



PHILIP D. MURPHY
Governor

TAHESHA L. WAY
Lieutenant Governor

State of New Jersey

HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL

100 North Road (Route 513)
Chester, New Jersey 07930-2322
(908) 879-6737
(908) 879-4205 (fax)
www.nj.gov/njhighlands



CARL J. RICHKO
Chairman

BENJAMIN L. SPINELLI, ESQ.
Executive Director

DRAFT CONSISTENCY REVIEW AND RECOMMENDATIONS REPORT

Petition for Plan Conformance Roxbury Township, Morris County

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

May 29, 2025

**New Jersey Highlands Water Protection and Planning Council
Petition for Plan Conformance - Draft Consistency Review and Recommendations Report**

PETITION SUMMARY

Municipality:	<u>Township of Roxbury, Morris County</u>
Date of Petition Submission:	<u>May 27, 2025</u>
Conformance Area:	<u>Planning Area</u>
Staff Recommendation:	<u>Approval subject to conditions</u>

A. REVIEW OF ADMINISTRATIVE SUBMITTALS

1. Township of Roxbury, NJ - Resolution 2025-143, “A Resolution Authorizing the Submission of Petition for Plan Conformance to the Highlands Water Protection and Planning Council for Land in the Preservation Area and in the Planning Area.”
2. Highlands Planning Area Conformance Assessment Report, May 2025 (Appendix B)

Introduction

Roxbury Township is located in the western portion of Morris County and in the central area of the Highlands Region. Roxbury borders the municipalities of Chester Township, Jefferson Township, Mine Hill Township, Mount Arlington Borough, Mount Olive Township, Netcong Borough, Randolph Township, and Wharton Borough in Morris County, and both Hopatcong Borough and Stanhope Borough in Sussex County.

The Township is almost 22 square miles and is home to a population of 23,397 people, according to the 2024 U.S. Census population estimates. Roxbury is made up of six unincorporated communities – Kenvil, Landing, Ledgewood, Lower Berkshire Valley, Port Morris, and Succasunna. Major roadways include Interstate Route 80, Route 46, Route 206, Route 183, and Route 10. Most of the Township’s non-residential uses are located along these major transportation corridors. The NJ Transit Lake Hopatcong station in Landing is served by the Morris & Essex Lines and the Montclair-Boonton Line.

The Township is home to the Berkshire Valley Wildlife Management Area, as well as many other large tracts of preserved land accounting for 3,683 acres or 26% of the total land area. Roxbury Township also contains part of Lake Hopatcong and Lake Musconetcong.

The Highlands Water Protection and Planning Act delineated two specific boundaries within the Highlands Region, the Planning Area, where conformance with the Highlands Regional Master Plan (RMP) is voluntary, and Preservation Area, where conformance with the RMP is mandatory. Sixty-nine percent (9,719 acres) of Roxbury Township lies within the Planning Area and thirty-one percent (4,301 acres) falls within the Preservation Area.

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Roxbury Township's Petition for Plan Conformance in the Preservation Area was approved by the Highlands Council in May 2013. In May 2025, the Township adopted a resolution to authorize the submission of a petition for plan conformance in the Planning Area and completed a Conformance Assessment Report for the Planning Area. Results of the report indicate that the Township's planning efforts have complemented goals and objectives of the Highlands Regional Master Plan and that conformance in the Highlands Planning Area will not only support Roxbury's current planning efforts but will enhance these planning goals and objectives in the future.

Land Use Capability Zones in the Planning Area

- Existing Community Zone: 4,471 acres (46%)
- Existing Community Environmentally Constrained Subzone: 1,458 acres (15%)
- Lake Community Subzone: 680 acres (7%)
- Protection Zone: 3,1100 acres (32%)

The Conformance Assessment Report notes that both the Highlands LUCZ designations and municipal zoning reflect the Township's existing development pattern. The largest zone in the Planning Area of the Township is the Existing Community Zone (ECZ). The ECZ correlates with residential neighborhoods and developed non-residential areas. The second largest LUCZ in the Planning Area is the Protection Zone which is located primarily in the Township's central portion and along the Preservation Area's boundary. The properties categorized as Protection Zone mostly coincide with the Township's Open Space District.

Sewer and Water Infrastructure

The Township is served by two major public sanitary sewerage treatment facilities. The Ajax Treatment Plant is located in the southeast corner of the municipality. This plant was originally intended to correct existing septic problem areas, serve infill development, and extend service only to areas with approved low and moderate-housing within the scope of the Township's approved Housing Plan. The permitted flow at the Ajax Treatment Plant is 2.0 million gallons per day (MGD). The current average daily flow is 1.428, leaving an available capacity of 0.572 MGD.

The Musconetcong Sewerage Authority Service area is the second major treatment facility and is located in Mount Olive. The service area includes Netcong, Stanhope, and portions of Mount Olive. The Township's allocation at the Musconetcong Sewerage Authority Service area is 0.767 MGD. Based on existing flows and the projected buildout from the Morris County Department of Planning & Development, Roxbury has 0.161 MGD to 0.255 MGD of excess sanitary sewer capacity available.

There are also two smaller wastewater treatment systems within the municipality. They are the Hercules Water Pollution Control Plant, which serves the Hercules industrial facility, and the Days Inn Water Pollution Control Plant, located in Ledgewood on Route 46, east of Mooney Road. It is a package plant that serves the Days Inn Hotel and Restaurant.

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Septic tanks or cesspools serve the Township's remaining areas. In the Planning Area, density is restricted by septic density targets (for non-sewered development) for each municipality based on the Land Use Capability Zone. In Roxbury Township those densities are 16 acres for the Protection Zone and 9 acres for the Existing Community Zone.

The Township of Roxbury is served by two water purveyors: NJ American Water, which is a private company that services the southern portion of the Township, and the Roxbury Township Water Department, which serves areas in the north. Both of these purveyors obtain their water from underground wells.

Net Water Availability

Roxbury Township is in 9 subwatersheds. Seven of the watersheds are in a water deficient area. The net water availability values are calculated as follows:

- Drakes Brook (above Eyland Ave) subwatershed (HUC14 02030105010010), which has a calculated net water availability of -0.13 MGD
- Lamington R (above Rt 10) subwatershed (HUC14 02030105050010), which has a calculated net water availability of 0.04 MGD
- Lamington R (Hillside Rd to Rt 10) subwatershed (HUC14 02030105050020), which has a calculated net water availability of -0.78 MGD
- Rockaway R (74d 33m 30s to Stephens Bk) subwatershed (HUC14 02030103030070), which has a calculated net water availability of -3.28 MGD
- Musconetcong R (Wills Bk to LkHopatcong) subwatershed (HUC14 02040105150030), which has a calculated net water availability of 0.15 MGD
- Drakes Brook (below Eyland Ave) subwatershed (HUC14 02030105010020), which has a calculated net water availability of -3.17 MGD
- Lake Hopatcong subwatershed (HUC14 02040105150020), which has a calculated net water availability of -0.23 MGD
- Rockaway R (Stephens Bk to Longwood Lk) subwatershed (HUC14 02030103030040), which has a calculated net water availability of -0.01 MGD
- Musconetcong R(Waterloo to/incl WillsBk) subwatershed (HUC14 02040105150070), which has a calculated net water availability of -0.54 MGD

The RMP requires conforming municipalities to develop a Water Use and Conservation Management Plan (WUCMP). A WUCMP identifies strategies to reduce, and where feasible, eliminate water deficits.

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Highlands Open Waters

Roxbury Township contains 189 waterbodies, totaling 631 acres. Among the waterbodies are:

- Lake Hopatcong: 173 acres
- Lake Musconetcong: 68 acres
- Chesler Lake: 42 acres
- Horseshow Lake: 18.6 acres

Roxbury Township contains multiple streams totaling 53.7 miles in length. Among the streams are:

- Drakes Brook: 4.3 miles
- Drakes Brook tributary: 10.8 miles
- Lamington River: 2.6 miles
- Lamington River tributary: 8.2 miles
- Musconetcong River: 2.2 miles
- Musconetcong River tributary: 4.7 miles
- Stephens Brook: 3.1 miles
- Stephens Brook tributary: 3.0 miles

The Township and Highlands Council have worked together on multiple planning efforts and initiatives to protect and improve water quality in the Township. The Highlands Council has provided grant funding to conduct data collection and planning for the dredging and beneficial reuse of sediment in the Landing Channel section of Lake Hopatcong, to create engineering and planting design plans for streambank stabilization and habitat enhancement of the Musconetcong River, and to prepare documents to improve and upgrade stormwater facilities located between Mount Arlington Boulevard and King Road.

Findings

Conformance in the Planning Area will reinforce many of the Township's existing goals, objects, policies, and regulations. Many Township regulations already align with the RMP including protections for forests, open water and riparian areas, and steep slopes. However, several planning and regulatory documents will need to be updated, amended, or prepared to be consistent with the RMP.

The Conformance Assessment Report finds that impacts to development potential and existing land uses from plan conformance in the Planning Area will likely be minimal due to environmental constraints and limited infrastructure capacity. As noted above, the majority of the Township in the Planning Area consists of the Existing Community Zone, meaning it is already developed and less environmentally constrained. Most anticipated development would occur in the form of redevelopment and infill and any impacts from conforming with the RMP would be limited.

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Pre-existing single-family homes in the Planning Area will not be impacted by conformance with the RMP in the Planning Area. Vacant lots that are, according to current municipal zoning, incapable of creating three or more new units, will not be impacted by conformance with the RMP.

Development on public water and sewer infrastructure is generally permitted in the Existing Community Zone. The majority of the Planning Area is served by water and wastewater facilities. Any future infrastructure expansion will likely be associated with addressing the Township's affordable housing obligations and will be located adjacent to areas with existing serviceable lines to reduce encroachment.

Lands in the Protection Zone are environmentally constrained which makes development challenging, and regardless of plan conformance status, would continue to be regulated through NJDEP regulations or local environmental protection zoning regulations.

The Conformance Assessment Report notes that the Township currently has no plans for Highlands Center Designation. However, the Township may consider Center Designation in the future to provide economic incentives and housing opportunities where land use, zoning, access to transportation, and available infrastructure make additional development, redevelopment, and in-fill development an attractive option for Center Designation.

The Township has not identified any potential Highlands Redevelopment Areas. The Conformance Assessment Report notes that properties will likely utilize the Local Redevelopment and Housing Law or are already designated brownfield sites. In addition, existing uses will likely be able to take advantage of the exemptions provided for already-developed areas.

B. STAFF RECOMMENDATION AND CONDITIONS

The approval of Roxbury Township's Petition for Plan Conformance for the Planning Area is recommended with the following conditions:

1. **Adherence to the Plan Conformance Implementation Tasks set forth in the Implementation Plan and Schedule (IPS)** (Appendix A). The Highlands Council is available to provide technical assistance and guidance for activities listed in the IPS. The Council's approval of the Township's Petition specifically includes grant funding for those items listed in Fiscal Year 2026 of the IPS. Funding for items beyond Fiscal Year 2026 are subject to future Highlands Council approval. The approval of the petition includes approval of grant funding in the total amount of \$79,000 for FY2026 for the purposes outlined below and in the Implementation Plan and Schedule.
2. **Adoption of Approved Master Plan Highlands Element and Re-examination Report.** The Township shall prepare the Highlands Master Plan Re-examination Report and the Master Plan Highlands Element and submit it to the Highlands Council for final approval. Upon receipt of

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final Highlands Council approval, the municipal planning board shall arrange for the required process of scheduling, notice, public hearing, consideration, and formal adoption of the documents by the municipal planning board. At the conclusion of the process, certified copies of the adopted documents shall be provided to the Highlands Council.

3. **Adoption of Highlands Conformance Ordinance.** The Township shall adopt the Highlands Conformance Ordinance, implementing the Land Use Capability Zones of the Highlands Regional Master Plan along with other Highlands resource protections. Adoption of the Conformance Ordinance also meets the requirement for the adoption of a Planning Area Petition Ordinance as required under Section 15 of the Highlands Act. The Highlands Resource Maps are attached (Appendix D).
4. **Approval of Highlands ERI.** The Township shall review the Highlands Interactive Environmental Resource Inventory (ERI) as it relates to municipal resources and notify the Highlands Council of any necessary updates. Upon conclusion that the ERI is accurate, the municipal environmental commission shall provide for and complete the required process of formal approval of the ERI. At the conclusion of the process, a copy of the minutes of the meeting(s) or resolution shall be provided to the Highlands Council.
5. **Preparation and Adoption of Housing Element and Fair Share Plan.** The Township shall prepare and adopt a municipal Housing Element and Fair Share Plan in accordance with the requirements of the Fair Housing Act (N.J.S.A. 52:27D-301 et seq.) and Municipal Land Use Law. In accordance with the Fair Housing Act, all newly constructed residential development within the Highlands Region is required to reserve for occupancy by low- or moderate-income households at least 20 percent of the residential units constructed. As the 20% requirement is found in the Fair Housing Act, not the Highlands Act, all municipalities located in the Highlands Region are responsible for the 20 percent requirement, irrespective of plan conformance status or if the project is exempt from the Highlands Act.
6. **Stormwater Management Plan.** Revise and adopt a municipal Stormwater Management Plan that includes: a) Highlands-specific amendments; b) revisions required by the Stormwater Management Rules at N.J.A.C. 7:8; and c) Stormwater Mitigation Plan. Additional work under the Program to include requirements of the current Municipal Separate Storm Sewer System (MS4) permit. This may include: ordinance revision and adoption; stormwater facilities mapping; new/updated storage and maintenance plans; training activities; and development of a Watershed Improvement Plan.
7. **Water Use and Conservation Management Plan.** Completion and adoption of a municipal wide Water Use and Conservation Management Plan (subject to future Highlands Council funding).

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8. **Community Forestry Plan.** The Township will develop a comprehensive plan to maintain the significant number of Township-owned street trees as well as trees within parkland. Roxbury has been significantly impacted by the Emerald Ash Borer and has removed many street trees over the past few years.

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APPENDIX A

**IMPLEMENTATION PLAN AND SCHEDULE
Township of Roxbury, Morris County**

DRAFT
Roxbury Township, Morris County, New Jersey
Highlands Implementation Plan and Schedule

Amended Grant Agreement Task #	PLAN CONFORMANCE TASK	Proposed Cost Fiscal Year 2026	Future Projects (requires future HC Approval)	Status and Comments
1	Housing Element and Fair Share Plan			4th Round Housing Element and Fair Share Plan prepared by June 30, 2025
1a	Adoption of Implementing Ordinances	\$ 5,000.00		Adoption of ordinances required as per the Fair Share Plan
2	Highlands Interactive Environmental Resource Inventory	\$ 3,000.00		Review Highlands Interactive ERI, propose amendments as necessary, and adopt.
3	Highlands Element of Municipal Master Plan	\$ 6,000.00		Adoption of updated Highlands element and reexamination report.
4	Highlands Center Feasibility Study		TBD	
5	Highlands Redevelopment Area Study		TBD	
6	Municipal Master Plan Elements (as applicable)			
	a. Land Use Plan Element		TBD	Municipal Priority - To include a climate change related hazard vulnerability assessment.
	b. Circulation Plan Element		TBD	Municipal Priority - with emphasis on safety concerns, reducing congestion, and supporting other modes; A \$25,000 grant was awarded in April 2024 for a Trails Plan Update
	c. Sustainable Economic Plan Element		TBD	
	d. Conservation Plan Element		TBD	
	e. Utility Services Element		TBD	
	f. Open Space and Recreation Plan Element		TBD	
	g. Historic Preservation Plan Element		TBD	
7	Adoption of Highlands Land Use Ordinance	\$ 5,000.00		Adoption of Highlands Land Use Ordinance serves to protect municipal resources; future land use ordinance amendments may follow to update existing municipal ordinances.
8	Zoning Map Update		TBD	Update municipal zoning map as necessary
9	Resource Management Plans and Programs			
	a. Water Use and Conservation Management Plan		TBD	
	b. Municipal Stormwater Management Plan	\$ 50,000.00		Preparation of Stormwater Management Plan including MS4 requirements; Grant for \$98,100 awarded in August 2024 for basin retrofit for King Road at Mount Arlington Blvd.
	c. Lake Management /Beach Restoration Plan		TBD	
	d. Community Forestry Plan	\$ 10,000.00		Municipal Priority - with focus on maintaining municipal parkland and street trees.
10	Attendance at Highlands Council Training Sessions			
	a. Municipal Exemption Determinations		\$ 500.00	
	b. Ordinance Administration: Application Procedures, Implementation, Enforcement			
	Estimated Subtotal	\$ 79,000.00		

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APPENDIX B

HIGHLANDS PLANNING AREA CONFORMANCE ASSESSMENT REPORT

May 2025

Township of Roxbury, Morris County

HIGHLANDS PLANNING AREA CONFORMANCE ASSESSMENT REPORT



*Township of Roxbury
Morris County, New Jersey*

May 2025

Prepared by the Roxbury Township Planning Board

*In consultation with
Banisch Associates, Inc.
Flemington, NJ 08822*

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INTRODUCTION

Roxbury Township is located in the central area of the Highlands Region, which spans 1,250 square miles and incorporates seven counties in New Jersey. Roxbury Township is located in the northcentral portion of Morris County and includes both Highlands Preservation and Planning Areas. The Township, founded in 1740, has a rich history of being a commercial and recreational destination area and a desirable place to live and work. The Township's current development pattern reflects this history, first as a mining center, then a hub on the Morris Canal, and later as a gateway to the Lake Hopatcong recreation and vacation areas. Historic settlements such as Kenvil, Landing, Port Morris, Succasunna, Ledgewood, and Lower Berkshire Valley reflect the Township's early history and still retain much of the character of that time. By the mid-century, the Township included established commercial corridors along its major roadway and residential uses flanking these areas, a pattern still existing today.

Given Roxbury's historical development patterns, planning efforts in the Township have focused on ensuring the vibrancy of the commercial centers, supporting the residential neighborhoods and historic areas, and protecting the natural resources of undeveloped areas. The result of this is that the Township's planning efforts have complemented many of the regional and state planning goals and objectives outlined in the State Development and Redevelopment Plan and the Highlands Regional Master Plan. Based on the complementary goals and objectives, the Township was able to conform to the Highlands Regional Master Plan for the Preservation areas of the Township and now seeks conformance within the Planning Areas. The following assessment outlines the cohesive nature of the Township's current land use patterns, activities, and planning goals to that of the Highlands Regional Master Plan, which shows that conformance in the Highlands Planning Area will not only support Roxbury's current planning efforts but will enhance these planning goals and objectives in the future.

ROXBURY'S PARTICIPATION IN THE HIGHLANDS

The New Jersey Legislature enacted the Highlands Water Protection and Planning Act (N.J.S.A.13:20-1 et seq.) on August 10, 2004, placing 88 municipalities – including Roxbury Township – within the Highlands Region. The Region consists of some 859,358 acres in northwest New Jersey and is divided between the Planning Area (444,399 acres) and the Preservation Area (414,959 acres). In August 2008, the Highlands Water and Planning Protection Council (Highlands Council) approved the 2008 Highlands Regional Master Plan, leading to its formal adoption on September 8, 2008.

Municipalities located within the Preservation Area of the Highlands Region are required by the Highlands Act to “...submit to the council such revisions of the municipal master plan and development regulations, as applicable to the development and use of land in the preservation area, as may be necessary in order to conform them with the goals, requirements, and provisions of the regional master plan.” (N.J.S.A. 13:20-14) Roxbury Township prepared and adopted the required planning documents, including, but not limited to, the Highlands Element of the Master Plan, the Environmental

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Resource Inventory, and the Land Development Ordinance, and received Plan Conformance approval from the Highlands Council on May 16, 2013, for the Preservation Area of the Township.

The Township seeks to evaluate participation in the Highlands Region for its Planning Area. As such, the Township has prepared a Planning Area Conformance Assessment to determine the impact on long-term planning and municipal objectives associated with Planning Area conformance.

LAND USE AND DEVELOPMENT ASSESSMENT

Sixty-nine percent (9,719 acres) of Roxbury Township lies within the Planning Area. The remaining thirty-one percent (4,301 acres) falls within the Preservation Area. Roxbury's Preservation Area portion primarily encompasses the Township's northeastern and central western areas (Figure 1). The Planning Area includes the remaining, more densely developed, areas of the Township.

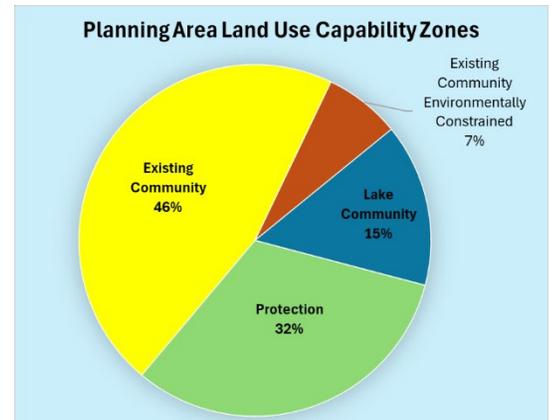
The following information provides an overview of the Township's planning documents, goals and objectives, and zoning in comparison with The Highlands RMP. The Township and the RMP identify the same objectives to protect natural resources, guide development to appropriate areas, and support existing communities to provide Roxbury's vibrant and sustainable future.

Highlands Land Use Capability Zone

The Land Use Capability Zone Map established in the RMP is designed to "...address the requirements of the Highlands Act and provide regional guidance for the implementation of the policies contained in the Regional Master Plan." The map depicts "overlay zones," each with a number of policy objectives that will affect how the Township addresses the issue of consistency in the Planning Area.

The largest overlay zone in the Planning Area consists of the Existing Community Zone (ECZ), which includes the Existing Community Environmentally Constrained subzone, and the Lake Community Zones, which cover 68% of the Planning Area (Figure 2). First, the Existing Community Zone accounts for 46% of the total land area and correlates with the majority of the residential neighborhoods and developed non-residential areas. The ECZ is defined as:

The Existing Community Zone consists of areas with regionally significant concentrated development signifying existing communities. These areas tend to have limited environmental constraints due to previous development patterns, and may have existing infrastructure that can support development and redevelopment provided that such development



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is compatible with the protection and character of the Highlands environment, at levels that are appropriate to maintain the character of established communities.

A subset of the Existing Community Zone is the Existing Community Zone – Environmentally Constrained Sub-Zone, covering approximately 7% of Planning Area in Roxbury. The RMP describes this sub-zone as follows:

The Existing Community Zone – Environmentally Constrained Sub-Zone consists of significant contiguous Critical Habitat, steep slopes and forested lands within the Existing Community Zone that should be protected from further fragmentation. They serve as regional habitat ‘stepping stones’ to larger contiguous Critical habitat and forested areas. As such, they are not appropriate for significant development, and are best served by land preservation and protection. Development is subject to stringent limitations on consumptive and depletive water use, degradation of water quality, and impacts to environmentally sensitive lands.

A second subset of the Existing Community Zone is the Lake Community Sub-Zone which, as the name suggests, covers the area in proximity to the lakes greater than 10 acres. It affects some 15% of the Planning Area and is defined as follows:

The Lake Community Sub-Zone consists of patterns of community development that are within the Existing Community Zone within 1,000 feet of lakes. The Highlands Council focused on lakes that are 10 acres or greater and delineated lake management areas consisting of an area of up to 1,000 feet (depending on the protection focus) from the lake shoreline in order to protect water quality, resource features, shoreline development recreation, scenic quality and community character. A future management area is planned, encompassing the full lake watershed, for protection of the lake water quality. This zone has unique policies to prevent degradation of water quality, and watershed pollution, harm to lake ecosystems, and promote natural aesthetic values within the Existing Community Zone.

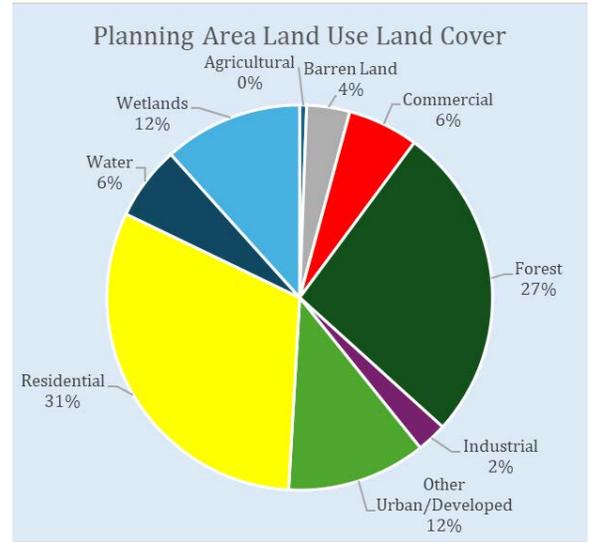
The next largest overlay zone in the Planning Area is the Protection Zone, which totals 32% of the land and applies to underdeveloped and undeveloped lands, primarily in the Township's central portion and along the Preservation Area's boundary. As established by the RMP, this zone is described as follows:

The Protection Zone consists of high natural resource value lands that are important to maintaining water quality, water quantity and sensitive ecological resources and processes. Land acquisition is a high priority in the Protection Zone and development activities will be extremely limited; any development will be subject to stringent limitations on consumptive and depletive water use, degradation of water quality, and impacts to environmentally sensitive lands.

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ROXBURY TOWNSHIP**

Land Use Land Cover

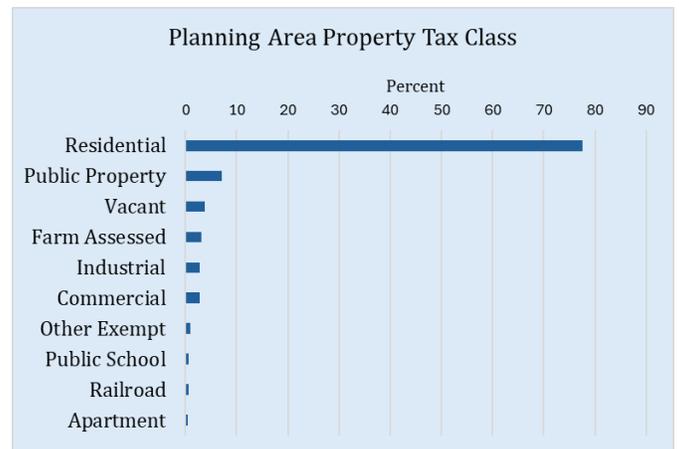
The Land Use Land Cover for the Township provides a more detailed picture of the characteristics of the land uses in the Planning Areas. Over half, 52%, of the Planning Area in the Township is developed. Of the developed areas in the Township, 32% is residential, 59% is commercial, and 2.5% is industrial. As identified in Figure 3, commercial and industrial uses are located along the major roadways in the Township, with the residential areas filling out the areas to the north and south. Much of the undeveloped areas are found north of Route 46, where traditionally environmental constraints such as forested areas and steep slopes have hindered full development.



The existing land use land cover data corresponds with the Highlands Land Use Capability Zones since the developed and undeveloped areas and their natural resources are a basis for developing the Capability zones.

Property Tax Class

Finally, property tax class in the Township identifies that 77% of the Planning Area is residential, with 5.5% consisting of non-residential uses (Figure 4). Residential land uses correspond with the Land Use Land Cover and Land Use Capability Zones of the Highlands, with large areas of residential uses found in the south and north, outside of the commercial corridors. The commercial areas are primarily found along the major roads running through the central and northern portions of the Township.



Roxbury Existing Zoning and Land Use Plan

Zoning

Roxbury Township’s current zoning and land use plan is a reflection of the Township’s existing development pattern. The Preservation area of the Township primarily includes open-space zoning and low-density residential areas. However, in the Planning Area, there are varied land uses in all classifications. Residential zoning in the Planning Area consists of districts with a minimum lot areas ranging from 7,500 square feet to five acres. The higher-density residential areas are located within the

**PLANNING AREA CONFORMANCE ASSESSMENT
ROXBURY TOWNSHIP**

sewer service zones and reflect existing development patterns, while lower-density residential districts are located outside of the sewer service areas. Additionally, there are twelve affordable housing districts to support the Township’s ongoing efforts to address its affordable housing obligations. The affordable housing districts are typically single lots or lots in common ownership as part of the prior round compliance and the settlement agreement for the 3rd round.

Non-residential zoning in the Planning Area is located along the major roadway systems, US Highways 46 and 206, State Highways 183 and 10, and Kings Highway. Non-residential zones in the Planning Area are provided for diverse uses, including commercial, office, manufacturing, industrial, research, and shopping centers. Access to the major highways created the existing development patterns that continue today (Figure 5).

Planning Area Zoning	
Zone Name	Percent
Residential District	39
Open Space District	18
Planned Office/Light Industrial District	10
Light Industrial/Office Research	9
Rural Residential District	5
Highway Business District	4
Limited Industrial District	3
Government Use District	2
Office Research District	2
Limited Business District	2
Planned Shopping Center District	2
Professional Office/Residential District	1
Affordable Senior/MultiFamily Residential/B	1
Office Building District	1
Multi-Family Residential District	0
Affordable Housing Residential District	0
Affordable Senior Citizen/MultiFamily Residential	0

Roxbury 2009 Township Land Use Plan

As identified above, the Township Land Use Plan heavily relies on supporting and directing development in already developed areas and providing for additional development in appropriate areas, reducing encroachment into undeveloped and environmentally constrained areas. The 2009 Land Use Plan included a service of goals and objectives related to all land uses in the Township. Below are examples of goals and objectives that conform to the goals and objectives of the Planning Area in the Highlands:

- By decreasing the development intensity on undeveloped and underdeveloped land in residential areas and increasing the protection of open space, environmentally sensitive areas and natural areas to promote and maintain the overall quality of life for residents throughout the Township.
- By encouraging cluster development where it is beneficial and appropriate to protect the character of the area and to create useable patterns of open space that benefit of the community.
- By siting commercial development along specified highway corridors and by arranging such development on sites in a manner which best protects nearby residential areas from potential conflicts, avoids environmentally sensitive areas and provides adequate landscape and setback areas from adjacent roadway.
- By developing regulations to promote a scale, type, design and intensity of commercial development in appropriate locations, which is compatible with the protection of surface and groundwater, quality and the minimizing of negative impacts to these critical recharge areas, as well as other environmental resources and sensitive areas.
- By promoting commercial and industrial roadways to provide access to adjacent commercial and industrial properties where feasible.
- By siting such [industrial] development in a manner to preserve the greatest amount of open space, avoid environmentally sensitive areas, minimize adverse impacts to adjacent properties and reduce impervious coverage.
- By developing regulations to promote a scale, type, design and intensity of office and industrial development in appropriate locations, which is compatible with the protection of surface and groundwater quality and the minimizing of negative impacts to these critical recharge areas, as well as other environmental resources and sensitive areas.
- By further defining the types of permitted industrial uses in the Township and to exclude from those permitted uses any which are found to be potentially dangerous and/or in conflict with the goal of protecting the surface and groundwater quality of the Township and region.

The 2009 Land Use Plan also recognized the Highlands as a special resource area and intended to consider the goals and objectives of the Highlands Water Protection and Planning Council in implementing the Regional Highlands Master Plan.

Sewer and Water Infrastructure

The Township includes public water, wastewater, and private on-site facilities. The Township is served by two major public sanitary sewerage treatment facilities ([Figure 6](#)). The Ajax Treatment Plant is located in the southeast corner of the municipality. This plant was originally intended to correct existing septic problem areas, serve infill development, and extend service only to areas with approved low and moderate-housing within the scope of the Township's approved Housing Plan. The Musconetcong Sewerage Authority Service area is the second major treatment facility and is located in Mount Olive. The service area includes Netcong, Stanhope, and portions of Mount Olive. There are also two smaller wastewater treatment systems within the municipality. They are the Hercules Water Pollution Control Plant, which serves the Hercules industrial facility, and the Days Inn Water Pollution Control Plant, located in Ledgewood on Route 46, east of Mooney Road. It is a package plant that serves the Days Inn Hotel and Restaurant. Septic tanks or cesspools serve the Township's remaining areas.

The Township of Roxbury is served by two water purveyors: NJ American Water, which is a private company that services the southern portion of the Township, and the Roxbury Township Water Department, which serves areas in the north. Both of these purveyors obtain their water from underground wells ([Figure 7](#)).

Estimate Build Out Potential

The Township's development trends over the past decade reflect a pattern of modest growth constrained by both market conditions and regulatory limitations of the remaining land base. Residential activity has been minimal, with the only significant development being the Woodmont Parc project in 2018, an inclusionary multi-family development that temporarily elevated the pace of housing growth. Outside of this outlier, the Township issued an average of approximately nine building permits per year, signaling a relatively low rate of new residential construction. This can be attributed to environmental constraints and limited infrastructure capacity of the remaining developable land in the Township.

Non-residential development has followed a similar pattern. While the average issuance of certificates of occupancy (COs) for non-residential space stood at roughly 126,000 square feet annually, the majority of this growth occurred in just three peak years. Most non-residential activity happened as a result of infill or conversion of prior activity into new spaces. Limited greenfield construction has occurred.

The Township conducted a residential build-out analysis of the remaining available vacant properties, taking into account environmental constraints (see [Appendix A](#)). The analysis estimates that approximately 18 vacant lots remain in the Highlands Planning Area of the Township that have enough unconstrained land to support residential developments at six units per acre, for a total of 264 new housing units. However, this figure likely overstates the actual build-out capacity since parcel-specific limitations, such as dimensional restrictions and localized environmental conditions, typically reduce the development yield. This does not include existing residential lots existing prior to 2004 that could construct a single dwelling unit under the Highland exemptions, or properties subject to affordable housing planning.

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The Highlands Council's Build-Out Portal provides a projection of residential potential under the Highlands regulations. The results of the Highlands Build-Out indicate three properties that could yield residential development, with an estimated 38 new housing units in the Planning Area.

The residential development pattern under the Highland regulations represents about 15 percent of the Township's earlier build-out estimate under the current regulation build-out potential. Given the Township's historic pace of residential construction, approximately nine new units per year, build-out under current regulations would occur gradually over time. While development opportunities still exist, particularly for infill or targeted growth, the overall scale of potential residential expansion is limited. As a result, the Township is unlikely to face significant growth pressures that would be constrained by conformance with Highlands Planning Area requirements.

Summary of Land Use and Development Assessment

A comparison of the Highlands and the Township's land use, infrastructure, planning policies, and goals and objectives outlined above to identify the cohesive nature between the Township's planning efforts and the Highlands regional master plan.

HIGHLANDS CENTER DESIGNATION AREAS

The Highlands Center designation process is a collaborative and comprehensive planning process that seeks to guide and focus development, redevelopment, and infill development within or adjacent to existing developed areas within the Highlands Planning Area. Identifying and designating areas for growth, infill, and redevelopment promotes economic activity, supports a robust tax base, utilizes existing infrastructure, and can provide commercial opportunities, diverse housing options, and affordable housing opportunities while reducing further encroachment into undeveloped or environmentally sensitive areas. Center designation tailors development and redevelopment based on the area's community character and long-term development goals. Center designation provides additional benefits to communities through access to additional planning grants and a tailored planning approach and may remove barriers to development and redevelopment associated with specific Land Use Capability Map Zones within a designated Center.

Center designation begins with identifying goals and long-term planning objectives associated with areas that may support additional development and redevelopment and evaluating those areas to determine if Center designation would be beneficial to the Township and meet the goals of the Highlands RMP. Should the Township seek center designation, a collaborative planning process would take place between the Township and the Highlands to best tailor and approach planning for that area. Roxbury Township includes a variety of land uses reflective of the historical development patterns that focus on non-residential uses along major highways and roadway networks, mixed-use and residential uses in the traditional areas of Kenvil, Landing, Port Morris, Succasunna, Ledgewood, and Lower Berkshire Valley, and lower-density residential development in the remaining areas of the Township. The existing zoning and Highlands Land Use Capability mapping further illustrate this historic development pattern.

The Township may consider center designation where land use, zoning, access to transportation, and available infrastructure would make additional development, redevelopment, and in-fill development an attractive option for center designation. [Figure 8](#) identifies areas where such factors exist. The Township currently has no plans for center designation but may consider such actions in the future as part of a holistic planning approach to provide economic incentives and housing opportunities.

HIGHLANDS REDEVELOPMENT AREAS

Highlands Redevelopment Areas may be found outside of traditional centers but would benefit from redevelopment activities as part of an overall economic development plan. Highlands Redevelopment areas often consist of existing developed areas that have an impervious coverage of 70% or greater, or brownfield sites, where contamination cleanup will benefit the community and environment. Highlands redevelopment areas allow for the development or redevelopment of the designated property allows development with flexibility and waivers from the Highlands regulations.

Redevelopment may also occur within the highlands through a variety of exemptions outlined in the act, which include activities such as the construction of a single-family home on an existing lot, reconstruction of buildings within 125% of the footprint, public or non-profit uses such as school, houses of worship, and hospitals. Redevelopment areas are then eligible for waivers and from the goals, policies and objectives of the RMP. Redevelopment areas may consist of brownfield sites or sites designated as Redevelopment Areas by the Highlands Council and Redevelopment Areas under the Local Housing and Redevelopment Law. Activities in redevelopment areas may include infilling, reusing, and repurposing sites to meet long-term planning efforts such as economic incentives and the production of diverse and affordable housing opportunities. A redevelopment area may consist of a single parcel or a larger area involving multiple properties.

A municipality may identify a redevelopment area that would benefit from the designation and meet the Highlands Redevelopment requirements, which include an analysis to determine if the property is a designated brownfield or has a minimum of 70% impervious coverage. The Highlands Council reviews any petition for a redevelopment area on a case-by-case basis to ensure that such development or redevelopment will not negatively impact ground and surface water quality or critical habitat and ecological integrity. The Township has not identified any potential Highlands redevelopment areas. Properties that may seek redevelopment in the Township will likely utilize the Local Redevelopment and Housing Law or are already designated brownfield sites. Existing uses will likely take advantage of the exemptions provided for already-developed areas. However, the Township will review any request for redevelopment by a property owner.

WATER AND NATURAL RESOURCE PROTECTION

The impacts of opting-in to the Highlands Planning Area for areas outside any potentially designated Centers and redevelopment areas will likely minimally impact existing land uses and development potential. As noted above, the majority of the Township in the Planning Area,

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65%, consists of the Existing Community zone, meaning it is significantly developed and less environmentally constrained. The majority of the Planning Area, especially those located along the major roadway networks or in one of the six traditional communities, include existing development that will not trigger many of the restrictions on development identified in the Highlands Act, and likely would be exempt under one of the Highlands exemption provisions. Existing water and wastewater facilities traditionally serve these areas, and any requested amendments to these facilities recently have been to provide inclusionary development for affordable housing. Any future infrastructure expansion will likely be associated with addressing the Township's affordable housing obligations and be located adjacent to areas with existing serviceable lines to reduce encroachment.

The remaining 35% of the land area is attributed to the Protection Zone and is comprised of the undeveloped and underdeveloped portions of the Township. These areas include environmentally constrained lands, which made development challenging, and regardless of opting-in, would continue to be regulated either through NJDEP regulations or local environmental protection zoning regulations.

The Highlands RMP covers a wide variety of environmental constraints and ecological systems. The key resource categories set forth in the RMP are as follows:

1. Forest Resources
2. Open Waters and Riparian Areas
3. Steep Slopes
4. Critical Habitat
5. Land Preservation and Stewardship
6. Carbonate Rock (Karst) Topography
7. Lake Management

To varying degrees the Township's Master Plan, Natural Resources Inventory and development regulations recognize a number of the natural resources contained in the RMP which apply to the Planning and Preservation Areas. The Township's consideration of conforming in the Planning area will reinforce many of the Township's existing planning goals and objectives, master plan, and zoning regulations. Below is a highlight of how the RMP and Township's existing regulations already align, making opting in result in minimal impact to areas outside the Preservation area.

Forest Resources (3 goals/16 policies/23 objectives)

The Highlands RMP goals for forest resources are to protect and enhance current forest areas and align forest regulations throughout the Region. As seen on the Forest Resource Areas Maps (Figure 9), the forest resource areas are located primarily in the central portion of the Township. RMP Policy 1B1 and 2 states:

Policy 1B1: To provide resource management guidance to encourage sustainable forest management, restoration, improved ecological health, carbon sequestration, and stewardship practices on public and private

lands in the Forest Resource Areas within the Protection Zone and the Conservation Zone in the Planning Area.

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.

Most of the Forest Resource Areas in the Planning Area are located in the Township's central areas or in undeveloped areas. The Township includes a §13-11, Tree Conservation, with the purpose of protecting, enhancing, and preserving trees throughout the Township. Conformance in the Planning Area may require adjustments to the existing ordinance but will not significantly alter the purpose or intent of the ordinance.

Open Waters and Riparian Areas *(1 goal/6 policies/22 objectives)*

The goals and policies for open water and riparian areas in the RMP relate to the protection, restoration and enhancement of water resource areas. Highlands open waters include "...springs, streams including intermittent streams, wetlands, and bodies of surface water, whether natural or artificial (excluding swimming pools), located wholly or partially within the boundaries of the Highlands Region." The RMP places a "high priority" on municipal action to develop and implement a Stream Corridor Protection/Restoration Plan to provide the desired level of protection, although it would appear that NJDEP will exercise the primary control in such matters through the Stormwater Management Rules, Flood Hazard Area Rules, and Freshwater Wetlands Rules as noted in the RMP.

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 "land improvements," "development," "land disturbances," or "land uses." 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 can not 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.

Objective 1D4f: In the ECZ 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 “land improvements,” “development,” “land disturbances,” or “land uses.” 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.

Roxbury includes larger areas of open water protection areas (Figure 9) and already has local regulations in place §13-7.819, Stream, Lake and Pond Buffers to restrict disturbance within 50 feet of a stream corridor. The ordinance standards will require review and modification to be consistent with current state regulations.

Steep Slopes (1 goal/11 policies/3 objectives)

Roxbury’s Land Use Ordinance, §13-7.818, restricts the amount of disturbance to slopes in the 15-to-24 percent range and limits disturbance of slopes 25 percent or greater. In accordance with the more restrictive classifications regarding slopes in the RMP, the Township will need to update its ordinance. Conformance with the RMP will require a mapped inventory of the Steep Slope Protection Area, Figure 10, which can be achieved with minor modifications to the Slope Analysis mapping in the Township’s NRI. If the regulations established in N.J.A.C. 7:38-3.8 will apply, it should be a relatively straightforward process to incorporate same into the Township land use code. The standards set forth in Policies 1E1 through 1E11 will apply to the Planning Area if the Township elects to opt-in. These standards are more stringent than those currently in place in Roxbury; therefore, the impact on future development within the Planning Area will need to be evaluated, especially as it pertains to affordable housing development.

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.

Critical Habitat (2 goals/11 policies/12 objectives)

Habitats for rare, threatened and endangered plant and animal species of the Highlands Region cover much of the municipality as mapped by the RMP (Figure 11). The goals and policies in the critical habitat section of the RMP relate to the protection and enhancement of habitat areas and regulatory measures to protect such resources. Specifically, the RMP will require that human encroachment into critical habitat areas be prohibited or not further expanded. Policy 1G1 and 2 states:

Policy 1G1: To require that conforming municipalities and counties identify Critical Habitat and management programs in their master plans and development regulations.

Policy 1G2: To require that conforming municipalities and counties include approved Habitat Conservation and Management Plans in master plans and development regulations.

The Township's code (§13-5.101) requires identification of critical habitat as part of an EIS to be submitted with development review applications.

Carbonate Rock (Karst) Topography *(1 goal/4 policies/6 objectives)*

The Township does not have specific regulations addressing carbonate rock geology outside of the Stormwater Management Regulations (§13-8.405) which require systems to take into account areas of limestone. Carbonate rock areas in Roxbury are located in the southern portion of the Township, with extensive swaths running from east to west. Almost all of the carbonate rock areas are located in the Planning Area (Figure 10). The Township will need to address the policy objectives of the RMP on this matter, which are primarily aimed at the identification of carbonate areas and establishing requirements to ensure the quality of the water supply.

Lake Management *(2 goals/14 policies/9 objectives)*

The Lake Management area, as outlined in the RMP, is intended to protect lake ecosystems from further damage and to restore and enhance lakes that have been degraded. The larger water bodies in the Lake Community Sub-Zone include Lake Hopatcong, Lake Musconetcong, and to the south Horseshoe Lake and the other smaller lake communities. All of these areas are in the Planning Area. In order to implement the Objectives and Policies of this sub-zone to the Existing Community Zone, adjustments will be needed to the residential zoning adjacent to Lake Communities and any other zoning along the affected portion.

Water Resources and Water Utilities

The various subsets under the general category of Water Resources and Water Utilities seek to establish "...a method for determining available water for human use by each subwatershed (HUC14)." This requires the preparation, adoption and implementation of a Water Use and Conservation Plan which, for Roxbury, will constitute a new type of planning effort and one that will greatly influence how new development will occur in the Township since the entire Township is in a water deficit area (Figure 5).

Four primary areas of concern to be addressed are water availability, replenishment of water sources, water quality, and the linkage of new potable water and sanitary sewerage facilities to "sustainable" development.

Water Resource Availability *(2 goals/ 10 policies/ 22 objectives)*

The first set of goals and policies relating to water resources call for "...a method for determining available water for human use by each subwatershed (HUC14)..." (hydrologic unit code). There are nine HUC14 areas in Roxbury and are addressed in Section 3.2 of the Township's NRI. A HUC14 is defined as follows:

HUC14 subwatershed means a delineated areas within which water drains to a particular receiving surface water body (e.g., a watershed), which is identified by a 14 digit number, or Hydrologic Unit Code (HUC). The HUCs were developed by the USGS. In the Regional Master Plan (RMP), the term HUC14 correlates to a subwatershed. A subwatershed is a subdrainage area within a watershed. The only difference between watershed and subwatershed is scale.

Roxbury is located entirely in a water deficient area. The majority of the Township falls within the deficient range of negative 0.99 to negative 0.10 million gallons per day. Two areas show an even larger deficient of negative 7.10 to negative 1.0 million gallons per day. One is located to the south in the Lamington River subwatershed, and the second is in the Rockaway River subwatershed, extending in a northerly pattern near the eastern portion of the Township. The remaining area in the Township, along the northeasterly edge, is in the deficient category of negative .09 to negative .01. The RMP attempts to address this situation in part with the requirement that municipal plan conformance include the adoption by each municipality of a Water Use and Conservation Management Plan. Among its aims, this Plan, in accordance with Objective 2B8c will be designed to:

- ensure efficient use of water through water conservation and Low Impact Development Best Management Practices;
- avoid the creation of new deficits in Net Water Availability;
- reduce or manage consumptive and depletive uses of ground and surfaces waters
- ensure continued stream flows to downstream Current Deficit Areas from Existing Constrained Areas within each HUC14 subwatershed; and
- provide 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

This is obviously a major undertaking. Clarification will be required with regard to how the Water Use and Conservation Management Plan will be applied to lands in the Planning Area where HUC14's cross over from the Preservation Area.

Protection of Water Resources Quantity (3 goals/10 policies/16 objectives)

The RMP promotes the monitoring and assessment of groundwater recharge and net water availability in the Township by HUC14 watershed. As indicated above, the RMP calls for Low Impact Development, Best Management Practices, and technical guidelines to maximize the protection of Prime Groundwater Recharge Areas. As part of Plan Conformance, Objective 2D3 requires controls in master plans and development regulations for this purpose and Policy 2D4 states:

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.

The Township contains areas of Prime Groundwater Recharge (PGWR) with the greatest concentration located in the Preservation Areas of the towns, and some scattered areas to the north (Figure 6). It is noted that Objective 2D4d would limit development of a site located in a PGWR to no more than 15 percent, consequently the Township should evaluate the impact on such areas. It is likely that a 15 percent cap will seriously limit development opportunities, certainly within affected properties in the nonresidential zone districts.

Water Quality (3 goals/19 policies/23 objectives)

The goals and policies in this section relate to providing protection to surface and groundwater sources through land use controls and to provide restoration and enhancement of water supply areas. In addition, the RMP calls for enhanced protection around water supply wells as indicated in Policy 2H2 which states:

To develop and implement, through Plan Conformance, local development review and Highlands Project Review, resource protection measures to protect and enhance ground water and water supply resources within Wellhead Protection Areas consistent with the source water assessments for each water supply source.

Objective 2H5a calls for inclusion of wellhead protection measures in both the Master Plan and development regulations. The Township does currently have provisions for the protection wellhead areas through §13-7.825, Protection of Critical Aquifer Recharge Areas. However, these provisions will have to be reviewed and modified to be considered consistent with the Highlands RMP.

Sustainable Development and Water Resources (5 goals/21 policies/45 objectives)

The goals and policies in this section of the RMP will limit new or expanded potable water and sanitary sewer systems in the Preservation Area (Policy 2I1) but does allow for these utilities to serve areas designated as a Highlands Redevelopment Area (Policy 2I2).

With regard to the Planning Area, the various policies and objectives in this section of the RMP call for severe restrictions for new water and sanitary sewer facilities in the Protection, Conservation and Environmentally-Constrained Sub-Zones. It is not clear if such restrictions are intended to apply if the Township does not opt-in, but it is clear that NJDEP will apply the policies of the Land Use Capability Map in its decision-making process for new permits in accordance with the Highlands Water Protection and Planning Act Rules (N.J.A.C. 7:38-1.1 [g]) which states in part:

“...for all decisions in or affecting the planning area or the preservation area, the Department shall give great consideration and weight to the RMP, to be incorporated by reference..., when adopted by the Highlands Council.” (Emphasis added.)

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Roxbury will need to be attentive to current efforts by Morris County planning officials to establish a county-wide Wastewater Management Plan to ensure consistency with the RMP in accordance with Policy 2K3 and the related objectives. Policy 2K3 reads as follows:

To provide adequate, appropriate, efficient and cost-effective wastewater management to all development in the Highlands Region, through Plan Conformance, local development review, and Highlands Project Review.

Transportation (5 goals / 25 policies / 13 objectives)

The goals and objectives of the RMP for transportation networks encourage multi-modal systems that provide for safe and adequate travel that will not result in a detriment to the Highlands region, its environment or the communities within. The Goals and Objectives of the Circulation Plan element include many goals that seek to reduce congestion, limit access to critical environmental areas in all subdivision and site plan design, encourage bus service, encourage the development of bikeway and walkway systems, and encourage sidewalk plans to link schools, public uses, and recreation areas. These goals relate to many of the objectives in the RMP.

Roxbury is particularly interested in preparing an updated circulation plan. The increase in warehouse and distribution centers throughout the state has resulted in truck traffic, negatively impacting local and regional roads. The Township seeks to provide additional support to reduce congestion and support other modes of transportation to alleviate some of these impacts, which can be further studied in an updated Circulation Plan.

Future Land Use

The RMP divides the category of Future Land Use into the following subsets:

- Land Use Capability Zones (6 goals/22 policies/13 objectives)
- RMP Updates, Map Adjustments and local build out analyses (1 goal/4 policies/6 objectives)
- Regional guidance for development and redevelopment (2 goals/12 policies/ 14 objectives)
- Redevelopment (4 goals/8 policies/8 objectives)
- Smart growth (1 goal/6 policies/24 objectives)
- Housing and community facilities (1 goal/8 policies/4 objectives)

The goals, policies and objectives in each subset will very likely require modifications to the Township's Master Plan and development regulations. In particular, the Township may consider potential growth opportunities through center designation and redevelopment components of the RMP. The Township generally supports the types of development sought in the RMP, such as Goal 6F:

Support of compact development, mixed use development and redevelopment and maximization of water, wastewater and transit infrastructure investments for future use of land and development with the Existing Community Zone.

With respect to redevelopment Goals 6J and 6L are, respectively:

Accommodation of regional growth and development needs through the reuse and redevelopment of previously developed areas, including brownfields, grayfields, and underutilized sites.

Conforming municipalities and counties consider development, redevelopment and brownfield opportunities in their master plans.

Additionally, Roxbury continues to actively participate in addressing the Township's mandated affordable housing programs through a variety of mechanisms that offer housing opportunities. Areas of potential residential or mix-use development that help to achieve the construction of affordable housing units should be reviewed and incorporated into any long-term planning process.

HIGHLANDS GRANT NEEDS

Should the Township seek approval for conformance in the Planning Area, the existing Township planning and regulatory documents will require amendments to reflect the associated Highlands requirements. While the goals and objectives outlined in the RMP are similar to those of Roxbury's Master Plan and Land Use Ordinances, extensive amendments to existing Township regulations will still be required. In addition, other major components of full plan conformance include a series of technical documents and plans to be prepared and adopted by municipalities. These may include:

Existing Master Plan Updates:

- Land Use Plan Element updates
- Updates to the previously approved Highlands Master Plan Elements as needed, such as the Conservation Plan, Utility Services Element, Recreation and Open Space Plan, Historic Preservation Plan Element, Historic, Cultural, and Scenic Resource Protection Element
- Circulation Plan Element (with emphasis on an assessment of local transportation improvement needs and safety concerns)

Additional Studies/Plans

- Prepare Sustainable Economic Plan Element
- Prepare Center Designation Reports to identify appropriate any potential center areas.
- Prepare Redevelopment Area Report to identify development, redevelopment and brownfield opportunities
- Programs for community and neighborhood design that support a variety of housing options, mixed uses, redevelopment, adaptive re-use of historic sites and structures, and infill development
- Forest Conservation and Mitigation Plan

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- Stream Corridor Protection/Restoration Plan
- Critical Habitat Conservation and Management Program
- Water Use and Conservation Management Plan
- Land and Water Resource Planning and Management Programs

Development Regulations

- Carbonate Rock Area development ordinance and standards
- Septic System Maintenance programs and ordinances
- New or modified regulations for community and neighborhood design that support a variety of housing options, mixed uses, redevelopment, adaptive re-use of historic sites and structures, and infill development
- Shoreland Protection and Water Quality Management Tiers standards

The Township must prioritize the update or completion of the documents above. The following documents will likely begin the process based on the Township's current needs.:

Task	Estimated Cost
Land Use Plan Amendment	\$10,000
Highlands Master Plan Updates to reflect Planning Area Conformance	\$7,500
Amendments to Land Development Ordinances	\$7,500
Lake Management/Beach Restoration Plan	\$25,000
Circulation Plan Element	\$15,000
Center Designation Study	\$15,000
Redevelopment Area Study	\$15,000
TOTAL	\$95,000

CONCLUSION

Roxbury Township has prepared this assessment in order to better understand the implications of conformance in the Planning area of the Township. As indicated in this report, the Township's existing development pattern, planning goals and objectives, and land development ordinance complement the Highlands RMP goals and objectives, and policies for the Planning Area. The Township seeks an opportunity to provide meaningful economic opportunities, enhance and support existing residential areas, and protect environmental resources. Should the Township seek conformance in the Planning area, several planning and regulatory documents will have to be updated, amended, or prepared. If the Township is favorable to conformance in the Planning Area, the next steps would be to prepare a Notice of Intent to conform to the Planning Areas and open discussions with the Highlands Council on that action.

APPENDIX A: Build-Out Analysis Comparison under Existing and Highlands Regulations

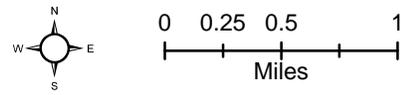
Table 1: Parcels Available for Residential Development Under Existing Regulations

Block	Lot	Tax Class	Location	Acres	Constrained Acres	Developable Acres	Total Units
10101	11	1	233 LEDGE-LANDING RD,REAR	0.94	0.00	0.94	5
4501	16	1	4 SUNNY VIEW DR	1.28	0.00	1.28	7
5701	7	3B	219 EMMANS RD	6.91	5.71	1.20	7
4002	14	1	BERKSHIRE VALLEY RD	1.57	0.00	1.57	9
1801	13	3B	79 EYLAND AVE	12.75	11.15	1.60	9
7002	2	1	142 N DELL AVE	1.74	0.00	1.74	10
6601	19	1	MT ARLINGTON RD, REAR	2.76	0.83	1.93	11
6701	4	3B	BERKSHIRE VALLEY RD	1.99	0.00	1.99	11
9401	1	1	4 ROUTE 206	1.88	0.00	1.87	11
9101	1	1	200 MOUNTAIN RD	2.06	0.00	2.06	12
2001	13	3B	28 GREEN LN	11.00	8.92	2.08	12
10013	2	1	6 RIGGS AVE, LAND	2.25	0.00	2.25	13
7204	2	3B	BERKSHIRE VALLEY RD	24.30	21.87	2.43	14
9802	12	1	245 KINGS HWY	7.73	5.30	2.43	14
3301	12.01	3B	40A CONDIR ST	6.25	3.30	2.95	17
6701	5	3B	BERKSHIRE VALLEY RD	4.03	0.00	4.03	24
8901	12	1	127 HOWARD BLVD	4.30	0.00	4.30	25
8602	22	1	ARLINGTON AVE	23.16	14.20	8.95	53
TOTAL							264

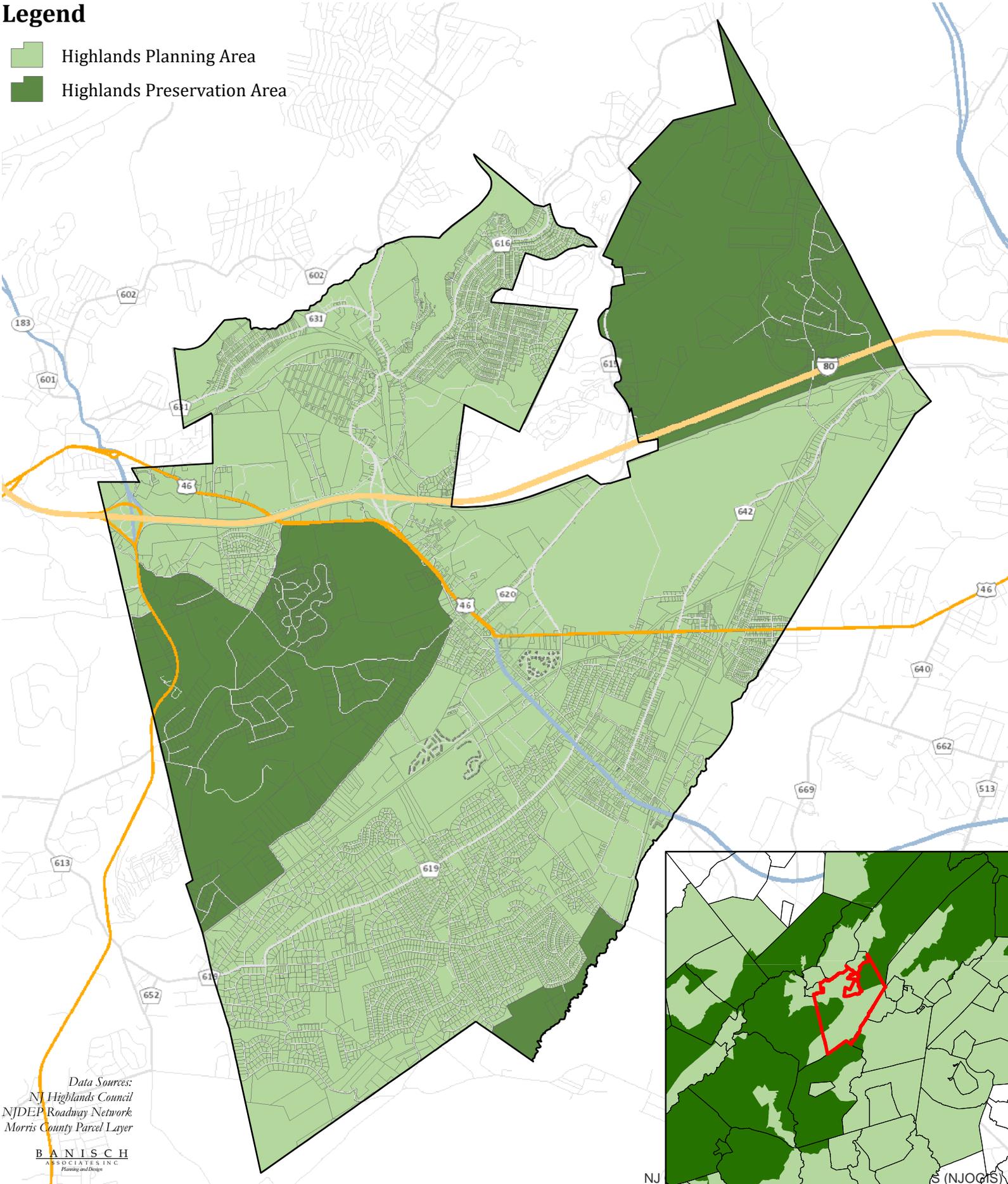
Table 2: Parcels Available for Residential Development Under Highlands Regulations

Block	Lot	Location	Developable Acres	Constrained Acres	Acres	Total Units
6601	19	MT ARLINGTON RD, REAR	1.16	1.60	2.76	6
10013	2	6 RIGGS AVE, LAND	0.97	1.28	2.25	5
10901	4	129 CENTER ST	4.66	8.43	13.09	27
TOTAL						38

Figure 1 Highlands Boundary Roxbury Township, Morris County, NJ May 2025



- ### Legend
- Highlands Planning Area
 - Highlands Preservation Area



Data Sources:
NJ Highlands Council
NJDEP Roadway Network
Morris County Parcel Layer

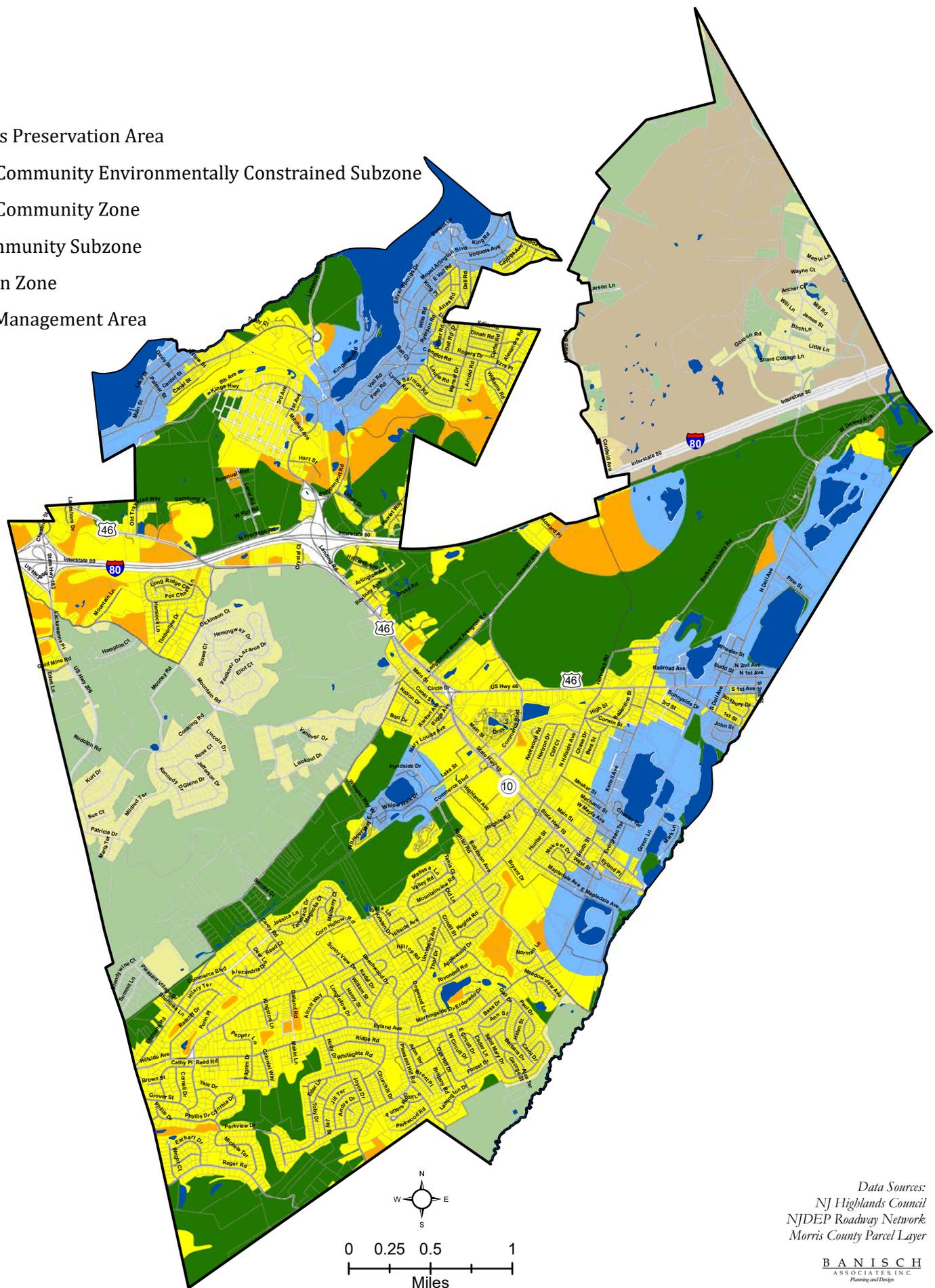


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Figure 2
Highlands Land Use Capability Zones
Roxbury Township, Morris County, NJ
May 2025

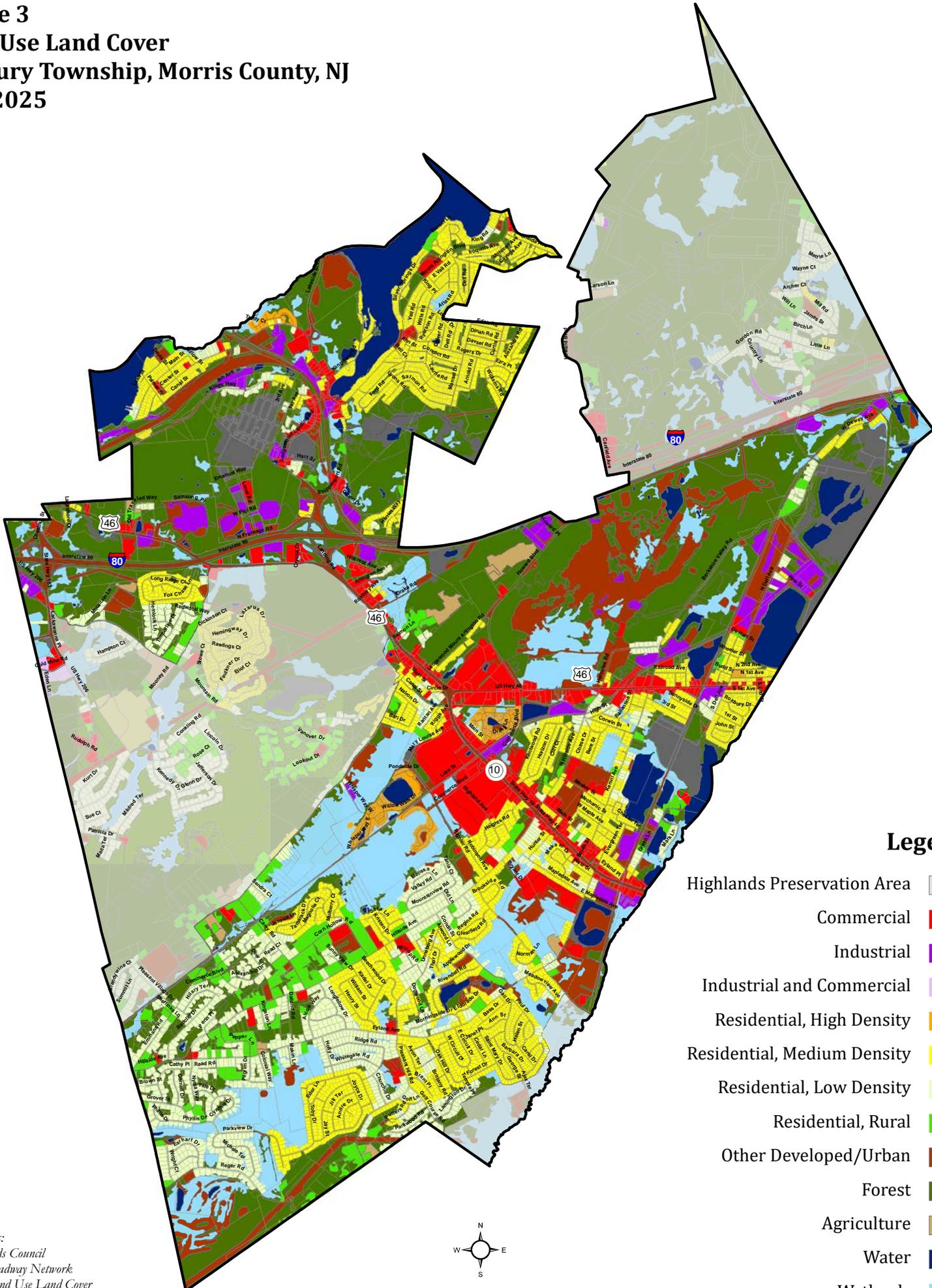
Legend

- Water
- Highlands Preservation Area
- Existing Community Environmentally Constrained Subzone
- Existing Community Zone
- Lake Community Subzone
- Protection Zone
- Wildlife Management Area



Data Sources:
 NJ Highlands Council
 NJDEP Roadway Network
 Morris County Parcel Layer

Figure 3
Land Use Land Cover
Roxbury Township, Morris County, NJ
May 2025



Legend

- Highlands Preservation Area
- Commercial
- Industrial
- Industrial and Commercial
- Residential, High Density
- Residential, Medium Density
- Residential, Low Density
- Residential, Rural
- Other Developed/Urban
- Forest
- Agriculture
- Water
- Wetlands
- Barren Land

Data Sources:
 NJ Highlands Council
 NJDEP Roadway Network
 NJDEP Land Use Land Cover
 Morris County Parcel Layer
BANISCH
 ASSOCIATES INC
 Planning and Design

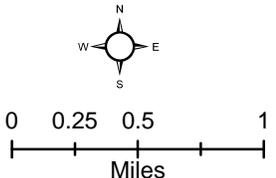
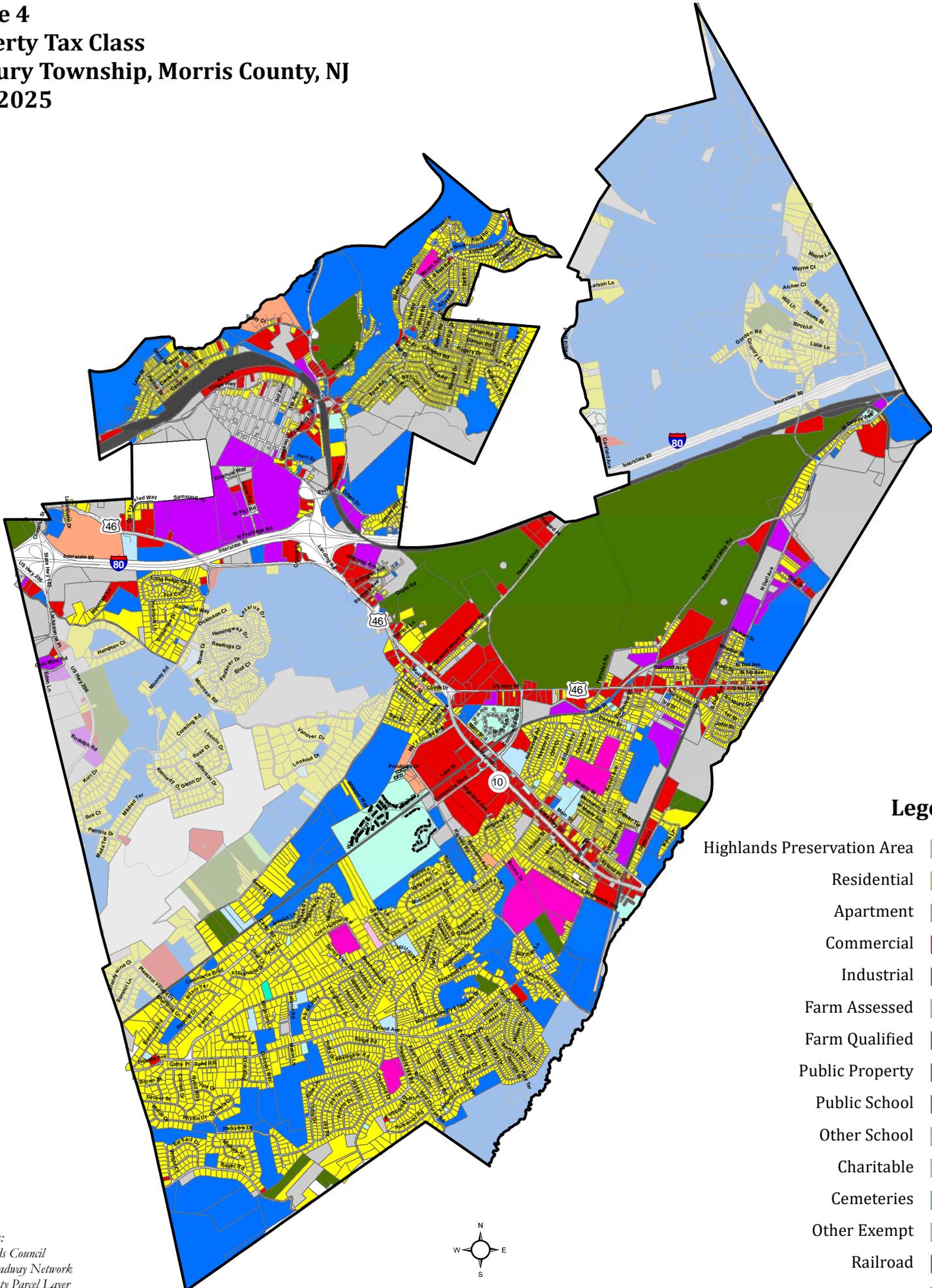


Figure 4
Property Tax Class
Roxbury Township, Morris County, NJ
May 2025



Legend

- Highlands Preservation Area
- Residential
- Apartment
- Commercial
- Industrial
- Farm Assessed
- Farm Qualified
- Public Property
- Public School
- Other School
- Charitable
- Cemeteries
- Other Exempt
- Railroad
- Vacant
- No Data

Data Sources:
 NJ Highlands Council
 NJDEP Roadway Network
 Morris County Parcel Layer

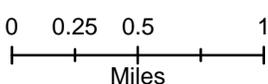
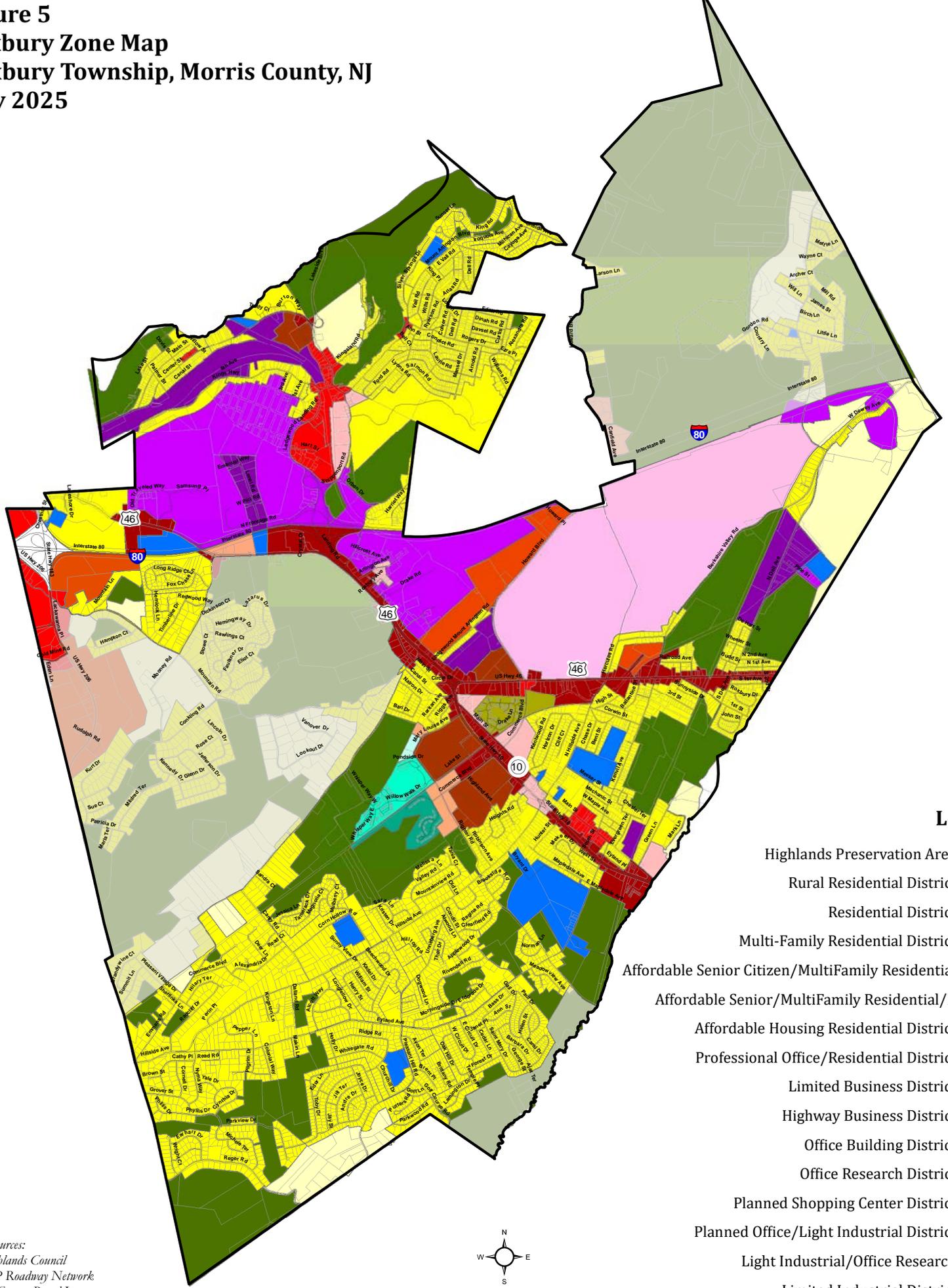


Figure 5
Roxbury Zone Map
Roxbury Township, Morris County, NJ
May 2025



Legend

- Highlands Preservation Area
- Rural Residential District
- Residential District
- Multi-Family Residential District
- Affordable Senior Citizen/MultiFamily Residential
- Affordable Senior/MultiFamily Residential/B
- Affordable Housing Residential District
- Professional Office/Residential District
- Limited Business District
- Highway Business District
- Office Building District
- Office Research District
- Planned Shopping Center District
- Planned Office/Light Industrial District
- Light Industrial/Office Research
- Limited Industrial District
- Open Space District
- Government Use District

Data Sources:
 NJ Highlands Council
 NJDEP Roadway Network
 Morris County Parcel Layer

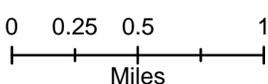
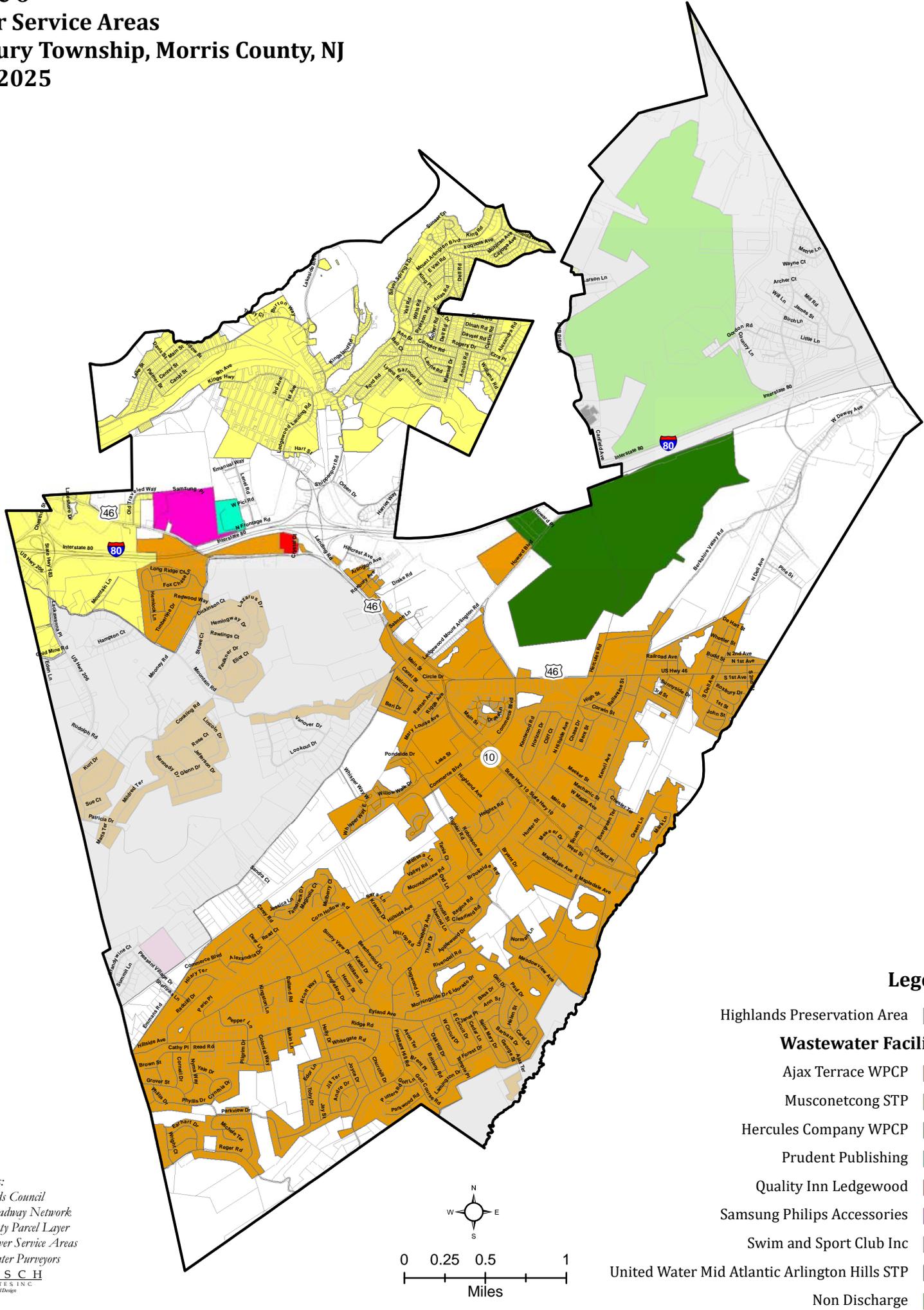


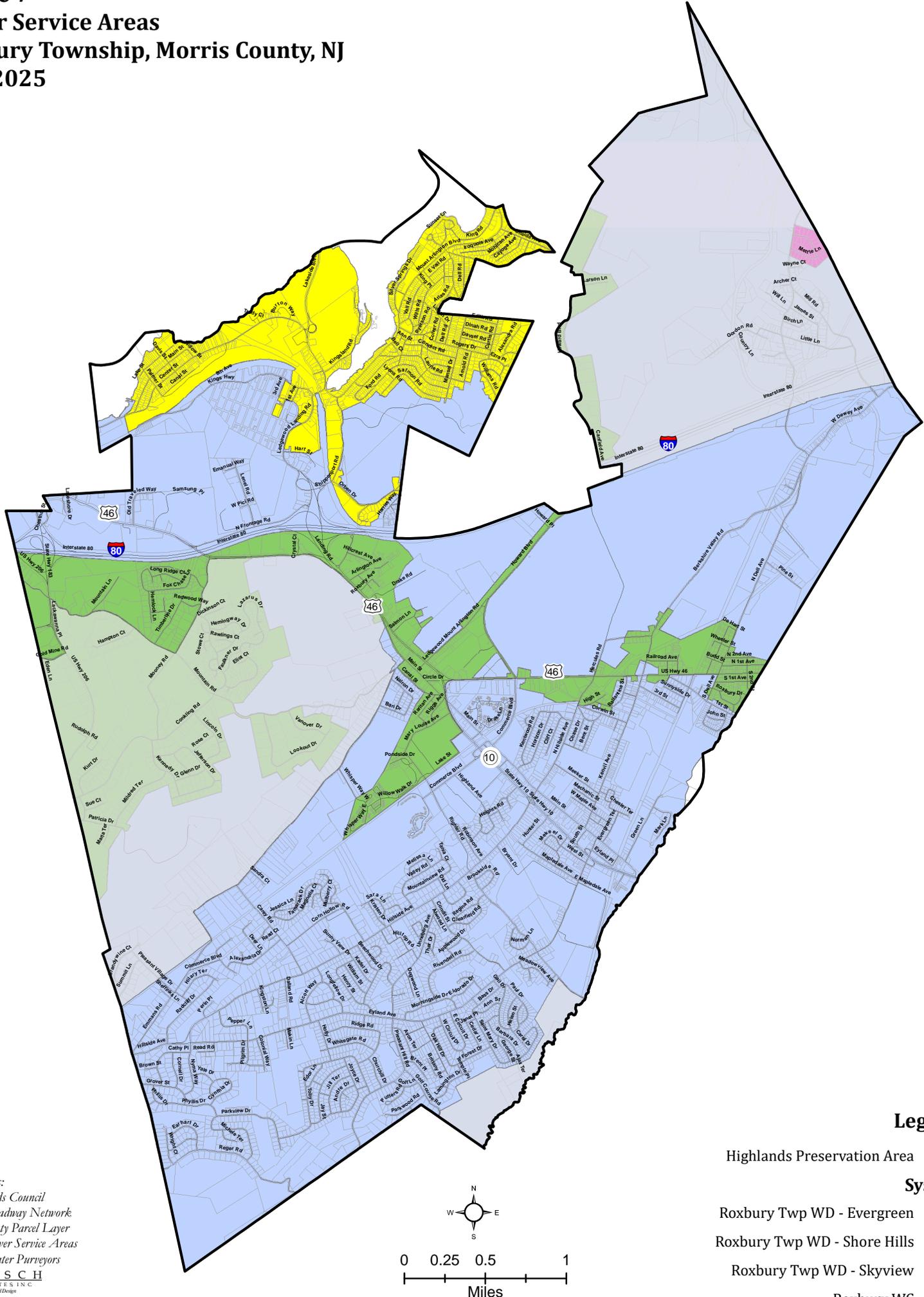
Figure 6
Sewer Service Areas
Roxbury Township, Morris County, NJ
May 2025



Data Sources:
 NJ Highlands Council
 NJDEP Roadway Network
 Morris County Parcel Layer
 NJDEP Sewer Service Areas
 NJDEP Water Purveyors
BANISCH
 ASSOCIATES INC
 Planning and Design

- Legend**
- Highlands Preservation Area
 - Wastewater Facilities**
 - Ajax Terrace WPCP
 - Musconetcong STP
 - Hercules Company WPCP
 - Prudent Publishing
 - Quality Inn Ledgewood
 - Samsung Philips Accessories
 - Swim and Sport Club Inc
 - United Water Mid Atlantic Arlington Hills STP
 - Non Discharge

Figure 7
Water Service Areas
Roxbury Township, Morris County, NJ
May 2025



Data Sources:
 NJ Highlands Council
 NJDEP Roadway Network
 Morris County Parcel Layer
 NJDEP Sewer Service Areas
 NJDEP Water Purveyors
BANISCH
 ASSOCIATES INC
 Planning and Design

Legend

- Highlands Preservation Area
- System**
- Roxbury Twp WD - Evergreen
- Roxbury Twp WD - Shore Hills
- Roxbury Twp WD - Skyview
- Roxbury WC

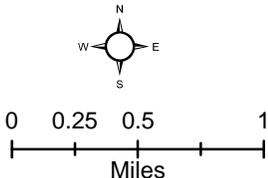
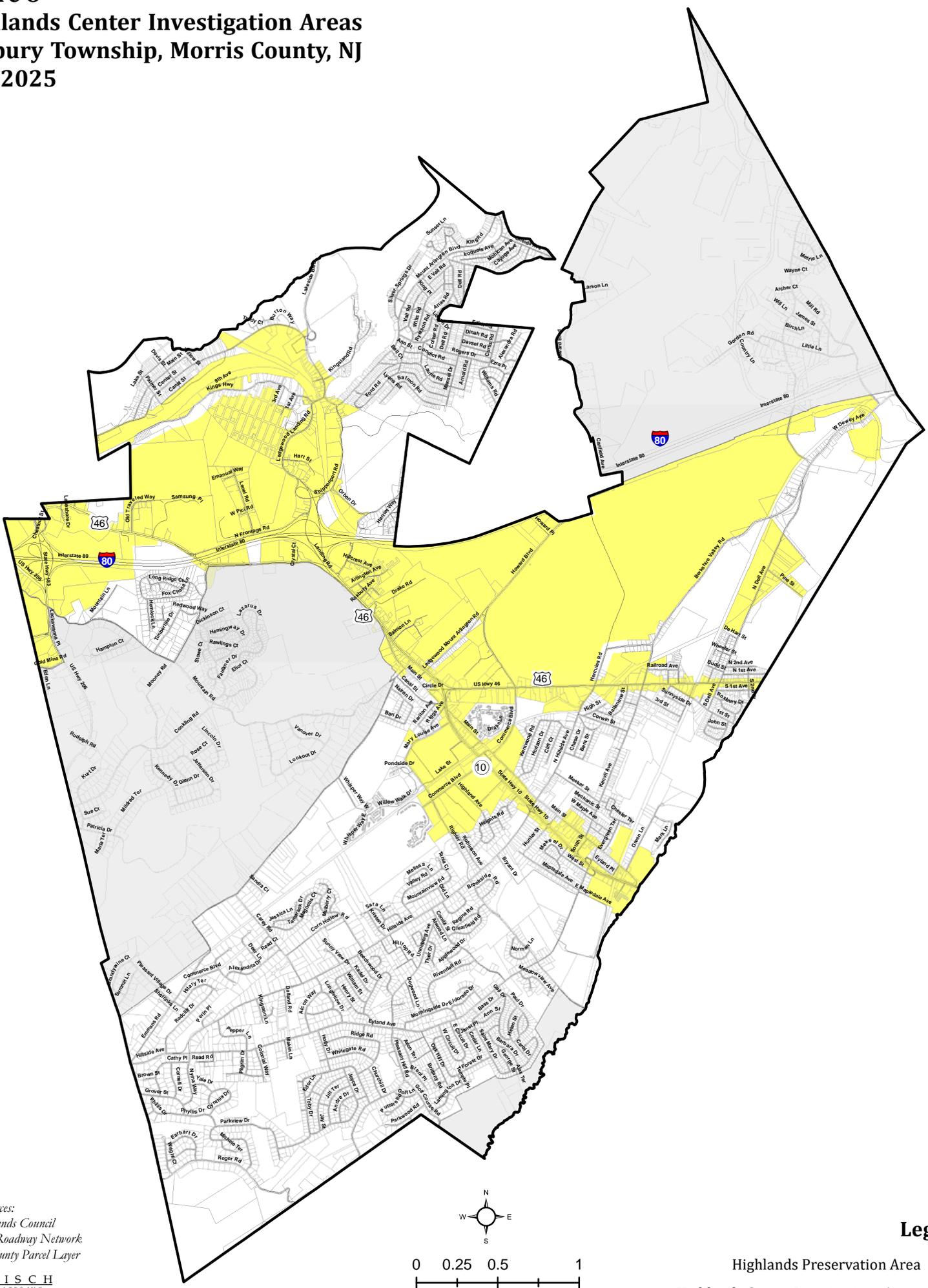


Figure 8
Highlands Center Investigation Areas
Roxbury Township, Morris County, NJ
May 2025

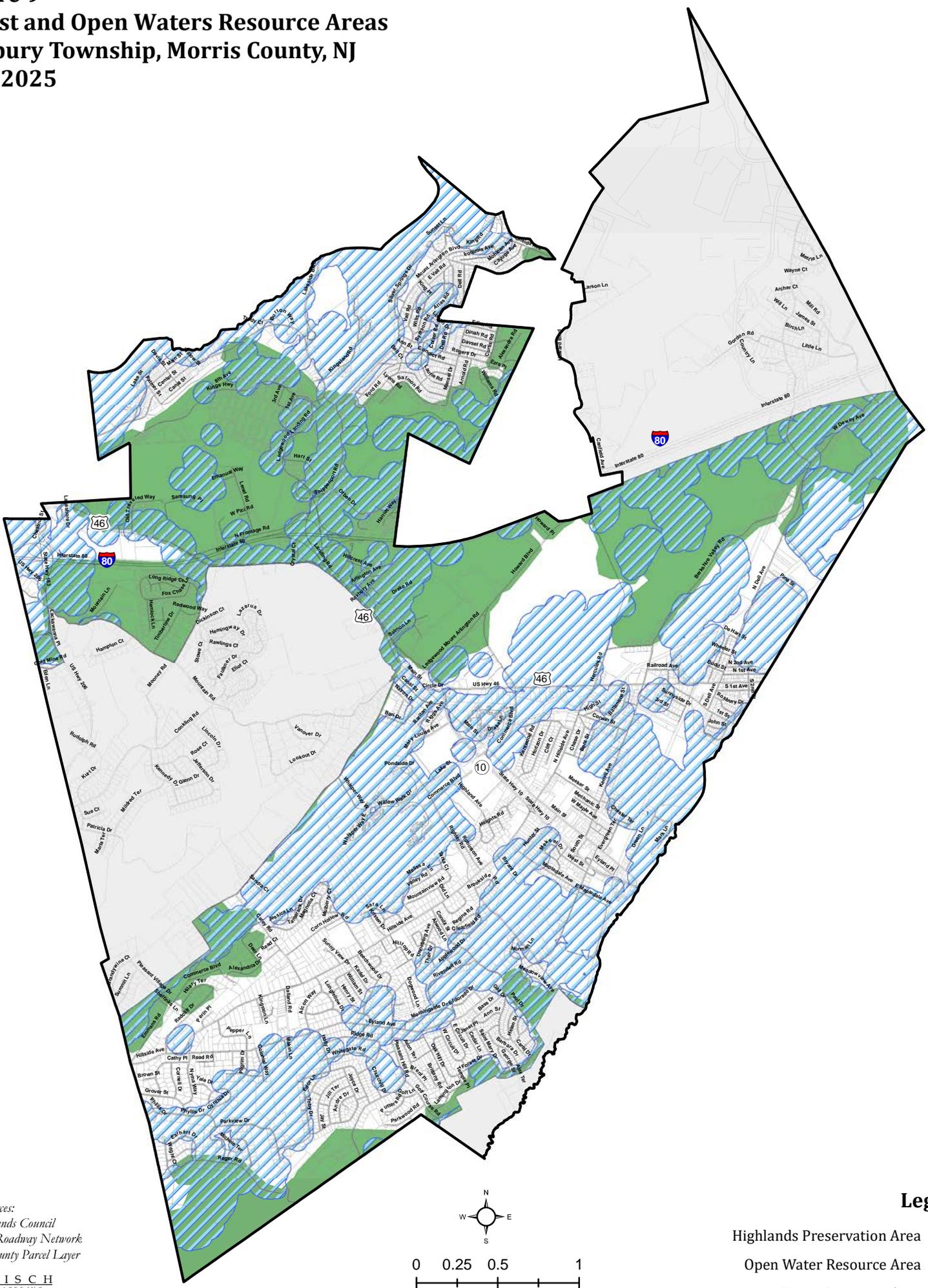


Data Sources:
 NJ Highlands Council
 NJDEP Roadway Network
 Morris County Parcel Layer

Legend

- Highlands Preservation Area
- Highlands Center Investigation Areas

Figure 9
Forest and Open Waters Resource Areas
Roxbury Township, Morris County, NJ
May 2025



Data Sources:
 NJ Highlands Council
 NJDEP Roadway Network
 Morris County Parcel Layer

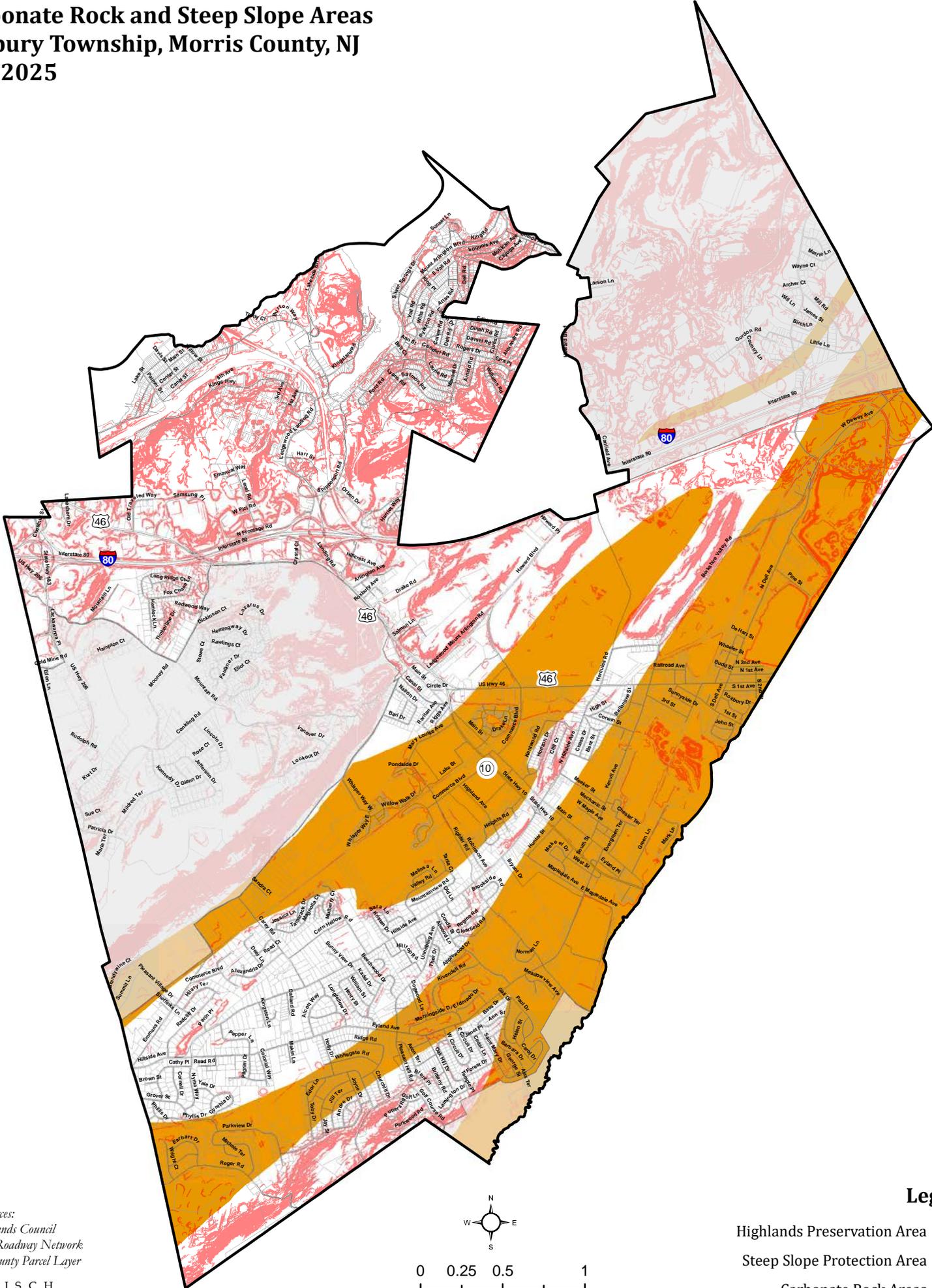
Legend

- Highlands Preservation Area
- Open Water Resource Area
- Forest Resource Area

N
 W — 0 — E
 S

0 0.25 0.5 1
 Miles

Figure 10
Carbonate Rock and Steep Slope Areas
Roxbury Township, Morris County, NJ
May 2025



Data Sources:
 NJ Highlands Council
 NJDEP Roadway Network
 Morris County Parcel Layer

Legend

- Highlands Preservation Area
- Steep Slope Protection Area
- Carbonate Rock Areas

**New Jersey Highlands Water Protection and Planning Council
Petition for Plan Conformance - Draft Consistency Review and Recommendations Report**

APPENDIX C

**PUBLIC COMMENTS/HIGHLANDS COUNCIL RESPONSES
Township of Roxbury, Morris County**

**New Jersey Highlands Water Protection and Planning Council
Petition for Plan Conformance - Draft Consistency Review and Recommendations Report**

APPENDIX D

**HIGHLANDS RESOURCE MAPS
Township of Roxbury, Morris County**

Exhibit 1: Highlands Area and Highlands Land Use Capability Zones

Roxbury Township

Land Use Capability Zones

- Protection Zone
- Existing Community Zone

Land Use Capability Sub-Zones

- Wildlife Management Sub-Zone
- Existing Community - Environmentally Constrained Sub-Zone
- Lake Community Sub-Zone

Highlands Preservation Area

- Municipal Boundary
- Parcel Boundaries

Roads

- Interstates
- US Highways
- State Highways
- County Highways



Map Created: 5/21/2025

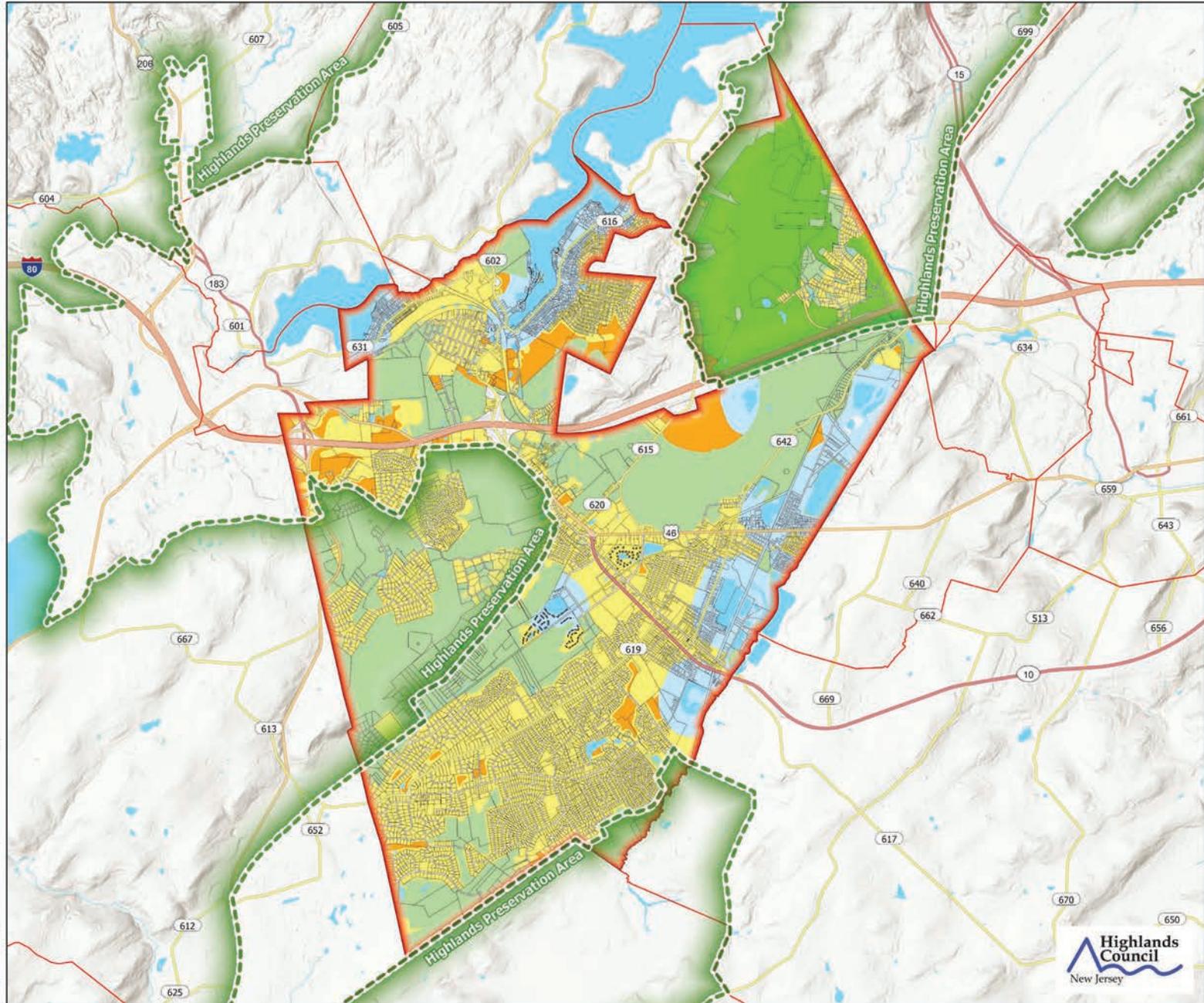


Exhibit 2: Wellhead Protection Areas

Roxbury Township

Wellhead Protection Areas

- Tier 1 (2 - Year)
- Tier 2 (5 - Year)
- Tier 3 (12 - Year)

Municipal Boundary

Highlands Preservation Area

Parcel Boundaries

Roads

- Interstates
- US Highways
- State Highways
- County Highways



Map Created: 5/21/2025

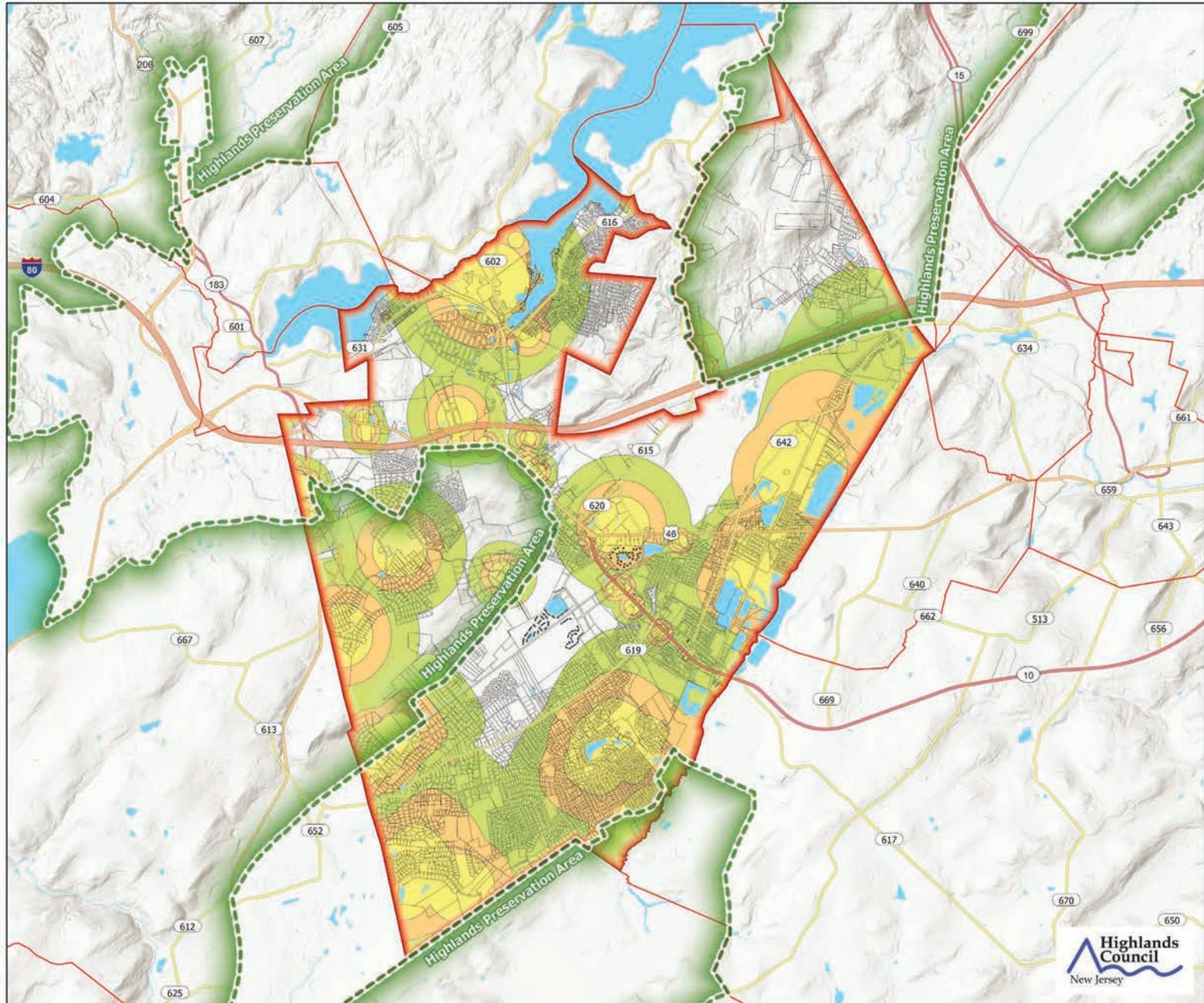


Exhibit 4: Highlands Riparian Areas

Roxbury Township

- Riparian Area
 - Municipal Boundary
 - Highlands Preservation Area
 - Parcel Boundaries
- Roads
- Interstates
 - US Highways
 - State Highways
 - County Highways



0 0.25 0.5 1 1.5 2 Miles

Map Created: 5/20/2025

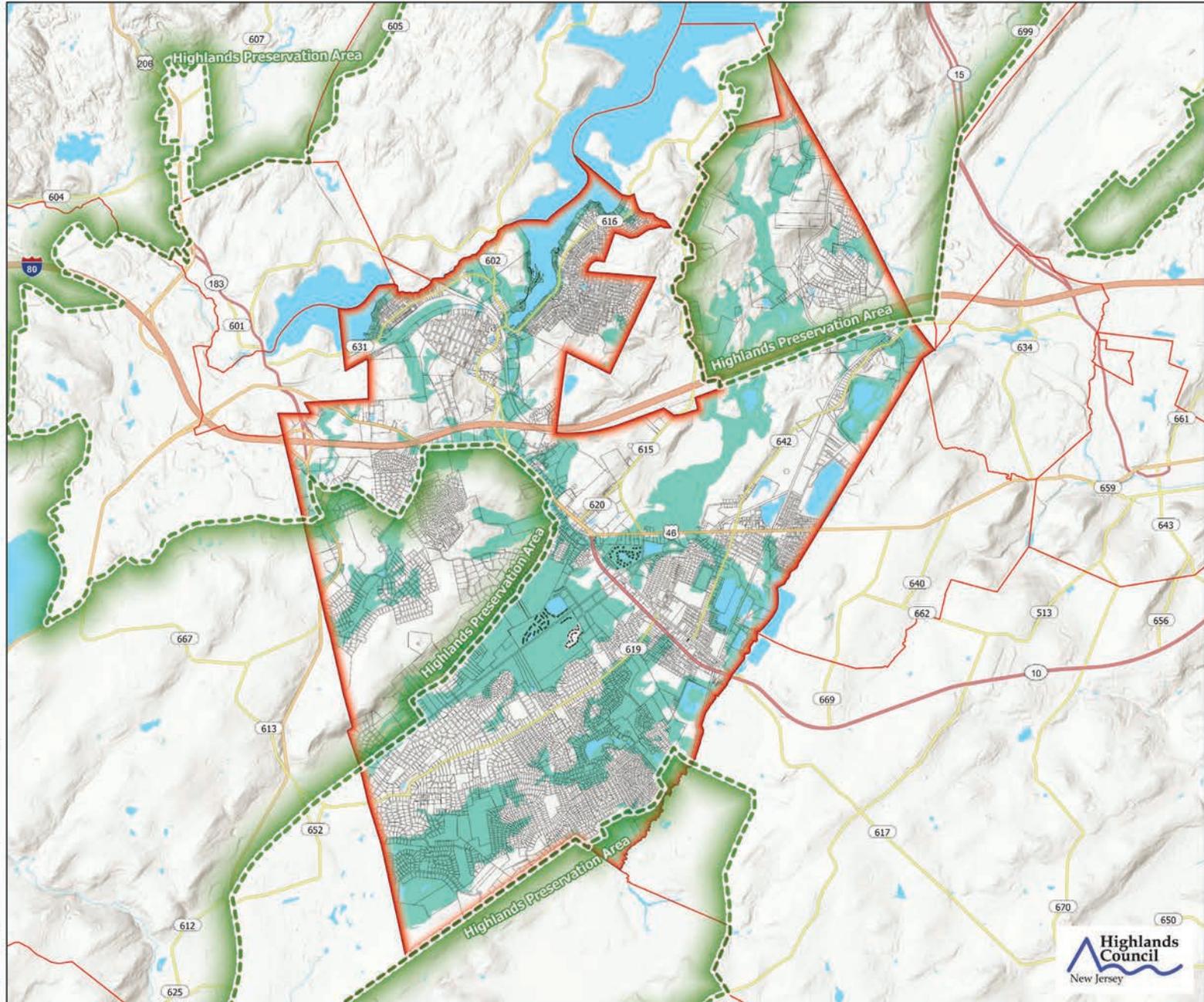


Exhibit 6: Forest Area

Roxbury Township

- Total Forest Area
- Municipal Boundary
- Highlands Preservation Area
- Parcel Boundaries
- Roads
 - Interstates
 - US Highways
 - State Highways
 - County Highways



0 0.25 0.5 1 1.5 2 Miles

Map Created: 5/21/2025

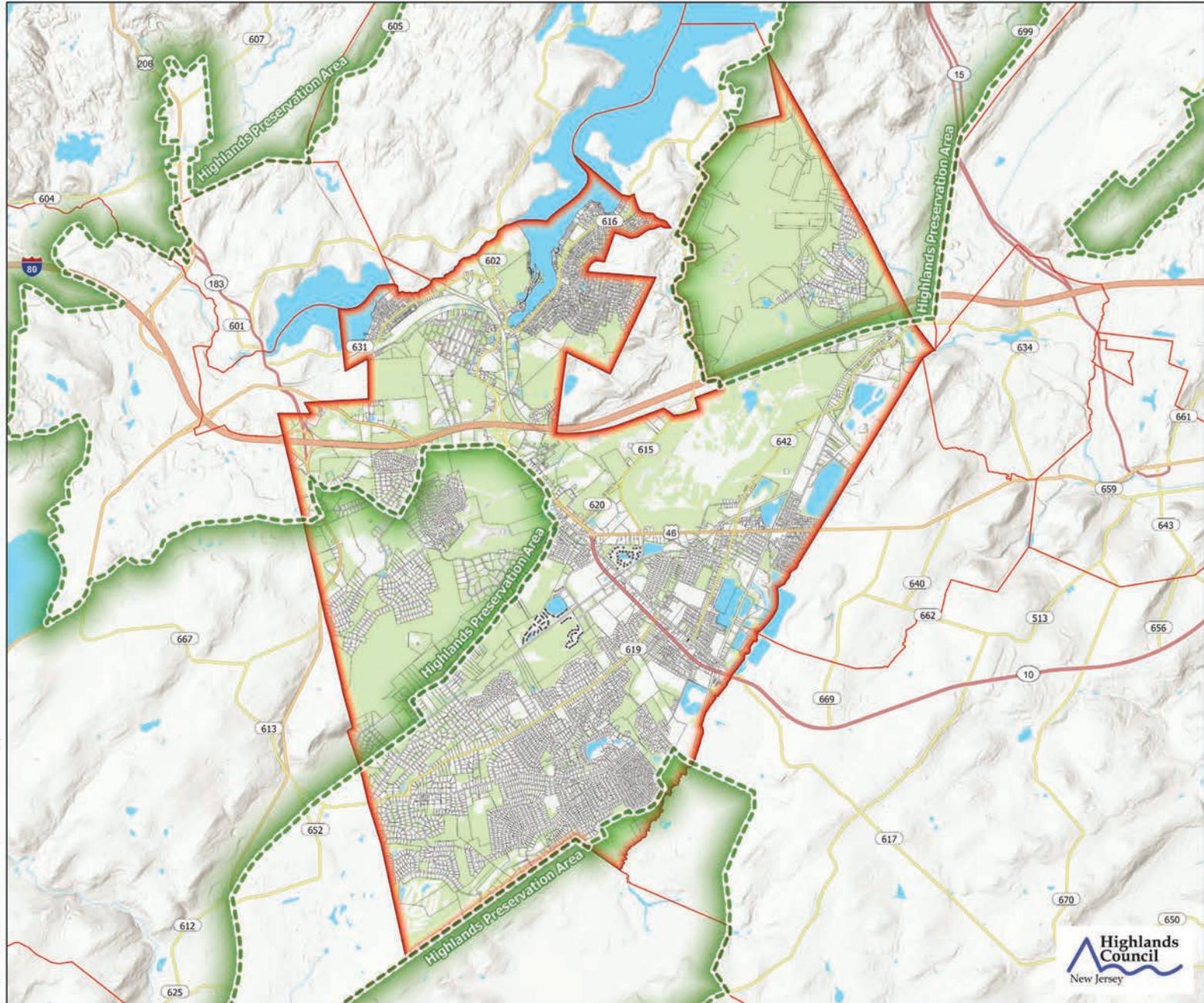


Exhibit 7: Prime Groundwater Recharge Areas

Roxbury Township

- Prime Ground Water Recharge Areas
 - Municipal Boundary
 - Highlands Preservation Area
 - Parcel Boundaries
- Roads
- Interstates
 - US Highways
 - State Highways
 - County Highways



Map Created: 5/20/2025

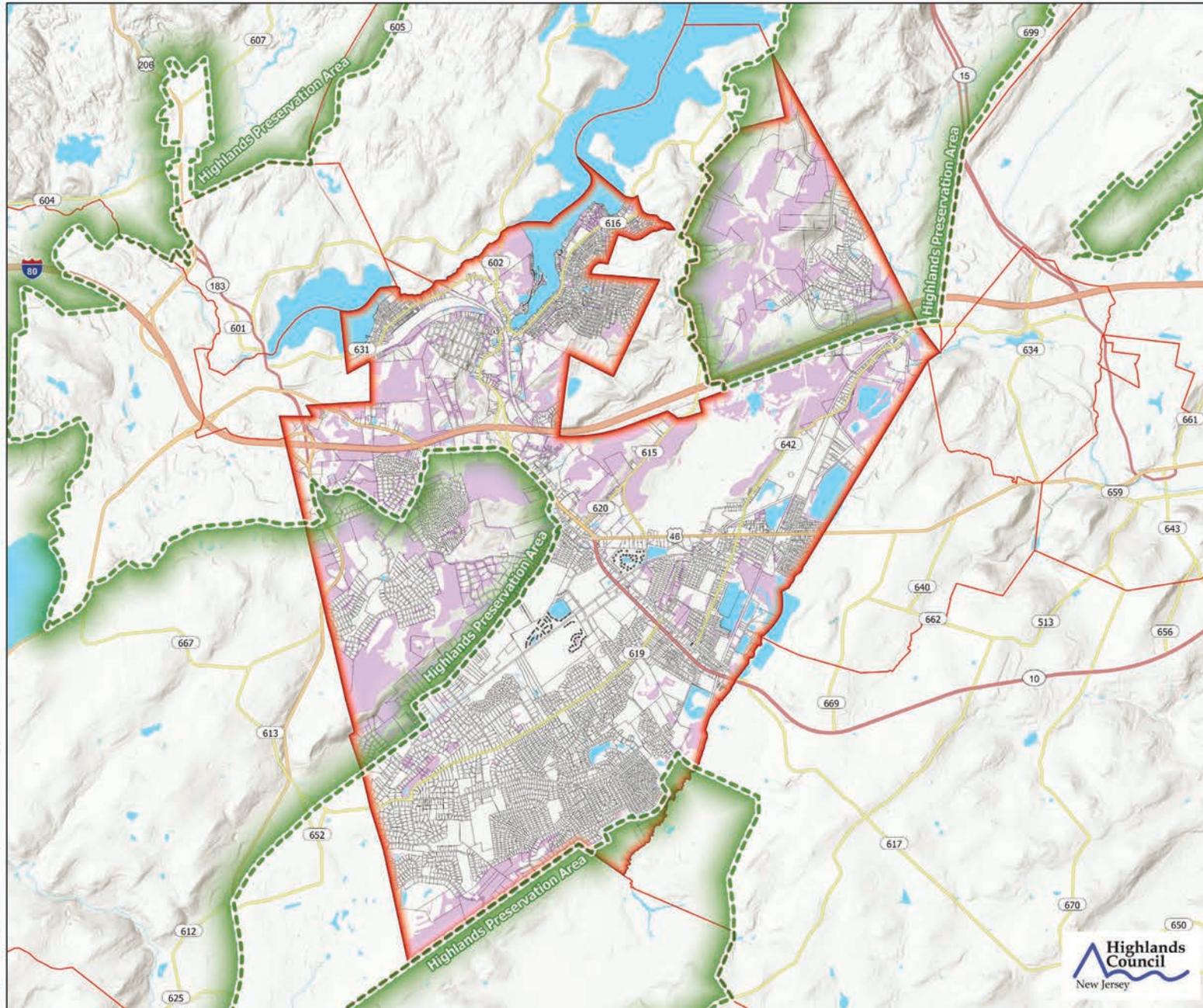


Exhibit 8: Special Environmental Zone

Roxbury Township

-  Municipal Boundary
-  Highlands Preservation Area
-  Parcel Boundaries
- Roads
 -  Interstates
 -  US Highways
 -  State Highways
 -  County Highways



Map Created: 5/21/2025

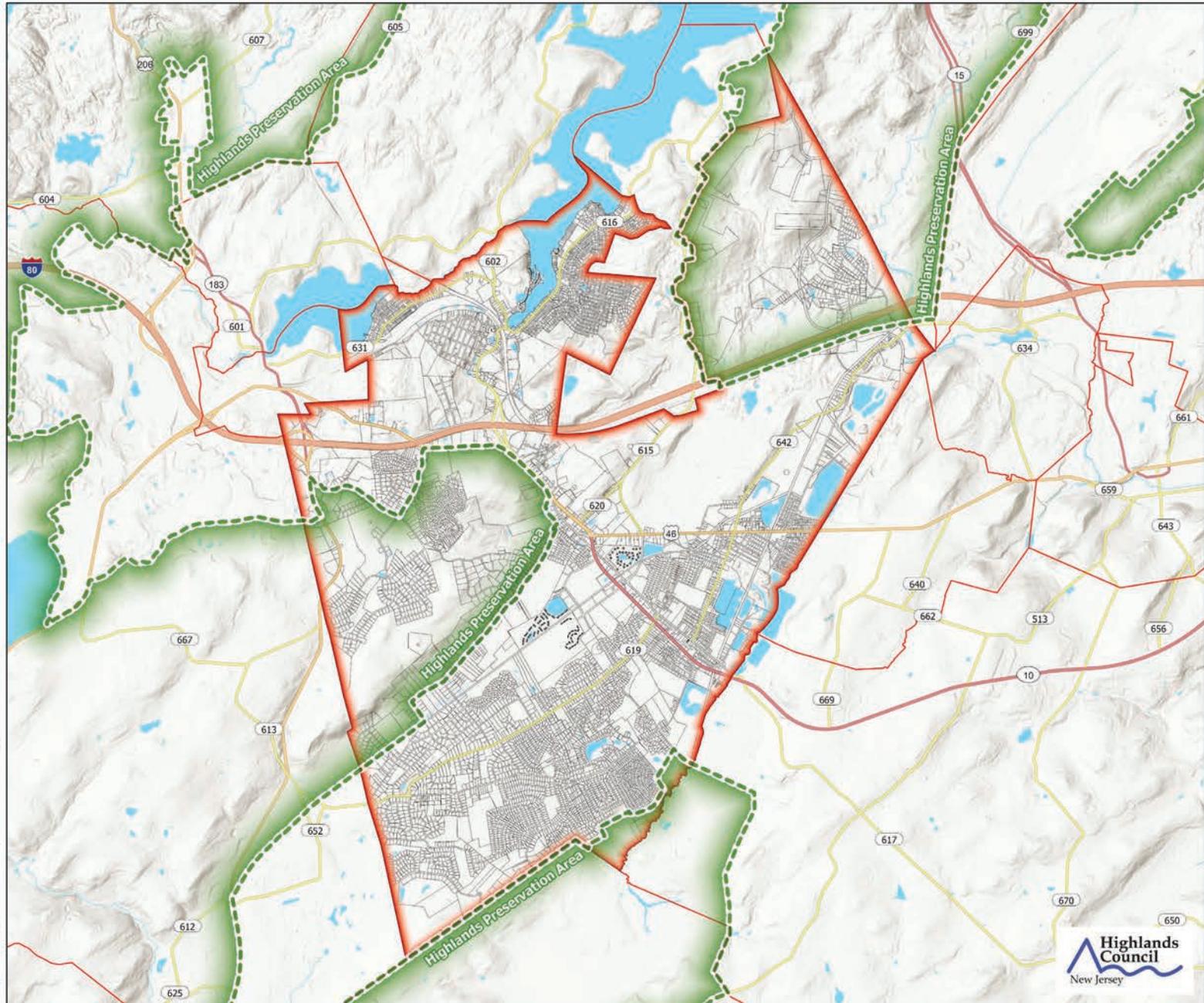


Exhibit 9: Steep Slope Protection Areas

Roxbury Township

Steep Slope Protection Area

- Moderate
- Severe

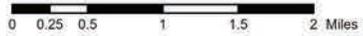
Municipal Boundary

Highlands Preservation Area

Parcel Boundaries

Roads

- Interstates
- US Highways
- State Highways
- County Highways



Map Created: 5/19/2025

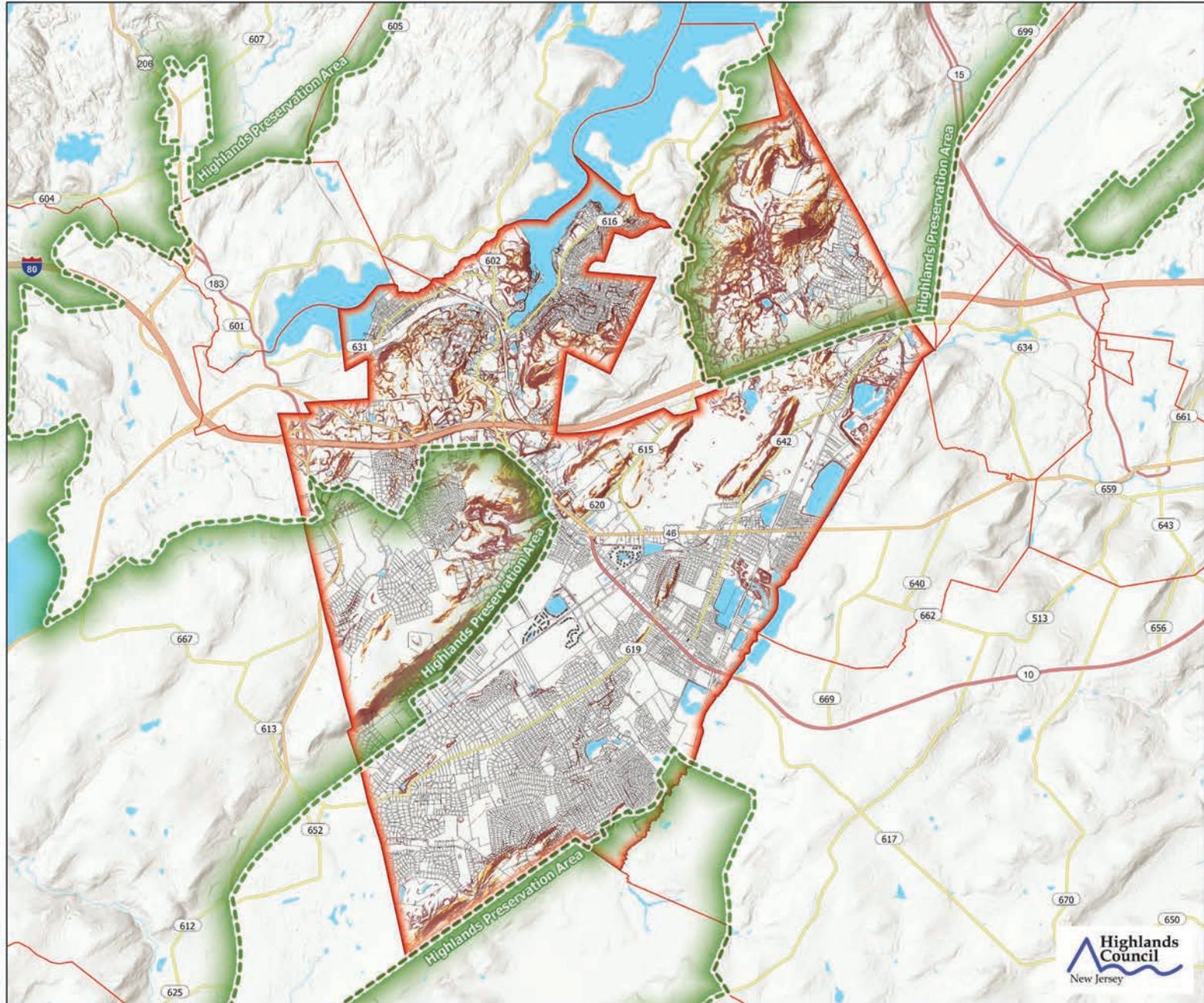


Exhibit 10: Critical Wildlife Habitat, Vernal Pools and NJDEP Natural Heritage Priority Sites

Roxbury Township

-  Significant Natural Areas
 -  Confirmed Vernal Pool Buffer (1,000 ft)
 -  Critical Wildlife Habitat
 -  Municipal Boundary
 -  Highlands Preservation Area
 -  Parcel Boundaries
- Roads
-  Interstates
 -  US Highways
 -  State Highways
 -  County Highways



Map Created: 4/17/2025

