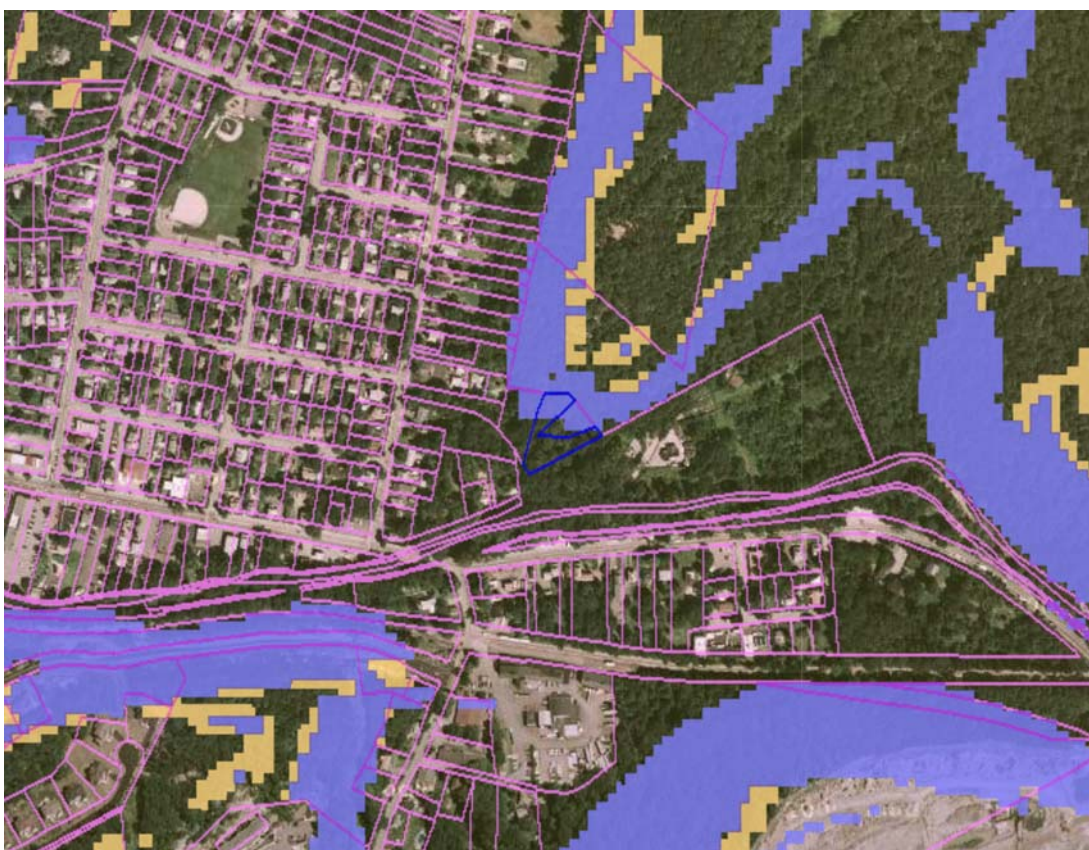
**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.





Severely Constrained Slopes: 

**Policy 1E8:** To prohibit through local development review and Highlands Project Review land disturbance within areas which are Severely Constrained Slopes and Moderately Constrained Slopes, except for linear development in both the Preservation and Planning Areas that meets the requirements of N.J.A.C. 7:38-3.8(c)1-4.

**Objective 2D4a:** 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 Steep Slopes.





**Objective 1F6b:** Prohibit indirect impacts from activity that is off-site, adjacent to, or within Critical Habitat that will jeopardize the continued existence of, or result in the likelihood of the destruction

**Objective 1F6c:** Waiver applications under Policy 7G2 for local development in a municipality with a Council-approved Critical Habitat Conservation and Management Plan shall be subject to the minimum standards and criteria for waiver provisions as set forth in the plan, to the maximum extent practicable.

**Objective 1F6f:** A Critical Wildlife Habitat area or Significant Natural Area delineation may be modified if an applicant can demonstrate, to the satisfaction of the Highlands Council in coordination with the NJDEPs Endangered and Nongame Species Program or Natural Heritage Program, that: 1. The nature of the site is such that it does not provide habitat for species of concern; 2. The species of concern are not present on the site during any critical part of their life cycle, do not depend upon the site for food, shelter or breeding, and the habitat; on the site is either unsuitable or not critical to species recovery in the Region; or 3. Existing land uses present a human, natural or development barrier to the use of the site by species of concern. Requirements for demonstrating the above criteria shall be included in the Critical Habitat Conservation and Management Plan.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas,

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.





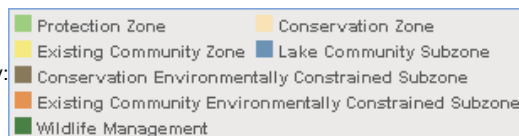
### Net Water Availability in Protection or Conservation Zone

40 BRANDT LANE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00046

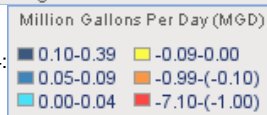
12/23/2009



Land Use Capability:



Net Water Availability by HUC14:



Identifies the portion of a HUC14 subwatershed within the Protection or Conservation Zone.

**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

**Objective 2B4a:** Give highest priority for the use of non-agricultural Net Water Availability or Conditional Water Availability within Protection Zone and Conservation Zone subwatersheds, through a Water Use and Conservation Plan developed under Objective 2B8c, local development review, and Highlands Project review: 1. To address a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for Net Water Availability; 2. To serve a designated Highlands Redevelopment Area; 3. To serve a cluster development that complies with Objective 2J4b; and 4. To serve affordable housing projects where at least 10% of the units are affordable.

**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.

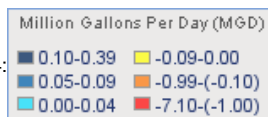


**Current Deficit Area**

40 BRANDT LANE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00046  
12/23/2009



Net Water Availability by HUC14:



Identifies HUC14 subwatersheds that are in deficit of Net Water Availability.

**Policy 2B6:** To require through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, Highlands Project Review, and interagency coordination that proposed public water supply and wastewater service areas, new or increased water allocations and bulk water purchases will not directly or indirectly cause or contribute to a Net Water Availability deficit, and where feasible will help mitigate any existing deficit.

**Objective 2B6a:** Areawide Water Quality Management Plans, Wastewater Management Plans or their amendments shall ensure that the proposed service area will not directly or indirectly cause or contribute to a Net Water Availability deficit, and shall be in conformance with any Water Use and Conservation Plan developed under Objective 2B8c.

**Policy 2B8:** To require through Plan Conformance, local development review, and Highlands Project Review the efficient and effective use of water availability, the planning for future water needs, the reduction and elimination of water deficits, and the mitigation of new consumptive or depletive use in any Current Deficit Areas or subwatersheds that could become deficit areas based on projected development and water uses, to ensure sustainable water supply, water resource and ecological values in conformance with RMP policies and objectives.

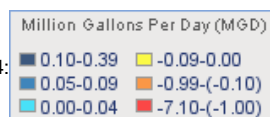
**Objective 2B8a:** Prevent net increases in consumptive or depletive water uses in Current Water Deficit Areas to prevent exacerbation of and help reduce or eliminate the deficit to ensure sustainable water supply, water resource and ecological values, emphasizing techniques



**Objective 2B8b:** Proposed new consumptive or depletive water uses within a Current Deficit Area shall only occur under the auspices of a Water Use and Conservation Management Plan approved under Objective 2B8c or through mitigation of the proposed consumptive or depletive use within the same HUC14 subwatershed through: a permanent reduction of existing consumptive and depletive water uses; ground water recharge in excess of the requirements of N.J.A.C. 7:8 (Stormwater Management Rules); or other permanent means. Where a Water Use and Conservation Management Plan has not been approved: 1. Each project shall achieve mitigation ranging from 125% to 200%, based on the severity of the Current Deficit and the amount of consumptive or depletive water use proposed; 2. Total consumptive and depletive water uses from any single project and all projects combined are not to exceed the Conditional Water Availability of Objectives 2B3a or 2B3b for any HUC14 subwatershed; 3. Mitigation shall be successfully completed prior to initiation of the water use, except as required by #4, below. Mitigation may be phased in keeping with project development; 4. For water uses where the combination of proposed consumptive and depletive water uses and current subwatershed deficit is high, according to a schedule established by the Highlands Council, off-site mitigation shall be successfully completed prior to any on-site construction. On-site mitigation shall be successfully completed prior to initiation of the water use but may be implemented concurrent with on-site construction. Mitigation may be phased in keeping with the level of consumptive or depletive water uses; and Mitigation plans for a project shall include: specific objectives for each mitigation component; monitoring and reporting requirements; methods by which shortfalls in meeting the mitigation objectives shall be addressed through additional action; and be guaranteed through performance bonds.

**Objective 2B8d:** All water users within a Current Deficit Area shall seek funding and opportunities to meet the intent of Objective 2B4b.

**Objective 2J2a:** Limit future water system demand and reduce existing demand where feasible by water systems that are dependent on Current Deficit Areas or Existing Constrained Areas as a source of water.



■ 0.10-0.39   ■ -0.09-0.00  
 ■ 0.05-0.09   ■ -0.99-(-0.10)  
 ■ 0.00-0.04   ■ -7.10-(-1.00)

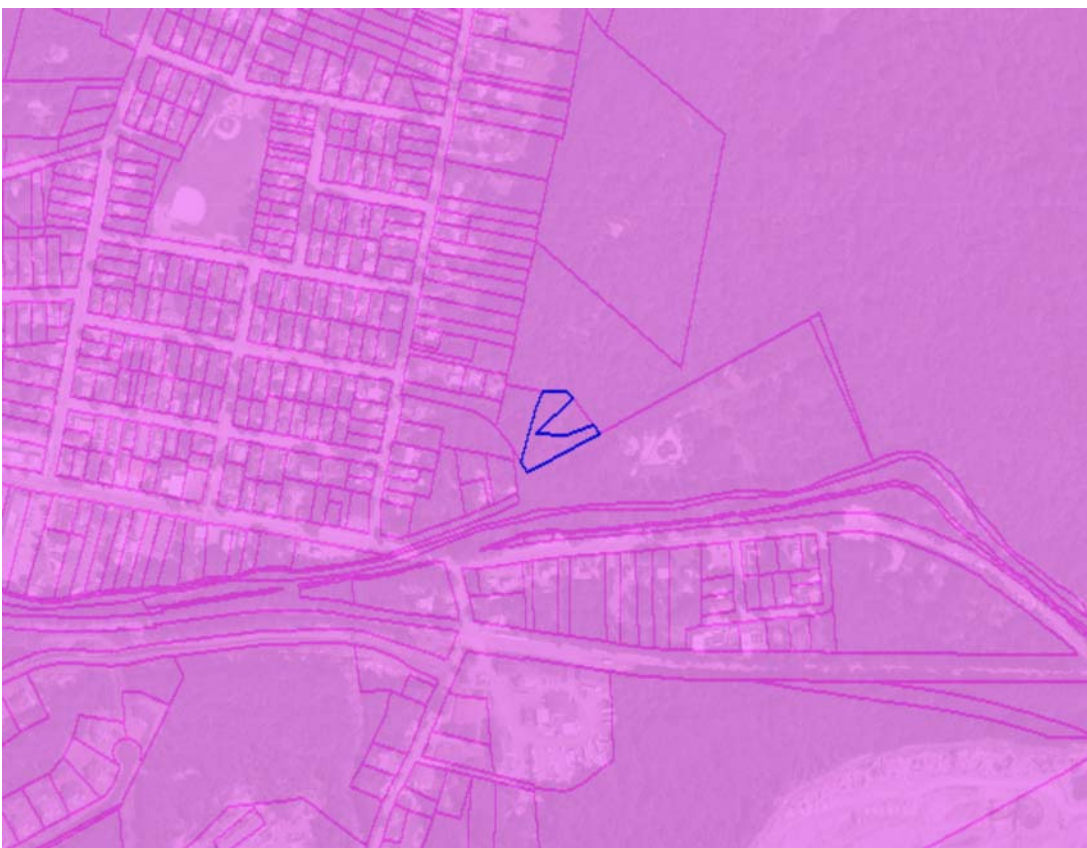
**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

**Policy 2B7:** To ensure through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, and Highlands Project Review that the use of Net Water Availability and Conditional Water Availability within each subwatershed supports development patterns that are in conformance with RMP policies and objectives.

30 of 39

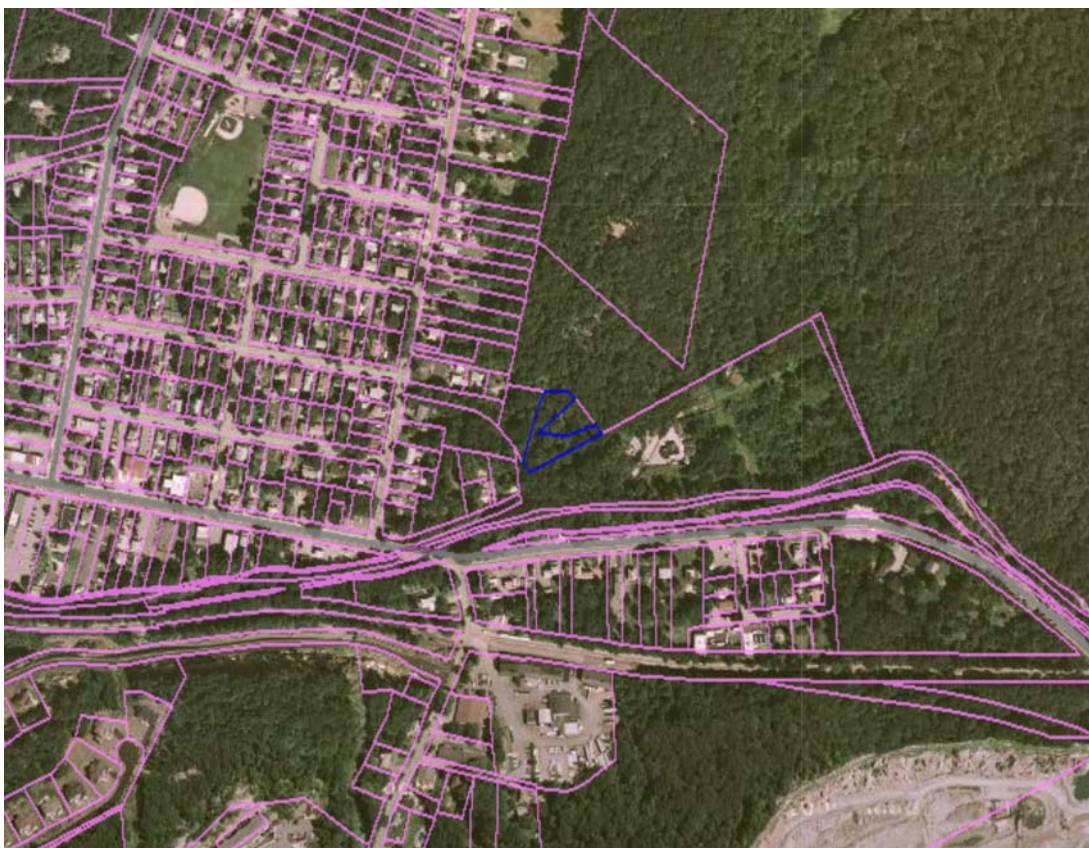
**Objective 2J2b:** Limit future water system demands to levels that will not create a Current Deficit Area where one does not currently exist.





Includes all developed lands within a 1/2 mile buffer from all freight rail networks.

**Objective 5A2a:** Encourage the movement of goods from the roadway network to the freight rail network wherever possible.



Private Bus Routes:

- Rail Stations:
- Morris + Essex Line - Gladstone Branch
  - Morris + Essex Line - Morristown Branch
  - Raritan Valley Line

Park & Ride Sites: 

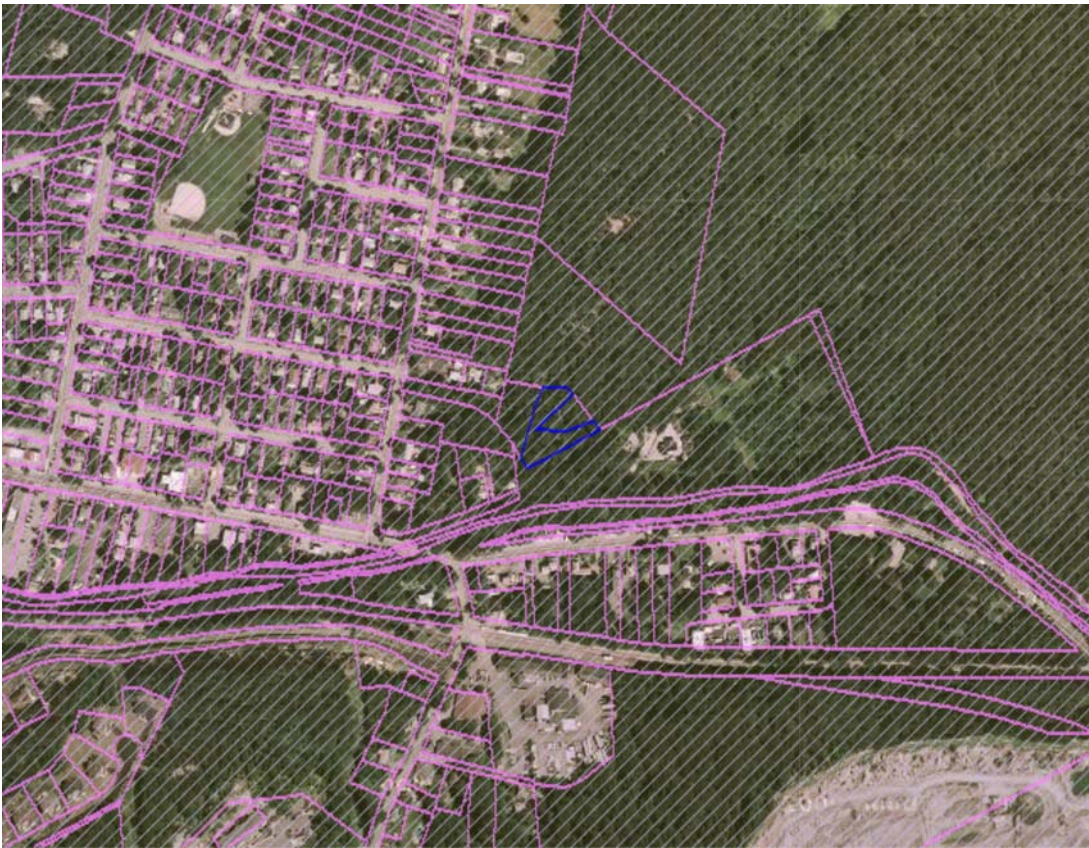
**Objective 5E1b:** Development and redevelopment in close proximity to rail stations and along bus routes.



**Planning Area**

40 BRANDT LANE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00046

12/23/2009

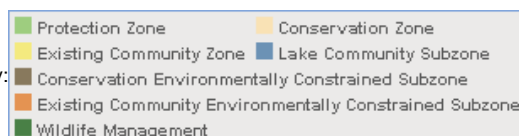
Planning Area / Preservation Area:  Planning Area /  Preservation Area

Means lands within the Highlands Region which are not within the Preservation Area.

**Objective 7F1d:** Planning Area exemptions, issued by the Highlands Council, shall be required, where appropriate, prior to consideration of a local development review or a Highlands Project Review. Guidance shall specify the exceptions where a review may proceed absent such an exemption determination. Applications for exemptions submitted to the Highlands Council shall be based upon the application requirements exemptions codified in N.J.A.C. 7:38.

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Consists of high natural resource value lands that are important to maintaining water quality, water quantity and sensitive ecological resources and processes.

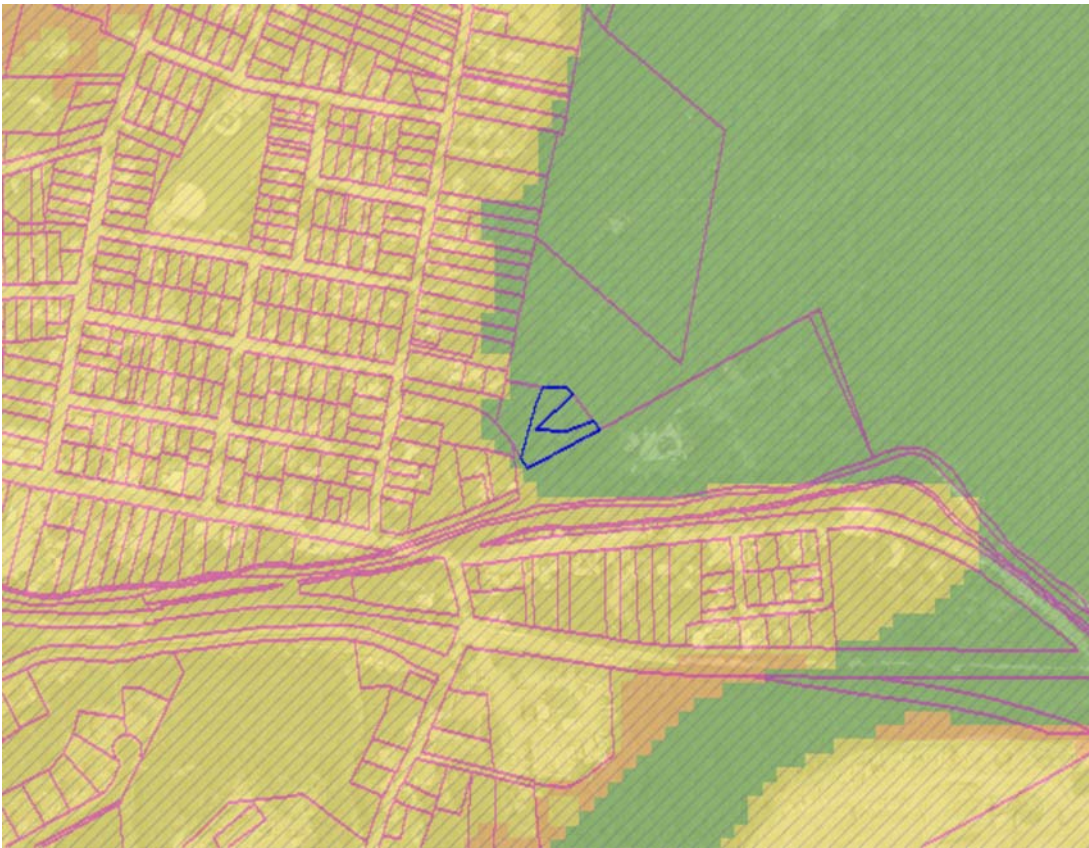
**Objective 6C1a:** Centers in the Protection Zone, potentially including clustered development, shall be at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan, and the use of septic systems or community wastewater systems.

**Policy 6C2:** To ensure through Plan Conformance, local development review and Highlands Project Review that any future development or redevelopment which does occur in a Protection Zone is subject to standards and criteria which protect the land and water resources of the Protection Zone from any potential adverse impact to the maximum extent possible.



### Protection Zone in Planning Area

40 BRANDT LANE, BLOOMINGDALE BOROUGH, Passaic County, Block 00060, Lot 00046  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

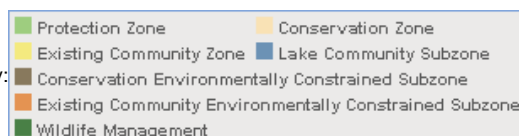
Planning Area / Preservation Area: Planning Area / Preservation Area

Includes the Protection Zone within the Planning Area.

**Objective 2L2a:** Use the median concentrations of nitrate in ground water for Planning Area HUC14 subwatersheds where the Protection Zone is predominant as the nitrate target for new development reliant on septic systems within the Protection Zone. The median is 0.72 mg/L.

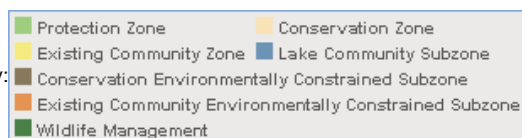
**Policy 6J3:** To encourage redevelopment in the Conservation and Protection Zones in the Planning Area of brownfields and grayfields that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields, as approved through Plan Conformance or the Highlands Redevelopment Area Designation process.





Includes both the Conservation Zone and the Protection Zone.





- Conservation Environmentally Constrained Subzone
- Existing Community Environmentally Constrained Subzone
- Wildlife Management

■ Planning Area / ■ Preservation Area

**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.



**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.

## Regional Master Plan Consistency Report

12/23/2009

Prepared by State of New Jersey Highlands Water Protection and Planning Council  
100 North Road (Route 513), Chester, NJ 07930  
Telephone: (908) 879-6737 Fax: (908) 879-4205

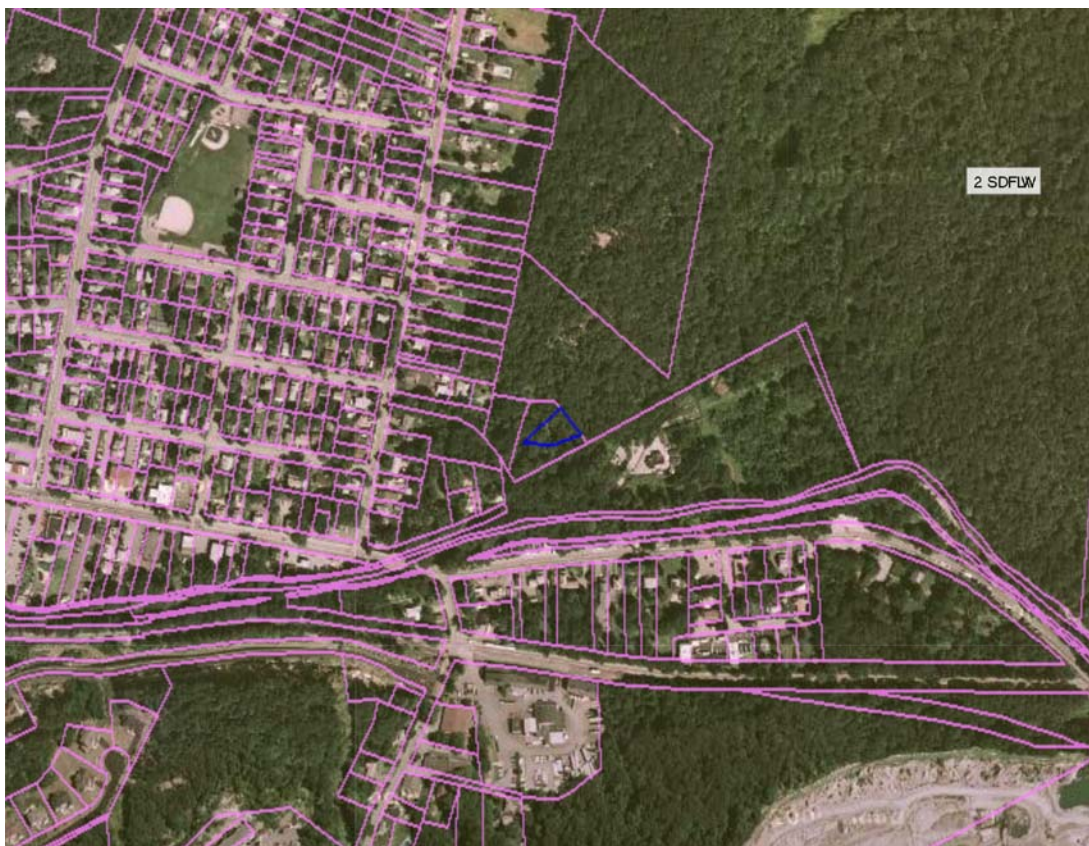


Please consider the environment before printing this report

### Disclaimer

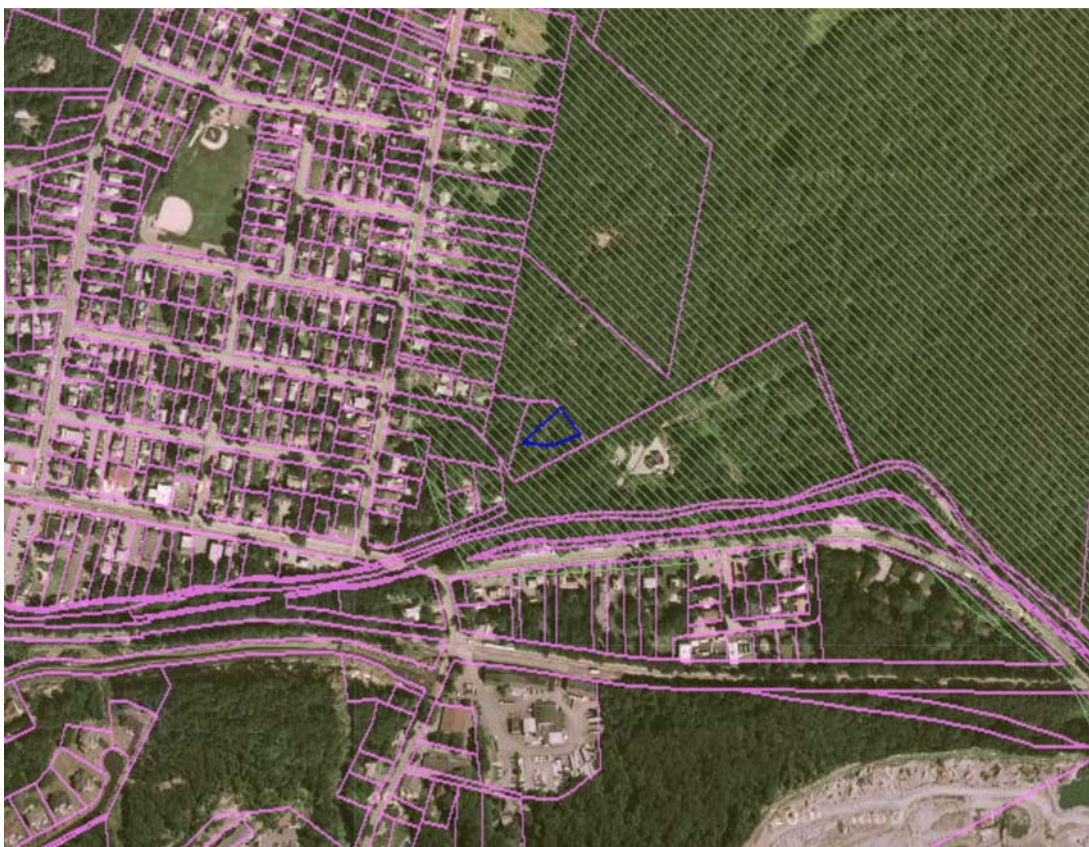
Please be advised that any reports generated from the online Consistency Review Application do not constitute a formal Consistency Determination from the Highlands Council. The information contained therein is provided solely for informational purposes and is not to be construed as providing advice, recommendations, endorsements, representations or warranties of any kind whatsoever.

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00047



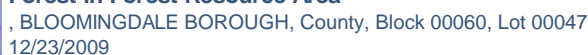
Powered by VERTICES Mapper™





The Forest Resource Area data layer is an intensity indicator that captures high ecological value forest areas including those forested lands that exhibit the least fragmentation, which are vital for the maintenance of ecological processes.

**Policy 1B3:** To limit through local development review and Highlands Project Review deforestation in the Forest Resource Area and forested lands within High Integrity Forest Subwatersheds within the Existing Community Zone to maximum extent practicable.



**Objective 1A2d:** To prohibit through Plan Conformance, local development review and Highlands Project Review the expansion or creation of public water supply systems or public wastewater collection and treatment systems or community-based on-site wastewater facilities into forested areas of the Forest Resource Area within the Planning Area except as provided for in Policy 2J4 with Objectives 2J4a through 2J4d, and Policy 2K3 with Objectives 2K3a through 2K3e, and within the Preservation Area except as provided for in Policy 2I1 and Objectives 2I1a and 2I1b.

**Policy 5C3:** To limit road improvements through local development review and Highlands Project Review where roads are constrained by topography, forested lands or the community character of land uses fronting on the road.





### Forest in Forest Resource Area in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00047

12/23/2009



Forest within Forest Resource Area: ■

Planning Area / Preservation Area: ■ Planning Area / ■ Preservation Area

The Forest in Forest Resource Area in Planning Area data layer illustrates the forested lands located within the spatially delineated Forest Resource Area of the legislatively delineated Highlands Planning Area. The Regional Master Plan includes protection policies specific to forested lands in the Forest Resource Area in the Planning Area.

**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.



Forest within Forest Resource Area: ■

Land Use Capability:

- Protection Zone
  Conservation Zone
- Existing Community Zone
  Lake Community Subzone
- Conservation Environmentally Constrained Subzone
- Existing Community Environmentally Constrained Subzone
- Wildlife Management

Planning Area / Preservation Area:  Planning Area /  Preservation Area

Planning Area Forest in Protection or Conservation Zone data layer represents all forested lands in the Protection Zone or Conservation Zone in the legislatively delineated Planning Area. Regional Master Plan protection policies limit development of these forests to low impact residential in an effort to maintain valuable forested lands within these two Zones in the Planning Area.

**Policy 1B2:** To limit through local development review and Highlands Project Review human development of forests to low impact residential development in the Protection Zone and the Conservation Zone in the Planning Area.



### Forest Resources

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00047  
12/23/2009



Forest Outside of Forest Resource Area: ■  
Forest within Forest Resource Area: ■

Forest Resources represents the Total Forest Area data layer that was extracted from the NJDEP 2002 draft Land Use Land Cover data. This data layer illustrates all upland and wetland forest and scrub/shrub categories (excluding old field) and represents all forested lands within the Region. The Regional Master Plan includes policies that limit clearing of trees within Forest Resources and that seek to protect overall forest resources integrity.

**Objective 1B3a:** Implementation through Plan Conformance of regulations, which limit the clearing of trees in conjunction with human development to circumstances where the clearing will not diminish the integrity of forest resources.

**Policy 1B5:** To ensure that forest resources are protected on a site specific basis during local development review and Highlands Project Review.

**Objective 1B5a:** Applications for local development review and Highlands Project Review require identification of any forest area on and adjacent to a site in accordance with the Highlands Councils Method for Identifying Upland Forest Areas in the Highlands Region.

**Policy 1B7:** To prohibit clear-cutting of forest lands except pursuant to an approved Forest Management Plan approved by the State Forester.

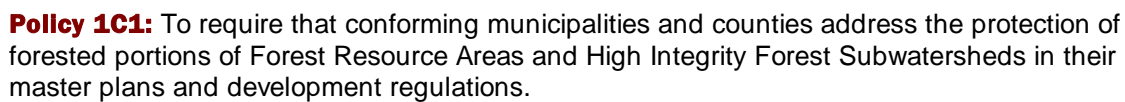
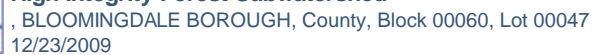
**Policy 1C3:** To require that conforming municipalities adopt a tree clearing ordinance consistent with an approved community forestry plan under the New Jersey Forest Service Community Forestry Program as part of the municipal master plan and local development regulations.

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID



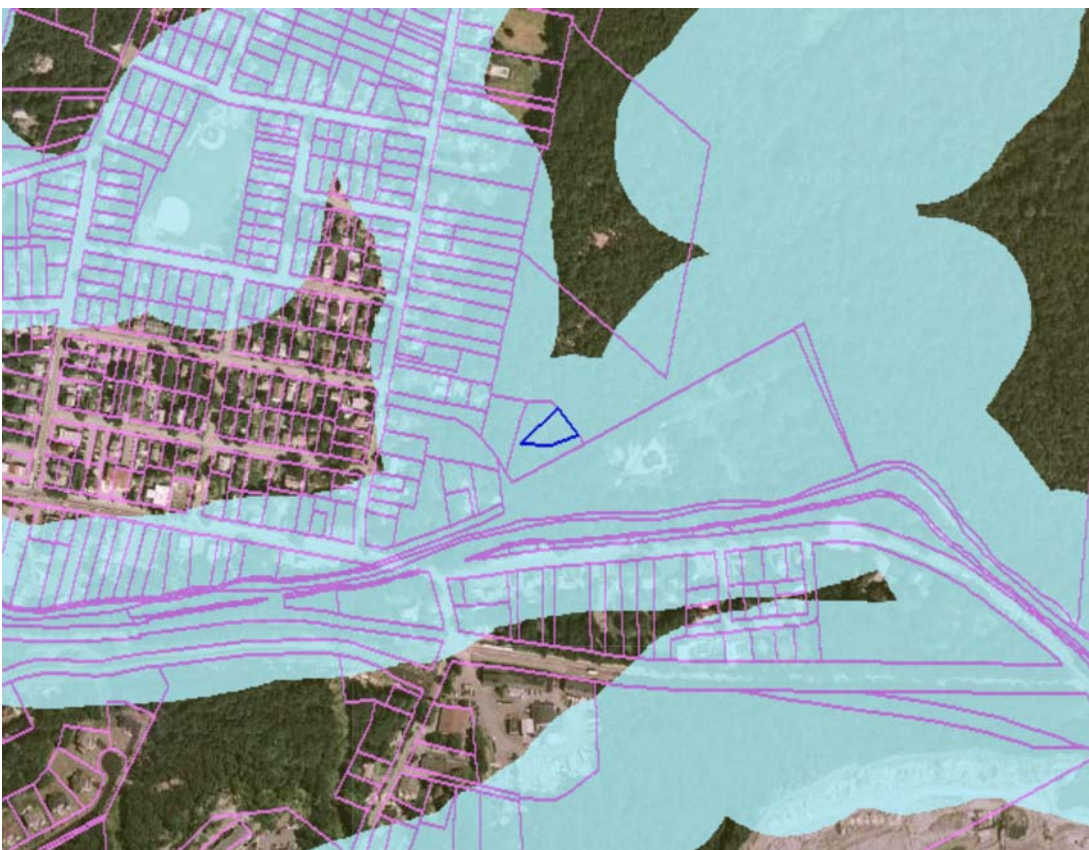






### Highlands Open Waters Protection Buffer

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00047  
12/23/2009



Open Water Protection Area: ■

Highlands Open Waters are defined by the Highlands Act as all springs, streams including intermittent streams, wetlands, and bodies of surface water, whether natural or artificial. The vegetated corridors adjacent to Highlands Open Waters are effective and important tools to protect water quality and aquatic habitat. Protection buffers safeguard Highlands Open Waters from the impacts of adjacent land use practices. The Regional Master Plan includes a protection buffer of 300 feet from the edge of the discernable bank of a Highlands Open Waters feature, or from the centerline where no discernable bank exists.

**Policy 1D4:** Highlands Open Waters shall include a protection buffer of 300 feet from the edge of the discernable bank of the Highlands Open Waters feature, or from the centerline where no discernable bank exists. With respect to wetlands and other Highlands Open Waters features (e.g., seeps, springs, etc.), the feature shall include a protection buffer of 300 feet from the delineated Letter of Interpretation (LOI) line issued by the NJDEP for wetlands, or from a field-delineated boundary for other features. In areas where existing development or land uses within the protection buffers have reduced or impaired the functional values of the buffers, the Council will seek opportunities to restore the buffer and its functions. Any proposed disturbance shall, through local development review and Highlands Project Review, comply with Highlands Open Waters buffer standards. The protection buffer width for Category 2 streams in the Planning Area may be modified through a Stream Corridor Protection/Restoration Plan, as specified in Objective 1D4i. In approved Redevelopment Areas, the Council may, at its discretion, modify the required buffer, upon a showing of no alternatives, no impact to the functional value of the buffer, and provision of alternative approaches to enhancing or protecting Highlands Open Waters and resources of the buffer area.

**Objective 1D4a:** Require that all applications for approval through local development review and Highlands Project Review include the identification and mapping of Highlands Open Waters.

**Objective 1D4c:** Require that proposed development within all Highlands Open Waters buffers (Preservation and Planning Areas) conforms through local development review and Highlands



**Objective 1D4i:** Develop through Plan Conformance and implement stream corridor or subwatershed-based Stream Corridor Protection/Restoration Plans which shall include Steps 1, 2, and 3, and may include Steps 4 and 5: 1. Identify areas where existing development, land disturbances, or land uses are within Highlands Open Waters buffers have removed or substantially impaired natural vegetation communities, and have significantly reduced or impaired the functional values of Highlands Open Waters buffers. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland usesq; 2. Identify and require opportunities for restoration of areas identified in Step 1 as part of mitigation requirements under a Highlands Act waiver or Objectives 1D4e and 1D4f, and public or nongovernmental restoration/stabilization projects; 3. Identify the extent of stream corridor features that are critical to supporting the functions of a healthy Highlands Open Waters buffer and that extend beyond the buffers required by Objectives 1D4b and 1D4c. The 300 foot buffer in these areas may be expanded to be most protective of these features which may include, but are not limited to, Critical Habitat, pollutant source areas identified through scientific techniques, and steep slopes; 4. Where Highlands Open Waters buffers include areas identified in Step 1, regarding Category 2 surface waters in the Planning Area only, the Stream Corridor Protection/Restoration Plan may identify where, based on scientific analysis of site-specific conditions (e.g., topography, vegetation cover type, habitat, soil type, upstream land uses and pollution inputs, width of floodplain, rate and volume of run-off), a buffer of less than the full 300 feet (but including the undisturbed buffer area at a minimum) is sufficient to maintain or improve the protection of Highlands Open Waters and Riparian Areas. The plan must identify alternative buffers that provide functional buffer values at least equivalent to existing conditions and are no less than 150 feet or no less than the extent allowed in State or municipal regulation (including Objectives 1D4b and 1D4c), whichever is greater. Further, the plan shall include a functional value assessment to ensure that there is no net loss in the overall functional value of the subwatershedos stream buffers. Buffers established through this process shall be determined based on site conditions rather than fixed distances, reflecting findings of the scientific analysis, and shall be used in the site design and development review process regarding determinations of restoration, continued use, or increased use of the disturbed buffer area. Buffer averaging for the purpose of accommodating development proposals is deemed not to meet the requirements of this provision; and 5. Where a proposed Highlands Redevelopment Area would not meet, in full, Objectives 1D4b through 1D4h but affects an undisturbed buffer area determined to not be necessary for the protection of the functional values for Highlands Open Waters buffer (as determined through scientific analysis of site-specific conditions), modification of the undisturbed buffer may be allowed to no less than the extent allowed in State or municipal regulation. However the Council shall first determine that there is no alternative to the proposed reduction of the buffer, and require a showing of no impact to the functional values of the buffer and provision of alternative approaches to enhancing or protecting the Highlands Open Waters and resources of the buffer area. Restoration or enhancement of buffer functional values shall be provided on-site or within the same stream reach to achieve a net improvement of existing buffer functional values.

**Objective 1D5b:** 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.

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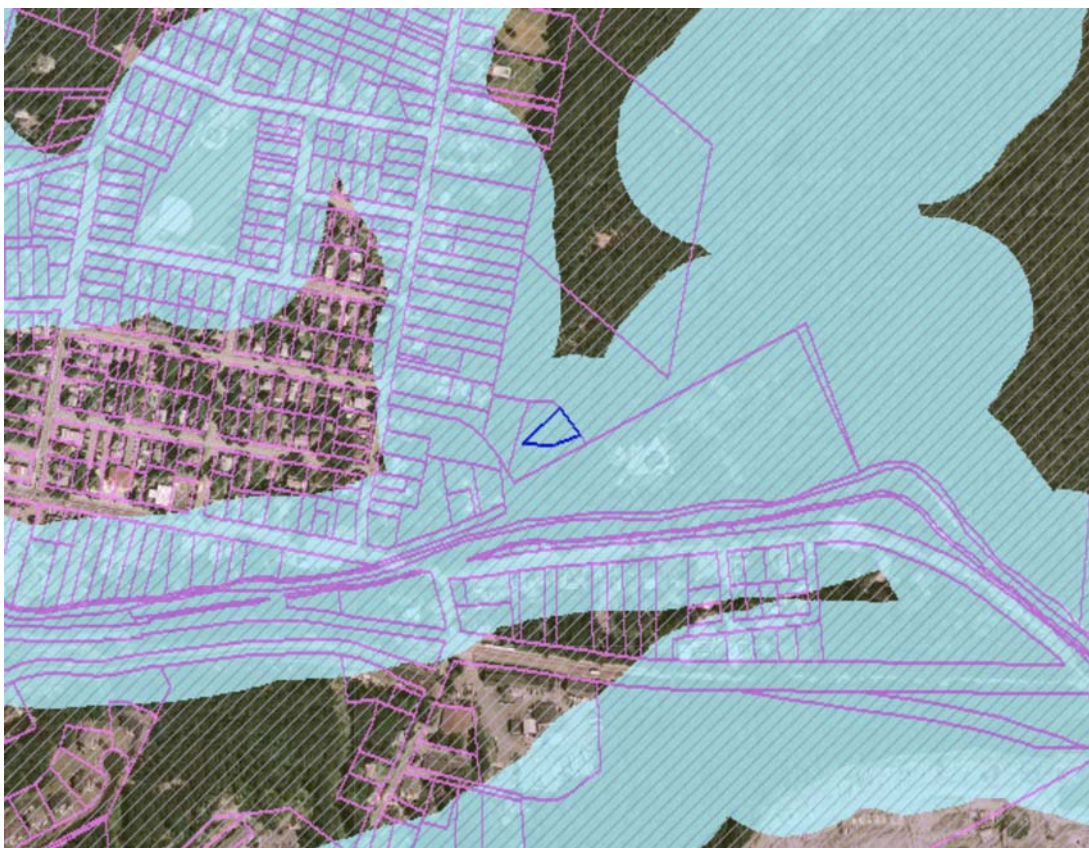
**Objective 211b:** The expansion or creation of public water supply systems, public wastewater collection and treatment systems and community on-site treatment facilities in the Preservation Area as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

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Planning Area / Preservation Area:  Planning Area /  Preservation Area

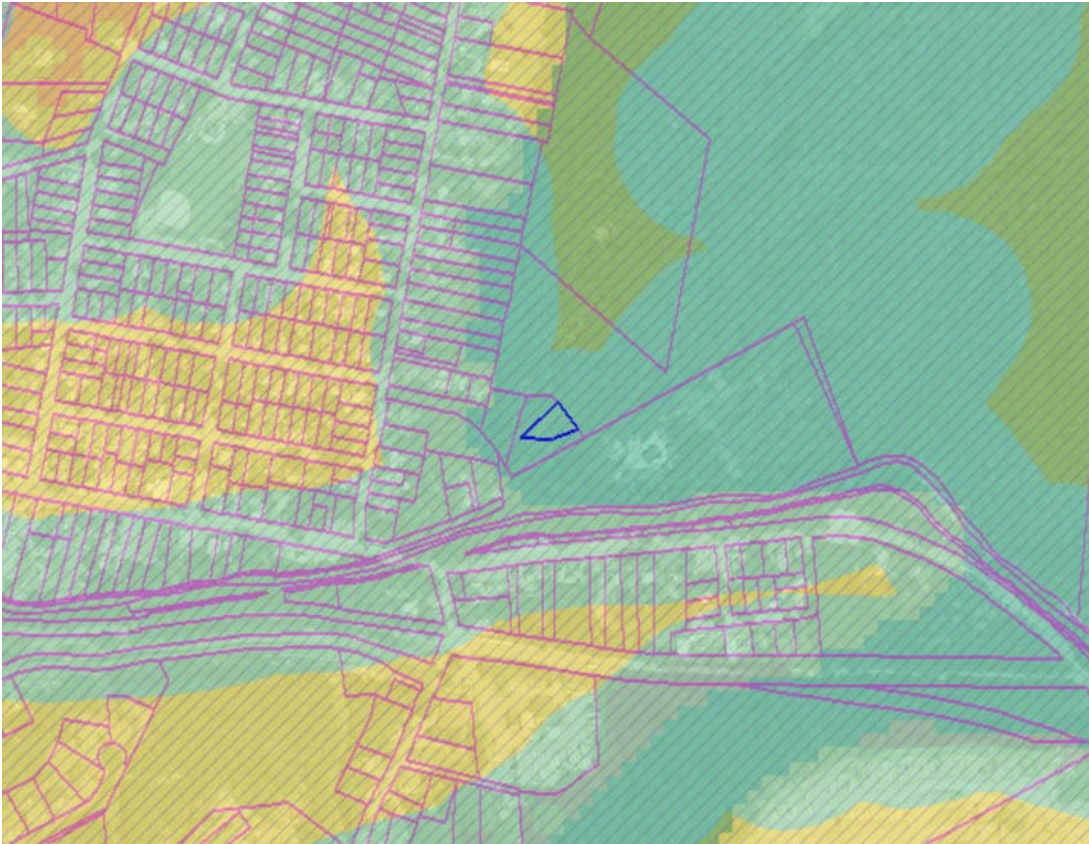
Includes all Highlands Open Waters protection buffers within the Planning Area

**Objective 1D4d:** Structures or other land improvements existing within a Highlands Open Waters buffer of the Planning Area on August 10, 2004 may remain, provided that the area of disturbance shall not be increased unless approved through local development review or Highlands Project Review in compliance with RMP policies and objectives. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q



# Highlands Open Waters Protection Buffers in Conservation or Protection Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00047  
12/23/2009



Open Water Protection Area:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Planning Area / Preservation Area: Planning Area / Preservation Area

Includes all Highlands Open Waters protection buffers within the Protection and Conservation Zones of the Planning Area.

**Objective 1D4e:** In the Protection and Conservation Zones of the Planning Area, proposed disturbances of Highlands Open Waters buffers shall only occur in previously disturbed areas, unless a waiver is granted by the Highlands Council under Policy 7G2. For purposes of this Objective when considering land for conversion to non-agricultural land uses, historic or current agricultural land uses shall not be considered pland improvements,q pdevelopment,q pland disturbances,q or pland uses.q Such proposed disturbances must demonstrate full utilization of the following performance standards in the listed order, to demonstrate the necessity of an encroachment into Highlands Open Waters buffers: 1) avoid the disturbance of Highlands Open Waters buffers; 2) minimize impacts to Highlands Open Waters buffers; and 3) mitigate all adverse impacts to Highlands Open Waters buffers so that there is no net loss of the functional value of the buffer, in compliance with Objective 1D4h. Minimization and mitigation opportunities shall be considered only upon a clear and convincing demonstration by the applicant that the protection buffer cannot be avoided and in no case shall the remaining buffer be reduced to less than 150 feet from the edge of Highlands Open Waters, unless a waiver is granted by the Highlands Council under Policy 7G2 and the proposed disturbance complies with Objective 1D4c.





# Riparian Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00047

12/23/2009



Riparian Corridor Integrity Score: HIGH MODERATE LOW

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. Riparian Areas serve as an interface between surface water bodies and terrestrial ecosystems and play a critical role in maintaining the quality and ecological integrity of Highlands Open Waters.

**Objective 1D5b:** 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.

**Objective 1D5e:** 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, in compliance with Policies 6N3 and 6N4 and provide for mitigation through restoration of impaired Riparian Areas in the same HUC14 subwatershed.

**Objective 1D5f:** Require that development within Riparian Areas conforms through local development review and Highlands Project Review to any applicable requirements of a Regional Stormwater Plan adopted pursuant to N.J.A.C. 7:8 (Stormwater Management Rules).

**Objective 1D5g:** Require identification and implementation of opportunities where the restoration and enhancement of previously impaired Riparian Areas are feasible and appropriate as mitigation to any allowable modification to Riparian Area requirements.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall



**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

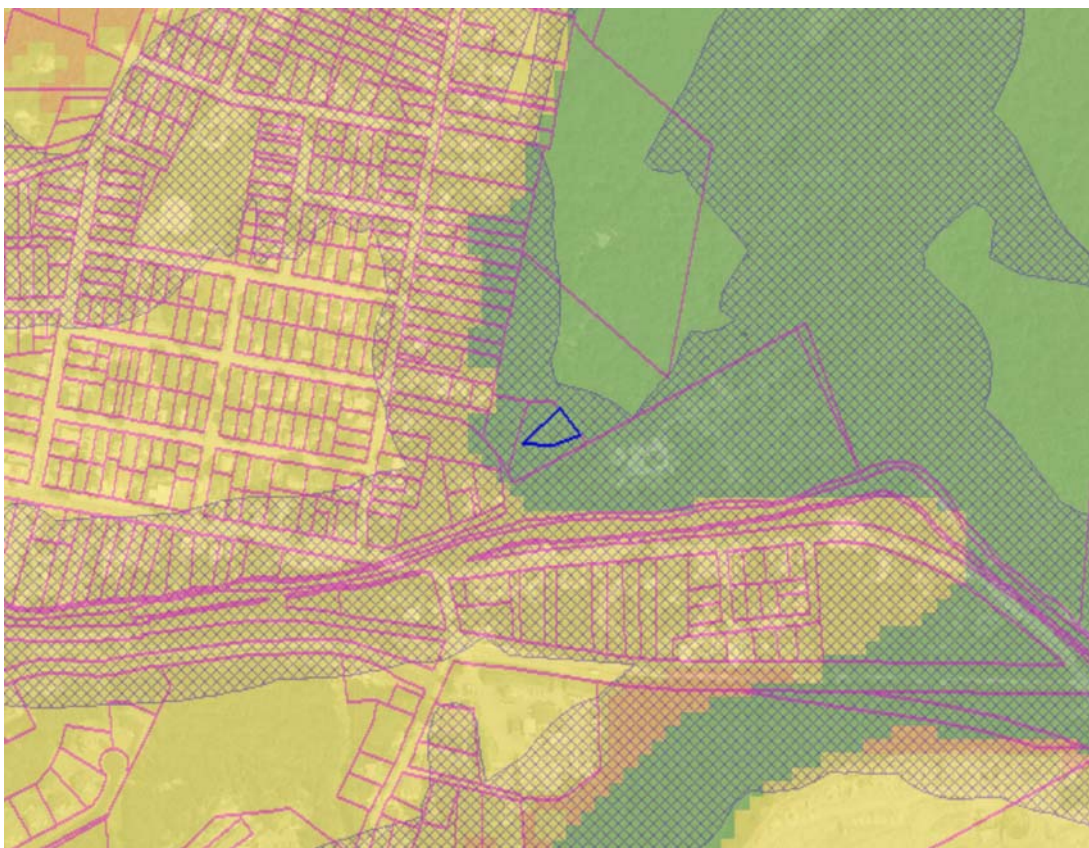
**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.



### Riparian Area in Protection Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00047

12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Riparian Corridor Integrity Score: HIGH MODERATE LOW

Includes all Riparian Areas within the Protection Zone.

**Objective 1D5c:** Prohibit modifications to Riparian Areas in the Protection Zone except where a waiver is approved by the NJDEP or the Highlands Council under Policy 7G1 or 7G2.





These areas include watersheds with Riparian Areas that contain a higher incidence of impervious area, agricultural uses and/or road crossings (as compared to High Score) and a reduced proportion of natural vegetation including high quality habitat for rare, threatened, and endangered water/wetland dependent species.

**Objective 1D5b:** 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.





### Steep Slope Protection Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00047  
12/23/2009



Steep Slope Protection Area: ■

Slope is a measurement of the steepness of terrain and is defined as the vertical change in elevation over a given horizontal distance. Disturbance of areas containing steep slopes can trigger erosion and sedimentation, resulting in the loss of topsoil. It can also result in the disturbance of habitats, degradation of surface water quality, silting of wetlands, and alteration of drainage patterns. The Highlands Council examined areas of slope in the Highlands Region that exhibited one of the following grade classifications and these grades were established as Steep Slope Protection Areas: 1) grades of slopes of 20% or greater; 2) grades of slope between 15 - 20%; and 3) grades of slope between 10 - 15% that occur within the Riparian Area.

**Policy 1E6:** To require through local development review and Highlands Project Review that applications for development include topographic information identifying the location of any Steep Slope Protection Areas located on the parcel proposed for development.

**Policy 1E7:** To require through local development review and Highlands Project Review that applications for development involving parcels of land with slopes of 10% or greater include identification of forested lands, areas which are highly susceptible to erosion, depth to bedrock and Soil Capability Classes.

**Policy 1E10:** To require that conforming municipalities and counties implement the steep slope protection provisions of Policies 1E2 through 1E9 through master plans and development regulations.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

**Objective 2J4a:** Prohibit new, expanded or extended public water systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area unless they are shown to be necessary for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The extension or creation of systems shall follow the requirements in Objective 2J4b (parts 2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2J4b.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas and Critical Habitat. For approvals regarding part 3, the project must avoid disturbance of Highlands Open Waters buffer areas, Riparian Areas, Steep Slopes and Critical Habitat, and must minimize disturbance of the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, and Prime Ground Water Recharge Areas. The choice of extension or creation of systems shall follow the requirements in Objective 2K3d (2 and 3). The applicable purposes are: 1. To address through a waiver under Policy 7G1 or 7G2 a documented existing or imminent threat to public health and safety from a pattern of failing septic systems (where the failing systems cannot reasonably be addressed through rehabilitation or replacement) or highly concentrated septic systems, where the threat is of sufficient scale to justify a public wastewater collection and treatment system or community on-site treatment facility and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. To address other issues of public health and safety, such needs shall have highest priority for allocation of existing system capacity; 2. To address development permitted through a Highlands Redevelopment Area or takings waiver under Policy 7G1 or 7G2; or 3. To serve a cluster development that meets all requirements of Objective 2K3d.

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

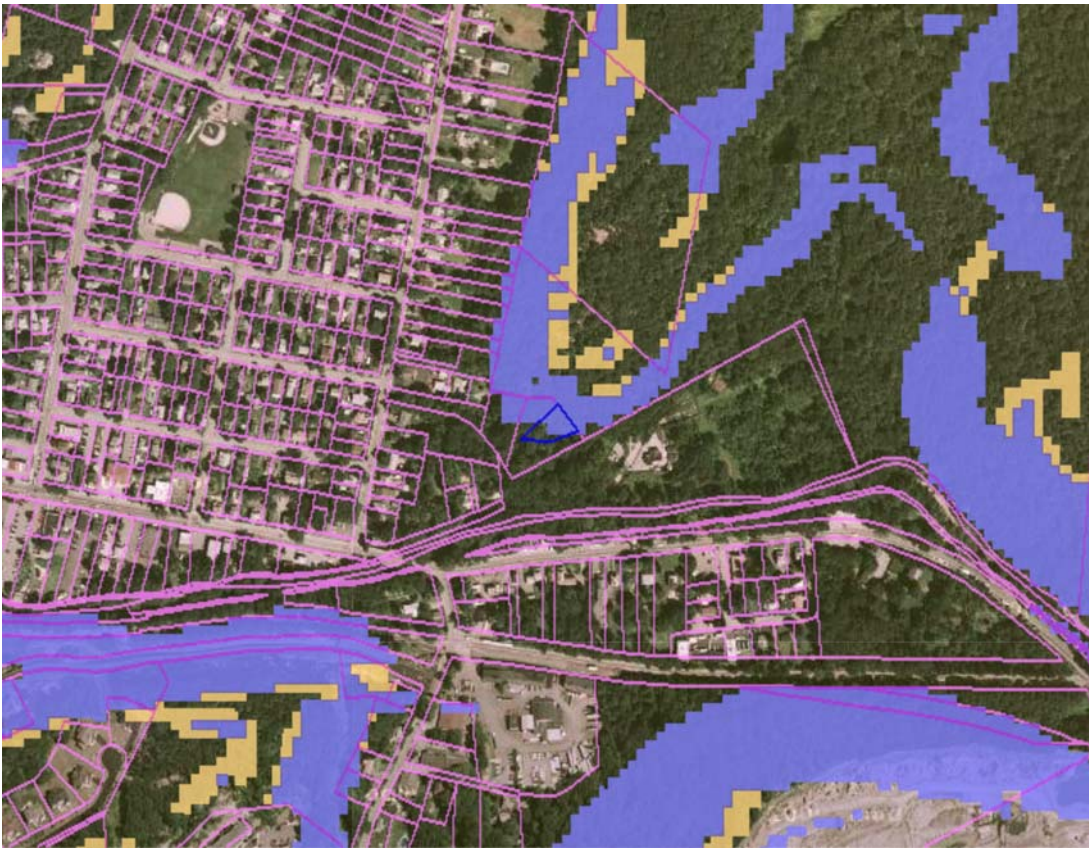
**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.



**Severely or Moderately Constrained Slopes**

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00047

12/23/2009



Moderately Constrained Slopes: ■

Severely Constrained Slopes: ■

Severely Constrained Slopes are all lands with slopes of 20% or greater and lands within Riparian Areas with slopes of 10% or greater. Moderately Constrained Slopes are all non-Riparian Area lands having a slope of 15% to less than 20% which are forested.

**Policy 1E8:** To prohibit through local development review and Highlands Project Review land disturbance within areas which are Severely Constrained Slopes and Moderately Constrained Slopes, except for linear development in both the Preservation and Planning Areas that meets the requirements of N.J.A.C. 7:38-3.8(c)1-4.

**Objective 2D4a:** 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 Steep Slopes.





**Objective 1F6b:** Prohibit indirect impacts from activity that is off-site, adjacent to, or within Critical Habitat that will jeopardize the continued existence of, or result in the likelihood of the destruction

**Objective 1F6c:** Waiver applications under Policy 7G2 for local development in a municipality with a Council-approved Critical Habitat Conservation and Management Plan shall be subject to the minimum standards and criteria for waiver provisions as set forth in the plan, to the maximum extent practicable.

**Objective 1F6f:** A Critical Wildlife Habitat area or Significant Natural Area delineation may be modified if an applicant can demonstrate, to the satisfaction of the Highlands Council in coordination with the NJDEPs Endangered and Nongame Species Program or Natural Heritage Program, that: 1. The nature of the site is such that it does not provide habitat for species of concern; 2. The species of concern are not present on the site during any critical part of their life cycle, do not depend upon the site for food, shelter or breeding, and the habitat; on the site is either unsuitable or not critical to species recovery in the Region; or 3. Existing land uses present a human, natural or development barrier to the use of the site by species of concern. Requirements for demonstrating the above criteria shall be included in the Critical Habitat Conservation and Management Plan.

**Objective 2I1b:** 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 as approved through a HPAA with waiver pursuant to N.J.A.C. 7:38 and Policy 7G1 shall maximize the protection of sensitive environmental resources including avoidance of Highlands Open Waters buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, Prime Ground Water Recharge Areas, and Critical Habitat.

**Objective 2K3c:** Prohibit new, expanded or extended 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 for and are approved by the Highlands Council for one or more of the purposes listed below. For approvals regarding parts 1, 2, and 3, the project must maximize the protection of sensitive environmental resources such as Highlands Open Waters buffer areas,

**Policy 6H1:** To protect, restore, or enhance sensitive environmental resources of the Highlands Region, including but not limited to Forests, Critical Habitat, Highlands Open Waters and their buffers, Riparian Areas, Steep Slopes, Prime Ground Water Recharge Areas, Wellhead Protection Areas, and Agricultural Resource Areas.

**Policy 6N4:** To require through Plan Conformance that municipalities and counties adopt LID best management practices where disturbance of Highlands resources is proposed, including but not limited to Steep Slopes, forest resources, Critical Habitat, Highlands Open Waters and Riparian Areas, and Prime Ground Water Recharge Areas.

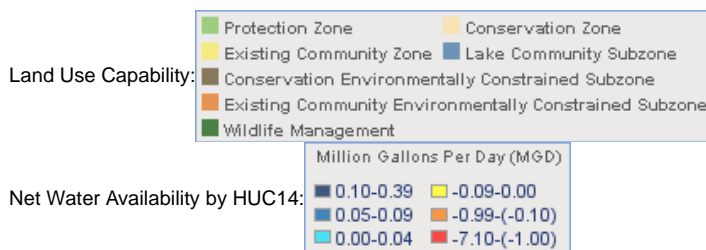




# Net Water Availability in Protection or Conservation Zone

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00047

12/23/2009



Identifies the portion of a HUC14 subwatershed within the Protection or Conservation Zone.

**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

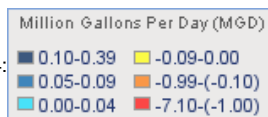
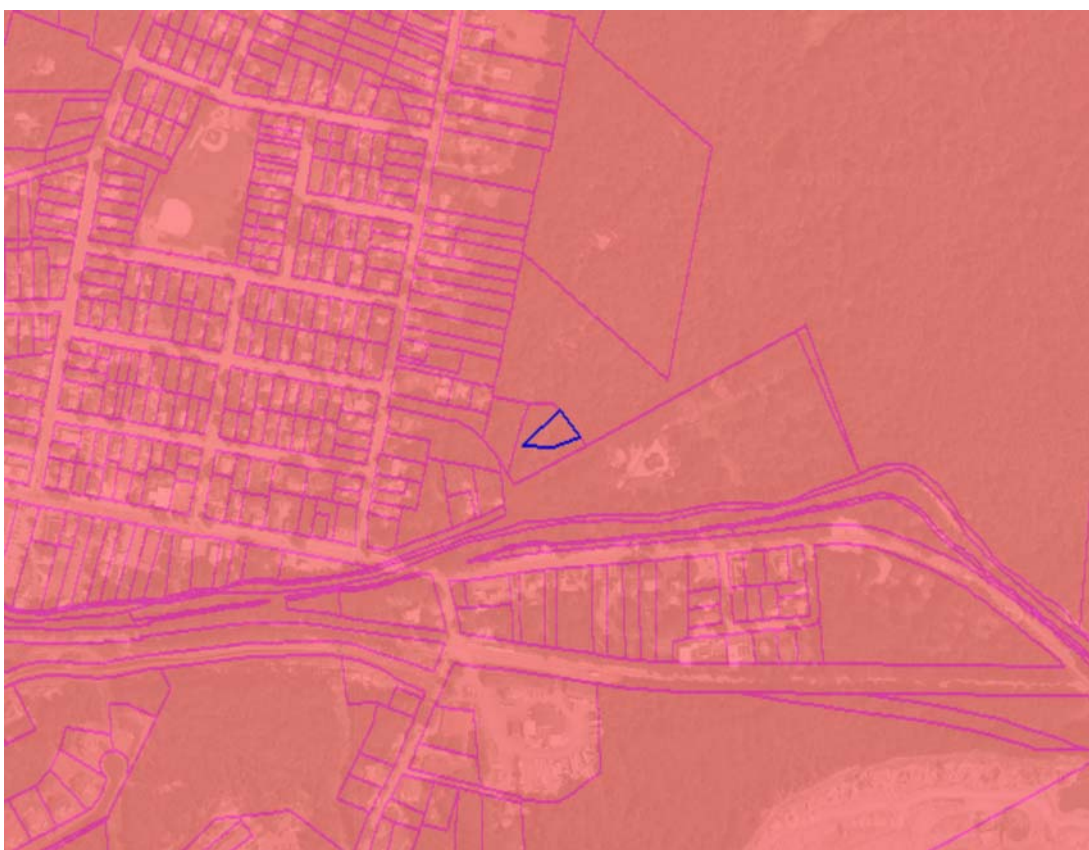
**Objective 2B4a:** Give highest priority for the use of non-agricultural Net Water Availability or Conditional Water Availability within Protection Zone and Conservation Zone subwatersheds, through a Water Use and Conservation Plan developed under Objective 2B8c, local development review, and Highlands Project review: 1. To address a documented existing or imminent threat to public health and safety from contaminated domestic and other on-site water supplies that is of sufficient scale to justify a public water supply and where no alternative is feasible that would sufficiently assure long-term protection of public health and safety. Such needs shall have highest priority for Net Water Availability; 2. To serve a designated Highlands Redevelopment Area; 3. To serve a cluster development that complies with Objective 2J4b; and 4. To serve affordable housing projects where at least 10% of the units are affordable.

**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.



**Current Deficit Area**

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00047  
12/23/2009



Net Water Availability by HUC14:

Identifies HUC14 subwatersheds that are in deficit of Net Water Availability.

**Policy 2B6:** To require through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, Highlands Project Review, and interagency coordination that proposed public water supply and wastewater service areas, new or increased water allocations and bulk water purchases will not directly or indirectly cause or contribute to a Net Water Availability deficit, and where feasible will help mitigate any existing deficit.

**Objective 2B6a:** Areawide Water Quality Management Plans, Wastewater Management Plans or their amendments shall ensure that the proposed service area will not directly or indirectly cause or contribute to a Net Water Availability deficit, and shall be in conformance with any Water Use and Conservation Plan developed under Objective 2B8c.

**Policy 2B8:** To require through Plan Conformance, local development review, and Highlands Project Review the efficient and effective use of water availability, the planning for future water needs, the reduction and elimination of water deficits, and the mitigation of new consumptive or depletive use in any Current Deficit Areas or subwatersheds that could become deficit areas based on projected development and water uses, to ensure sustainable water supply, water resource and ecological values in conformance with RMP policies and objectives.

**Objective 2B8a:** Prevent net increases in consumptive or depletive water uses in Current Water Deficit Areas to prevent exacerbation of and help reduce or eliminate the deficit to ensure sustainable water supply, water resource and ecological values, emphasizing techniques



including, but not limited to water reuse, recycling and conservation.

**Objective 2B8b:** Proposed new consumptive or depletive water uses within a Current Deficit Area shall only occur under the auspices of a Water Use and Conservation Management Plan approved under Objective 2B8c or through mitigation of the proposed consumptive or depletive use within the same HUC14 subwatershed through: a permanent reduction of existing consumptive and depletive water uses; ground water recharge in excess of the requirements of N.J.A.C. 7:8 (Stormwater Management Rules); or other permanent means. Where a Water Use and Conservation Management Plan has not been approved: 1. Each project shall achieve mitigation ranging from 125% to 200%, based on the severity of the Current Deficit and the amount of consumptive or depletive water use proposed; 2. Total consumptive and depletive water uses from any single project and all projects combined are not to exceed the Conditional Water Availability of Objectives 2B3a or 2B3b for any HUC14 subwatershed; 3. Mitigation shall be successfully completed prior to initiation of the water use, except as required by #4, below. Mitigation may be phased in keeping with project development; 4. For water uses where the combination of proposed consumptive and depletive water uses and current subwatershed deficit is high, according to a schedule established by the Highlands Council, off-site mitigation shall be successfully completed prior to any on-site construction. On-site mitigation shall be successfully completed prior to initiation of the water use but may be implemented concurrent with on-site construction. Mitigation may be phased in keeping with the level of consumptive or depletive water uses; and Mitigation plans for a project shall include: specific objectives for each mitigation component; monitoring and reporting requirements; methods by which shortfalls in meeting the mitigation objectives shall be addressed through additional action; and be guaranteed through performance bonds.

**Objective 2B8c:** Water Use and Conservation Management Plans shall be required through municipal Plan Conformance for all subwatersheds to meet the policies and objectives of Goal 2B, to ensure efficient use of water through water conservation and Low Impact Development Best Management Practices, and to avoid the creation of new deficits in Net Water Availability. Where developed for Current Deficit Areas, the plans shall include provisions to reduce or manage consumptive and depletive uses of ground and surface waters as necessary to reduce or eliminate deficits in Net Water Availability, or to ensure continued stream flows to downstream Current Deficit Areas from Existing Constrained Areas, to the maximum extent practicable within each HUC14 subwatershed. Water Use and Conservation Management Plans shall demonstrate through a detailed implementation plan and schedule how and when the current deficit will be resolved in a subwatershed prior to approval for new water uses in the subwatersheds with the most severe deficits (i.e., in excess of 0.25 million gallons per day), and the plan shall be implemented prior to initiation of new water uses.

**Objective 2B8d:** All water users within a Current Deficit Area shall seek funding and opportunities to meet the intent of Objective 2B4b.

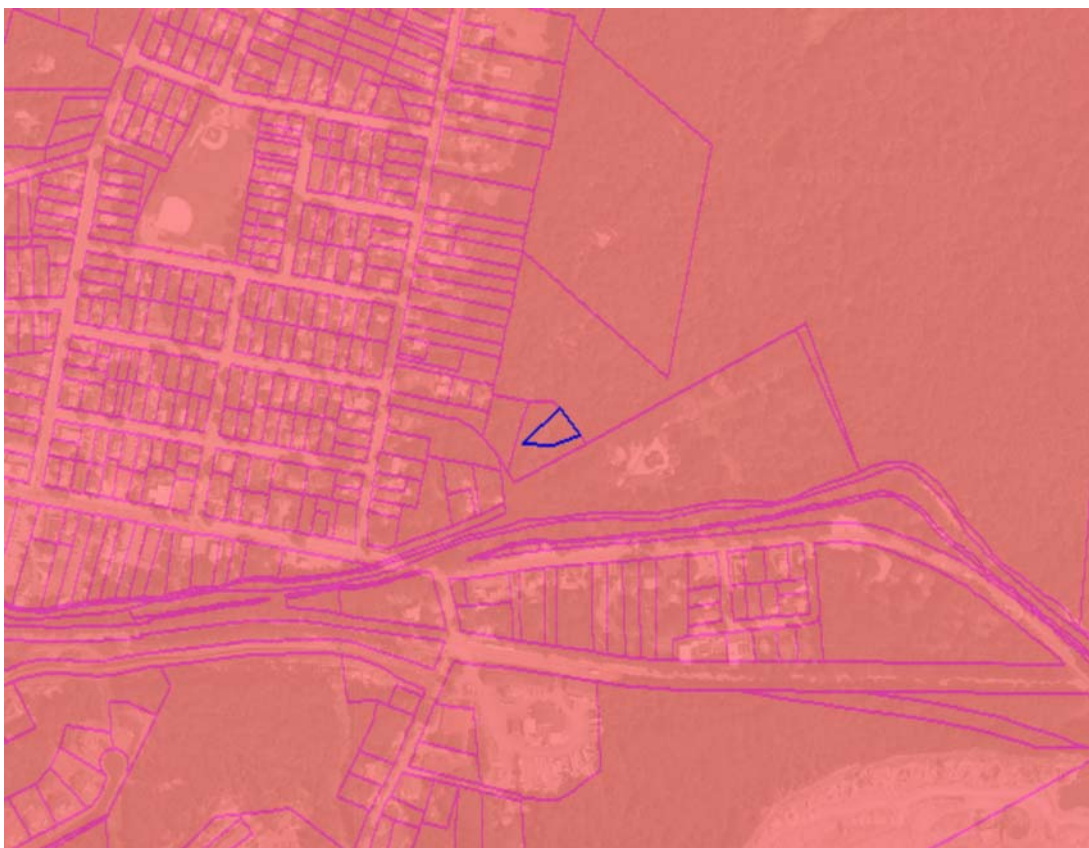
**Objective 2J2a:** Limit future water system demand and reduce existing demand where feasible by water systems that are dependent on Current Deficit Areas or Existing Constrained Areas as a source of water.

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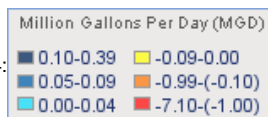


### Net Water Availability

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00047  
12/23/2009



Net Water Availability by HUC14:



Net Water Availability is calculated for each HUC14 subwatershed by deducting consumptive and depletive water uses from Ground Water Availability. The Regional Master Plan incorporates Net Water Availability as a capacity threshold on future water uses. 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 in deficit and deemed to be a Current Deficit Area. In Current Deficit Areas where a Water Use and Conservation Management Plan has not yet been adopted, limited amounts of Conditional Water Availability are provided. The use of Net Water Availability or Conditional Water Availability is subject to Regional Master Plan policies.

**Policy 2A2:** To ensure that increasing water demands do not exceed Net Water Availability or exacerbate existing deficits of subwatersheds. Net Water Availability is affected at a subwatershed level by location and extent of Land Use Capability Zone Map and its status as Current Deficit Area or Existing Constrained Area.

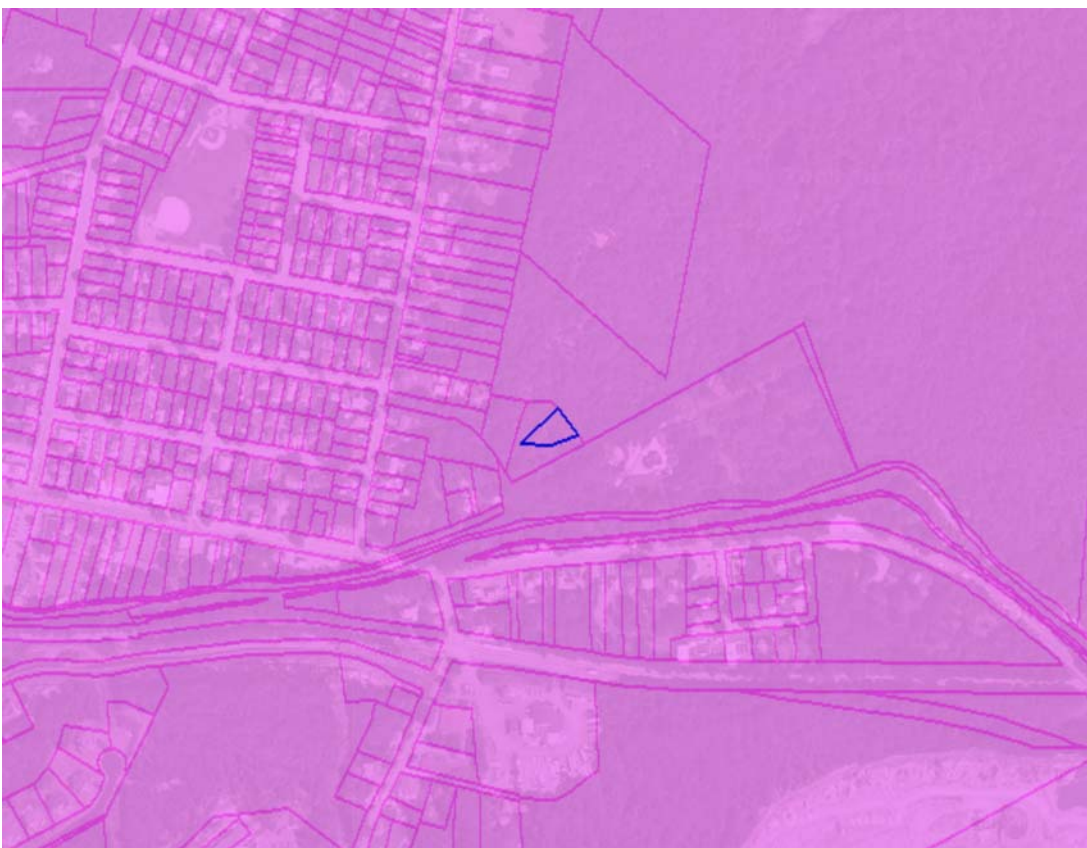
**Objective 2B4c:** Establish and implement mandatory stormwater reuse for recreational and other non-agricultural irrigation, as well as other non-potable water purposes to minimize both the volume of stormwater discharges and water withdrawals for these purposes.

**Policy 2B7:** To ensure through Plan Conformance (including through a Water Use and Conservation Plan developed under Objective 2B8c), local development review, and Highlands Project Review that the use of Net Water Availability and Conditional Water Availability within each subwatershed supports development patterns that are in conformance with RMP policies and objectives.

**Objective 2B8c:** Water Use and Conservation Management Plans shall be required through municipal Plan Conformance for all subwatersheds to meet the policies and objectives of Goal

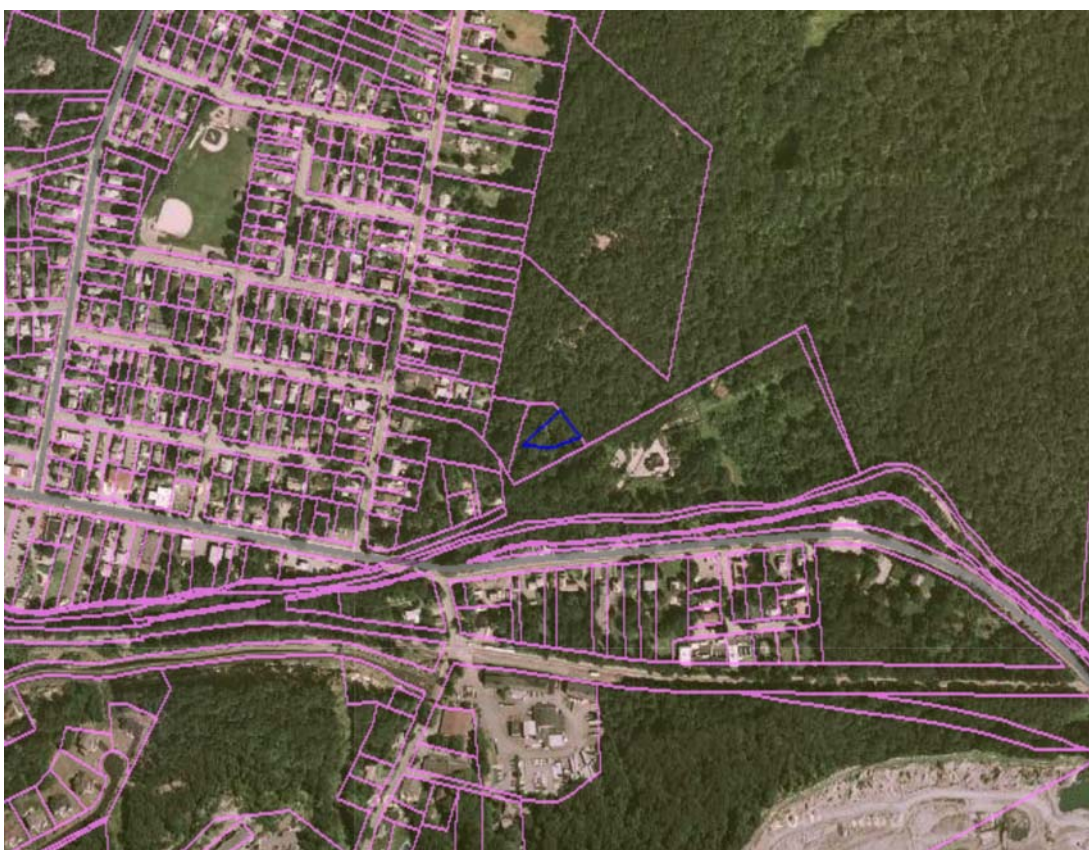
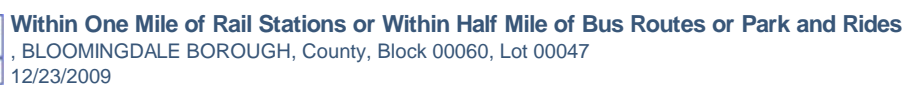
**Objective 2J2b:** Limit future water system demands to levels that will not create a Current Deficit Area where one does not currently exist.





Includes all developed lands within a 1/2 mile buffer from all freight rail networks.

**Objective 5A2a:** Encourage the movement of goods from the roadway network to the freight rail network wherever possible.



Private Bus Routes:

- Bergen + Main Line
- Montclair Boonton Line

Rail Stations:

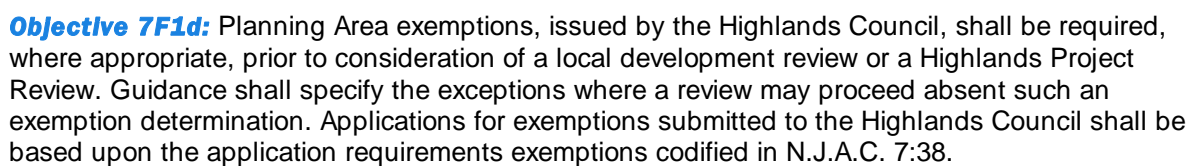
- Morris + Essex Line - Gladstone Branch
- Morris + Essex Line - Morristown Branch
- Raritan Valley Line

Park & Ride Sites: 

Includes all developed lands within a 1/2 mile buffer from all park and ride locations, rail stations, and NJ Transit public and major private bus routes in or within 1/2 mile of the Highlands Region.

**Objective 5E1b:** Development and redevelopment in close proximity to rail stations and along bus routes.

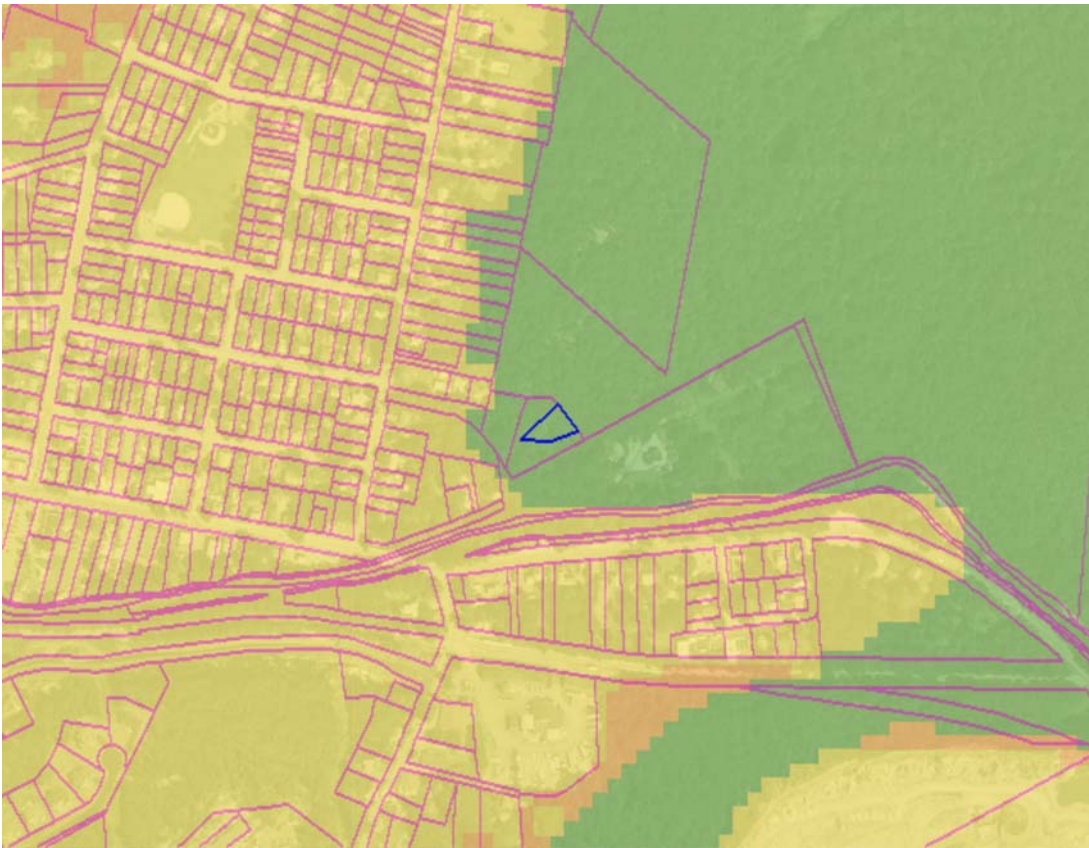






**Protection Zone**

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00047  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

Consists of high natural resource value lands that are important to maintaining water quality, water quantity and sensitive ecological resources and processes.

**Policy 6C1:** To limit new human development in the Protection Zone to redevelopment, exempt activities, and environmentally-compatible low density new land uses, in accordance with RMP resource protection needs and water quality and quantity capacity constraints and to ensure that the impacts of development using exemptions under the Highlands Act (see Policy 7F1) are considered in regional protection measures.

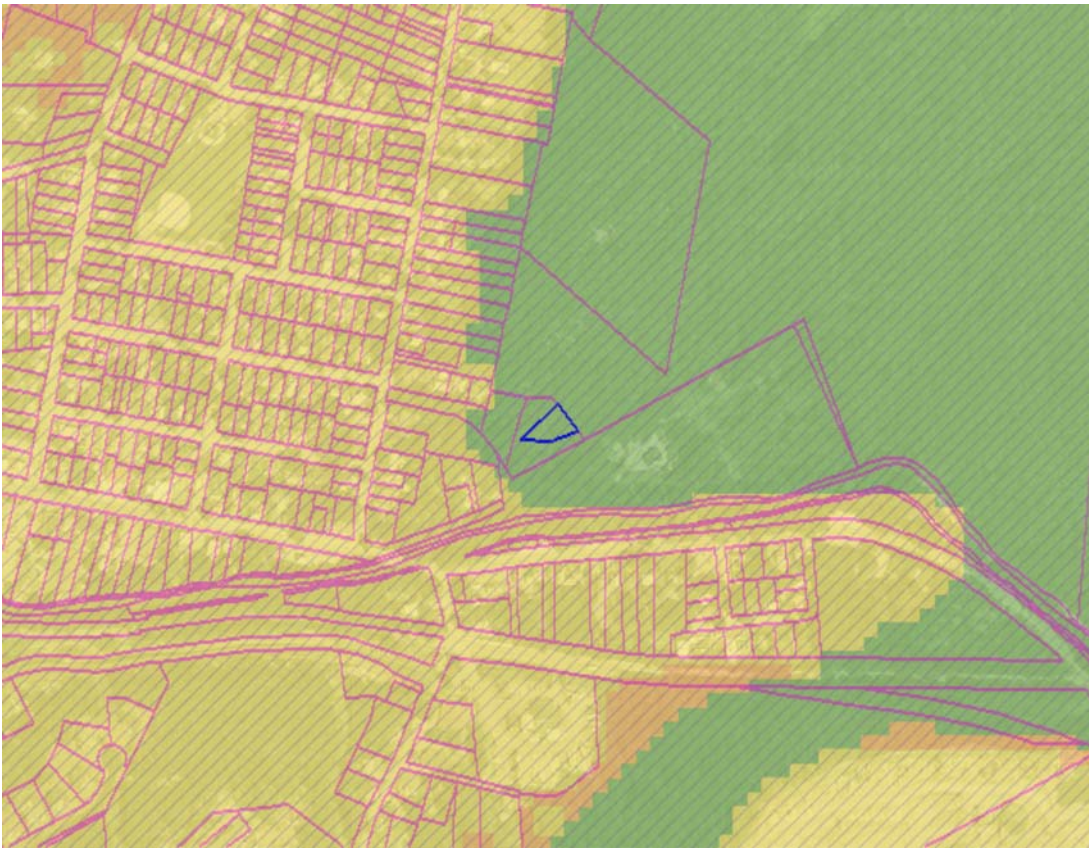
**Objective 6C1a:** Centers in the Protection Zone, potentially including clustered development, shall be at densities appropriate to the Zone, the community character, the State Development and Redevelopment Plan, and the use of septic systems or community wastewater systems.

**Policy 6C2:** To ensure through Plan Conformance, local development review and Highlands Project Review that any future development or redevelopment which does occur in a Protection Zone is subject to standards and criteria which protect the land and water resources of the Protection Zone from any potential adverse impact to the maximum extent possible.



### Protection Zone in Planning Area

, BLOOMINGDALE BOROUGH, County, Block 00060, Lot 00047  
12/23/2009



Land Use Capability:

Protection Zone	Conservation Zone
Existing Community Zone	Lake Community Subzone
Conservation Environmentally Constrained Subzone	
Existing Community Environmentally Constrained Subzone	
Wildlife Management	

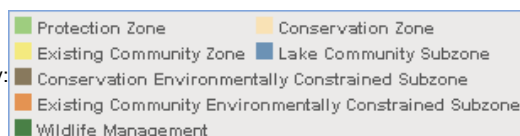
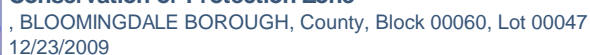
Planning Area / Preservation Area: Planning Area / Preservation Area

Includes the Protection Zone within the Planning Area.

**Objective 2L2a:** Use the median concentrations of nitrate in ground water for Planning Area HUC14 subwatersheds where the Protection Zone is predominant as the nitrate target for new development reliant on septic systems within the Protection Zone. The median is 0.72 mg/L.

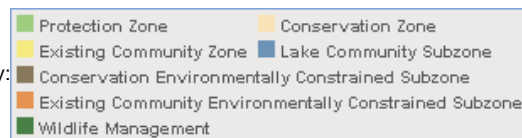
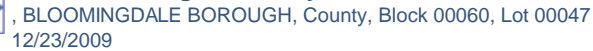
**Policy 6J3:** To encourage redevelopment in the Conservation and Protection Zones in the Planning Area of brownfields and grayfields that have adequate water, wastewater, transportation capacity, and are appropriate for increased land use intensity or conversion to greenfields, as approved through Plan Conformance or the Highlands Redevelopment Area Designation process.





Includes both the Conservation Zone and the Protection Zone.





Planning Area / Preservation Area:  Planning Area /  Preservation Area

**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.



**Policy 2J4:** To minimize, through Plan Conformance, local development review and Highlands Project Review, the creation or extension of public water supply systems within the Protection Zone, the Conservation Zone and the Environmentally-Constrained Sub-zones of the Planning Area, and to allow for the creation or extension of public water supply systems where appropriate within the Existing Community Zone.