



Master Plan Update

Natural Resource Inventory
Conservation Element
Open Space and Recreation Plan

DRAFT

May 10, 2023

Prepared by:



**J Caldwell
& Associates, LLC**
Community Planning Consultants

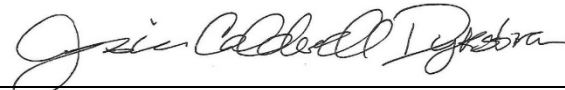
Master Plan Update
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I. Introduction

I. Introduction

The Town adopted a complete update to its Master Plan in August 2008 and adopted a Reexamination of the Master Plan in July 2019. In 2009, the Town adopted a Circulation Element of the Master Plan. The Town received Plan Endorsement from the State Planning Commission on May 15, 2013. Also, in 2013, the Town Council adopted a Strategic Vision Plan for the downtown. As part of the 2013 Plan Endorsement process, the Town of Newton agreed to develop and adopt a Natural Resource Inventory, Conservation Element of the Master Plan and Open Space and Recreation Element of the Master Plan. A Master Plan Reexamination was also adopted in December 2014, to propose and adopt amendments to the Master Plan required through the Plan Endorsement process with the State Planning Commission. Additionally, a Master Plan Reexamination Report was adopted in September 2016, specifically to address changes in affordable housing requirements in the State and adopt an updated Housing Element and Fair Share Plan. This plan includes a Natural Resource Inventory to inform the Master Plan and a Conservation Element and Open Space and Recreation Plan Element of the Master Plan.

II. Natural Resource Inventory

Purpose and Scope

The purpose of this Natural Resource Inventory (NRI) is to provide a foundation for identifying and preserving the existing environmental and cultural resources. Specifically, this NRI includes a review of Newton's geology, groundwater, forest, plant and wildlife habitats, open space, known contaminated sites, and soils.

Geology, Soil, and Topography

Bedrock Geology

The Town of Newton contains seven (7) different types of bedrock within its bounds, illustrated in **Figure 1**. The most prominent soils are Allentown dolomite (724.28 acres, or 33% of the Town's total acreage), the Bushkill member (538.03 acres, or 25%), the lower part of Beekmantown Group (245.81 acres, or 18%), and the Ramseyburg member (353.32 acres, or 16%). Allentown dolomite contains quartz and shale and can be dated back to the Late Cambrian age¹; the Bushkill member contains shale, slate, and siltstone²; the lower part of the Beekmantown Group contains dolomite and minor limestone³; and the Ramseyburg member contains sandstone, siltstone, shale, and slate.⁴

Surficial Geology

The surficial geology illustrated in **Figure 2** shows the distribution of surface-level loose materials in the Town of Newton. The predominant material is Kittatinny Mountain Till, which comprises just over 70 percent of the Town's surface layer. This layer is characterized by silty sand that can contain up to 35 percent gravel, and thin beds of well- to moderately-sorted sand and pebbly sand⁵.

¹ United States Geological Survey, "Allentown Dolomite," n.d. Retrieved from <https://mrdata.usgs.gov/geology/state/sgmc-unit.php?unit=NJOCAa%3B8>

² United States Geological Survey, "Bushkill Member," n.d. Retrieved from <https://mrdata.usgs.gov/geology/state/sgmc-unit.php?unit=NJOmb%3B8>

³ United States Geological Survey, "Beekmantown Group, Lower Part," n.d. Retrieved from <https://mrdata.usgs.gov/geology/state/sgmc-unit.php?unit=NJObl%3B8>

⁴ United States Geological Survey, "Ramseyburg Member," n.d. Retrieved from <https://mrdata.usgs.gov/geology/state/sgmc-unit.php?unit=NJOmr%3B8>

⁵ NJDEP, Division of Science and Research, NJ Geological Survey, "Environmental Geology of Warren County, New Jersey: Surficial Geology and Earth Material Resources," 1995. Retrieved from <https://nj.gov/dep/njgs/pricelst/ofmap/ofm15c.pdf>

II. Natural Resource Inventory

Soils

Though there are 18 types of soil throughout Newton (**Figure 3**), the two most prominent soils are the rock outcrop-Farmington-Galway complex (RnfD) and the urban land-Chatfield-rock outcrop complex (USFARC). Both of those soils each comprise about 12 percent of Newton's soils. RnfD soils have 15 to 35 percent slopes, and are not prime farmland soils⁶. The USFARC soils contain 0 to 15 percent slopes and are also not prime farmland soils⁶. The only soils identified as those important to farmland are Catden muck, 0 to 2 percent slopes (CatbA, 3.7% of the Town's total area), and the two Hazen-Paulinskill complexes (HdxBb and HdxAb), which comprise only 0.9 percent and 0.8 percent, respectively, of the Town's soils. the two most prominent soil types are the rock outcrop-Farmington-Galway complex (RnfD) and the urban land-Chatfield rock outcrop complex (USFARC), which comprise about 24 percent of Newton's total soil. RnfD soils are comprised of, "moderately deep, well drained, and moderately well drained soils formed in till,"⁷ and are located throughout the town, but primarily located on New Hampshire Street, Mount View Street, and the southern end of Woodside Avenue. USFARC soils are located in the south-central portion of Newton, along Carriage Lane, Route 206/Main Street, and the northern end of Woodside Avenue.

Topography

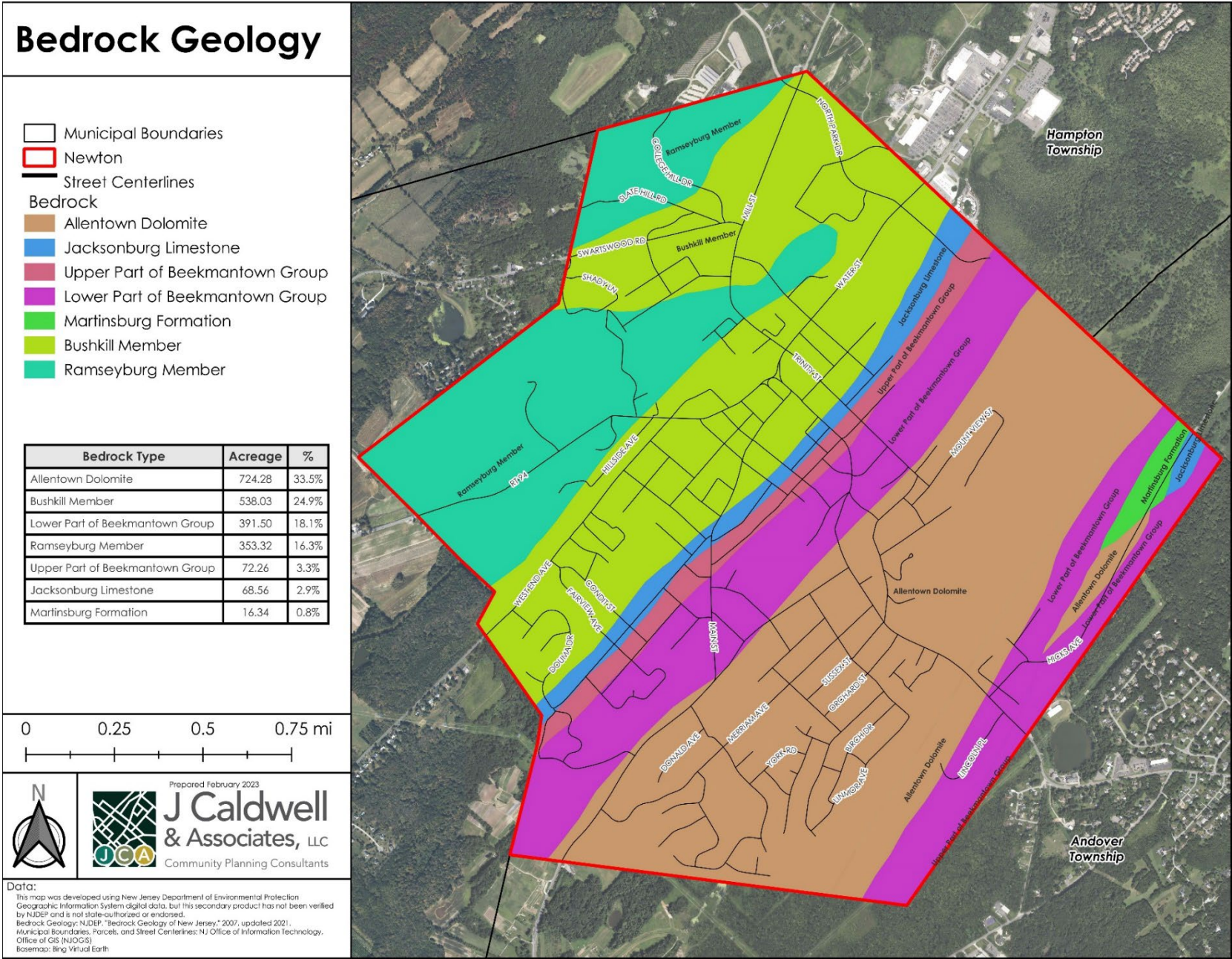
Newton is approximately 636 feet above the mean sea level. **Figure 4** illustrates the Town's topography. Generally, Newton's topography is generally higher in the northern section of the Town, where elevations rise to 700 to 800 feet above sea level. Much of the remainder of the Town slopes down to around 640 feet of elevation. The lower sections in the southeastern corner drops below 600 feet in large swaths of wetlands. Much of the Town's developed areas are relatively flat around the 600-640-foot elevation mark.

⁶ USDA NRCS Web Soil Survey, August 2022.

⁷ National Cooperative Soil Survey, USA. Social Data Explorer – Galway: Official Series Description. 2009. Retrieved from <https://casoilresource.lawr.ucdavis.edu/sde/?series=galway#osd>

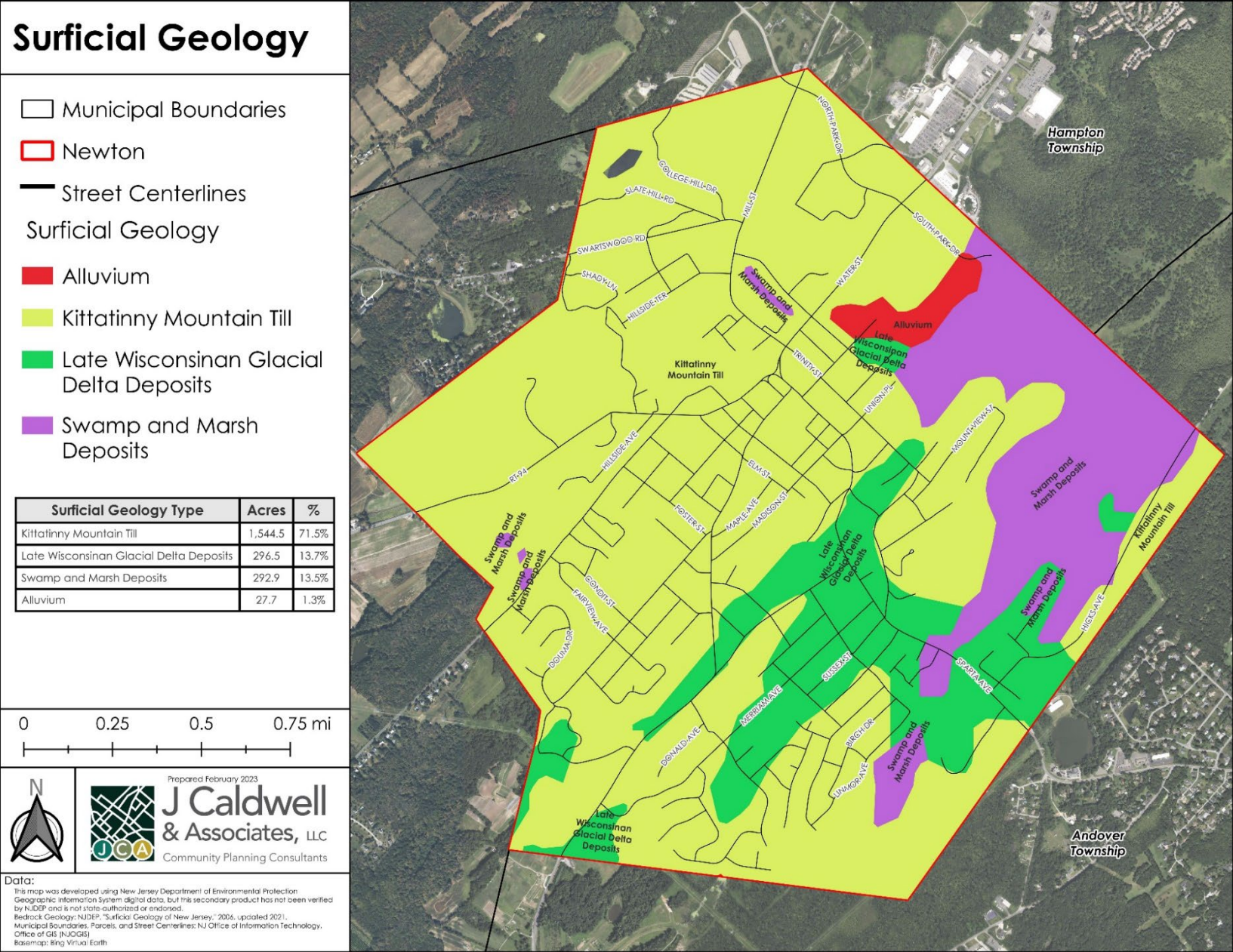
II. Natural Resource Inventory

Figure 1. Bedrock Geology



II. Natural Resource Inventory

Figure 2. Surficial Geology



II. Natural Resource Inventory

Figure 3. Soils

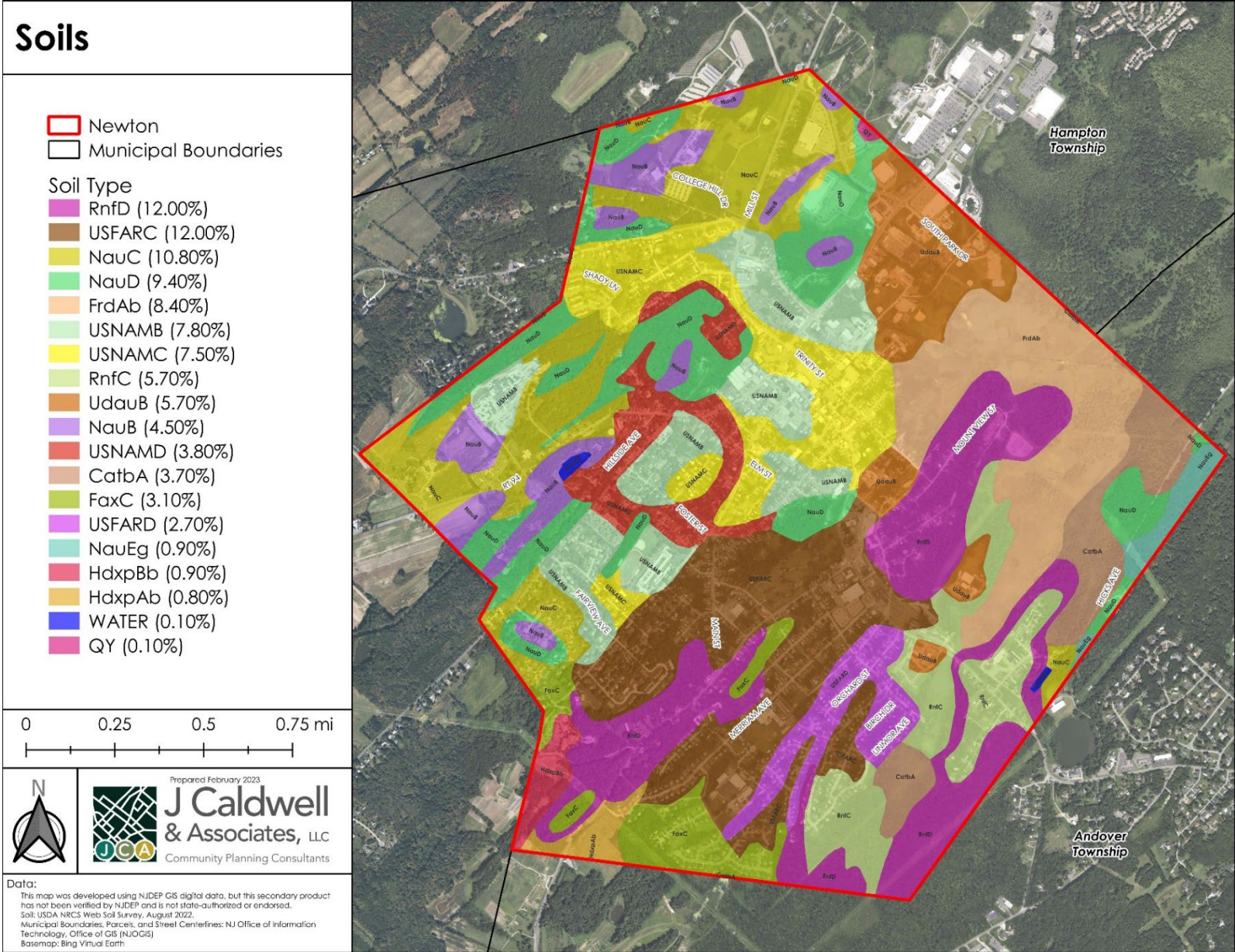
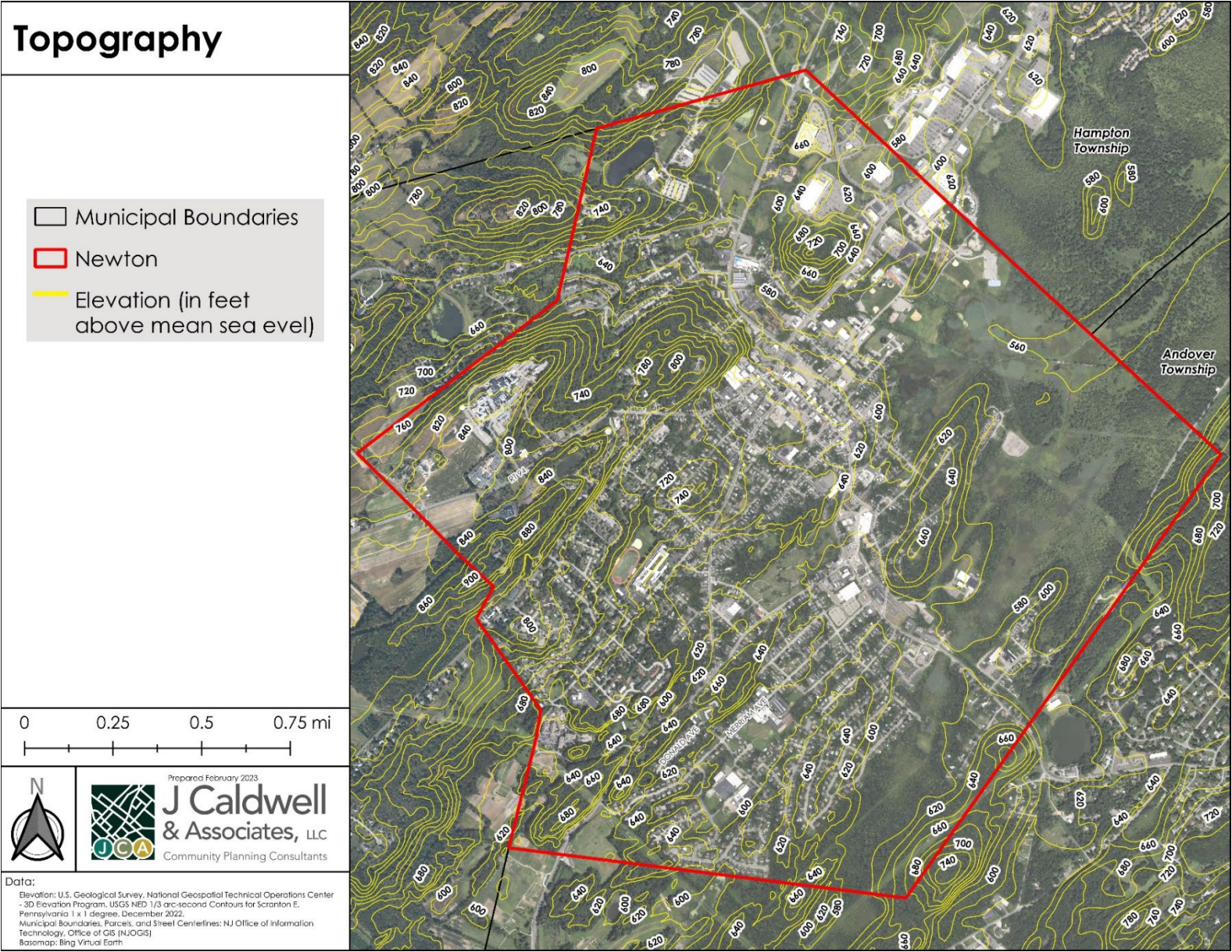


Figure 4. Topography



Water Resources

Surface Water and Stormwater Classification

The Town of Newton is located entirely in the Upper Delaware Watershed Management Area. As identified in **Figure 5**, there are two (2) subwatersheds located in Newton's bounds: the Paulins Kill (above Rt 15) and Pequest River (above Brighton). Most of the Town falls within the Paulins Kill (above Route 15) subwatershed. There are about 15 acres of waterbodies and just under 10 miles of streams in Newton. Of those streams, the Pequest River, a Category 1 waterway runs through Newton for approximately 900 feet and requires a 300-foot development buffer under the Flood Hazard Area Control Act.

Groundwater

Groundwaters are subsurface waters which fill the space between rock and soil. Groundwater recharge refers to the process through which water enters an aquifer and replenishes it. **Figure 6** identifies the various groundwater recharge areas in Newton. Most of the groundwater recharge areas within the municipality recharge between 11 to 15 inches of water per year, though a large portion of land recharges between 16 to 23 inches per year. Newton also contains approximately 280 acres of wetlands (**Figure 7**), where groundwater recharge is not calculated.

Aquifers

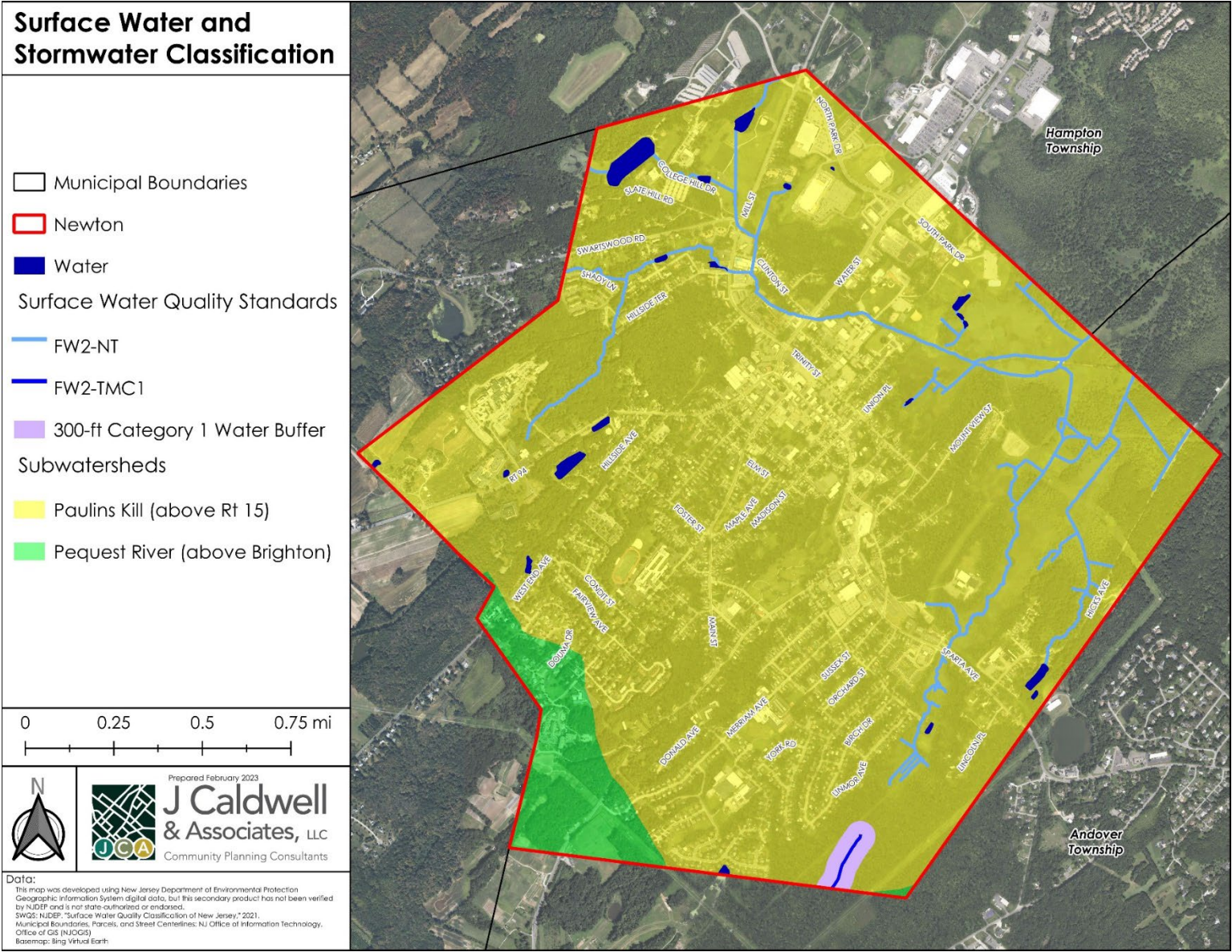
Aquifers are geologic formations which supply groundwater to wells and springs. These formations are porous, water-saturated layers of sand, gravel, or bedrock. Water is dispersed through rain and stormwater and infiltrate soils. The two bedrock aquifer formations present in Newton (**Figure 8**) are the Martinsburg Formation and Jutland Sequence (Rank D), and the Jacksonburg Limestone, Kittatinny Supergroup, and Hardyston Quartzite (Rank C-B). Rank D bedrock aquifers have well yield values between 25 and 100 gallons per minute (gpm) and Rank C-B bedrock aquifers have a well yield of between 101 and 500 gpm. There is one (1) surficial aquifer in Newton: Lake bottom sediment, which has a well yield value of less than 25 gpm (Rank E).

Known Contaminated Sites

There are 18 known contaminated sites (KCS) present in Newton (**Figure 9**). Of these, three (3) of them are Remediation Level D, which requires multi-phased remedial actions and indicates multiple sources or releases of contamination. There are two (2) KCS which are ranked as Remediation Level C3, indicating an unknown or uncontrolled discharge to soil or groundwater. Remediation C2 sites, of which there are four (4) in Newton, have one known source or release with groundwater contamination. Remediation Level C1 KCS, of which there are three (3) in Newton, have potential groundwater contamination. Two (2) KCS in Newton are Remediation Level B, which indicate a single-phase remediation action and a single contamination affecting only soils.

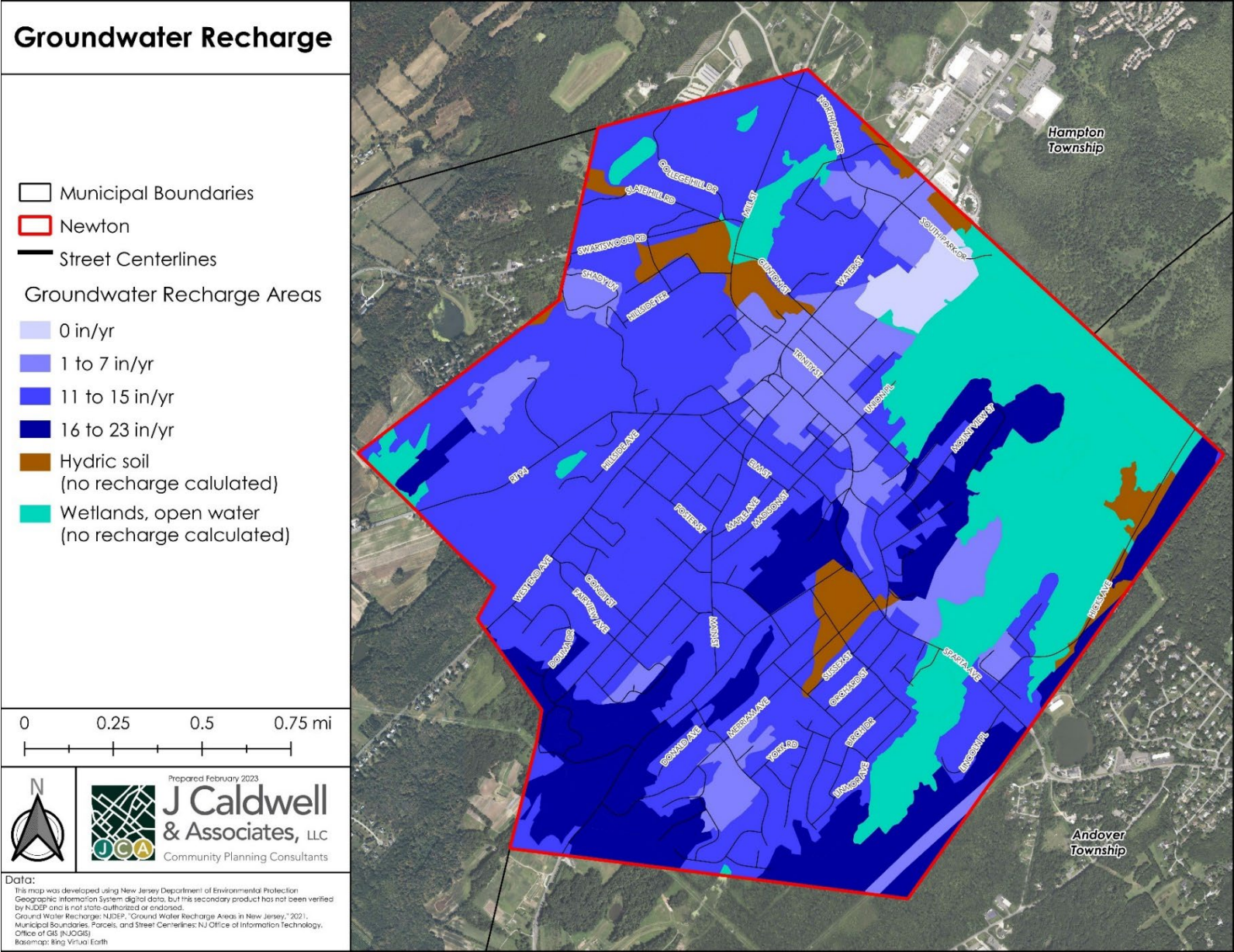
II. Natural Resource Inventory

Figure 5. Surface Water and Stormwater Classification



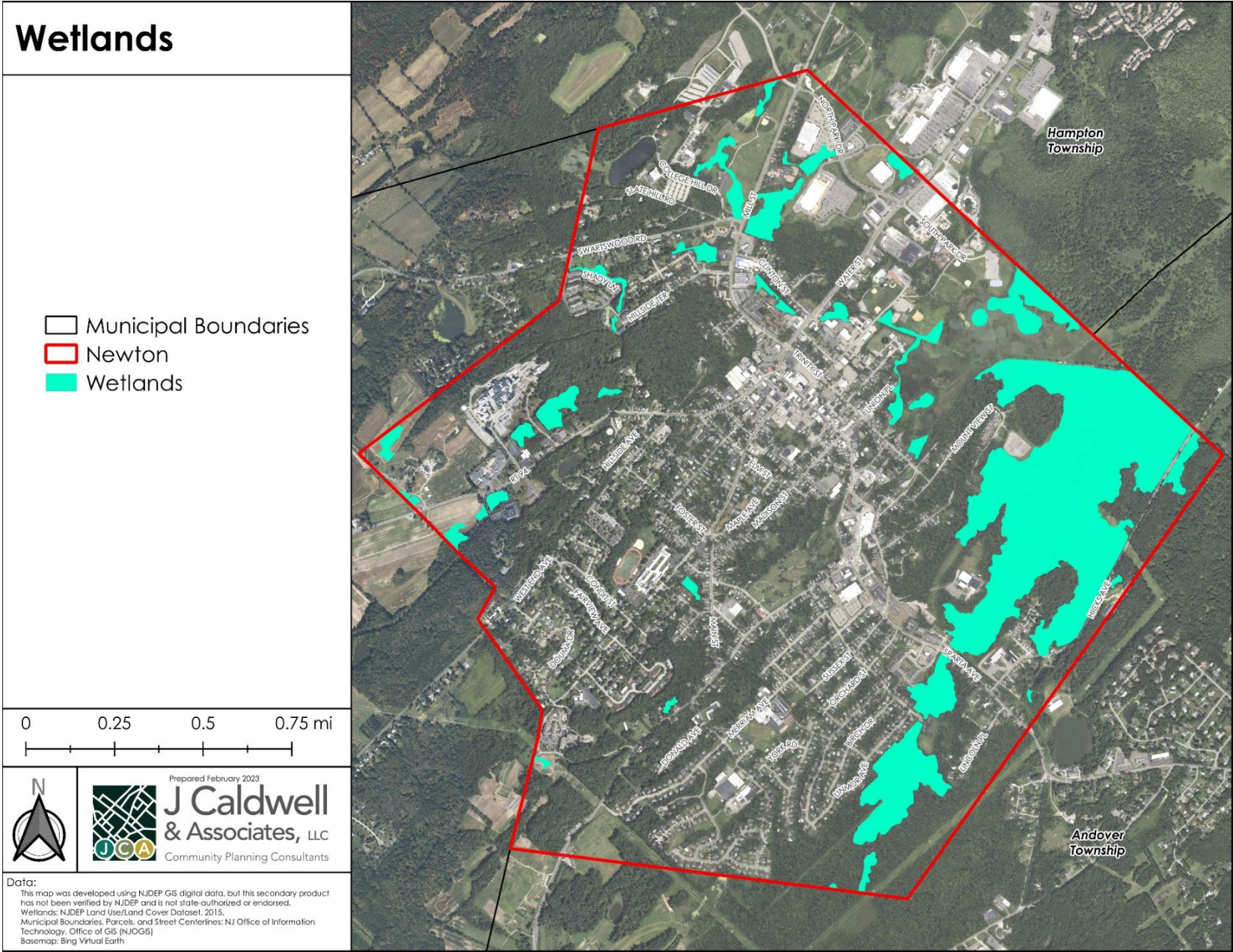
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Figure 6. Groundwater Recharge



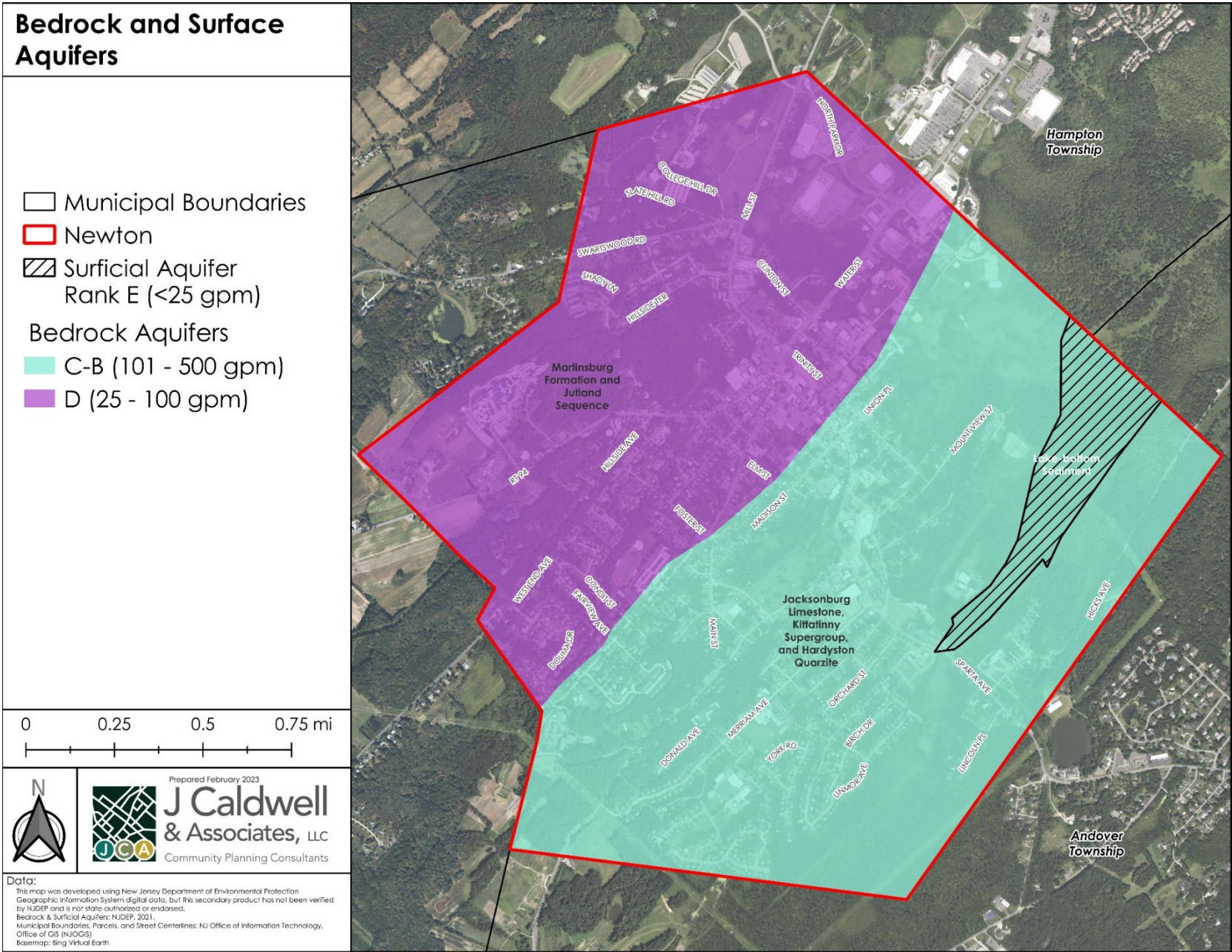
II. Natural Resource Inventory

Figure 7. Wetlands



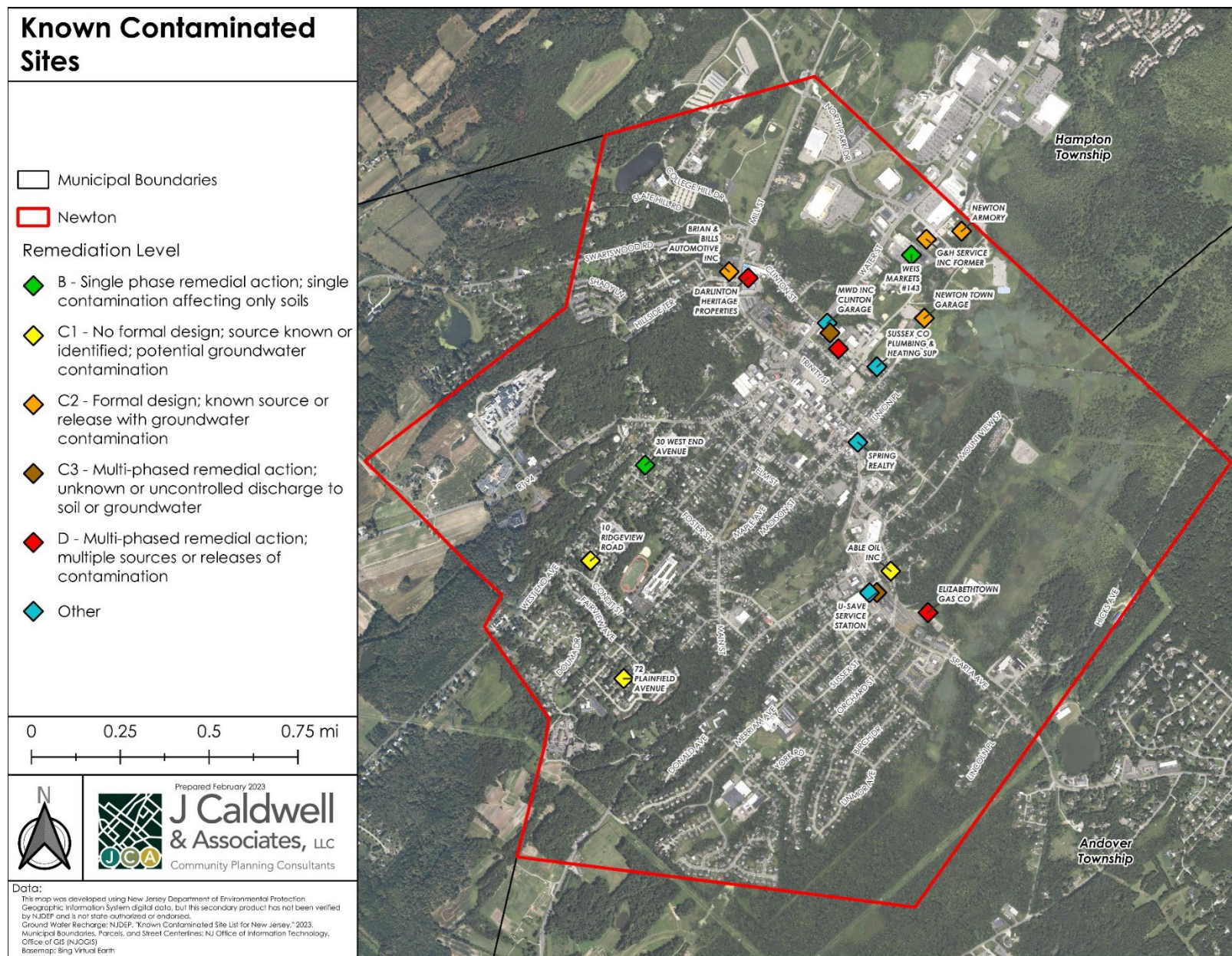
II. Natural Resource Inventory

Figure 8. Bedrock and Surface Aquifers



II. Natural Resource Inventory

Figure 9. Known Contaminated Sites



II. Natural Resource Inventory

Habitats

Habitat Rankings

Though mostly developed, there are areas throughout Newton which are home to various important wildlife and plant species. The Landscape Project, a tool prepared by the New Jersey Department of Environmental Protection (NJDEP), Division of Fish and Wildlife (DFW), Endangered Nongame Spaces Program (ENSP), combines the NJDEP's 2015 Land Use / Land Cover (LULC) dataset with documented wildlife locations to delineate imperiled and special concern species habitats (**Figure 10**). Newton contains habitats Ranked 1, 2, 4, and 5. Habitats which have a habitat patch Ranking of 1 are suitable for specific species, and indicate areas that may want to be considered for future wildlife surveys. Rank 2 habitat patches contain one or more occurrences of species of special concern. Rank 4 habitat patches contain one or more occurrences of State endangered species. Habitat patches Ranked 5 contain one or more occurrences of wildlife listed as endangered and threatened pursuant to the Federal Endangered Species Act of 1973.

Wildlife and Plant Species Present

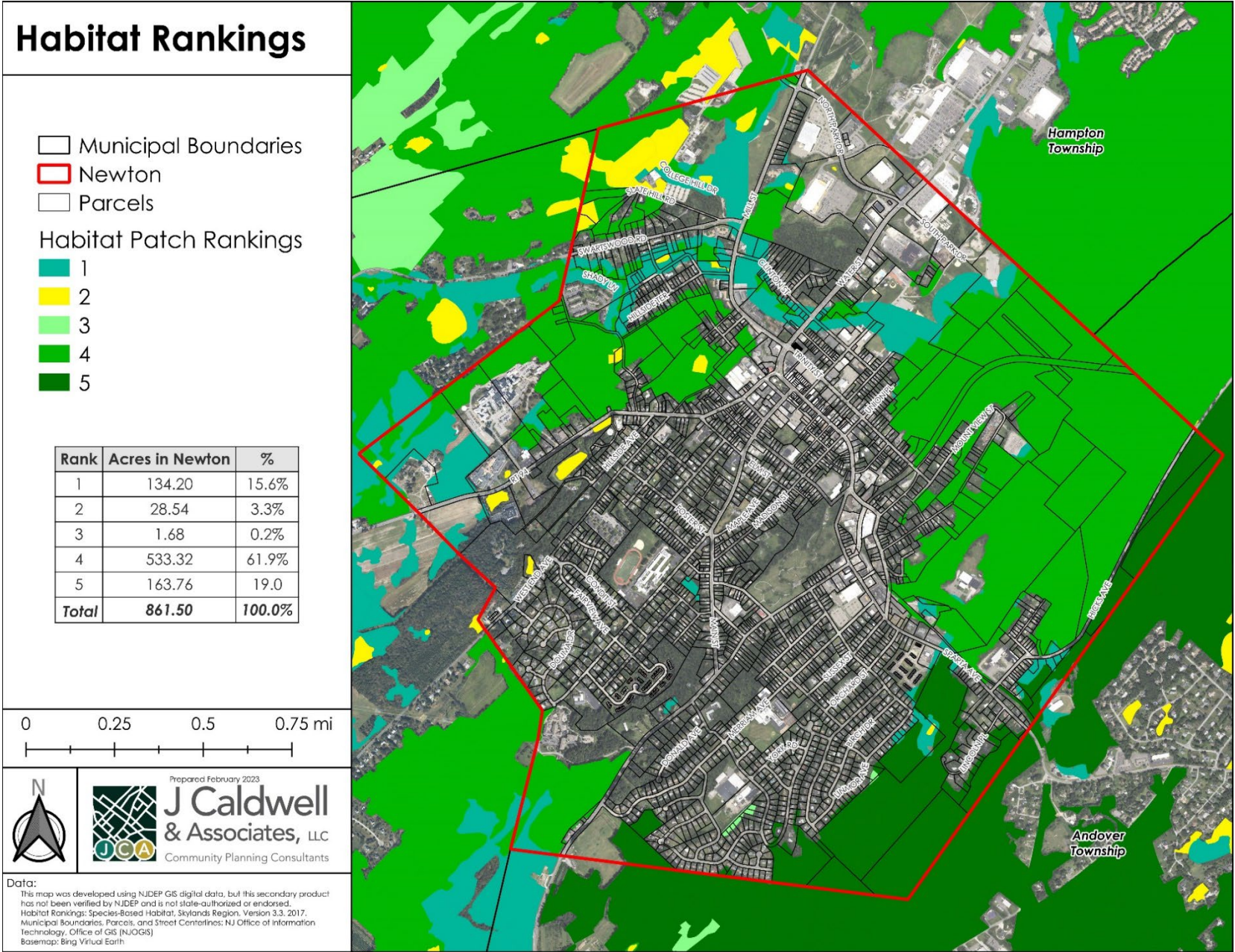
A portion of the Paulinskill Wildlife Management Area (WMA) covers approximately 111.3 acres of the Town of Newton's land. This is approximately 5 percent of the Town's total land. **Tables 1** and **2** identify the presence of plant and wildlife species in this WMA.

Forest Core

The Landscape Project, described above, also identified areas known as "forest core." These areas are large, contiguous swathes of forest which are at least 10 hectares, or about 25 acres. Forest core metrics assist in determining the prioritization of forested habitat patches.

II. Natural Resource Inventory

Figure 10. Habitat Rankings



II. Natural Resource Inventory

Table 1. Wildlife Species in the Paulinskill WMA

Status	Species	Acres	% of WMA	% of Total Resource
Federal Listed	Bog Turtle	12.28	0.52	0.38
State Endangered	American Bittern	460.23	19.48	56.71
	Bald Eagle	1252.57	53.03	1.11
	Bobcat	1972.33	83.50	2.35
	Red-shouldered Hawk	506.08	21.42	1.31
State Threatened	American Kestrel	75.67	3.20	3.44
	Barred Owl	630.43	26.69	0.31
	Longtail Salamander	127.26	5.39	3.62
	Triangle Floater	0.98		28.53
	Wood Turtle	3.88	0.16	0.01
Special Concern	Brown Thrasher	3.88	0.16	0.01
	Cliff Swallow	84.84	3.59	69.09
	Creeper	0.41		6.65
	Great Blue Heron	927.90	39.28	1.23
	Least Bittern	400.05	16.94	22.09
	Least Flycatcher	56.26	2.38	1.09
	New England Bluet	84.08	3.56	6.86
	Northern Metalmark	745.93	31.58	28.09
	Red-shouldered Hawk	264.66	11.20	0.69
	Veery	402.69	17.05	0.40
	Vesper Sparrow	0.84	0.04	0.07
	Wood Thrush	679.66	28.77	0.87

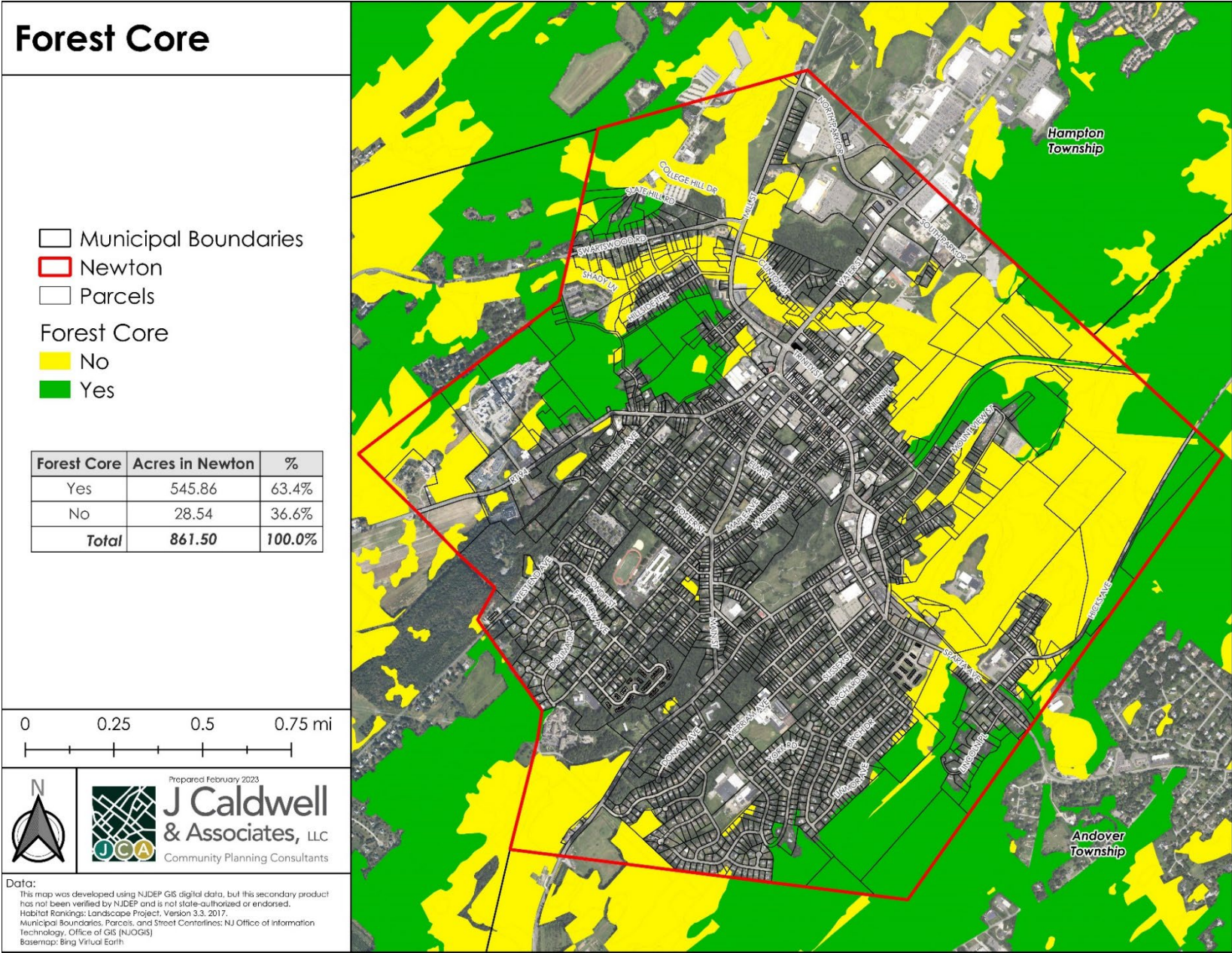
NJDEP Fish and Wildlife Office of Information Systems, "Wildlife Management Area Explorer."

Table 2. Plant Species in Paulinskill WMA

Status	Species
State Critically Imperiled - Single Location (S1.1)	Data sensitive Species or Ecological Community
State Critically Imperiled - Single Location (S1S2)	Appalachian Mountain Boltonia Aster-like Boltonia - Small-headed Aster - Field Mint Herbaceous Vegetation Gattinger's Witch Grass Soft-leaf Sedge Sycamore - Green Ash - American Elm / Red-osier Dogwood Forest
State Critically Imperiled (S1)	Bog Rosemary Bog Willow Data sensitive Species or Ecological Community Few-fruit Sedge Lesser Panicked Sedge Pear Hawthorn Rush Aster Sphagnum White-grained Mountain-rice Grass Wiry Panic Grass
State Imperiled (S2)	Bebb's Sedge Buck-bean Cave Aquatic Community Cave Terrestrial Community Data sensitive Species or Ecological Community Ebony Sedge Frank's Love Grass Green Sedge Hitchcock's Sedge Matted Spike-rush Retorse Sedge Robin's Pondweed Small Bedstraw Small Yellow Sedge Stiff Gentian Swamp Birch
State Imperiled (S2?)	Dry-mesic Calcareous Forest
State Rare (S3)	Brown Sedge Hard-stem Bulrush Highbush-cranberry Sweetgale

NJDEP Fish and Wildlife Office of Information Systems, "Wildlife Management Area Explorer."

Figure 11. Forest Core



Historic and Cultural Resources

Historic Sites

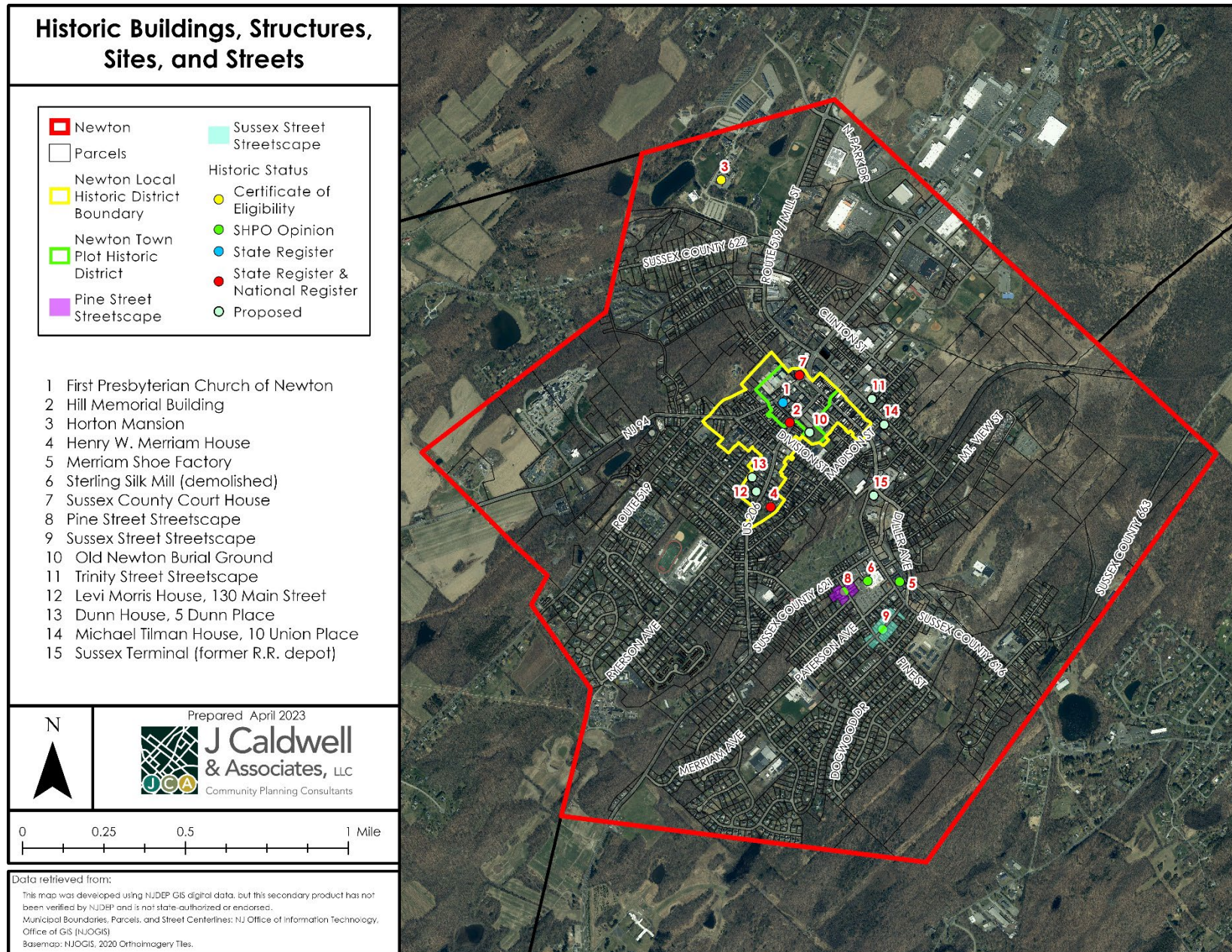
The Town of Newton is located south of the geographic center of the County of Sussex, being about nine miles north of the southern end of the County. The Town was originally part of New Town Precinct, in Morris County, on March 27, 1751. The Precinct became part of Sussex County when it was created on June 8, 1753. The Precinct was subdivided into various Precincts that later became many of the municipalities in Sussex County. The term "precinct" was officially dropped in 1798, when the state legislature passed the Township Act, which re-designated precincts as "townships." The Township of Newton was abolished on April 11, 1864, when it was divided into Andover and Hampton Townships and the Town of Newton. Lands were ceded back to the Newton in 1869 from Andover Township, from Fredon Township in 1920, and again in 1927 from Andover Township.

In 1985, in order to protect historic sites within the Town, the Town Council adopted a Historic and Cultural Resource Survey that broke the Town down into three sections and provided an inventory of the individual historic buildings and structures within each section. The "Summary Report", which accompanied the inventory, provided specific recommendations for future actions by the Town, including the formal designation of Historic Districts and the establishment of a commission that would implement regulatory review of proposed alterations to or demolition of the buildings within those designated Historic Districts.

In 1987, the Town Council established a local ordinance creating the Historic Preservation Commission, the boundaries of the locally designated Historic District and the criteria to be used in reviewing applications to the Commission. In 1992, the Town prepared the nomination application for the "Newton Town Plot Historic District." The Town Plot District was entered on the State Register of Historic Places on September 24, 1992 and on the National Register on November 11, 1992. The Town Plot District included all of Church Street and Park Place, portions of High, Main, Spring and Moran Streets and no. 1 Dunn Place. In 1993, the Town prepared a study entitled "Archeological Reconnaissance Survey – Town of Newton, Sussex County, New Jersey", which reviewed and identified pre-colonial settlement history and sites in the Town.

II. Natural Resource Inventory

Figure 12. Historic Sites



Land Use

Existing Land Use

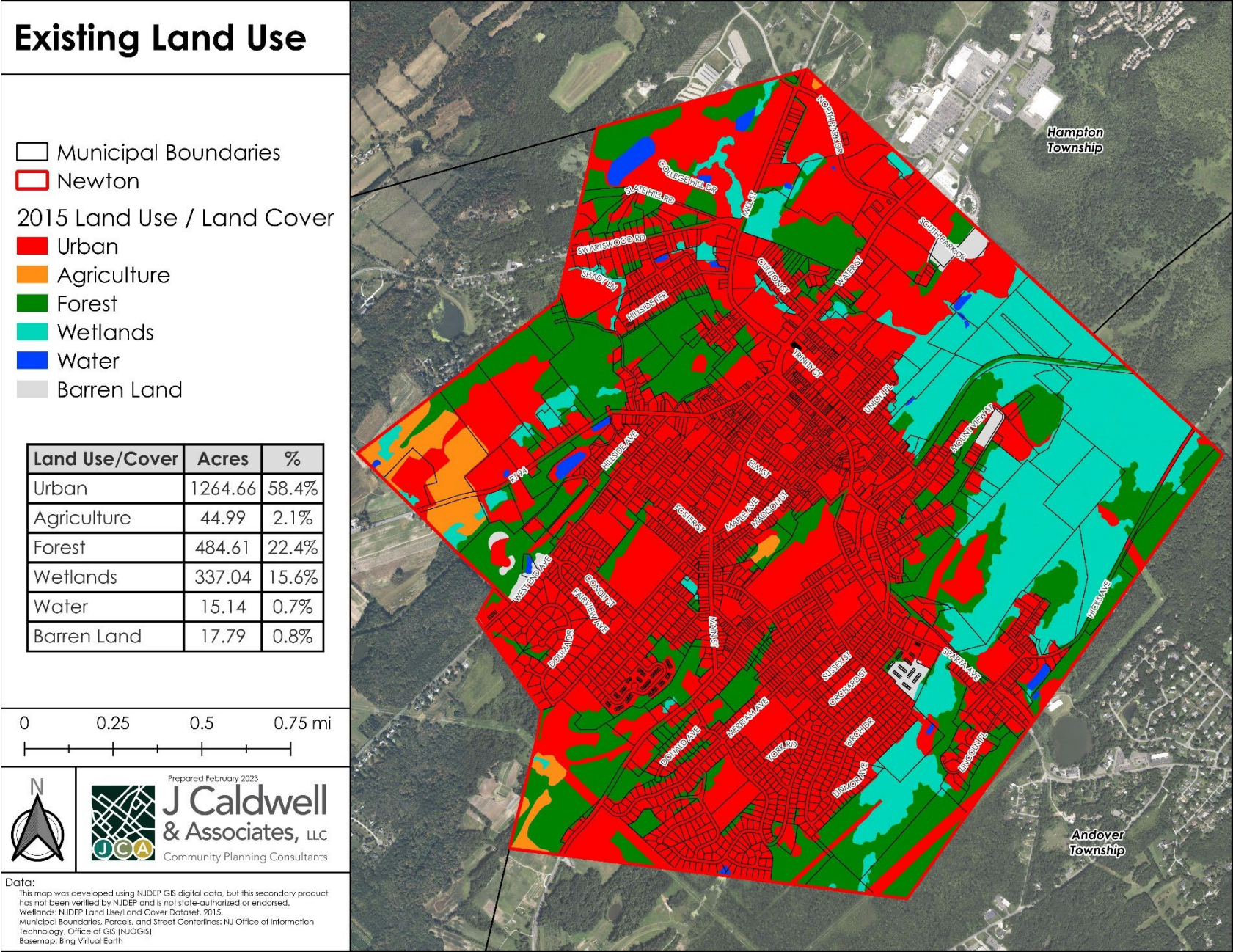
Figure 14 illustrates the existing lands use in Newton. The largest category of use is urban, comprising approximately 1,264.7 acres of land, or 58.4% of the Town's total land coverage). The next largest uses by acreage are forested land (484.61 acres, or 22.4%) and wetlands (337.04 acres, or 15.6%). Agriculture comprises approximately 45 acres (2.1%) of Newton's land, barren land comprises 17.79 acres (0.8%), and water comprises 15.14 acres (0.7%).

Open Space

Newton contains preserved open space under municipal, County, and State ownership (**Figure 15**). Most of the preserved open space is owned by the State (208.1 acres, or 74.2% of all open space in the town). The municipality owns approximately 71.5 acres (25.5%) of the preserved open space, and the County owns just under one acre (0.3%) of the preserved open space. The Open Space and Recreation Plan Element will include a more detailed description of Newton's open space and recreation resources.

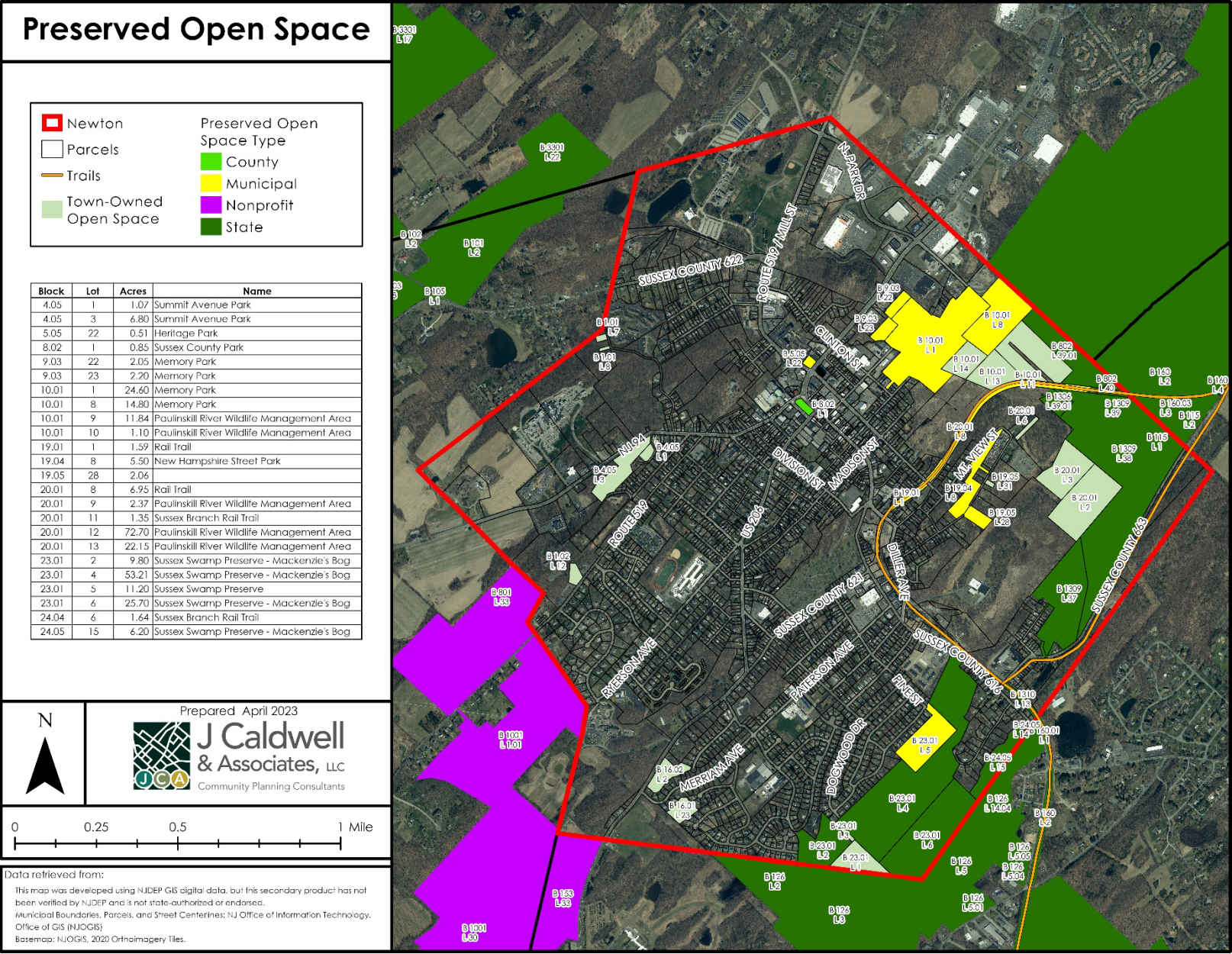
II. Natural Resource Inventory

Figure 13. Existing Land Use



II. Natural Resource Inventory

Figure 14. Preserved Open Space



III. Conservation Plan Element

Overview

The New Jersey Municipal Land Use Law (MLUL) permits Planning Boards to prepare a Conservation Plan Element of the Master Plan. N.J.S.A. 40:55D-28 states that the Conservation Plan should include the following:

1. Providing for the preservation, conservation, and utilization of natural resources;
2. A systematic analysis of the impact of each other component and element of the Master Plan on the present and future preservation, conservation, and utilization of those resources.

Purpose and Scope

The purpose of this Conservation Element is to identify measures to provide for the preservation, conservation, and utilization of natural resources identified in the Natural Resource Inventory (NRI) identified in Section II of this report. The following list are the resources which the Town of Newton should particularly consider in future planning efforts.

- Soil Conservation;
- Groundwater Recharge; and
- Important Habitats.

This document provides a summary of Newton's conservation efforts thus far, and an analysis of each of the above-mentioned resources on their values and benefits to the health, safety, and general welfare of the community.

Goals

Failure to develop land appropriately can have negative effects on the health of the environment and the community. The recognition, conservation, and protection of natural resources are integral to sustainable land development activities.

The goals of this Conservation Plan Element are as follows:

1. To conserve and protect environmentally sensitive areas (e.g. steep slopes, floodplains, and important habitats);
2. To prevent the degradation of the environment through improper use of land;
3. To utilize modern water runoff control techniques to improve local drainage patterns; and
4. To promote green building techniques, low impact development, energy efficient buildings and the use of alternative energy

Natural Resource Protection

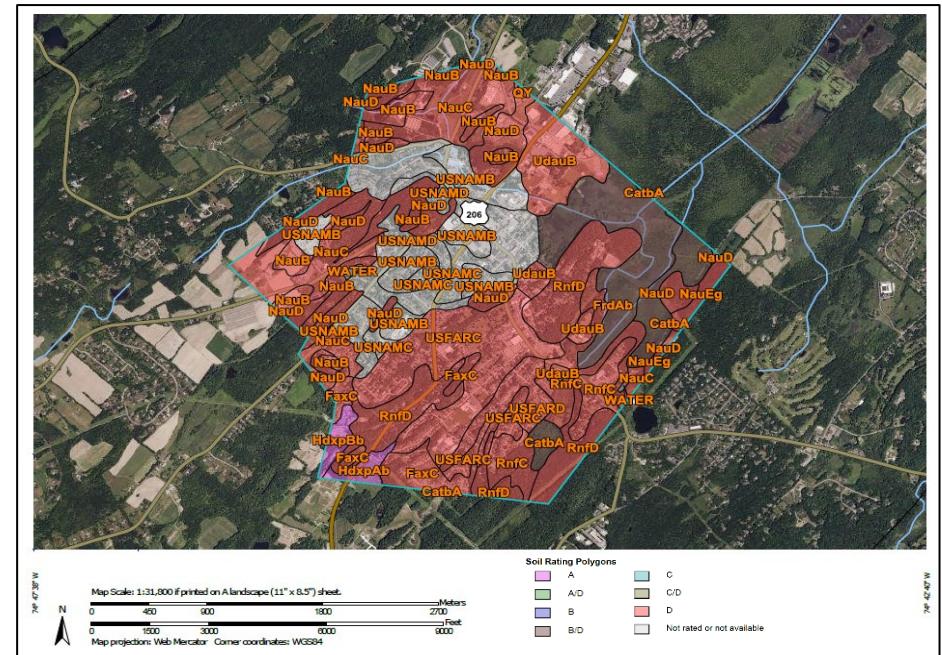
Soils

Even though Newton is largely built-out, maintaining the health and integrity of soils is important as they have numerous impacts on their surroundings, including:

1. Sustainability: Soil health impacts the soil erosion, soil depletion, and soil fertility;
2. Water management: Healthy soils assist in minimizing stormwater runoff and the infiltration of water into soils;
3. Climate change mitigation: Sustainable soil conservation and management practices can assist in reducing the impact of climate-change-related hazards;
4. Biodiversity: soil conservation can restore and maintain habitats for native flora and fauna.

As identified in Section II of this report, Newton has a variety of soil types located throughout the municipality. Each soil type has different characteristics which can impact drainage and slopes. In Newton, the two most prominent soil types are the rock outcrop-Farmington-Galway complex (RnfD) and the urban land-Chatfield rock outcrop complex (USFARC), which comprise about 24 percent of Newton's total soil. RnfD soils are comprised of, "moderately deep, well drained, and moderately well drained soils formed in till,"⁸ and are located throughout the town, but primarily located on New Hampshire Street, Mount View Street, and the southern end of Woodside Avenue. USFARC soils are located in the south-central portion of Newton, along Carriage Lane, Route 206/Main Street, and the northern end of Woodside Avenue. Most (67.0% or 1,449.1 acres) of the soils within Newton are assigned to hydrologic group D (**Figure 15**), which indicates, "a very slow infiltration rate (high runoff potential) when thoroughly wet."⁹ The remainder of Newton's soils are unranked (19.3% or 416.9 acres, primarily in the town center area), ranked B/D (12.1% or 261.3 acres, primarily within the Paulinskill Wildlife Management Area), or ranked A (1.7% or 36.8 acres in the southern part of the town).

Figure 15. Hydrologic Group Map of Newton, NJ Soils



⁸ National Cooperative Soil Survey, USA. Social Data Explorer – Galway: Official Series Description. 2009. Retrieved from <https://casoilresource.lawr.ucdavis.edu/sde/?series=galway#osd>

⁹ USDA NRCS Web Soil Survey, Hydrologic Soil Group—Sussex County, New Jersey, Town of Newton. Retrieved from https://websoilsurvey.sc.egov.usda.gov/WssProduct/tjfxqvtqjb1qtgwq115ldrrb/tjfxqvtqjb1qtgwq115ldrrb/20230330_10091410669_17_Hydrologic_Soil_Group.pdf

III. Conservation Plan Element

Although most of Newton is already built-out, there are some small areas which have potential for development. Considering that the vast majority of soils in remaining lands have “very high” levels of stormwater runoff, or the “loss of water from an area by flow over the land surface,”¹⁰ the Town should continue to enforce best practices for stormwater runoff management.

Groundwater Recharge

Groundwater plays a crucial role in maintaining the health of wetlands, rivers, lakes, and other ecosystems, as well as the flora and fauna that depend on them. Contaminated groundwater can lead to ecological imbalances and a loss of biodiversity. As identified in the Natural Resource Inventory (NRI), Newton has a range of recharge areas. Most areas provide a minimal amount of recharge, but there are portions of the Town which recharge as much as 16 to 23 inches per year. The areas with higher recharge rates are present primarily in the southern portion of the Town in the undeveloped areas along Woodside Avenue. Other areas with high recharge rates are present in the Newton Cemetery in the center of Newton and along Mount View Street.

Climate change is impacting groundwater recharge levels—changes in temperature and precipitation patterns will occur, and as such, Newton acknowledges the need to ensure land uses are carefully managed to accommodate these changes and mitigate any issues that arise. Most of the areas in Newton which are ideal for groundwater recharge are undeveloped. For those areas where recharge is minimal, methods to prevent water loss should continue to be encouraged. These methods may include practices such as rainwater harvesting. In more sensitive recharge areas, development should be limited.

Important Habitats

Even though geographically small, Newton is home to an array of various habitats. The NRI prepared in conjunction with this Conservation Plan identified various areas of Newton which may contain important habitats. Shown in **Figure 10**, almost 62 percent of Newton's important habitat lands are Rank 4 habitat patches, which contain one or more occurrences of State endangered species. The vast majority of these lands are present in the Paulinskill River Wildlife Habitat Management Area. Habitat patches ranked 5 contain one or more occurrences of wildlife listed as endangered and threatened pursuant to the Federal Endangered Species Act of 1973. The areas within Newton that are ranked 5 are primarily in the southern portion of the municipality.

Summary of Local Conservation Activities

Ordinances

Stormwater Control

Chapter 258 “Stormwater Control” of Newton's code calls for flood control, groundwater recharge, and pollutant reduction through the use of green infrastructure best management practices and nonstructural stormwater management strategies. The ordinance sets forth goals of maintaining natural hydrology, reducing erosion, encouraging infiltration and groundwater recharge, and reducing pollution.

¹⁰ USDA NRCS Web Soil Survey, August 2022.

III. Conservation Plan Element

Water Restrictions

Chapter 288-21-23.1 of the Town Code limits the usage of water to customers of the Newton Water and Sewer Utility. Restrictions set forth in this chapter include specific lawn watering time regulations and irrigation systems.

Soil Disturbance

Chapter 241-2-11 of the Town Code prohibits the deposit of, "...any contaminated material, or animal or vegetable substance or garbage or refuse or dirt gathered in cleaning sewers, or waste of mills or factories, or any materials which are offensive to health or tend to decay, to become putrid or to render the atmosphere impure or unwholesome, or any other environmentally inappropriate materials as determined by the New Jersey Department of Environmental Protection."

USDA Composting and Food Waste Reduction Grant

In 2023, the Town of Newton was awarded a grant through the United States Department of Agriculture to establish a composting program. The program will be a collaborate effort between Newton, the public school system, Sussex County Community College, non-profit organizations, and local businesses.

Community Forestry Management Plan

Building on the 2010-2014 Plan, the 2018 Community Forestry Management Plan set forth recommendations on implementing and enhancing programs for managing public street trees and continuing to increase focus on trees in Town parks and properties.

Relationship of Conservation Plan to other Master Plan Elements

Many of Newton's planning efforts over the years have reflected the Town's desire to encourage the preservation and protection of natural resources. This Conservation Plan Element should be used in conjunction with existing efforts to protect and preserve natural resources and ecological areas of importance. The following sections provide an analysis of Newton's Master Elements and their relationship to this plan.

Master Plan

Newton's last complete Master Plan update was adopted in 2008. The update included a Land Use Plan Element, Community Facilities Element, Circulation Plan Element, Recycling Element, and a Historic Resources Element. The following sections describe how this Conservation Plan Element should be used to advance the goals of Newton's ongoing conservation efforts.

Land Use Plan Element

The most recent complete update to the Town's Land Use Element was in 2008. This element proposed transect districts, which prepared the Town to implement a form-based code. With these transect zones, Newton desired to promote compact communities with vibrant urban spaces focused on pedestrians instead of vehicles. As a result of these zones, the T-1 Natural Area transect zone was established.

III. Conservation Plan Element

This district covers wetlands, water and wetland buffers, and lands which should remain undeveloped. Permitted uses in this zone include parks, nature preserves, and walking trails. The 2008 Land Use Element also established the T-2 Rural Reserved Areas, which are large tracts of land on the outskirts of Town intended to be kept open through the use of conservation or farmland easements. These transect zones are particularly important in the conservation of natural resources.

Community Facilities Element

The 2008 Community Facilities Element identified opportunities to use the expansion of active recreation opportunities as a means to preserve environmentally sensitive land and open space.

Circulation Plan Element

One of the goals of the 2008 Circulation Plan Element included “encouraging use of alternate transportation modes (e.g. pedestrian, bicycle, local transit, and rail) to lessen dependence on the automobile for local trips in Town, thereby minimizing in-Town congestion and air pollution.” Additionally, the Circulation Plan Element proposed a network of designated bike paths that utilized existing trails and open space. The preservation and conservation of remaining open space or ecologically important lands would assist in the completion of this network.

Recycling Element

A Recycling Element was prepared as part of the 2008 Master Plan Update. At the time of that report, the Sussex County Waste Management Plan projected that waste will increase at a minimum of five percent per year, noting that waste per capita in Sussex County has been on the rise at a faster rate than the rest of the State. The Sussex County Waste Management Plan identified numerous responsibilities the Town has to address recycling issues, including appointing a Municipal Recycling Coordinator, adopting a recycling ordinance, periodically review and update Master Plan and land use regulations, and submitting an annual Municipal Recycling Tonnage Report to the NJDEP. These recommendations have been implemented and this Conservation Plan Element advances the intent of these items.

Conservation Recommendations

The following are recommendations for consideration during the planning process:

1. Continue to encourage green infrastructure to meet groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards. Utilize the NJDEP’s Best Management Practices as guidance.
2. Limit additional land development in sensitive groundwater recharge areas.
3. Run awareness and education campaigns to encourage residents and visitors to protect important habitats.
4. Proactively protect the existing ecologically sensitive areas.
5. Connect environmentally sensitive areas through bike paths, when possible, to encourage alternative modes of transportation.

IV. Open Space and Recreation Plan

IV. Open Space and Recreation Plan

Purpose and Scope

The Town of Newton's 2023 Open Space and Recreation Plan (OSRP) has been prepared in accordance with the guidelines and requirements as set forth by the New Jersey Department of Environmental Protection's (NJDEP's) Green Acres Program and the New Jersey Municipal Land Use Law (MLUL). The purpose of this OSRP is to provide updates on open space, recreation, and other land development issues and offers current goals and policies as well as a new action plan.



Figure 17. Photograph of Pine Street Park by Michael Tonner, Apr. 2021



Figure 16. Memory Park, newtontownhall.com/facility/details/memory-park-6

Introduction

This OSRP for the Town of Newton outlines open space and recreational goals that are consistent with other county, state, and regional plans; inventories open space and recreational resources; assesses open space and recreational needs; makes recommendations on priorities for additional preservation/protection; and establishes a list of actions necessary to meet Town goals.

What is Open Space?

Simply put, open space is undeveloped land. Open space can come in a variety of different forms and types. It can be small or large, active or passive, land or water, flat or mountainous, and publicly or privately owned. Below are just some examples of the many forms open space may take:

Forest	Lakes	Public Art	Athletic Fields
Fields	Ponds	Scenic Views	Playgrounds
Meadows	Historic Sites	Gardens	Trails
Yards	Cultural Centers	Orchards	Greenways

The Municipal Land Use Law (MLUL), which provides the statutory basis for planning and zoning across New Jersey, provides a more detailed insight into what open space is:

Open space means any parcel or area of land or water essentially unimproved and set aside, dedicated, designated or reserved for public or private use or enjoyment or for the use and enjoyment of owners and occupants of land adjoining or neighboring such open space; provided that such areas may be improved with only those buildings, structures, streets and off-street parking and other improvements that are designed to be incidental to the natural openness of the land or support its use for recreation and conservation purposes.

As outlined above, one of the main components of open space is that it must be “set aside, dedicated, or reserved.” In other words, open space must be generally safe from any development that is not incidental to the use of that space.

IV. Open Space and Recreation Plan

What are the Types of Open Space?

Active Recreation

Active recreation consists of activities that require equipment. These activities generally take place at prescribed places, sites, or fields. They may be formally organized and performed with others.

Passive Recreation

Passive recreation refers to recreational activities that are commonly unorganized and noncompetitive, including, but not limited to, picnicking, bird watching, kite flying, bicycling, and walking. Site amenities for such activities include, but are not limited to picnic tables, photo stands, open play areas where substantial clearing is not required, rest rooms, tot lots, boardwalks, paved paths, pathways, benches, and pedestrian bridges and appurtenant structures.

Farmland Preservation

Farmland preservation is a joint effort by landowners and local governments. The goal of farmland preservation is to set aside and protect a region's agricultural areas for future use, education, and enjoyment.

Environmental Conservation Recreation

Environmental recreation and conservation include activities which require little to no organization. They may also be relatively inactive and less energetic.

Greenbelt

A greenbelt is an interconnected network of undeveloped and typically forested areas. Greenbelts maintain clean water and air resources. They also help protect flora and fauna, and create natural buffers between land uses.

What are the Benefits of Open Space?

Open space is vital for both the physical and mental well-being of a community. Its benefits are wide-ranging and affect nearly every facet of everyday life. Some of these benefits include the following:

Quality of Life

Open space can exist in a variety of forms, including forests, fields, meadows, trails, waterways, greenways, and other vistas. In addition to their natural beauty, these spaces offer mental and physical health benefits to its users, and provide a valuable break from everyday life.

Ecological Benefits

The preservation of open space protects and preserves important environmental features, such as wetlands, floodplains, and steep slopes. Furthermore, these areas often contain delicate ecosystems filled with unique wildlife and vegetation species.

IV. Open Space and Recreation Plan

Recreational

Open space provides recreational opportunities for community members of all ages and backgrounds. Athletic fields and facilities may be multipurpose, and can accommodate tennis, baseball, basketball, hockey, football, soccer, cricket, running, boating, and general exercise for instance. Regardless of the activity, recreational fields can act as gathering spaces that may bring together the community.

Economic

Open space is also an investment into a community. By promoting attractive and desirable places, open space can attract new businesses and residents to nearby areas. Proximity to open space amenities can also increase nearby property values and provide tourism opportunities.

Transportation

One of the often overlooked benefits of open space are its transportation benefits. Interconnected parks, trails, and greenways provide for an alternative means of transportation, one that is both environmentally friendly and traffic reducing.

What is an Open Space and Recreation Plan?

As established by the New Jersey Department of Environmental Protection (NJDEP), an Open Space and Recreation Plan (OSRP),

“...articulates a local government's vision of open space and recreation. It should establish a philosophical and practical justification for the protection of open space and recreation opportunities. The OSRP should provide a frame work for implementation. Through an OSRP, the municipality identifies and examines the open space and recreation resources of the community; evaluates their quality, function, accessibility and extent; assesses whether they address the needs of the community (in consideration of its population and demographics); and determines whether they include the most significant expanses of open space in the community (e.g., for environmental sensitivity, scenic viewshed preservation, unique defining features); and sets forth a plan to protect and enhance existing facilities while seeking out new or expanded facility options and/or open space as needed, to address gaps in the existing open space/recreation network.”

To put it simply, an OSRP is a blueprint that recognizes the benefits of open space. It provides for an identification of a community's resources, and a strategy to preserve, enhance, and expand upon those resources to ensure that future generations may continue to enjoy them. While every OSRP is specifically tailored to the needs of the municipality for which it is prepared, they nevertheless address the same requirements and guidelines as established by the MLUL.

N.J.S.A. 40:55D-28 of the MLUL outlines the contents of a municipal master plan, which is intended to guide the use of lands within a municipality in a manner which protect public health and safety and promotes the general welfare. Recreation plans and conservation plans are identified as optional master plan elements.

The MLUL establishes that the recreation plan element is intended to show,

IV. Open Space and Recreation Plan

"...a comprehensive system of areas and public sites for recreation."

Likewise, the MLUL further establishes that a conservation plan element should provide for:

"...the preservation, conservation, and utilization of natural resources, included, to the extent appropriate, energy, open space, water supply, forests, soil, marshes, wetlands, harbors, rivers and other waters, fisheries, endangered or threatened species wildlife and other resources, and which systematically analyzes the impact of each component and element of the master plan on the represent and future preservation, conservation, and utilization of those resources."

Goals and Objectives

The purpose of this 2023 OSRP is to continue the Town's tradition of preserving and enhancing open space and recreation amenities for future generations. This plan builds upon the following goals:

Goal 1 – IMPLEMENTATION: Coordinated planning and adequate funding for the management and maintenance of the Town's open space resources.

Municipal resources have always been and will continue to be limited. Through the establishment of a team focused on strategic implementation of this plan, however, immediate and longer-term priorities can be established, interdepartmental planning and coordination ensured, and limited financial resources most efficiently employed. A diversity of funding sources, such as Green Acres Funding, Community Development Block Grants, various state grants, and public-private partnerships, can be pursued and utilized for coordinated project implementation.

Goal 2 – MAINTAINANCE AND IMPROVEMENT: Maintained and improved open space recreational resources (i.e., athletic fields, parks, playgrounds, trails, hard courts, dog parks, and other recreational facilities). Natural areas with intact native habitats, limited invasive species, maximized native plants, maintained or reestablished natural hydrology, and improved water quality. Optimized extent and health of the Town's tree canopy.

Growing and competing needs and limited funds have led to a backlog of maintenance and improvement projects for open space resources. Clear guidelines are needed for prioritizing projects, balancing maintenance and acquisition, and ensuring efficient management. Active recreation interests such as fields, aquatic facilities, and parks that are used intensively as well as passive recreation interests such as improving trail conditions shall be a priority for the Town of Newton.

The overall ecological health of the Town's natural areas shall be examined in order to protect and connect intact habitats, limit invasive species, maximize native species, optimize tree and shrub cover, maintain or reestablish natural hydrology, and optimize water quality. Increasing the number of street trees and maintaining the existing stock of street trees is also encouraged.

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Goal 3 – ACCESSIBILITY: Maximized accessibility of Newton's Outdoor Recreation Facilities and Natural Open Spaces.

Increasing the accessibility of Newton's open space resources is a critical and required step to accommodate residents of all abilities and to remove or modify barriers to existing recreational facilities. Newton will strive to incorporate universal design to maximize accessibility to and within as many outdoor recreation facilities and natural open spaces as feasible to provide equal access for residents of all ages and abilities.

Goal 4 – MINIMIZED GAPS IN THE AVAILABILITY OF OPEN SPACE RESOURCES: New and improved open space resources in areas of greatest need including, but not limited to, Environmental Justice areas, areas affected by heat island effects, and areas lacking certain types of local open space resources.

Improving the distribution of Newton's open space resources shall also be prioritized through the commitment to providing residents of all ages and abilities a diversity of quality outdoor facilities and natural open spaces within a 10-minute walk, by providing municipal open space resources and connections and encouraging the provision of other public and private open space resources and connections.

Goal 5 – CONNECTIVITY: Linked open space resources with accessible paths, bike lanes, and trails.

Connectivity is a crucial component to link and provide access to Newton's open space resources. Bicycle and pedestrian access to Newton's open space resources would serve all of Newton: underserved areas, disabled residents, older residents, families, able-bodied residents, school age children, and local businesses. Many of Newton's open spaces are primarily accessed by cars. Improved, safe, "quiet" sidewalks, trails and paths that connect these resources and promote passive recreation would positively affect the users' wellbeing. Implementing wayfinding and navigation measures within these improved/expanded connections will be highly beneficial to the Town. Newton shall strive to continue improve bike and pedestrian safety, bike and pedestrian linkages between open spaces and schools, and connectivity for populations with limited access to open space. Improved bicycle infrastructure and safe pedestrian routes will aid in the dependence of fossil-fueled vehicle transit options, thereby helping to reduce greenhouse gas emissions.

Connected natural areas also contribute to the area's overall ecological health by providing corridors for safe wildlife passage. Wildlife corridors ensure greater biodiversity, enabling the survival of species that are threatened by human development.

Goal 6 – PROTECTION: Protected and expanded open space resources.

Better protection of Newton's open space resources was identified as a priority. This concept reflects four clear interests:

1. Putting stronger legal protections on portions of existing park and conservation lands;
2. Planning for the protection of portions of large, privately owned space parcels, and schools, etc.;
3. Ensuring that sound land use planning and design practices are implemented; and
4. Ensuring that the myriad benefits of open space are provided to all of Newton's residents.

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Natural areas improve air quality, help capture and manage stormwater, absorb carbon and mitigate the effects of climate change and enhance ecological biodiversity and so should be protected from possible development. Recreational resources are critical for supporting physical and emotional health and so should be protected from development. Open spaces contribute to public health, community livability, property values, and a sense of community.

Largely privately owned open spaces such as schools, are not currently protected from sale or development, so the Town should develop response strategies for the possible disposition of one or more of these prime open space resources to protect its interests and ensure an appropriate balance of development and protection.

The recognition that climate change will both adversely impact the Town's open space resources and can be mitigated by those same resources. As a result, there is a desire to ensure that all design and management efforts take into account increased precipitation and heat, and more severe storm events. Newton will strive to maximize the Town's ability cope with climate change by designing and siting facilities with changing temperatures, precipitation, and flooding patterns in mind.

The aforementioned goals align with and advance the following 2008 Town of Newton Master Plan goals and objectives.

1. To promote the conservation of historic sites and districts, open space, energy resources and valuable natural resources in the Town and to prevent urban sprawl and degradation of the environment through improper use of land.
2. Conserve and protect environmentally sensitive areas (e.g., steep slopes, wetlands, and floodplains) in Newton.
3. Utilize modern water runoff control techniques to improve local drainage patterns from new development and to enhance the environment.
4. Provide for an adequate range of open space and public facilities to accommodate the needs of existing and future residents of Newton.
5. Distribute conveniently located recreation areas throughout the Town in relation to the distribution of population so the greatest number of people can take advantage of them.
6. Make the most efficient use of both school and Town recreational facilities through joint programming of after-school sports and recreational activities.
7. Improve the appearance of the community by the elimination of negative elements such as non-conforming signs and by encouraging aesthetically designed screening with adequate setbacks and landscaping.
8. Improving the appearances of dominant focal points with an area where needed (e.g. park, public building, church steeple) and exert better control over the location and design controls which encourage attractive screening of parking and trash dumpsters from public view.
9. Promote green building techniques, low impact development, energy efficient buildings and the use of alternative energy.
10. Preserve and protect existing street trees and promote planting of additional street trees and replacement of dying and diseased trees, utilizing property sized trees in appropriate locations.

IV. Open Space and Recreation Plan

Inventory

Although the Town of Newton does not have many recreational facilities and open space within its borders, adjacent municipalities such as the Townships of Andover, Fredon, and Hampton help contribute to the shared recreational options. These recreational facilities, parks, and nature preserves are owned by a variety of different entities, including the State of New Jersey, County of Sussex, and Newton.

As shown the Town presently contains a total of 282.08 acres of open space and recreational lands. Approximately three percent (3%) of these lands in the Town are owned and operated by Sussex County. The largest State-owned recreational facility is the Paulinskill River Wildlife Management Area, which is located in the northeasterly portion of the Town and encompasses approximately 110.16 acres.

Municipally-owned environmental recreation and conservation lands and recreational facilities comprise an approximate 25.9% of all open space.

A summary of these state, county, and municipal-owned resources is provided in **Table 3**, below.

Table 3. Open Space and Recreation Inventory

Land Resource	Acreage	Percentage
State of New Jersey	208.07	74.2%
Sussex County	0.85	0.3%
Town of Newton	73.17	25.9%

State-Owned Resources

The following State-owned resources are located in the Town:

Paulinskill River Wildlife Management Area

The Paulinskill River Wildlife Management Area (WMA) is State-owned and is located in the northeasterly bounds of Newton. This WMA consists of approximately 1,038 acres overall, but for the purpose of this OSRP, only 110.16 acres are situated in and adjacent to the Town of Newton. The WMA contains significant water resources and wetlands and drains into the Delaware River and the Delaware and Raritan Canal. Additionally, the WMA consists of wooded swamps, bogs, impoundments, and supports numerous endangered plants, including the pear hawthorn, rush aster, and bog rosemary as well as an abundance of wildlife. The 20-mile Sussex Branch Trail and the 27-mile long Paulinskill Valley Trail, both of which are part of the State Trails System, traverse or border portions of the site. The Paulinskill River Wildlife Management Area is predominately used hunting, fishing, bird watching, and other passive recreational activities.

Sussex Swamp Preserve – Mackenzie's Bog

Much of the Sussex Swamp Preserve was once farmland but now protects one of New Jersey's largest limestone fens. Located about a mile from downtown Newton, the preserve is home to limestone ridges, dense rolling forests, and vital wetlands. The site was first

IV. Open Space and Recreation Plan

discovered in 1914 by Kenneth Kent Mackenzie, a New York City attorney, and one of the most knowledgeable New Jersey field botanists. Mackenzie discovered hundreds of locations of rare plants. The Newton site contains numerous rare plant species including the state endangered pale-laurel, arborvitae, seaside arrow-grass, bog willow, rhodora, rush aster, bog rosemary, and Labrador marsh bedstraw. **Tables 1 and 2** in the Conservation Plan Element of this report contain a list of the endangered species in the Paulinskill WMA. The preserve also includes a portion of the watershed of Stickle Pond to the southeast and drains into both the Paulinskill and Pequest rivers in the Upper Delaware Watershed Management Area.

Sussex Branch Rail Trail

The Sussex Branch Rail Trail is built on the former line of the Erie Lackawanna Railroad and runs for 18 miles. The Town of Newton completed an extension of the trail in the Fall of 2021, allowing trail users to continue along the corridor into the Town. This helps to replace a previous on-road detour along Hicks Avenue that was not hospitable to cyclists and pedestrians. While there is still a gap in the trail within Newton, local officials are working on extending the trail to fill in the gap. The Town of Newton hosts a 1.6-mile extension that promotes walking, biking, horseback riding, and cross-country skiing during the winter months.

County-Owned Resources

Sussex County Park

The Sussex County Park, also referred to as the Newton Green, encompasses 2.8 acres in the center of the Newton Historic District with frontage along Main Street to the southeast, Spring Street to the northeast, High Street to the northwest, and Park Place to the southwest. The park is quartered by walkways, the Soldier's and Sailor's Memorial (1895) is centered in the triangular greensward facing Main Street. The site is mostly used for passive recreation and is also a place where community events are held.

Municipally-Owned and Operated Resources

The Town of Newton contains a variety of municipally-owned and operated resources which offer a variety of active and passive recreational opportunities.

Heritage Park

Heritage Park is situated on the corner of N.J.S.H. Route 206/94 and Mill Street and the Newton Firehouse #1 fire station and the Sussex County Administrative Center are nearby. The site is primarily open space where passive recreation can occur. There are sidewalks along the two (2) rights-of-way and a third that connects Route 206/94 with the multi-family residences adjacent to the park along Mill Street.

Rail Trail (Sussex County Rail Trail)

The Town of Newton hosts a 1.6-mile extension that promotes walking, bicycling, horseback riding, and cross-country skiing during the winter months.

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Memory Park

Memory Park, the largest park in the Town, is situated off of Moran Street at the heart of Newton and only minutes away from Spring Street and the N.J.S.H. Route 206/94 shopping corridor. Memory Park boasts a full size 90-foot baseball diamond as well as several Little League fields, softball fields, a full-size soccer field and a youth football field. In addition, visitors to Memory Park can enjoy a playground designed for children from ages 2-9 and a shady picnic grove that makes the perfect spot for a relaxing afternoon. Memory Park is also home to the Newton Pool.

The headwaters of the Upper Paulinskill, locally known as Moore's Brook, flows through Memory Park, into a large floodplain area at the back end of the park before entering lands owned by the State of New Jersey which is commonly referred to as the Hyper-Hummus section of the Paulinskill River Wildlife Management Area.

New Hampshire Street Park

New Hampshire Street Park is situated along New Hampshire Street and located near the Newton Theatre and the Newton Town Municipal Building. This park contains an off-street parking lot and areas for passive recreation. Recreational activities are limited at this site.

Resource Assessment – Garden State Greenways Mapping

The Garden State Greenways Program, a part of the New Jersey Conservation Foundation, is a collaborative planning tool designed to help communities coordinate and plan for open space across boundaries. Garden State Greenways encourages linking parks, recreation, and farmland together to form an interconnected system of preserved lands throughout the state of New Jersey. This is achieved primarily through providing maps, data, and other information for municipalities and other regional bodies for their use in planning for their communities.

The Garden State Greenways mapping is broken down into specific areas of environmental and open space concerns, and can be viewed individually. Several of those individual maps are discussed below.

Sussex Swamp Preserve (Pine Street Park)

Pine Street Park is a hidden gem, located at the end of a quiet residential street. Pine Street Park is home to small sized youth soccer games and also has a small playground for young children. Pine Street Pond, within the park, is a quiet spot for catching frogs and exploring the outdoors. There is also an updated basketball court that hosts friendly games throughout the spring and summer.

Summit Avenue Park

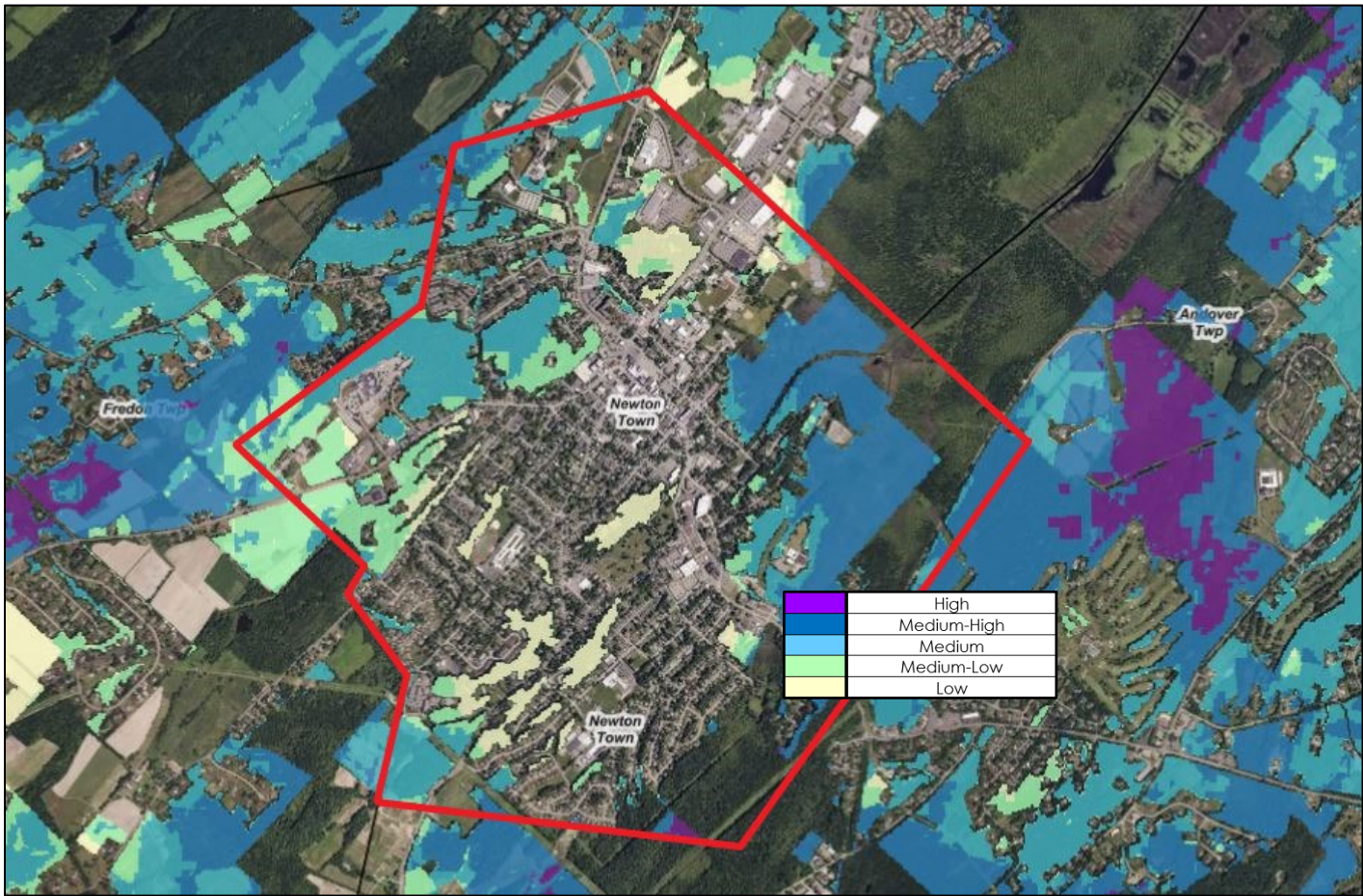
Summit Avenue Park has a small shelter and benches adjacent to the Summit Avenue Park Pond. This park is a favorite for locals walking their dogs.

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Priority Lands for Ecological Integrity

The priority lands for ecological integrity are those identified as being the most important for protecting the quality of the environment. These lands are vital to maintaining the overall health of the ecosystems of the lands and waters in the state. As illustrated in the map below, with Newton being an existing developed town, there are not large areas of priority lands in the town. The maps show that the most important areas in Newton for environmental protections are the areas in the northeasterly and northwesterly end of the town, near the Andover Township and Fredon Township municipal borders respectively. In addition, the northerly section of the Town of Newton along N.J.S.H. Route 206/94 and Mill Street, the Newton Cemetery (central section), and the southerly section near the Andover and Fredon Township municipal borders are identified as being low to medium priority.

Figure 18. Priority Lands for Ecological Integrity



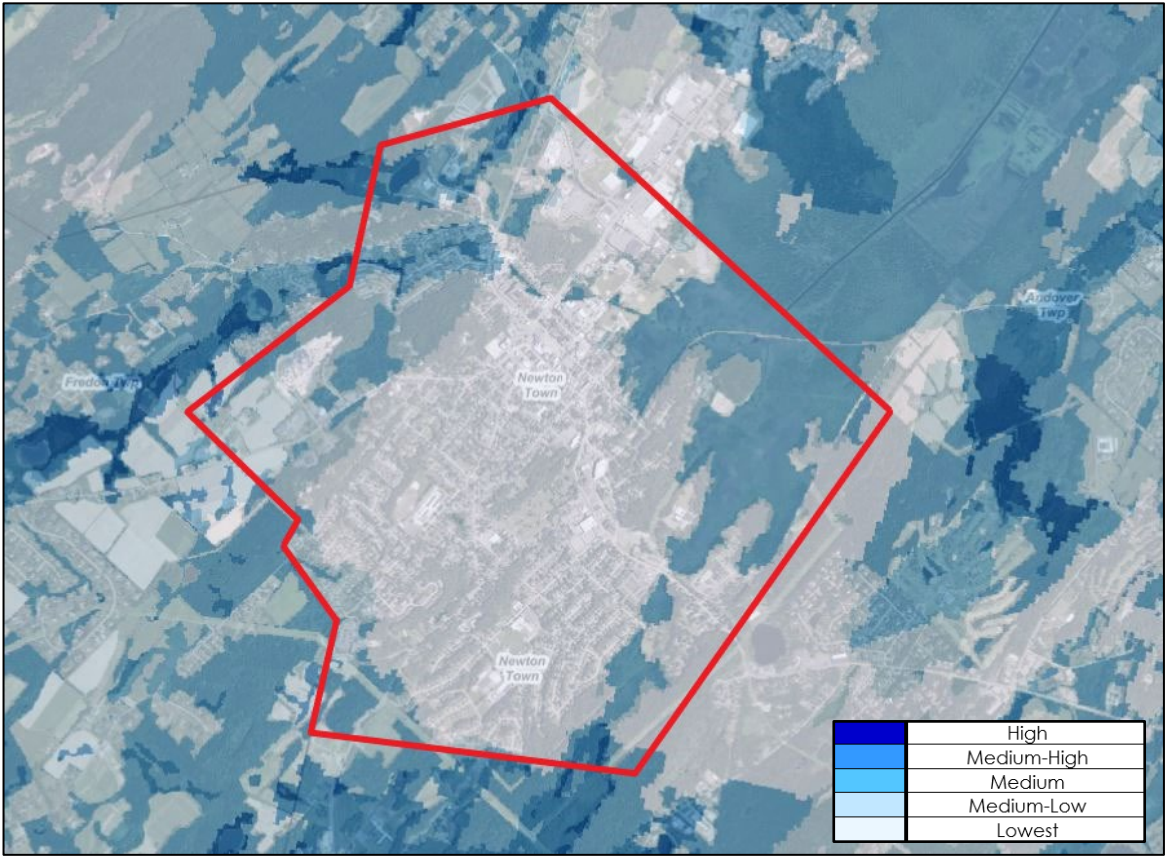
Source: Conservation Blueprint

IV. Open Space and Recreation Plan

Priority Lands for Water

The water quality priorities mapping shows those areas that are most important for protecting the quality of surface and ground water resources. As expected, the lands most important for protecting surface water quality are also the lands that are closest to surface waters. These are the lands which surround the watercourses. Lands around the northerly portion of Newton near the Sussex County Community College are identified as medium-high to high priorities while the northeasterly portion of the town along the Andover municipal border where the Sussex Rail Trail traverses through, are shown as medium priority. However, the majority of the existing developed town is identified as low priority.

Figure 19. Priority Lands for Water



Source: Conservation Blueprint, compiled Spring 2020.

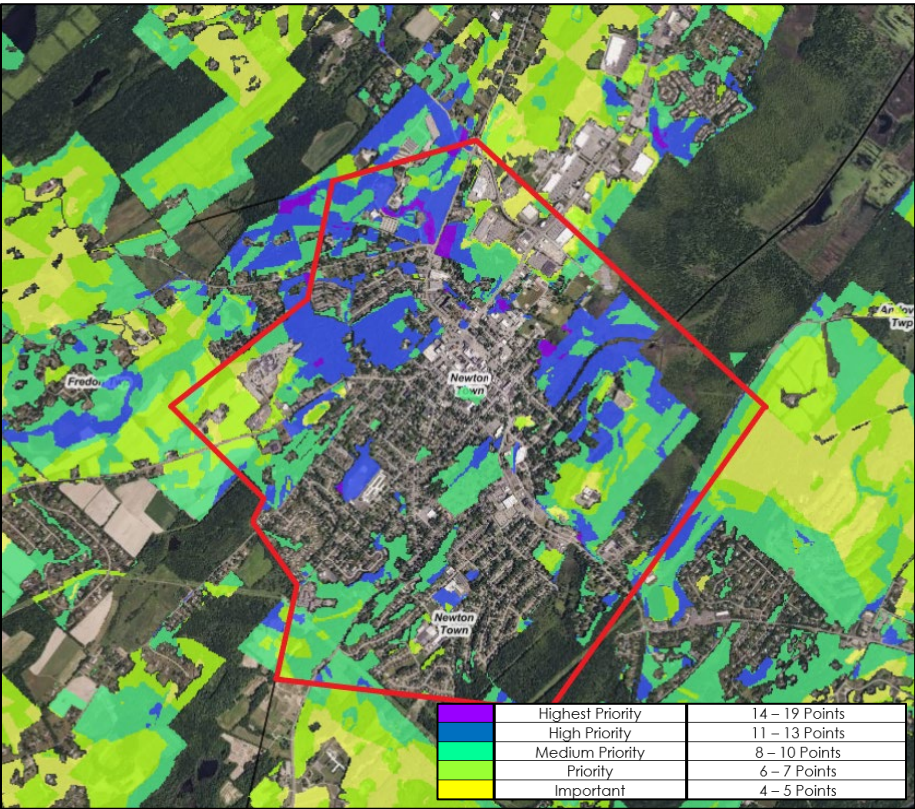
IV. Open Space and Recreation Plan

Priority Lands for Community Greenspace

The priority lands for community greening data and mapping is intended to identify the lands in New Jersey that might be most appropriate for open space and recreation purposes. The focus of these priority lands is not as much on protecting the environment but on meeting recreation needs and connecting people with nature. While there are small parcels of land throughout the Town given the highest priority designation, there are many more swaths of land identified as high and medium priority, especially in the northerly, southerly, and easterly sections of the Town primarily along the municipal border with Hampton, Andover, and Fredon Townships. The Newton Cemetery is also noted as a high and medium priority.

Garden State Greenways mapping follows a pattern of prioritizing lands proximate to surface waters for their importance to the environment. Protecting the lands surrounding the surface waters to maintain the ecological integrity of the area by reducing run off into streams, which reduces the chances of flooding, as well as naturally filtering stormwater before it reaches the creeks and streams. The bodies of water and the lands surrounding them are also the home to the greatest diversity of wildlife found in the area. These natural corridors also provide immense potential for interconnected open space greenway systems through passive recreation trails that follow the watercourses. Given the data and mapping provided by Garden State Greenways, it is clear that through protecting water resources, many goals can simultaneously be achieved.

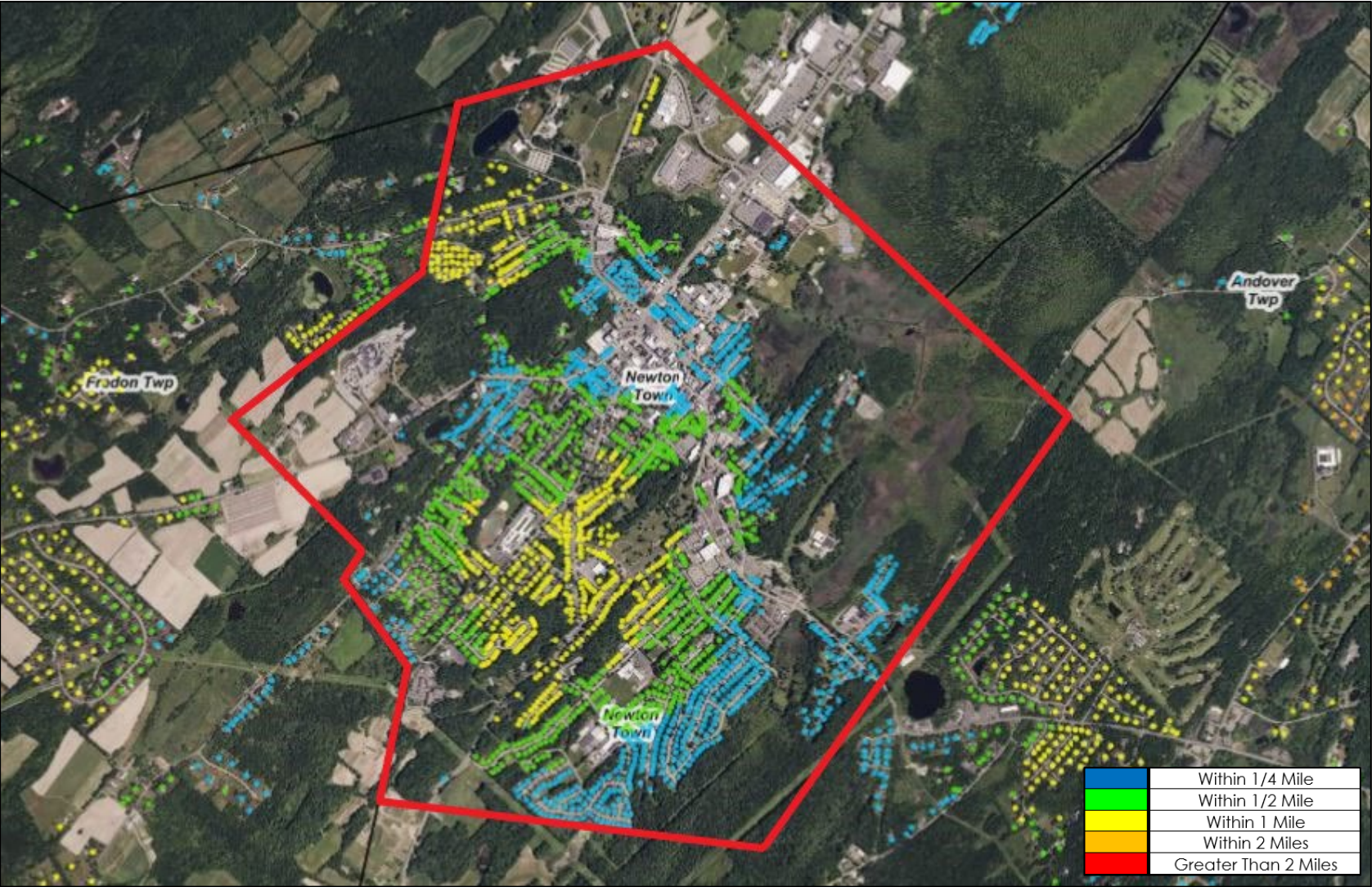
Figure 20. Priority Lands for Greenspace



Source: Conservation Blueprint Community Green Space Model Methodology Document

Additional Maps: Distance to Open Space, Recreational Lands, and Trails

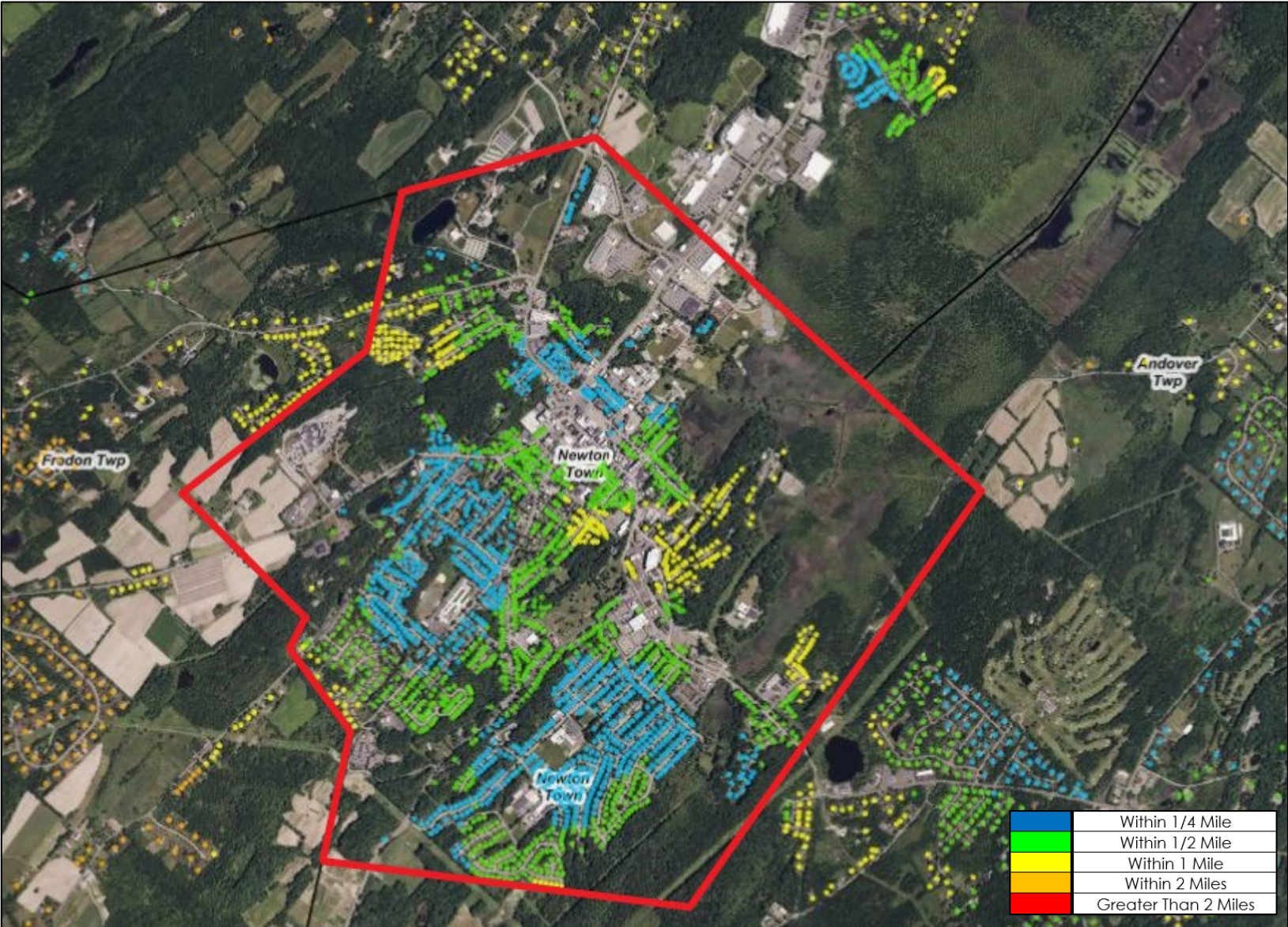
Figure 21. Distance to Preserved Open Space



Source: Conservation Blueprint - Green Space Accessibility: Distance to Preserved Open Space

IV. Open Space and Recreation Plan

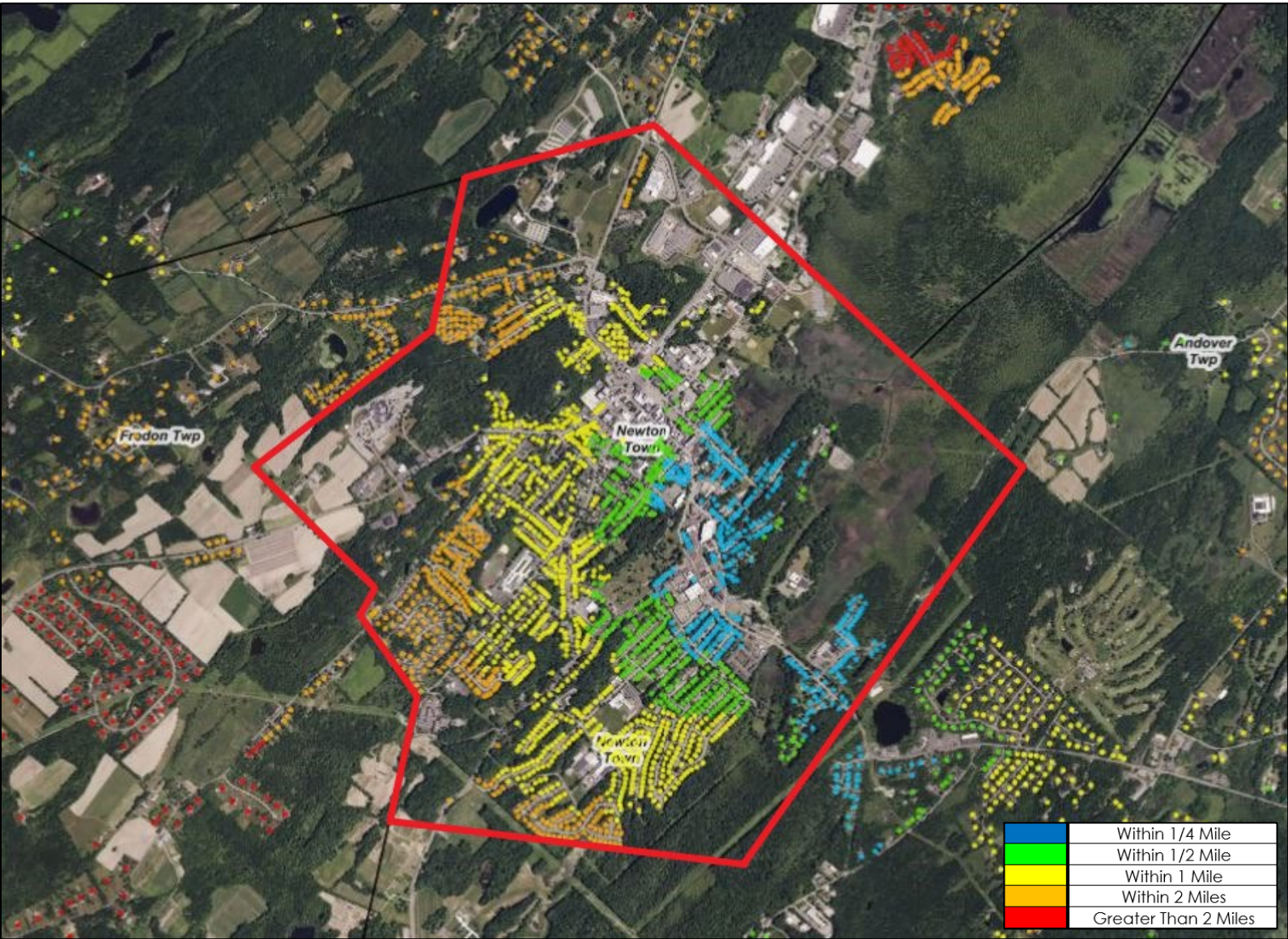
Figure 22. Distance to Recreational Lands



Source: Conservation Blueprint - Green Space Accessibility: Distance to Recreational Lands

IV. Open Space and Recreation Plan

Figure 23. Distance to Trails



Source: Conservation Blueprint - Green Space Accessibility: Distance to Trails

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Needs Analysis

National Recreation and Park Association (NRPA)

The National Recreation and Park Association (NRPA) is the leading non-profit organization dedicated to the advancement of public parks, recreation, and conservation. In 1983, the NRPA published its Recreation, Park and Open Space Guidelines. These guidelines were intended to provide a framework for acquiring and developing open space and recreation amenities. Generally, the NRPA's guidelines recommend 6.25 to 10.5 acres of open space and recreation for every 1,000 population.

As estimated by the U.S. Census' latest American Community Survey (ACS), the Town has a population of approximately 8,488 people. When applying the NRPA's standards, it is estimated that the Town has a recreation need of approximately 53 to 89 acres. Based solely upon the uplands acreage of the Town's existing active recreational areas (i.e. those areas unencumbered by wetlands), it is estimated that the Town is essentially meeting this present need.

By 2029, it is estimated that the Town will have a population of approximately 9,089 people. When applying the NRPA's standards, it is estimated that the Town will have a recreational need of approximately 56 to 90 acres. Based upon that estimate, the following two scenarios are noted:

1. If no additional recreational facilities are constructed between now and 2029, it is estimated that the Town's upland recreational acreage will still fall within the established range established by the NRPA's standards.
2. If the Town develops or provides additional recreational facilities to existing parks and recreational spaces, it is estimated that the Town's recreational acreage will fall within the range established by the NRPA's standards.

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The following table denotes the NRPA's classification table guidelines for park type and size.

Table 4. NRPA Classification Table Guidelines for Parks

Recreation System	Developed Open Space		
	Quantity of Open Space Recommended	Size of Parcels	Area Served
Mini – Park	According to guidelines, the town should have 3 to 5 Mini-Parks.	1 Acre or less (NRPA) Not less than 2,000 SF or more than 30,000 SF	Less than ¼ miles radius
Neighborhood Subdivision Level	According to the guidelines, the town should have 3 to 5 Neighborhood Parks	15+ Acres (NRPA)	¼-to-1/2-mile radius to serve population up to 5,000 (NRPA)
Community Level	According to guidelines, the Town should have 2 Community Parks	25+ Acres	Several neighborhoods 1-to-2-mile radius (NRPA)
Large Urban Park	According to guidelines, Large Urban Parks have a broader purpose than community parks and are used when community and neighborhood parks are not adequate to serve the needs of the community. Focus is on meeting the community-based recreational needs as well as preserving unique landscapes and open spaces.	Usually, a minimum of 50 acres with 75 acres being optimal	Can serve the entire community approximately a 3-mile radius

Source: "Park, Recreation, Open Space and Greenway guidelines," a publication of the National Recreation and Park Association dated December 1995.

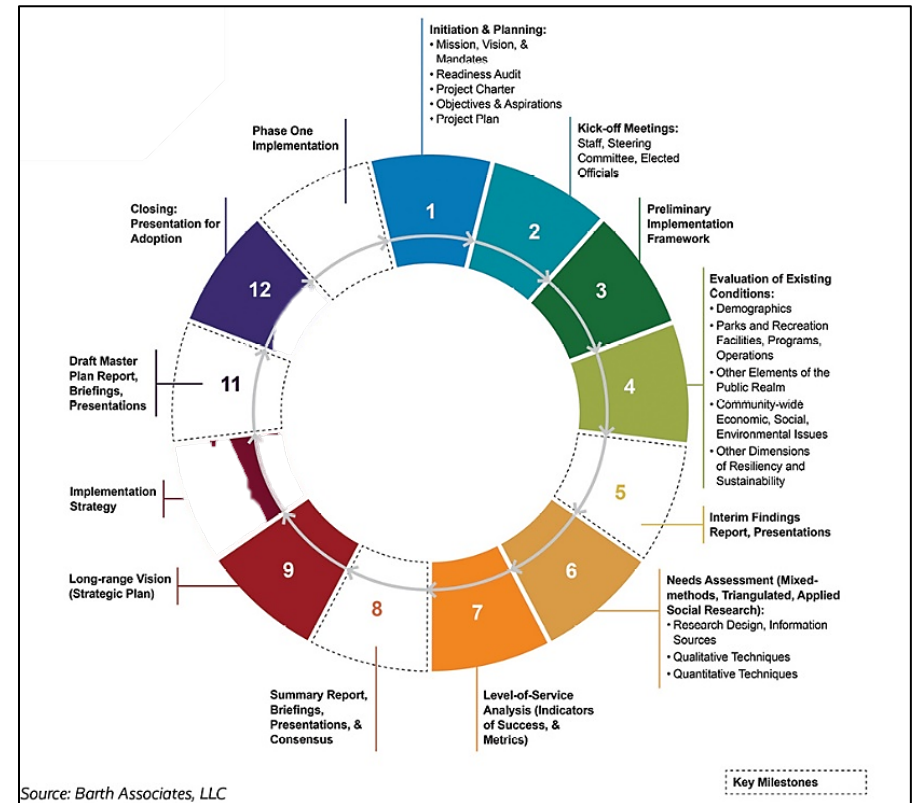
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However, much has changed since NRPA's Recreation, Park, and Open Space Guidelines where recreation agencies focused on things, like playgrounds, ball fields, boat ramps and youth athletics. Now it is encouraged and recommended to involve in socioeconomic and environmental issues, such as the coronavirus (COVID-19) pandemic, wildfires, urbanization, social equity and services, habitat restoration, and economic development. In recognition of these increased complexities, there are no longer any nationally accepted standards for parks and recreation planning. Each community must determine its own standards, level-of-service (LOS) metrics, and long-range vision for its parks and recreation system based on community issues, values, needs, priorities and available resources.

Parks and recreation facilities should no longer be regarded as isolated, but rather as elements of a larger, interconnected public realm that also includes streets, museums, libraries, stormwater systems, utility corridors and other civic infrastructure. Alternative dimensions of parks and recreation systems, such as equity and climate change, should be considered from the onset of the planning process. Furthermore, each site or corridor within the system should be a planned high-performance public space (HPPSs) that generate multiple economic, social, and environmental benefits.

The traditional linear approach narrowly defined the parks and recreation system master planning (PRSMP) process, which was replaced with a cyclical, open-ended process that is frequently updated and integrated with other foundation public realm plans, such as long-range transportation plans, stormwater master plans, habitat conservation plans, and future land-use plans.

Figure 24. Parks and Recreation System Planning Process



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Open Space / Active and Passive Recreation Analysis

The following table identifies existing municipally- and county-owned parks and the recreational amenities offered at each park. Here, we can see that Memory Park, Newton's largest public park has a variety of amenities including a dog park, which opened on January 13, 2023. Following in its footsteps is the Pine Street Park, which has softball and soccer fields, a playground, and a basketball court. However, the remaining parks in town lack some of the basic necessities to provide residents and visitors with leisure activities therefore, areas of improvement should be considered to elevate the existing open space and recreation inventory in Newton.

Table 5. Existing Parks and Recreation Facilities

Park	Fields				Playground	Courts			Skate Park	Swimming Pool	Gazebo/Pavilion	Picnic Tables/Benches	Other
	Baseball	Softball	Soccer	Other		Basketball	Tennis	Volleyball					
Heritage Park	--	--	--	--	--	--	--	--	--	--	--	--	--
Memory Park	2	3	2	2	1	2	--	--	1	1	1	12	Dog Park
New Hampshire Street Park	--	--	--	--	--	--	--	--	--	--	--	--	--
Rail Trail	--	--	--	--	--	--	--	--	--	--	--	1	--
Pine Street Park	--	1	1	--	1	1	--	--	--	--	--	--	--
Summit Avenue Park	--	--	--	--	--	--	--	--	--	--	--	4	Ice Skating Pond
Sussex County Park	--	--	--	--	--	--	--	--	--	--	1	9	--
Newton Totals	2	4	3	2	2	3	0	0	1	1	2	26	1

Source: [Sussex County 2003 Open Space and Recreation Plan – Table 1 Municipal Recreation Facilities](#)

Table 6, below, demonstrates the activities that are available at resource-based recreation facilities. The Paulinskill River WMA offers several recreation amenities including wildlife and water activities as well as providing trails for hiking. While the Sussex Branch Trail provides residents and visitors the ability to go hiking, horseback riding, biking, and cross-country skiing. Both sites provide a balanced amount of active and passive recreation. Additional improvements should be considered to enhance these open space recreational areas while providing minimal disturbance to environmentally sensitive areas.

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Table 6. Resource-Based Recreation Facilities

Name of Facility	Wildlife Activities				Water Activities				Trail Use					Winter Activities						Facilities									
	Hunting	Fishing	Birdwatching/Blinds	Dog Training Area	Swimming/Bathhouse	Boat/Canoe Launch	Coat/Canoe Rentals	Motor Boats	Hiking	Horseback Riding	Biking	Nature Trails	Canoeing	Cross Country Skiing	Sledding	Ice Fishing	Ice Skating	Ice Boating	Snowmobiling	Visitor Center	Interpretive Program	Picnic Area	Picnic Shelter	Playground	In-line Skating Area	Refreshments	Overlook	Historic Interests	Campsites
Paulinskill River WMA	✓	✓	✓	--	--	✓	--	--	✓	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Paulinskill Valley Trail/Sussex Branch Trail	--	--	--	--	--	--	--	--	✓	✓	✓	--	--	✓	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Source: [Sussex County 2003 Open Space and Recreation Plan](#)

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Recommendations

Table 7. Open Space & Park Recommendations

Name	Location	Recommendations
Heritage Park	22-38 Water Street	<p>There is a need to provide more access, connectivity, and recreational amenities (i.e., benches).</p> <p>Repair any sidewalks/pavers.</p> <p>Continue/Increase the number of community events held annually at the site.</p>
Memory Park	111 Moran Street	<p>The Town should maintain the existing fields and amenities on site and monitor existing conditions.</p> <p>Continue/Increase the number of community events held annually at the site.</p> <p>Explore options to expand the Sussex County Rail Trail to provide more connectivity to the site.</p>
New Hampshire Street Park	47-73 Mount View Street	<p>There is a need to provide more access, connectivity, and recreational amenities at this site as there is only an existing off-street parking area.</p> <p>Future improvements as well as enhancing the use of the park, should reflect community interests.</p>
Pine Street Park	Pine Street (Rear)	<p>Maintain existing and provide additional passive recreational amenities.</p>

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Rail Trail	Trinity Street (Rear)	Provide continued maintenance and enhance the trail with wayfinding signs, etc.
Summit Avenue Park	150 High Street	Maintain existing amenities and provide more access and pedestrian connectivity.
Sussex County Park	4 High Street / Spring Street / Park Place	<p>The County should maintain the existing amenities, and/or enhance existing features (i.e., provide water features) on site, and monitor existing conditions.</p> <p>Continue/Increase the number of community events held annually at the site.</p> <p>Maintain or improve existing pedestrian circulation and safety.</p>

Action Plan

Short-Term

- A.** Adopt the Open Space and Recreation Plan as an Element of the Town of Newton Master Plan.
- B.** Submit the final OSRP to the New Jersey Green Acres Program for participation in the state's Planning Incentive Program.
- C.** Town of Newton Council and representatives to consider options for enhancing use of existing open space and recreational areas.
- D.** Adequately maintain existing facilities to provide for long term use.
- E.** Promote eco-tourism for open space and recreational areas in the Town to help spur additional economic development in and around the Town Center District (downtown Newton).

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Long-Term

- A.** Consider a ballot item for voter approval establishing a local purpose tax dedicated to open space, farmland preservation, historic preservation, and recreation. Work with the Recreation Advisory Commission to educate residents on the need for and benefits of such a tax, including the financial benefits.
- B.** Town of Newton Recreation Advisory Commission to develop and present formal recommendations for consideration by the Town Council for the additional recreational facilities and streetscape enhancements recommended by this OSRP.
- C.** Maintain a list of properties in the Town that have the potential to be acquired and developed as parks or open space.
- D.** Expand parklands with active recreation facilities to meet the present and future needs of Newton. Develop linear linkages between parks to promote alternative transportation opportunities between neighborhoods.
- E.** Periodically survey and update the recreation inventory and needs analysis to anticipate needs rather than react to deficiencies.

Ongoing

- A.** Prioritization of water mitigation and drainage needs at the Babe Ruth Field at Memory Park in order to make the site more accessible and usable for residents. Town officials have taken advantage of a State Department of Environmental Protection (NJDEP) grant to transform the field into a more enjoyable amenity through the redirection of water run-off, expansion of the rain garden, and drainage of Moore's Brook.

Relationship to Other Plans

The State Development and Redevelopment Plan (SDRP)

The State Development and Redevelopment Plan (SDRP) was developed to promote “sustainable economic growth in a way that balances development with the need to protect open space. The Plan is “designed to improve the quality of life and community value through coordinated design techniques that promote efficient land use patterns.” These efficient land use patterns consist of core areas, or centers, with access to public infrastructure and surrounded by natural resources, farmland, and environmentally sensitive lands. To achieve these new patterns of development and preservation, the Plan identifies five planning policies associated with the physical and spatial characteristics of geographical areas. Two of these planning areas are designated primarily for farmland preservation and environmental protection programs. The creation of additional open space or recreational areas would be entirely consistent with the State Plan.

Statewide Comprehensive Outdoor Recreation Plan (SCORP)

NJDEP’s Green Acres Program’s Statewide Comprehensive Outdoor Recreation Plan (SCORP) serves as the state’s strategic plan for open space preservation and recreation planning. The SCORP offers the Balanced Land Use Concept for calculating open space and recreation needs for communities. The Balanced Land Use Guidelines recommend that at least 3% of the developed and developable area of a community be dedicated as public open space. This approach recognizes that environmentally sensitive lands are usually unsuitable for tennis courts, ball fields, basketball courts, and other active recreation facilities, but may be suitable and should be preserved in federal, state, county, and municipal park systems and conservation areas.

The following table utilized the Balanced Land Use Guidelines. As shown, these guidelines recommend that 62 acres should be permanently dedicated as public open space and available for public recreation uses. When solely considering the acreage of the Town’s existing active recreational areas, the SCORP guidelines identify that the Town’s existing active recreational areas exceed the required amount of municipal open spaced needed (2023) by a surplus of 9 acres.

Table 8. SCORP Balanced Land Use Guidelines

	Description	Acreage
A.	Total Area of Town	2,613
B.	Wetlands and Slopes over 12%	337
C.	Federal and State Open Space	208
D.	Developed and Developable Lands (a-(b+c))	2,068
E.	Municipal Recreation and Land Set Aside (3% of developable and developable Area of municipality)	62
F.	Present Municipal Recreation Lands	71
G.	Municipal Open Space Needed	-9 *

* = Surplus of +9 Acres

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The Sussex County Open Space and Recreation Plan Update: August 2016

The update to Sussex County's 2003 *Open Space and Recreation Plan* assesses existing public lands and open space to prioritize and implement land stewardship and preservation initiatives. This will enhance the water quality function and value of the land for the county residents. The Plan Update offers a targeted, site-specific action program, in which projects are identified to protect water resources, expand existing parklands, natural areas and trails in the county. The following goals and policies of the Sussex County 2016 *Open Space and Recreation Plan Update* are consistent with this Open Space and Recreation Plan.

Goal 1: Protect the quantity and quality of water resources.

Goal 2: Secure protection of rivers, lakes, and streams.

Goal 3: Connect land for regional greenways and trail development.

Goal 4: Shape growth and maintain rural character of a community.

Goal 5: Safeguard threatened and endangered species habitat.

Goal 6: Add to publicly owned land.

Goal 8: Offer opportunities for resource-based ("passive") recreation.

Goal 9: Provide opportunities for facility-based ("active") recreation.

Goal 10: Engage in land stewardship activities.

Goal 11: Promote tourism activities.

Goal 12: Enhance land and sites with historic values.

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Municipal Plans

The Town of Newton is bordered by three municipalities: Andover Township, Fredon Township, and Hampton Township developed communities consisting primarily of rural- and low-density development. The uses along both municipal borders are compatible especially at the municipal border with Andover Township in which the area is generally zoned for single-family residential and agricultural uses. Fredon Township and Hampton Township are zoned the same in the same regard however, Hampton also has areas zoned for highway commercial and multi-family. While the density of the uses varies to some degree, all of the Townships share common goals to protect agriculture and the rural character of their communities. For this reason, any additional open space or recreational areas created in the Town of Newton would be compatible with the land uses of the surrounding municipalities.

TOWNSHIP OF ANDOVER

The following are the goals and policies of the Township of Andover 1992 Master Plan that are consistent with this Open Space and Recreation Plan.

Goal 6: To encourage farmland preservation by actively pursuing funds for development rights acquisition, where possible.

Goal 13: To allow some flexibility from site plan standards to encourage environmental preservation.

Recreation Committee

- A. New storage facility/field house (w/ bathrooms) at Hillside Park.*
- B. Beach on Lake Iliff (to be completed w/ Green Acre funds)*
- C. Development of three sports fields on Goodale Road the renovation (winterizing) of the Hillside Park Hall.*
- D. Basketball court ball improvements at Hillside Park.*

TOWNSHIP OF FREDON

The following are the goals and policies of the Township of Fredon Open Space and Recreation Plan that are consistent with this Open Space and Recreation Plan.

Open Space Preservation and Environment Conservation

Goal 1: To protect areas constrained by steep slopes, wetlands, category one streams, flood prone areas, forested areas, and areas with threatened or endangered habitat by enforcing the township's environmental regulations and establishing new regulations to address unregulated elements.

Relationship to Other Plans

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Goal 2: To minimize the visual impact of future development on the rural landscape and scenic corridors. And within this context, ensure that new development is located in the appropriate areas and that it provides the appropriate buffers necessary to protect the environment and minimize the visual impact.

Recreation and Community Facilities

Goal 1: Enhance the level of community facilities in the township to meet the current needs of the municipality while remaining consistent with the rural character of the township.

Goal 2: Concentrate the development of additional community facilities in the center of the township where they can enhance the newly constructed recreation center with additional municipal amenities including additional passive recreational facilities.

Goal 3: To encourage future development to incorporate passive recreational trails on site that will enhance the design and construction of the municipal wide passive recreation trail.

TOWNSHIP OF HAMPTON

The following are the goals and objectives of the Township of Hampton Recreation and Open Space Plan Element from the 2002 Master Plan that are consistent with this Open Space and Recreation Plan:

Goal 4:

- A. Support protection of current open space resources and additional resources where found appropriate.
- B. Support the retention and continued viability of farm and forest activities and resources.
- C. Provide for recreation and cultural facilities, providing a variety of programs to meet the levels of community interest.
- D. Support the identification of sites and areas of historic and cultural importance and aid in their conservation, maintenance and usefulness to the community.

Objectives:

- A. *Utilize the Open Space and Recreation Plan developed by the Morris County Land Conservancy and the Hampton Township Open Space Committee in August 2000, as information, planning, and capital programming source.*
- B. *Evaluate the Open Space and Recreation Plan in the context of the overall projections, needs and public fiscal resources of Hampton Township.*

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- C. *Prepare a revised Open Space, Recreation and Historic element of the Master Plan to support the Capital Improvement Program with projected priorities.*

Goal 5: Maintain and improve the level of contact and response with regard to adjoining municipal county and State development and planning activities and their impact on the community.

Objectives:

- A. *Review the Master Plan development ordinances, and other relevant documents and activities of adjacent municipalities, Sussex County and the State of New Jersey to determine their impact on Hampton Township.*
- B. *Encourage continuing dialogue with officials from the municipalities, the county and the State in order to mitigate conflicts in existing and proposed land development circulation and transportation, and community related activities, and to foster cooperation and coordination of public activities wherever economically and practically feasible.*

Goal 8: Identify and protect lands which may be needed to located or expand public facilities, or to protect for future expansion of open space and recreation lands.

Objectives:

- A. *Prepare an Official Map identifying existing and proposed location of public facilities including roads, right-of-way widths, drainage basins and drainage rights-of-ways and their widths, the location of existing and proposed public buildings, and existing and proposed open space and recreation lands.*

Goal 9: Encourage the concept of a community identity for Hampton

Objectives:

- A. *Investigate those elements of community activities which foster a sense of identity within Hampton, i.e., history, town-wide activities, government.*
- B. *Suggest types of activities where the Township can foster community identification and cohesion such as architectural and site design standards, and streetscape and signage measures in commercial areas, and improved pedestrian circulation.*

Goal 10: Maintain a high level of performance and economy in the provision of municipal services.

Objectives:

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- A. *Evaluate present activities in the provision of municipal services.*
- B. Project the level of services which may be needed in the ten-year target period.
- C. Project staffing and capital needs in order to meet service needs.
- D. Suggest alternate means of service provisions.