A photograph of a forest path in autumn. The path is covered in fallen yellow and orange leaves. Two people are walking away from the camera down the path. The trees are tall and thin, with some green and some yellowing leaves. The lighting is soft, suggesting a late afternoon or early morning setting.

OPEN SPACE AND RECREATION PLAN

Lenox, Massachusetts

Draft Update 2013

Rev. 2015



The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Charles D. Baker
GOVERNOR

Karyn E. Polito
LIEUTENANT GOVERNOR

Matthew A. Beaton
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1181

April 21, 2015

Gwen M. Miller
Land Use Department
6 Walker Street
Lenox, MA 01240

Re: Open Space and Recreation Plan

Dear Ms. Miller:

Thank you for submitting Lenox's Open Space and Recreation Plan to this office for review for compliance with the current Open Space and Recreation Plan Requirements. I am pleased to write that the plan is approved. This final approval will allow Lenox to participate in DCS grant rounds through December 2020.

Congratulations on a great job. Please call me at (617) 626-1171 if you have any questions or concerns about the plan.

Sincerely,

A handwritten signature in cursive script that reads "Melissa Cryan".

Melissa Cryan
Grants Manager

BERKSHIRE REGIONAL PLANNING COMMISSION
1 FENN STREET, SUITE 201, PITTSFIELD, MASSACHUSETTS 01201

TELEPHONE (413) 442-1521 · FAX (413) 442-1523

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NATHANIEL W. KARNS, A.I.C.P.
Executive Director

April 6, 2015

Melissa Cryan, Grants Manager
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Dear Ms. Cryan:

The Berkshire Regional Planning Commission (BRPC) has reviewed the draft *Lenox Open Space and Recreation Plan (OSRP)*. There are several aspects of the plan that are consistent with the *Sustainable Plan for the Berkshires*, the recently-adopted region-wide plan for Berkshire County. A few of the highlights are listed hereafter.

- Recommending the development of a town wetlands bylaw to increase the Lenox Conservation Commission's ability to review, comment and permit development near sensitive wetland resources. The Massachusetts Association of Conservation Commissioners is a valuable resource that can offer examples of existing wetland bylaws from across the Commonwealth.
- The creation of recreational amenities along the Housatonic River. It will be important for town officials to work in close coordination with officials in neighboring Lee and Pittsfield to work with GE and the US EPA to create an improved recreational system in conjunction with PCB cleanup activities.
- Highlighting the importance of east-west wildlife corridors to link large blocks of natural lands that exist along the eastern and western areas of the town. Protecting existing greenways for wildlife to migrate across heavily developed roadways such as the Route 7 corridor is becoming an increasing concern for wildlife biologists and conservationists across the region.
- Calling for certification of vernal pools. These habitats are critical to the long-term survival of particular amphibian species in the region, yet they are afforded little or no protection from development when uncertified. Town residents have a good record of certifying vernal pools and we encourage them to continue to investigate and document them where possible.
- Noting the importance of historic landscapes associated with Great Estates within the town.

We note that the OSRP utilized natural resource GIS data from the Natural Heritage and Endangered Species Program (NHESP), the BioMap2 and CAPS. These have resulted in very informative maps in Section 4 of the plan. The NHESP has created two important planning documents developed specifically for the Town of Lenox, describing in good detail the rare and endangered species and exemplary plant communities that reside in the town. These reports are in

the BioMap2 series and are titled *Conserving the Biodiversity of Massachusetts in a Changing World* and *Guiding Land Conservation for Biodiversity*. Attaching these reports as appendices to the OSRP may be a convenient way to display these documents and ensure their use in future OSRPs.

The BRPC commends the Town of Lenox for its planning efforts and encourages the town to continue to pursue opportunities to protect the region's scenic character, natural resources and quality of life.

Sincerely,

A handwritten signature in blue ink, appearing to read 'N Karns', with a long, sweeping horizontal line extending to the right.

Nathaniel Karns, AICP
Executive Director



TOWN OF LENOX
TOWN MANAGER'S OFFICE
6 Walker Street, Lenox, MA 01240
www.townoflenox.com

Christopher J. Ketchen,
Town Manager
cketchen@townoflenox.com
(413) 637-5500 (x1201)

March 24, 2015

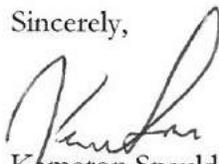
Ms. Melissa Cryan
Grants Manager
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Dear Ms. Cryan:

Persuant to your letter dated December 24, 2013, the Planning Board and the Town Manager of the Town of Lenox have reviewed an support the Open Space and Recreation Plan developed by the Open Space and Recreation Plan Committee in 2013.

Please advise if you require additional information as part of your review of our Open Space and Recreation Plan.

Sincerely,


Kameron Spaulding,
Chair, Planning Board


Christopher J. Ketchen,
Town Manager

Open Space and Recreation Plan for
Lenox, Massachusetts
Draft Update 2013

Prepared by:
Renee LaGue, Becca Robbins, & Amy Wolfson
The Conway School

We would like to thank

...the Lenox Town Planner, Mary Albertson, and the other Open Space and Recreation Committee members, including Jan Chague, Gige Darey, Tim Flanagan, Kim Flynn, Kim Graham, John McNinch, Kate McNulty Vaughan, Anthony Patella, and Ruth Wheeler.

...town officials including Capital Projects Manager and former Superintendent of Public Works Jeff Vincent, Building Commissioner William Thornton, and Administrative Assessor Cris Roberts.

...all Lenox residents who attended the two public open space forums and completed the online survey.

...Kevin Sprague for allowing us to use his amazing photos of Lenox in this document, including the cover photo.

...Mark Maloy at the Berkshire Regional Planning Commission for providing GIS layers and support.

...the faculty, staff, and fellow students of the Conway School for their dedicated support, guidance, and camaraderie.

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Photo: Kevin Sprague

Section 1: Plan Summary

1. Plan Summary

The protection of open spaces and provision of recreational opportunities are integral parts of a resilient, active, and connected community. The 2013 Open Space and Recreation Plan Update gathers the desires of the community, examines the needs of the town's natural species, and offers tangible objectives for achieving identified goals.

Lenox is loved by residents and visitors because of its rich ecosystems, copious recreational assets, historical landscapes, cultural attractions, and scenic qualities.

In two community forums and a community survey, residents overwhelmingly responded that protecting natural resources was one of their top priorities. These included water resources, forests, wildlife habitat, migration corridors, and clean air. Citizens were also concerned with protecting open fields, pastoral views, and preventing development on mountain ridges and other scenic areas.

It is important that residents are educated about existing recreational resources and natural systems in town. Many citizens were not aware of the locations of parks and did not know where to access trails. Awareness of these will lead to better appreciation of the town's open space efforts. Collaborative partnerships at many scales are necessary to achieve the town's goals and will bring new parties into the conversation about open space.

Responsibility for park lands is currently divided between the Kennedy Park Committee, which is responsible for Kennedy Park, the Community Center, which is responsible for recreation areas, and the Conservation Commission, which is responsible for certain parcels including Parson's Marsh. To best coordinate maintenance of existing parks and prioritize acquisitions, a Parks Commission should be established.

Connectivity emerged as a major theme in the community forums. Linking sidewalks and hiking trails and improving the bikeability of town are integral to building a connected community.

Recommendations are organized around ten overall goals:

- ◆ Water resource areas are protected and water supplies are augmented.
- ◆ Plant and wildlife habits are protected.
- ◆ Agricultural lands are protected.
- ◆ Critical visual, cultural, and historic resources are protected.
- ◆ The public is fully aware of all recreational facilities and other public spaces.
- ◆ A Parks Commission or similar entity is responsible for recommending policies for all park lands in town.
- ◆ Recreation opportunities serve the community's needs.
- ◆ Residents can access open spaces and neighborhoods on foot or by bicycle.
- ◆ A strong constituency of open space and recreation advocates is built through education and collaborative partnerships.
- ◆ Funding is secured to support implementation of the actions identified in this OSRP update.

What is Open Space?

The state of Massachusetts defines open space as “undeveloped land with particular conservation or recreation interest. This includes vacant lots and brownfields that can be redeveloped into recreation areas” (2008 Massachusetts OSRP Workbook). These parcels can be owned by federal, state, or town agencies, non-governmental organizations, or private citizens. In Lenox, open spaces include wildlife sanctuaries, forests, wetlands, open meadows, sports fields, farms, and undeveloped lots. Some of these lands also have scenic and historic value.



Pastoral views in Lenox (Photo: Kevin Sprague)

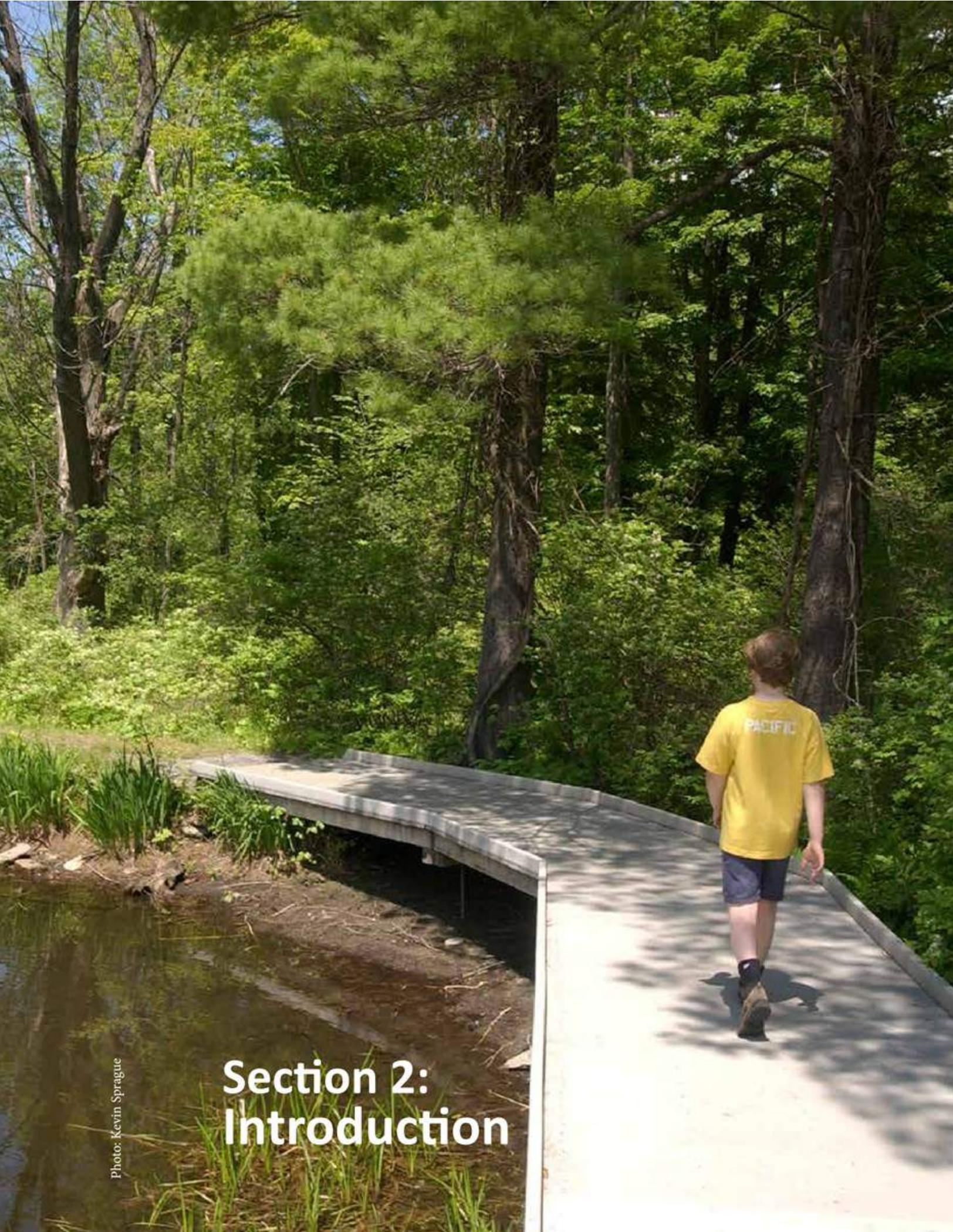


Photo: Kevin Sprague

Section 2: Introduction

2A. Statement of Purpose

This report will evaluate the town's current natural and recreation resources in order to establish recommendations about areas for improvement. Clear goals and objectives will provide tangible and relevant steps necessary to accomplish these recommendations. This report is intended as a guiding document for prioritizing town open space and recreation acquisitions, improvements, and other actions.

This *2013 Open Space and Recreation Plan* is an update of the draft *2009 Open Space and Recreation Plan*, which was submitted to the state but only conditionally accepted. Lenox completed prior Open Space and Recreation Plans in 1984 and 1999. Most recommended action items from the 2009 OSRP have not been accomplished and are still relevant today.

This report reflects the community's interest in protecting, preserving, and enhancing its open space holdings and recreational facilities. Approval of this OSRP will allow the Town of Lenox to apply for competitive grants offered by the state and other entities. In addition, Lenox approved the Community Preservation Act in May 2006, which allowed the town to set aside money for land acquisition and public park development. These two sources of funding will aid in implementing recommendations made in this report.

2B. Process and Public Participation

In October 2012, Lenox appointed ten members who represent diverse town interests to an Open Space and Recreation Plan Committee (OSRPC). These members included:

- At-Large: Kim Graham
- Board of Selectmen: John McNinch,
Chair
- Community Center Board: Anthony Patella
- Community Preservation Committee:
Kate McNulty Vaughan
- Conservation Commission: Tim Flanagan
- Historical Commission: Jan Chague
- Kennedy Park: Ruth Wheeler
- Land Use/Town Planner: Mary Albertson
- Lenox Land Trust: Gige Darey
- Planning Board: Kim Flynn

This committee was established to update and re-submit the 2009 draft OSRP. A team of three graduate students from the Conway School held public meetings and prepared a draft OSRP update for the town, which was completed in April 2013.

The following public process helped identify proposed actions regarding open space lands (see Section 7). Public participation for this project involved a number of simultaneous and mutually reinforcing tasks.

Open Space and Recreation Plan Committee Meetings

The Lenox OSRPC and the Conway School students met every other week from January to March to organize and advertise community meetings and report project updates. Notices and agendas for these meetings were advertised on the town website and the general public was welcome to attend. Reporters from local newspapers attended some meetings.

Public Forum

On January 30, 2013, Conway School students held a public forum with the help of OSRPC members to gather community input about the future of Lenox's open space. This forum was attended by around 60 community members, who were asked to discuss the future of Lenox's open spaces. Small groups were given maps of their town and asked to identify favorite destinations, current recreational activities, and areas of interest or concern. This meeting was covered by reporters from local newspapers.

Open Space and Recreation Survey

A survey was created by the OSRPC to further encourage community input and enhance outreach. The survey was made available online and in paper form. The survey was advertised through public postings, the newspaper and the town website as well as word of mouth. Most responses were completed online. Paper copies were also made available in downtown locations and a laptop was set up in the high school so students could complete the survey. This survey was available for three weeks and was completed by 430 people, or nine percent of the town's population.

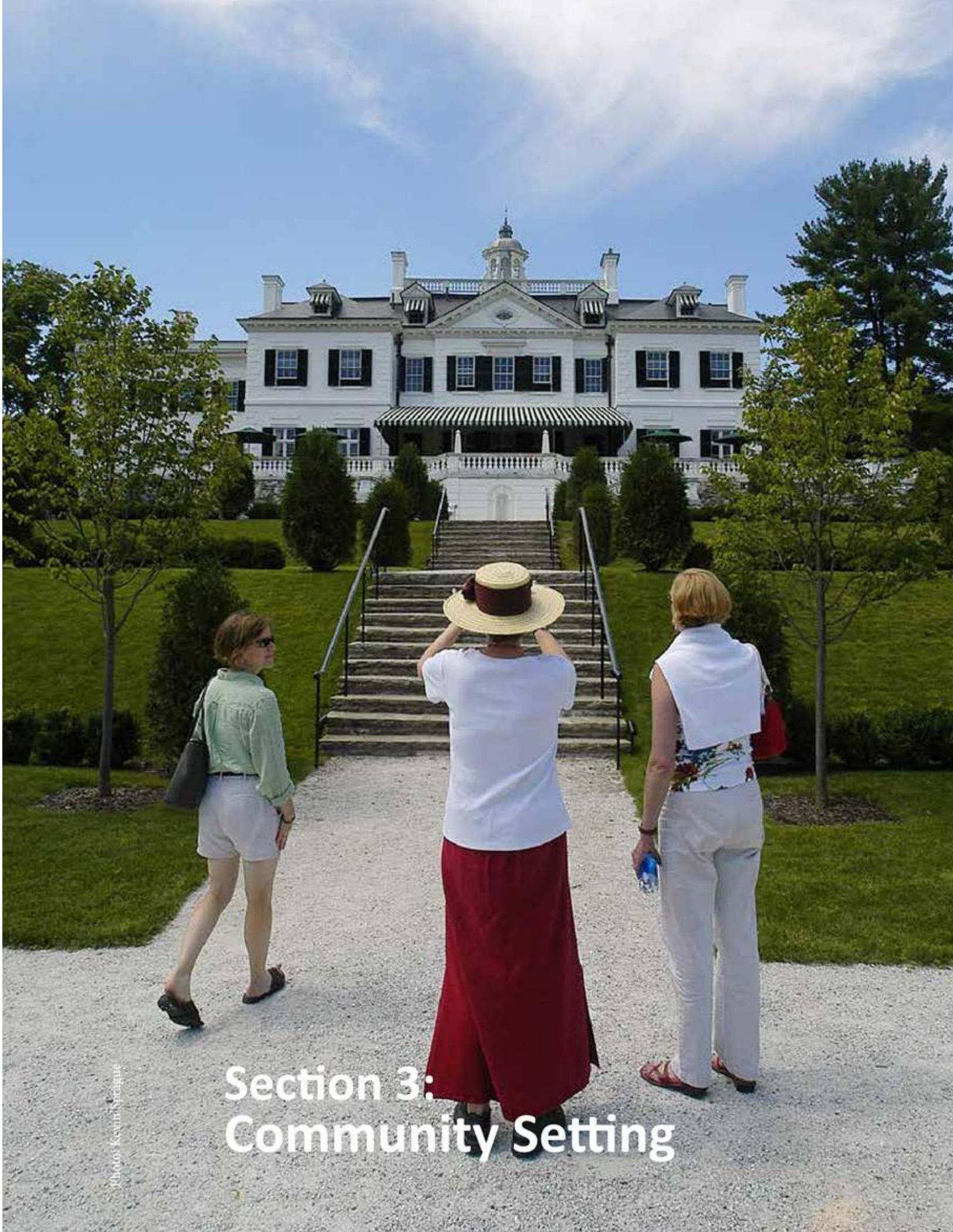
Findings Meeting

Information acquired from both the public forum and the online survey allowed the students and the OSRPC to identify the interests and concerns of Lenox's citizens. A follow-up meeting was held on March 5, 2013, to present preliminary recommendations and hear public response. Around forty people attended this meeting and shared ideas and opinions about the preliminary recommendations. This meeting was covered by three reporters from local newspapers.

Working meetings, along with the public forum and findings meeting, were advertised in flyers at local businesses, as well as on the town website. The Open Space and Recreation Plan Committee meetings were advertised on the town website. Particular attention was paid to outreach toward environmental justice populations. This is described in greater detail in Section 2C, Outreach and Public Participation.

2C. Outreach and Public Participation

Enhanced outreach efforts were made to get representation from environmental justice populations. The OSRPC meetings and public forums were held within the census block designated as an environmental justice community in Lenox and adjacent to a bus stop. The meetings were advertised by flyers in area businesses as well as on the town website. Meetings were scheduled for evening hours so they would conflict with fewer work schedules.



Section 3: Community Setting

3A. Regional Context

Location

Lenox is a small, residential town in the center of the Berkshires of Western Massachusetts. The town is situated between Pittsfield to the north and Lee to the south (through which the only nearby interstate highway, Interstate-90 (Massachusetts Turnpike), runs). This highway links the Berkshires with the rest of Massachusetts to the east and with New York's Capital region to the west. Within Berkshire County, most traffic flows north and south along river valleys, with heavy traffic passing through Lenox on Route 7/20.

Recreation

The Berkshire region is synonymous with theater and musical performances, striking art collections, beautiful scenery, and rugged landscape. The region presents many opportunities for exercising mind and body through cultural experiences and more physical activities such as skiing, boating, and hiking. The Appalachian Trail runs through the Berkshires, and Lenox's closest access point is through October Mountain in neighboring Washington. Many small networks of hiking and biking trails run through the county (Map 3A.1).

Topography

Lenox's natural beauty and cultural attractions are some of the most impressive in the Berkshires, including picturesque mountains and rolling hills, with the bulk of settlement along the Housatonic River valley. Mountains rise up to the east (October Mountain) and west (the Lenox-Stockbridge range). Cultural attractions such as Tanglewood (the summer home of the Boston Symphony Orchestra), Shakespeare and Company, Ventfort Hall Mansion & Museum, and The Mount (Edith Wharton's estate) place Lenox at the heart of Berkshire culture. This setting makes Lenox an extremely attractive place in which to live and visit.

Economics

The town is relatively affluent thanks to a thriving tourism industry that allows residents to enjoy high quality services. Because of Lenox's desirability as a destination for retirees and vacation homeowners, the town must deal with intense demands placed on the land, economy, and transportation system. In order to preserve its tremendous beauty, high quality of life, and cherished small-town feel, the town will find it increasingly necessary to reach outwards to other municipalities and to look inwards to its own neighborhoods.

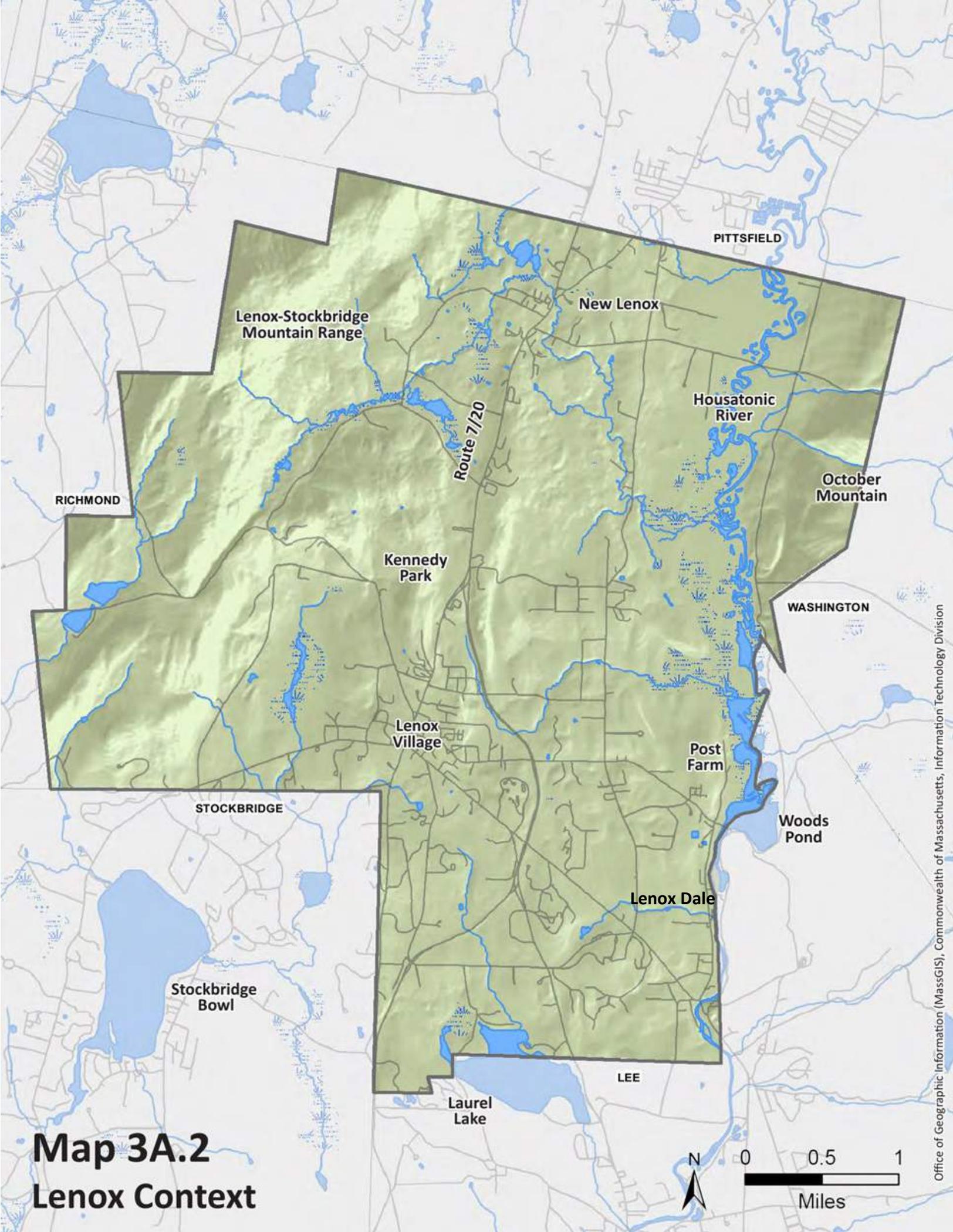
The town is generally more affluent than other Berkshire towns, and its economy relies on seasonal visitors more than many towns in the county. However, the economy has suffered with the 2008 economic recession, and residential and commercial development in town has slowed. Industrial development, a mainstay of the economies in adjacent Lee and Pittsfield, never really became established in Lenox. Instead, Lenox's economy depended on attracting wealthy socialites, investors, and industrialists to the area for second homes, beginning in the mid-nineteenth century.

Shared Resources

Lenox sits in the Housatonic River Watershed. The Housatonic River runs from Pittsfield through Lenox and forms part of Lenox's boundary with Lee. The river is polluted with harmful PCBs released into the river from a General Electric factory that operated in Pittsfield from the 1930s to 1977. PCBs and other contaminants restrict the type of recreation that can occur in the river.

Lenox shares Laurel Lake, the site of the town beach, with neighboring Lee, and many Lenox residents recreate at the Stockbridge Bowl in Stockbridge. Lenox has its own drinking water reservoirs, but relies on the Pittsfield water system when demand rises. Other resources that transcend town boundaries include Woods Pond shared with Lee, and October Mountain State Forest, shared with Washington and Lee. In addition, much of Tanglewood's grounds stretch beyond the Lenox town line into Stockbridge.

There is tremendous need for additional cooperation among Lenox, the surrounding communities, and state agencies to preserve natural resources and ecologically and aesthetically valuable lands for future generations, as well as to meet the recreational needs of the town's population. A collaborative approach to identifying and preserving areas important to promoting open spaces and natural resources, as well as determining which sites are actually suitable for development, will be much more effective than uncoordinated, haphazard approaches by individual towns.



Lenox-Stockbridge
Mountain Range

New Lenox

PITTSFIELD

Housatonic
River

October
Mountain

RICHMOND

Route 7/20

Kennedy
Park

WASHINGTON

Lenox
Village

Post
Farm

STOCKBRIDGE

Woods
Pond

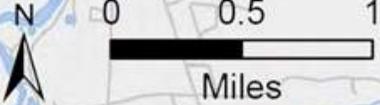
Lenox Dale

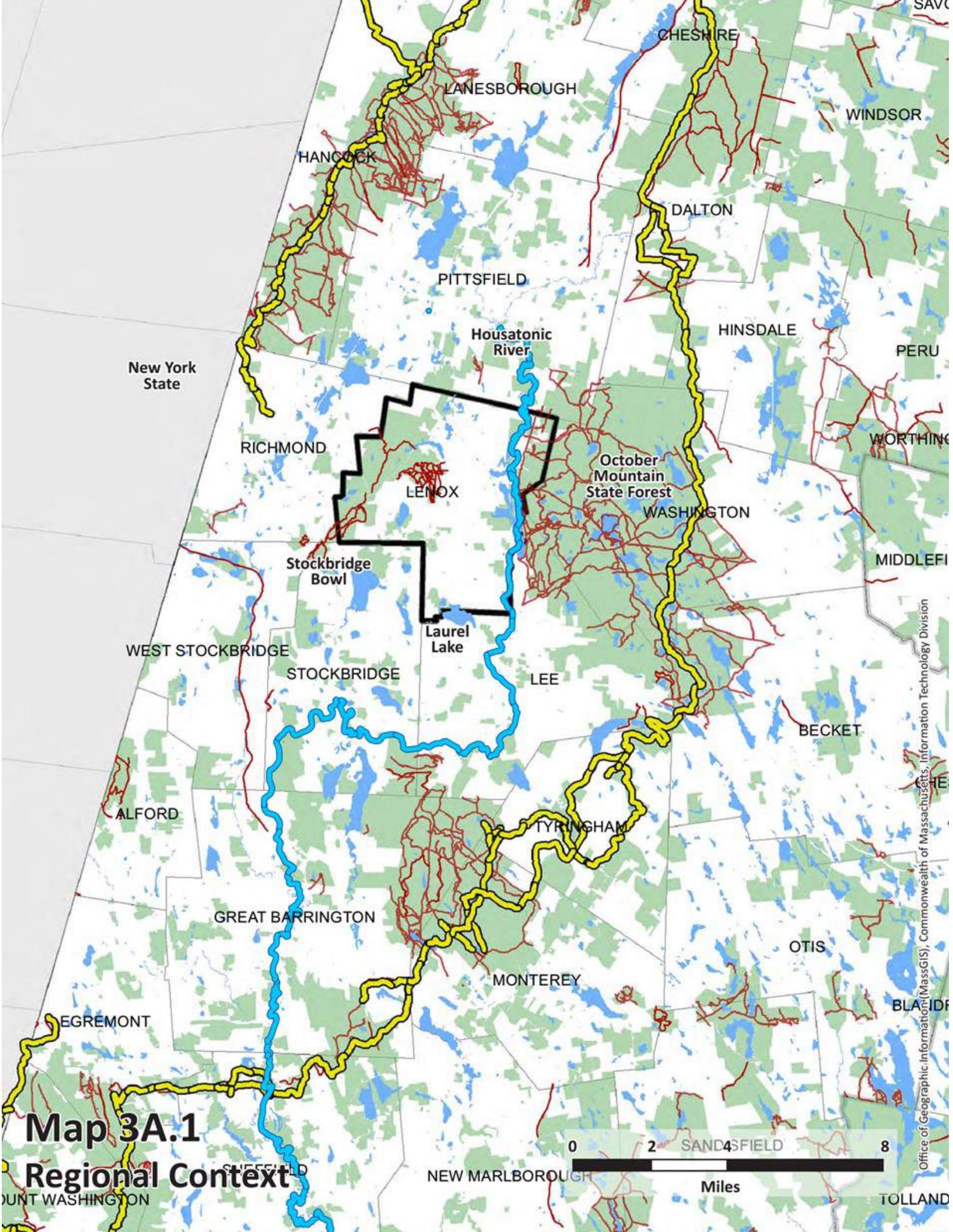
Stockbridge
Bowl

LEE

Laurel
Lake

Map 3A.2
Lenox Context





New York State

CHESHIRE

LANESBOROUGH

WINDSOR

HANCOCK

DALTON

PITTSFIELD

Housatonic River

HINSDALE

PERU

RICHMOND

LENOX

October Mountain State Forest

WASHINGTON

WORTHING

Stockbridge Bowl

Laurel Lake

MIDDLEFIELD

WEST STOCKBRIDGE

STOCKBRIDGE

LEE

BECKET

ALFORD

TYRINGHAM

GREAT BARRINGTON

OTIS

EGREMONT

MONTEREY

BLAIRFIELD

Map 3A.1

Regional Context

0 2 8

NEW MARLBOROUGH

SANDSFIELD

Miles

TOLLAND

Office of Geographic Information (MassGIS), Commonwealth of Massachusetts, Information Technology Division

Regional Context

Lenox sits in the heart of the Berkshires, which is teeming with natural and recreation resources. Hiking and biking trails of varying distances run through the county. Residents and tourists visiting Lenox have access to these amenities in and around the town. Water resources used for recreation, drinking, and plant and animal species are often shared between Lenox and the surrounding towns, requiring regional cooperation to help preserve and protect these lands.

LEGEND

-  Lenox town boundary
-  Surrounding town boundaries
-  NY state
-  Water features
-  Housatonic river
-  Protected open space
-  Hiking/biking trails
-  Long distance trails

3B. Community History

In 1762, the Mahican Indians sold their land to settlers from Connecticut, and in 1767 the town of Lenox was incorporated. At first Lenox was a small community of farmers with few merchants, innkeepers, or traders but the town became the county seat in 1784, which brought a significant number of people to town including attorneys and their clients.

Early industry in Lenox and Lenoxdale included mines, iron works, glass works, sawmills, grist mills, fulling mills, and paper mills. By the late 1800s, the glass industry and iron industry had gone out of business due to competition in the Midwest. Industry began to play a smaller role in Lenox's economy and as time went on, most new industries chose to locate to Pittsfield and Lee instead of Lenox.

By the mid-1800s the word began to spread about the clean air and country atmosphere of Lenox. The town attracted intellectuals, socialites, artists, and literary figures looking for a reprieve from city life, especially from New York City.

Country farms were being bought and replaced by large estates modeled on those of European royalty. In 1903, land was being sold in Lenox for as high as \$20,000 an acre, while similar properties in surrounding towns might only cost a few dollars an acre (Mallery).

The grounds of these "Great Estates"—often professionally planned and meticulously groomed—provided magnificent views of the surrounding mountains. The Great Estates were the homes of some of the wealthiest and most prominent families in the country and remain among some of the most valuable scenic and cultural locations in Lenox today.

Residents of the Great Estates depended on local townspeople to provide the necessary infrastructure—shops, hotels, and stores—to support their way of life. A few locals remained in farming but most of the best farmland had been bought for the estates. Many local residents worked for the estates in service positions. Railroad building, beginning in the mid-1800s, brought immigrants to the area, many of whom also worked in the Great Estates.

The Mount in autumn (Photo: Kevin Sprague)



In the twentieth century, the Great Estate era began to crumble. The upkeep of vast mansions and tracts of land became less and less affordable due to the newly instituted federal income tax, which cut into the ostentatious lifestyles of the super-rich, and the Great Depression, which forced most of the remaining estate owners to sell their properties. World War II saw the demise of the last operating Great Estate. Many were put on the market at far below their previous value. Some decayed beyond repair and were eventually destroyed. Some were sold off for housing and other development. In 1985, Lenox passed a Great Estates bylaw to help preserve the surviving buildings and their grounds. After World War II, Lenox began to enjoy a resurgence of wealth, again based on tourism and cultural attractions that included Tanglewood, the Wharton estate, and numerous spas and resorts.

Post-war development took the form of suburban residential sprawl. Fueled by low interest rates and a booming economy, Lenox witnessed a surge of home-building similar to many other regions of the country. The General Electric plant in neighboring Pittsfield was thriving in the middle of the twentieth century and Lenox became a bedroom community. Subdivisions sprouted up, some in sensitive wetland areas, and during this time it appeared that the growing population and housing stock would overwhelm the town.

In the 1960s, a state movement promoting local conservation and town planning began to emerge, giving momentum to efforts by year-round residents to preserve natural resources and the former Great Estates properties, both of which make Lenox an especially attractive town. The Conservation Commission, first appointed by Town Selectmen in 1962, marked its early years with the acquisition of a number of valuable open spaces which were designated for public use. The town's acquisition of Kennedy Park provided Lenox residents with downtown public access to trails, picnic areas, and open spaces (Map 5A). In 1969, the 287-acre Post Farm, which had been abandoned, was acquired. Wharton Park on Laurel Lake was acquired in coordination with the Lee Conservation Commission. A Parks and Recreation Commission was formed to provide recreational programs for town residents, complementing the Conservation Commission's efforts to plan for the preservation and use of Lenox open space. This commission no longer exists and its duties are being performed by the Kennedy Park Committee, the Community Center, and the Conservation Commission.

Comprehensive planning efforts took place with the development of a Master Plan in 1968 and 1999 and an Open Space and Recreation Plan in 1984, 1999, and a draft in 2009. These plans presented an analysis of Lenox's resources and strategies for improving them and avoiding potential threats. A Historic District was delineated in 1975 and a Historical Commission was created in 1976. The Historical Society was formed in 1980 to record, preserve, and protect the historical assets in town.

Although residential growth has leveled off, development is still of concern. While development options in Lenox are fairly restricted, a maximum buildout under current zoning bylaws would destroy the rural character of town and create a pattern of suburban sprawl and strip development along Route 7/20. See section 3D and map 3D.4 for more on this topic.



Residence of Hiram Feltre.

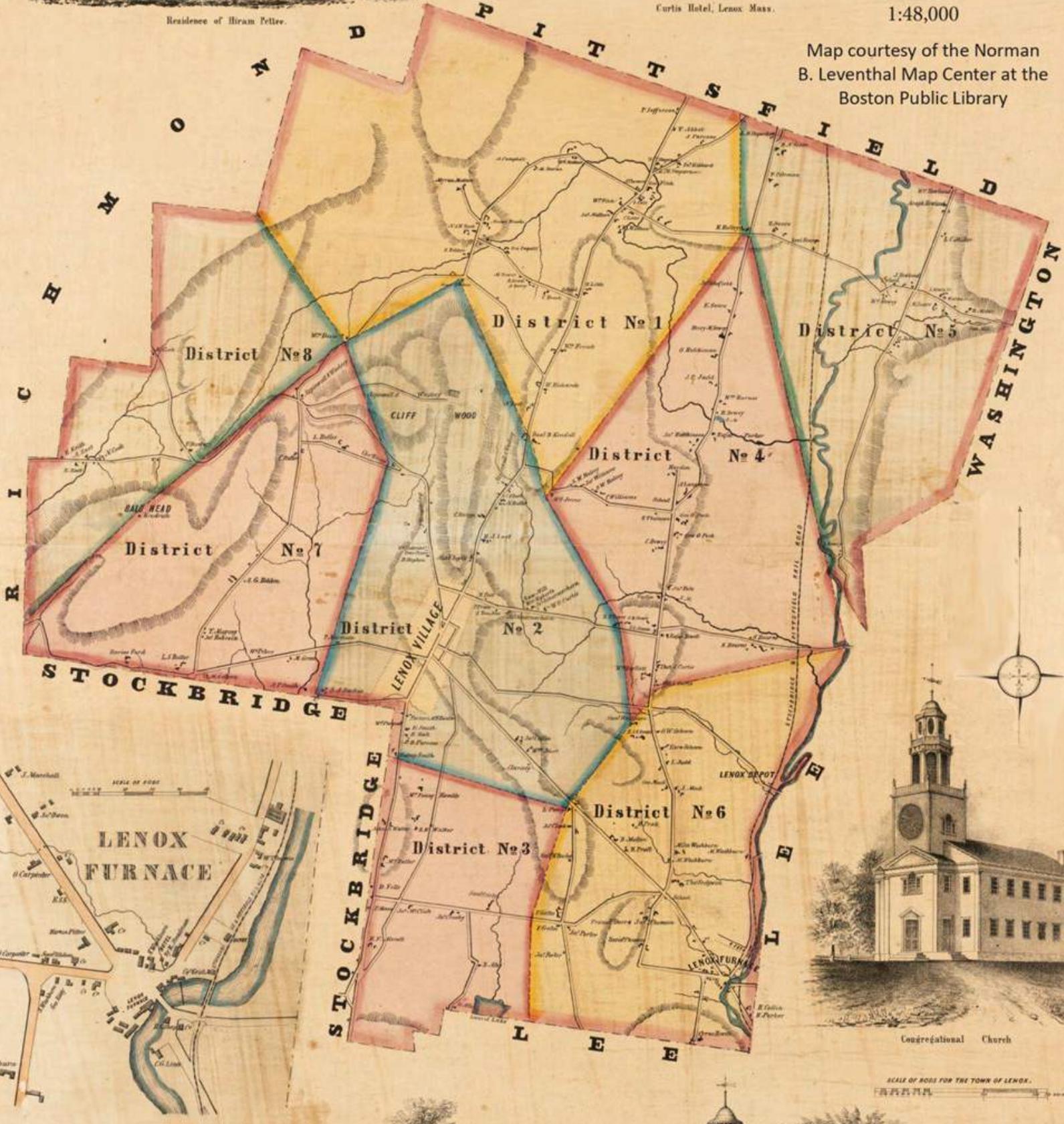


Curtis Hotel, Lenox, Mass.

Lenox 1858

1:48,000

Map courtesy of the Norman B. Leventhal Map Center at the Boston Public Library



Congregational Church

SCALE OF RODS FOR THE TOWN OF LENOX.
0 25 50 75

3C. Population Characteristics

Population Trends

Following World War II and prior to 1980, Lenox experienced rapid population growth. Lenox's highest population (6,523 people) was recorded in 1980. Between 1980 and 1990, the population in Lenox decreased sharply, tied largely to the departure of a large religious organization, Bible Speaks, and people affiliated with it. According to the US Census, the population stabilized between 1990 and 2000, but has slowly been on the decline in recent years. In 2011, the population was 4,995 people. According to the Massachusetts Institute for Social and Economic Research (MISER), Lenox's population is projected to fall to 4,149 people by 2020.

Lenox Population

Year	Population	Δ%
1970	5,804	
1980	6,523	11.0
1990	5,069	-22.0
2000	5,077	0.2
2010	5,025	-1.0
2011*	4,995	-0.6

Sources: 1970-2010 US Census;

*US Census American Community Survey 2007-2011

Lenox's population trends are connected to the pattern of population and employment in the surrounding areas, particularly Pittsfield and parts of central and southern Berkshire County. According to the US Census, Berkshire County's population reached its height of nearly 150,000 people in 1970, and has experienced a steady decline since then. Each successive decade has seen a loss of manufacturing jobs that has not been completely offset by gains in other employment sectors. This pattern created an

overall effect of out-migration of residents seeking employment elsewhere. Population losses in Berkshire County have amounted to almost 19,000 people from 1970 to 2011.

Berkshire Population

Year	Population	Δ%
1970	149,402	
1980	145,110	-2.9
1990	139,352	-4.0
2000	134,953	-3.2
2010	131,219	-2.8

Source: 1970-2010 US Census

According to the 2010 US Census there were a total of 3,044 housing units in Lenox, of which 2,283 (75 percent) were occupied. One thousand four hundred and eighty were owner-occupied (50 percent) and 803 (35 percent) were renter-occupied. Seven hundred and sixty-one units were vacant in 2010 (during the Census data collection), including units available for rent or sale but not yet occupied. The vast majority (75 percent) of the "vacant" units were for seasonal, recreational, or occasional use. Nearly 19 percent of all housing units were used only seasonally or occasionally occupied.

Many of those moving to Lenox are retirees; According to the 2011 US American Community Survey (2011 ACS) senior citizens make up a large proportion of the town (26 percent), the majority of whom are over 75 years. This is almost double the percentage of senior citizens in Massachusetts as a whole (14 percent). A large percentage of high school graduates move away to attend college and then find employment elsewhere. Only 22 percent of

Lenox's population is between the age of 18 and 44 years, compared with 37 percent statewide (2011 ACS).

Population Density

The population density per square mile in Lenox is 236.8, which is about the same as in the year 2000. Population and housing density is greatest in Lenox Village (Map 3C.1) where 1,100 people live in a 0.66-square-mile area (1,658 people per square mile). The western portion of the town is the least densely populated area with approximately 83 residents per square mile. Density reflects zoning regulations, lot size, the topography of an area, and the amount of protected open spaces. Twenty-five percent of the 13,877 acres of total land in Lenox is permanently protected open space.

Industry Trends

Within Lenox, service and tourist industries play large roles in Lenox's economy. Fifty-eight percent of the largest 25 employers are connected to service or tourist industries, including hotels such as Canyon Ranch and the performing arts such as Tanglewood. These two employers are located in the central/southern portions of town. In December 2012, the unemployment rate for Lenox was 5.9 percent (0.7 percent lower than the Massachusetts rate), down from 6.8 percent in 2010.

Zoning bylaws give guidance to where future industries could be located. The southern portion of the town along the Housatonic River is zoned for industry. Bringing more industry to Lenox could economically benefit the town and diversify business opportunities by increasing the types of businesses in town.

Tub Parade (Photo: Kevin Sprague)



Employment Trends

While the tourist industry provides a number of job opportunities, not all Lenox residents work in town, nor do they all work in the tourist industry.

The majority of the workforce in Lenox is grouped into four broad categories of occupation: 1) business, science and arts management (52.6% of the workforce), 2) business and financial management (23.8%), 3) service occupations (22%), and 4) education, legal, community service, arts and media (19%). These are estimates obtained from the American Community Survey.

The mean commute time in Lenox is approximately fifteen to sixteen minutes. This indicates that many members of the workforce in Lenox are commuting to jobs in nearby communities such as Lee, Stockbridge, or Pittsfield. Commute time does range from less than ten minutes to an hour or more, but the majority of residents fall within the range of less than ten minutes and twenty-four minutes. The upper limit of this range could indicate that residents are traveling to other regional activity centers such as Great Barrington or Lanesborough as well.

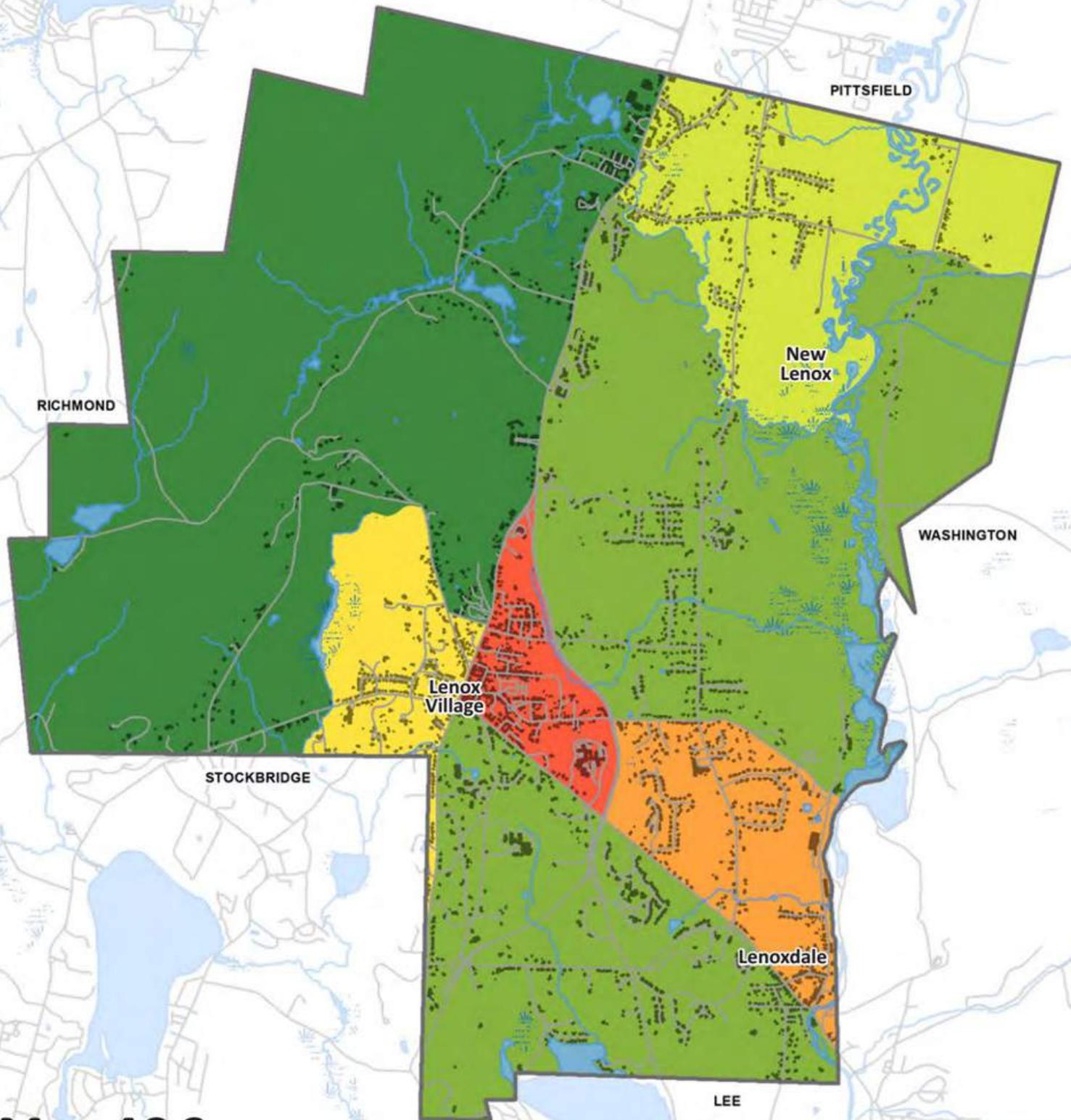
Income

The 2010 ACS found that the median household income (the combination of two earners' incomes) in Lenox is \$60,604. This is below the median household income for the state (\$64,509). The median family income (household income of two or more people related through blood, marriage, or adoption) is \$57,300 for the town and \$81,165 for the state.

Recreation opportunities in Lenox should be suitable for residents at varying income levels. Many residents would benefit from community spaces for active recreation and spaces for passive activities such as hiking trails, walking paths, and places to swim or watch birds.

The 2010 Census identified an environmental justice (EJ) population in Lenox (Map 4A.2) located in and to the southwest of Lenox Village. This block group is home to 389 residents (9.6 percent of the town's population). The environmental justice designation is based on income and signifies that 25 percent or more of households in this area earn 65 percent or less than the Massachusetts median household income, meaning that at least a quarter of the households in this block group earn less than \$41,931 per year. The median age of this EJ block group is 56.2 years; 10 percent are under 18 years of age, and 35.5 percent are over 65 years of age. In 2010 nearly 25 percent of the households in this group earned an income of less than \$25,000.

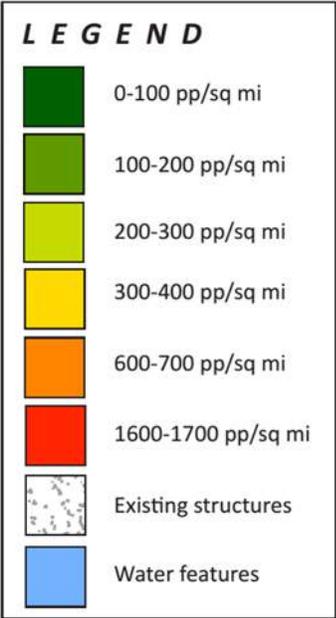
The EJ population in Lenox is within a half-mile walking distance (mostly north and west) of a variety of open spaces and recreation opportunities. Kennedy Park offers many trails and free open access to visitors. Also close-by, Tanglewood, Cranwell, and Shakespeare and Company offer recreation activities at a fee. Laurel Lake is within walking distance to the residents in the southern most section of the EJ population area. Other open space and recreation opportunities on the eastern side of Lenox such as Woods Pond and Post Farm are farther away from this group and would probably necessitate driving. It is important to provide recreational opportunities that are inexpensive or free of cost so that money is not an obstacle for recreation. The town should make sure that enough recreational spaces are within walking distance from the environmental justice population area and are made accessible by sidewalks or other safe walking routes.

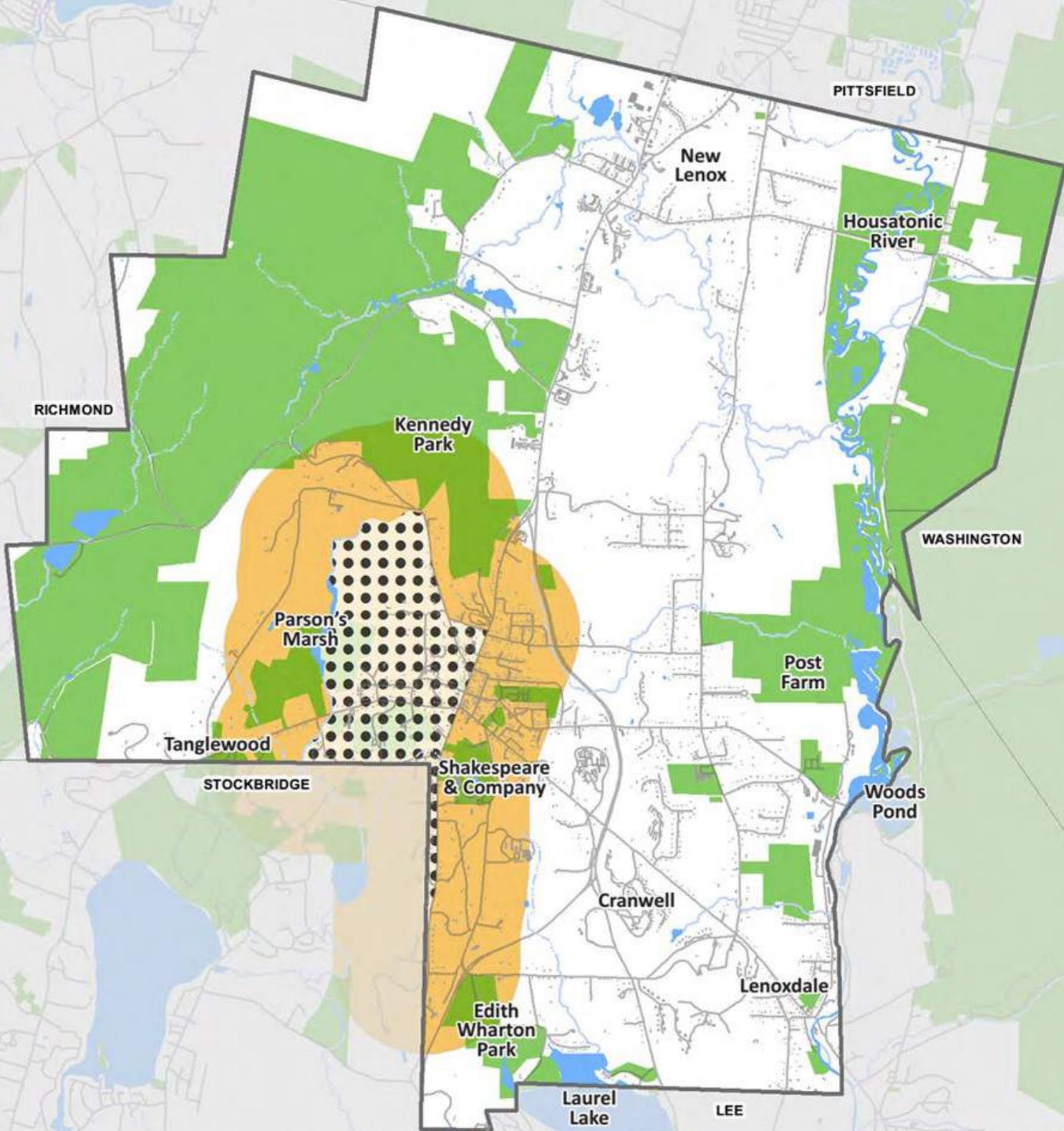


Map 4C.2
Population Characteristics:
Population Density

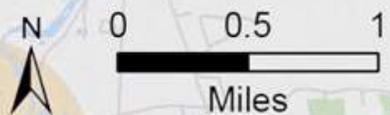
Population Characteristics: Population Density

Residential population density varies across Lenox. The density reflects historic development patterns, zoning regulations, lot size, the topography of the area, and the amount of protected open space. Lenox Village has the highest number of people per square mile. The least dense area is on the western side of town where the Lenox-Stockbridge range is located. After Lenox Village, Lenoxdale and New Lenox have denser populations of residents respectively, than the rest of town. Historically, these three areas have been more heavily populated than other areas.





Map 3C.2
Environmental Justice



Environmental Justice

The 2010 Census identified an environmental justice (EJ) population in Lenox located in and to the southwest of Lenox Village. This block group is home to 389 residents (9.6 percent of the town's population). The environmental justice designation is based on income and signifies that 25 percent or more of households in this area earn 65 percent or less than the Massachusetts median household income, meaning that at least a quarter of the households in this block group earn less than \$41,931 per year (2010 US Census). The median age of this EJ block group is 56.2 years; 10 percent are under 18 years of age, and 35.5 percent are over 65 years of age. In 2010 nearly 25 percent of the households in this group earned an income of less than \$25,000.

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recreation opportunities on the eastern side of Lenox such as Woods Pond and Post Farm are farther away from this group and would probably necessitate driving for residents to be able to access these spaces. It is important for Lenox to make sure it provides recreational opportunities that are inexpensive or free of cost so that money is not an obstacle for recreation. The town should make sure that enough recreational spaces are within walking distance and are made accessible by sidewalks or other safe walking routes.



3D. Growth and Development Patterns

Patterns and Trends

Early Lenox was made up of three separate population centers, Lenox Village, New Lenox, and Lenox Dale, two of which had their own train station: Lenox Dale and New Lenox. Houses were built along the streets connecting these villages. The arrival of wealthy cottagers in the late 1800s radically changed the landscape. They bought land from farmers and built mansions with vast grounds and formal gardens. By World War II, these Great Estates fell into ruin and the town saw a large increase in single-family housing in areas formerly occupied by pasture or forest, especially in the southern half of town (see Land Use map 3D.1). This trend continued until the 1980s, when development slowed.

Population has been declining in town since 1980. This decline combined with stricter land protection laws passed in recent years has resulted in relatively little residential development. However, the continued growth of tourism in town has fueled commercial development along the Route 7/20 corridor between Lenox Center and New Lenox (Map 3D.1). Developed land made up 12 percent of Lenox's area in 2005, according to Massachusetts Audubon Society's *Losing Ground* study. Developed land sits within a matrix of undeveloped land, mostly forests and wetlands but also agricultural and open land. (See Map 4D.1 for a more detailed map of natural land cover). This is partially because development is limited by steep slopes and wetlands, and partially because an active core of conservation-minded individuals and organizations in Lenox worked together to preserve open spaces before they were developed.

It is important to continue to monitor growth and conserve undeveloped land in order to guard these assets. Open spaces and recreation lands define Lenox's character. Citizens love the town's mountainous and pastoral vistas, rural roads, forested hills, rare plants and wildlife, compact downtown and the relative lack of sprawl.

Infrastructure

Transportation

Fifty-two miles of roads in Lenox are maintained by the Highway Department (DPW). Due to the mountain ranges to the east and northwest of Lenox, most connecting roads run north-south. Route 7/20 is a busy road which bypasses Lenox Center and runs through Pittsfield in the north and Lee and the Massachusetts Turnpike (Interstate 90) in the south. The Massachusetts Turnpike links Lenox with the rest of Massachusetts and the New York Capital region. Most visitors to town arrive on these major roads.

The maintenance of roads introduces a variety of pollutants into the environment. Road salt attracts animals to roads where they may become roadkill, harms aquatic life, damages roadside vegetation, leading to erosion issues, and can reach drinking water supplies.

Sand can clog stormwater catch basins and fill streambeds. It also clouds water, hurting aquatic animals, and can be ground into a fine dust by traffic, which may trigger respiratory problems like asthma (EPA Safe Winter Roads).

To alleviate these problems, the town DPW should develop a reduced salt/sand policy for roadways and examine the possibility of using alternate chemicals.

The Berkshire Regional Transit Authority (BRTA) provides fixed-route bus service throughout Berkshire County. The bus route from Pittsfield to Lee stops at Lenox Dale, Lenox Village, and the Price Chopper in New Lenox ten to twelve times a day on weekdays and Saturdays, with no service on Sunday. Each bus has a wheelchair lift or ramp with space to carry two wheelchair customers and a "kneeling service" that lowers the front height of the bus to assist those who have difficulty boarding. The BRTA also provides destination-to-curb para-transit service for people who are mobility-impaired and not able to ride the regular bus (BRTA, 2013).

There are approximately nine miles of sidewalk in town (Town of Lenox). They are concentrated in Lenox Center and radiate outward along major streets. There are a few sidewalks in Lenox Dale that do not connect with the sidewalks in Lenox Center. New Lenox has only one sidewalk along Route 7/20, which connects north to Pittsfield but nowhere else. These disconnected sidewalks do not allow people to safely walk from one part of town to another. While schools are connected to some streets by sidewalk, students living on other streets may not be able to walk to school safely.

Lenox should develop a sidewalk system that fills current gaps in service and connects people with destinations such as schools, stores, and recreation areas.

This sidewalk system could include

- ◆ Filling the gap between Lenox and Lenox Dale on Walker Street.
- ◆ Continuation of Route 7/20 sidewalk along New Lenox Road and East Street north to King William Road.
- ◆ Connecting Tillotson Park in Lenox Dale to Crystal Street, Housatonic Street, and Mountainview cemetery.
- ◆ Extending sidewalk along Hubbard Street with East Street and Main Street to form loop from Lenox Center.
- ◆ Continuation of Kemble Street sidewalk east along Plunkett Street to connect with Laurel Lake Road.

There are no designated bike paths in town. Bicyclists must use the street. On some scenic and less-traveled roads this is not a problem but busy streets such as Route 7/20 are difficult to navigate by bike. A bike path was recently proposed along East Street but became a controversial topic due to concern over tree removal and property rights. The subject was not pursued further.

Bike paths in other locations or bike lanes should be developed in order to facilitate easier and safer bicycle travel through Lenox, to get people outside and to reduce dependence on automobiles.

A rail line cuts through the wetlands and floodplain on the western side of the Housatonic River. It provided freight service and connecting passenger service from Pittsfield to Danbury, Connecticut, until 1971 but is currently only used for freight. Industry in town is located along the railroad line in the southeast corner of town because the railroad was the major form of shipping and because extensive floodplains and wetlands further north along the railroad limited development.

Water Infrastructure

Lenox's water and sewer systems must meet the needs of a population which shrinks in the winter and swells in the summer months when tourists fill the town.

The Lenox water system includes two reservoirs, a water treatment facility at the reservoir site, and 48 miles of water main. It is operated by the town Department of Public Works and is designed to treat an average flow of 730,000 gallons per day (GPD) and a peak flow of 1.4 million GPD (Town of Lenox).

According to Richard Fuore of the Lenox Department of Public Works, the average daily demand for water in 2012 was 710,000 gallons. Demand increased to 1.58 million GPD during the peak summer tourist season.

Demand nearly reaches capacity during most times of the year. Luckily, Lenox also has a pump station which allows it to draw from Pittsfield's water supply. Currently the town can draw a daily average of 82,000 GPD and a peak of 430,000 GPD (Lenox 2011 Drinking Water Report).

Even though the population of Lenox has been on the decline, high numbers of summer tourists and a system near capacity mean the town needs to continue planning for additional water sources.

Wastewater Treatment System

The Lenox Wastewater Treatment Plant is located in Lenox Dale along the Housatonic River and has three pump stations on the west, east, and north sides of town. The plant is designed to treat an average daily flow of 1.8 million GPD and a peak flow of 4.1 million GPD (Town of Lenox).

The current average daily flow is 800,000 million GPD, which leaves sufficient capacity for new growth (Vincent). There are no current plans to extend municipal sewer service in town.

The Pittsfield wastewater treatment plant also treats sewage from parts of Lenox and is located immediately north of the Lenox border on the Housatonic River (City of Pittsfield). If wastewater is improperly treated in either of these sites, it could have a negative effect on communities and the environment downstream.

Long-Term Development Patterns

Ninety-five percent of the town is zoned for residential development. Most of the town is zoned for residential house lots of one acre or more. In 2009, an open space flexible overlay district was created that is coincident with the R-1 zone. Subdivision developments in this area are required to include a minimum of 35 percent contiguous open space. The overlay district zoning does not affect homes that are built singly.

Areas zoned for low-density R-3 housing consist almost entirely of permanently protected land (Map 3D.2). Lenox Village and Lenox Dale centers are zoned for compact residential and commercial development, which allow people to live within walking distance of neighbors and shops. Compact development is not permitted in New Lenox, so instead of a town center, the land there will continue to be developed at a one-acre residential density and a two-acre commercial density.

Five percent of the land in town is zoned for commercial or industrial development. Industrial development is located on the river. While it was historically useful to have industry located along the river and rail line, freight trains no longer stop in Lenox and factories are no longer water-

powered. Industries typically pollute more than other land use types and can have a negative effect on water quality and species living in the river.

The main area designated for commercial development forms a strip running south from Pittsfield to Lenox Village along Route 7/20. This zoning pattern allows commercial buildings to be strung out along a busy road, precluding walking or biking to destinations. It also destroys the scenic nature of the roadside.

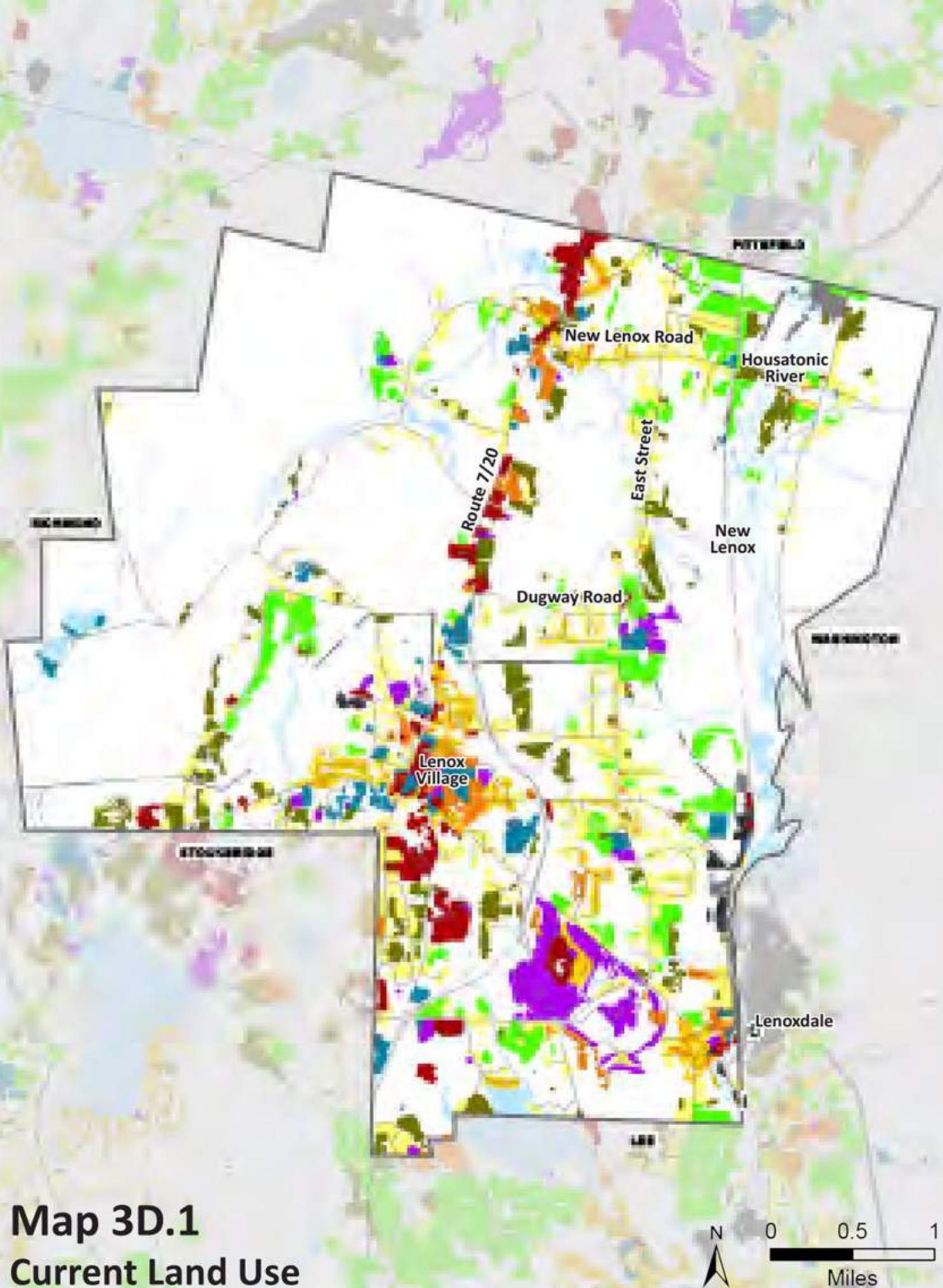
This has been partly ameliorated close to Lenox Village by Gateway Overlay district zoning, which allows a mix of uses in close proximity including residential, retail, office, entertainment, and open space (Map 3D.2). However, this overlay district is relatively small and does not change the overall nature of most of the strip. There is currently one 40-unit condominium project being implemented (Albertson). There are no scheduled or proposed subdivisions in town (Thornton). On its own, the condominium project is not likely to have a large effect on existing open space in Lenox. In 2009, the Berkshire Regional Planning Commission (BRPC) completed an analysis of what Lenox would look like if it were fully built out to the limits allowed under zoning regulations. While explosive future growth is unlikely based on recent population trends, it is useful to project how the community would be affected by the buildout. The BRPC calculated that 4,491 total dwelling units could be built, or 1,671 more than existed in 2009

In 2009 after the buildout analysis was done, the town created the open space flexible development overlay district. However, the overlay district only applies to subdivisions of five acres or more and very few have been built in recent decades. The overlay district does not affect the density of houses that are built singly. The buildout analysis done by the BRPC in 2009 is still accurate if the current trend of single-home development continues.

In this buildout, development is restricted throughout town by permanently protected land, land protected by the Massachusetts Wetlands Protection Act (floodplains, wetlands, rivers, and associated buffers), and steep slopes over 15 percent. Steep slopes restrict development only in that they are extremely expensive to build on. See map 3D.3 for a depiction of development restrictions and currently buildable land.

According to the BRPC's 2009 calculations, there are approximately 4,481 acres available for new residential construction in Lenox. If all available land shown on map 3D.3 were fully built out, this area would generate demand for 724,382 gallons of water consumption per day, produce 3,905 tons of solid waste, require 1,108 places for new students, and create 41 miles of new roads. Sprawling development emits far more greenhouse gases than compact development because of residents' dependence on cars. A more compact development pattern would create a more pedestrian-friendly town, cost less in terms of infrastructure, and protect undeveloped open spaces. It would also increase housing options in town. Smaller housing units in walkable neighborhoods close to cultural activities and shops might attract young adults and provide places for older people to age gracefully near friends and family.

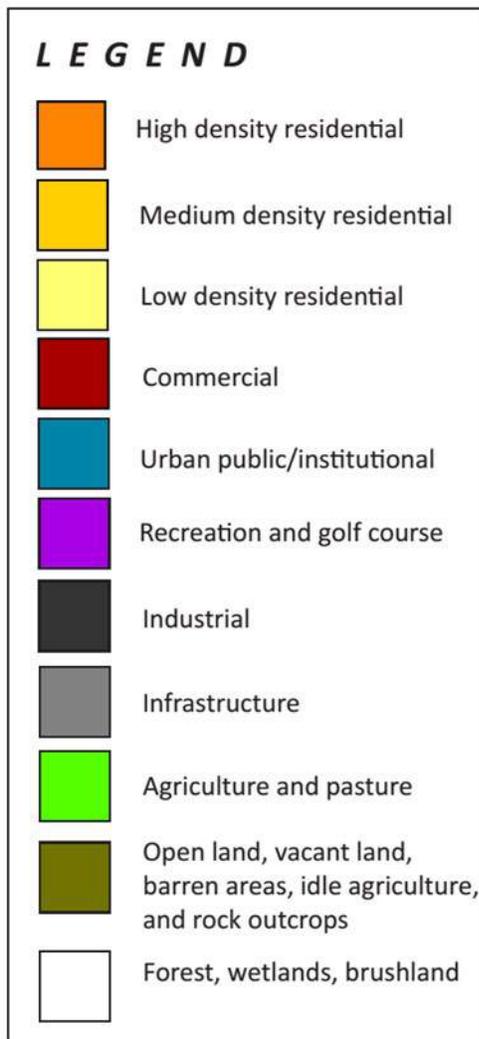
It is important for Lenox to continue to encourage density in town centers and discourage sprawl in order to preserve the open spaces residents love so much.



Map 3D.1
Current Land Use

Current Land Use

This map shows 2005 land use. Natural lands including forest, wetlands, and brushland are shown in white. For a detailed map of vegetation, see map 4D. Developed areas and land that appears to be actively managed (open land, agricultural land, and pastures) are shown in color. Most developed and actively-managed land is located in the southern half of town, with a secondary center in the north. Two narrow bands connect the two areas. This pattern reflects the location of the valley floor, the location of roads, and the fact that most currently-protected land exists in the uplands. Developed and managed lands are mixed together throughout town.



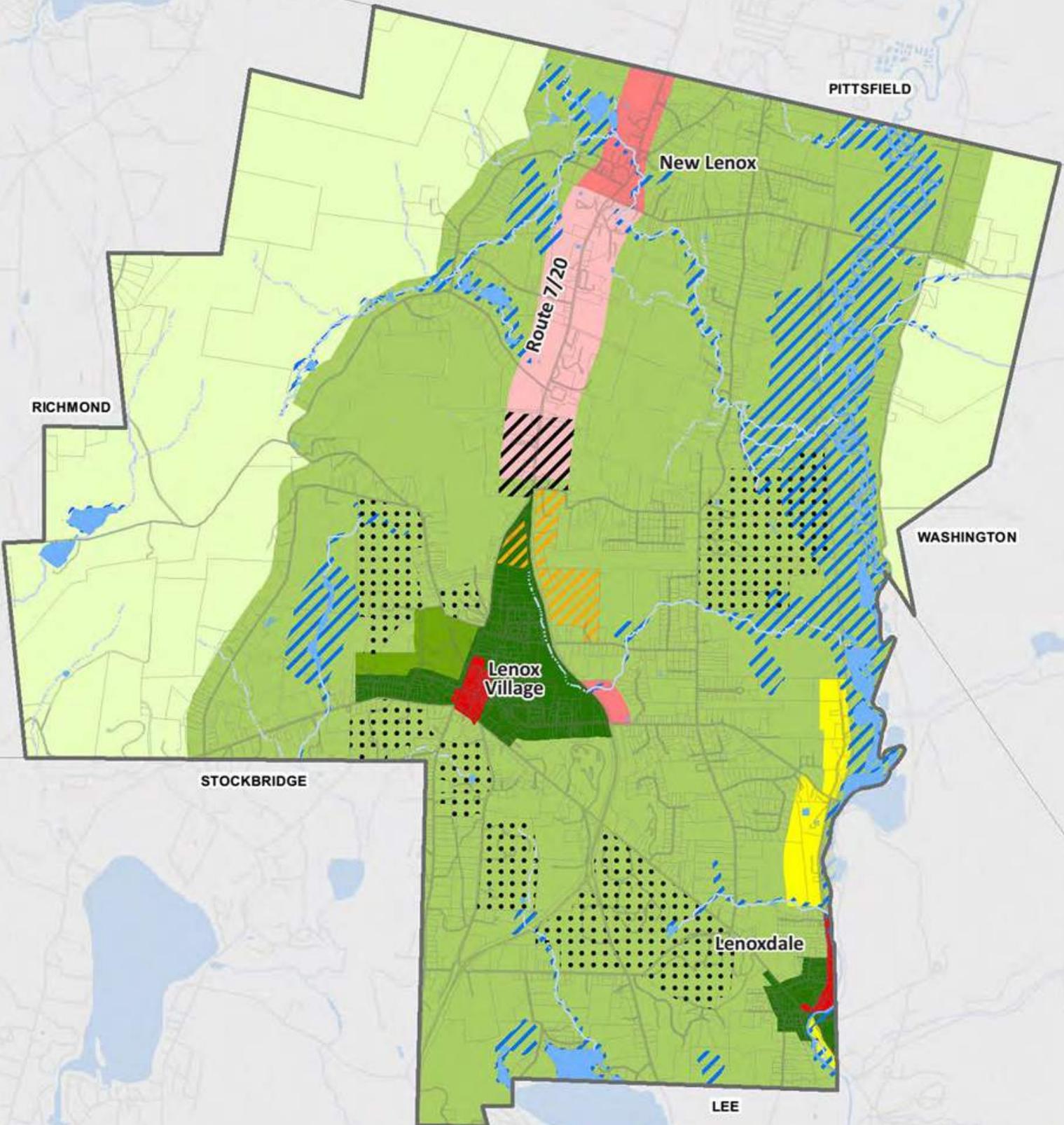
Most buildable land in town has some amount of development with the exception of a large area between East Street and Route 7/20 south of New Lenox Rd. Although this area is crossed by a few streams, a significant amount of buildable land remains (Map 3D.4).

Industries and infrastructure are located almost exclusively along the Housatonic River. See Map 3D.3 for a discussion of why this could be a problem.

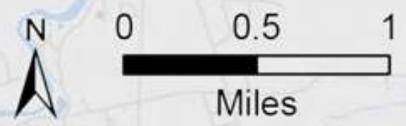
Medium and high density development is clustered in Lenox Village and Lenox Dale in accordance with zoning. Some high-density development is located in New Lenox despite the fact that this area is not zoned for a village center.

Low-density development takes up a large amount of land in the southeast part of town and could spread north of Dugway Road.

Commercial development mostly occurs in a strip along Route 7/20 with a cluster in Lenox Village. A small commercial area also exists in Lenox Dale and at one of the Great Estates. This is in accordance with the zoning bylaws in town.



Map 3D.3
Zoning



Zoning

Ninety-five percent of the town is zoned for residential development. Areas zoned R-1 make up the bulk of town. In 2009, an open space flexible overlay district was created that covers this same area. This zoning requires developments of more than five acres to include at least 35% contiguous open space. Singly-built homes in this area must still be built on lots of one or more acre so sprawl remains a concern.

Compact residential development zoning allows people to live within walking distance of stores and services in Lenox Village and Lenox Dale but not in New Lenox.

Five percent of the land in town is zoned for commercial and industrial use. The main

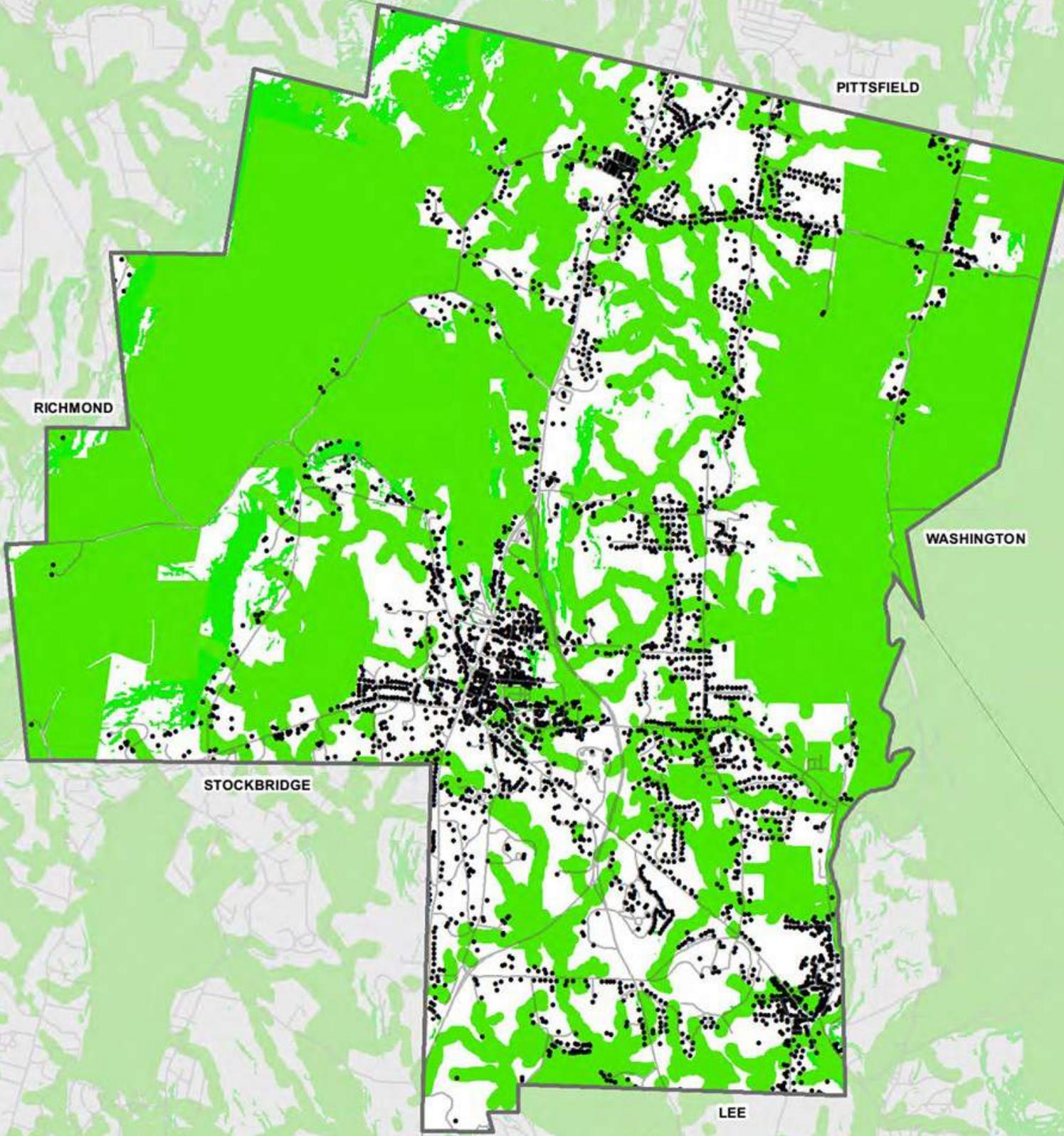
area designated for commercial development forms a strip running south from the Pittsfield border to Lenox Village along Route 7/20.

This zoning pattern allows commercial buildings to be strung out along a busy road, precluding walking or biking to destinations. It also destroys the scenic nature of the roadside. Gateway mixed use zoning has been implemented, which will address these concerns but only in a small part of the commercial strip.

Overlay districts are mapped on top of other districts. They modify and take precedence over regulations in base districts. Otherwise, regulations in base districts apply.

LEGEND

	R-3: Residential: 3 acre min lot size Max Building Coverage: 10%		Structures, roads and parcel lines
	R-1: Residential: 1 acre min lot size Max Building Coverage: 20%. This area is also zoned as an Open Space Flexible Development Overlay District, which offers an alternative to traditional subdivision zoning.		Water features
	R-30: Residential: 30,000 ft ² min lot size, Max Building Coverage: 20%	Overlay Districts	
	R-15: Residential: 15,000 ft ² min lot size Max Building Coverage: 20%		Estate Preservation Area zoning requires the preservation and restoration of the original features of former great estates.
	C-3: Commercial: 3 acre min lot size Max Building Coverage: 20%		The Floodplain District is based on the 100-year floodplain. Buildings cannot be built in this district. Permitted uses include agriculture, forestry, outdoor recreation, wildlife management areas, and previously existing buildings.
	C-1: Commercial: 1 acre min lot size Max Building Coverage: 30%		Gateway Mixed Use Development zoning encourages a mix of uses in close proximity, including residential, retail, office, entertainment, and open space.
	C: Commercial: 5,000 ft ² min lot size Max Building Coverage: 75%		Wireless Telecommunications District zoning designates areas for wireless facilities and towers so they will not have a negative impact on the town.
	I: Industrial: 2 acre min lot size Max Building Coverage: 35%		



RICHMOND

PITTSFIELD

WASHINGTON

STOCKBRIDGE

LEE

Map 3D.2
Developable Lands



Developable Lands

This map shows restrictions to development, locations of current buildings, and the land area in Lenox that is currently developable. In Lenox, most land that has been permanently protected is located in the mountains on the eastern and western sides of town.

This map shows constraints to development, locations of existing buildings, and the land area in Lenox that is currently developable. In Lenox, most land that has been permanently protected is located in the mountains on the eastern and western sides of town.

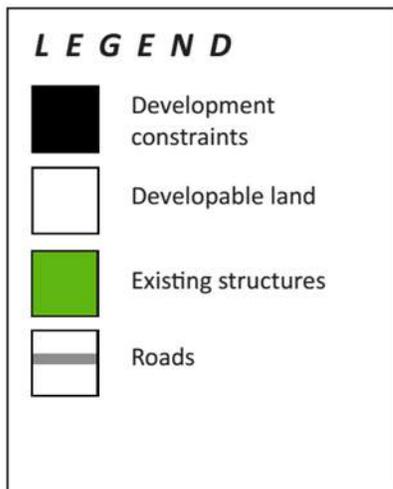
The floodplain and wetlands around the Housatonic River prevent development in most of the northeastern part of town. Most buildable land exists in a roughly wedge-shaped area that runs through the middle of town. Within this wedge the major restrictions are 200-foot river resource areas, wetlands, and 100-foot wetland buffers. Most past development in town has occurred in this area (which corresponds with the valley floor) and most future development will continue to be sited here.

Most developable land in Lenox is zoned for residential development with lot sizes greater than one acre. Houses could continue to sprawl throughout the white areas on the map, stressing the town's resources and requiring extensive infrastructure improvements. If additional open spaces are not planned for these areas and they are filled in with houses, current parks and recreation areas may become overused.

Development restrictions include:

- Land **permanently protected** by the town, state, and federal government
- **Conservation restrictions**, which are voluntary legal agreements between a landowner and a conservation organization. Landowners keep their land but permanently restrict future development and land use.
- **State Wetlands Protection Act** restrictions including
 - Wetlands
 - 100' buffer zones around wetlands
 - Rivers
 - 200' River Resource Areas on both sides of rivers
 - The 100-year floodplain
- **Steep Slopes** over 25 percent do not completely restrict development but make building very expensive.

Lands under Chapter 61 protection are not included as development restrictions because the protection is temporary and can be revoked at any time. Lands under the jurisdiction of the Scenic Mountain Act are also not included because development is allowed if it follows specific rules.



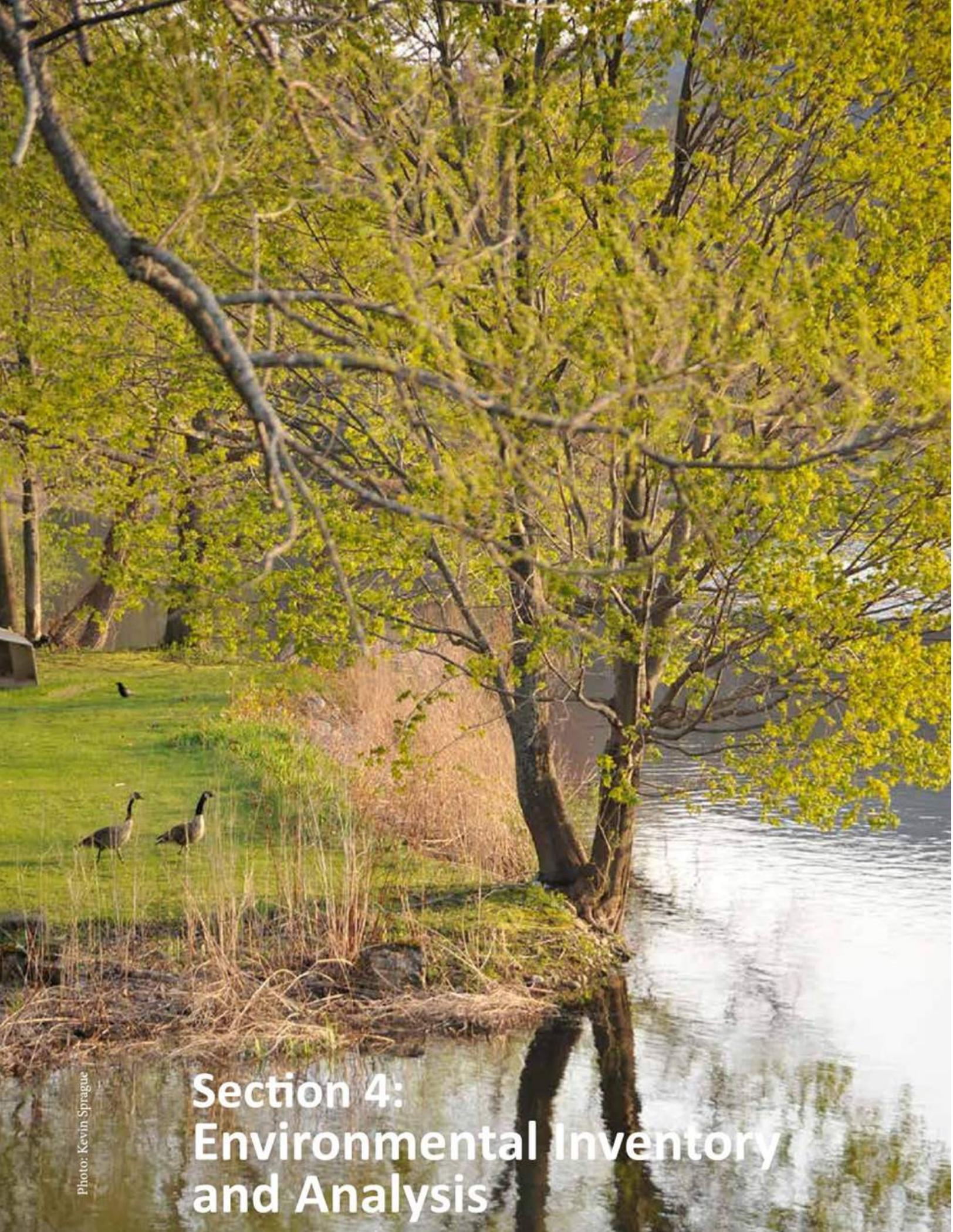


Photo: Kevin Sprague

Section 4: Environmental Inventory and Analysis

4A: Geology, Soils, and Topography

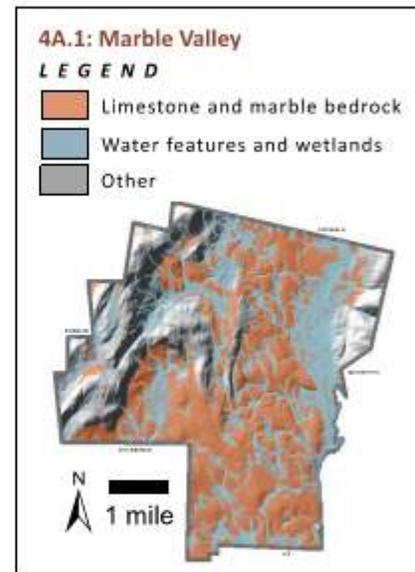
Lenox has mountains and steep slopes on its east and west and a hilly, rare marble and limestone valley through its center. Opportunities for development are dictated by this topography. Development is easier in the marble valley due to more modest slopes and a deeper depth to bedrock than the mountainous regions. However, many rare plant and animal species rely on this valley, creating conflicts between conservation and development.

Topography

Differential erosion has created a striking contrast between the valley and bordering mountains in Lenox. Broad floodplains of the Housatonic and the rolling hills of the valley, ranging in elevation from 1000 to 1500 feet above sea level, stretch from north to south in the central portion of town. The Lenox-Stockbridge Range and October Mountain parallel one another on the western and eastern borders of town (Map 4A.1.) Elevations in Lenox range from approximately 950 feet above sea level at the Housatonic River to 2,124 feet above sea level atop the Lenox-Stockbridge Range.

Geologic Features

Bedrock in the Lenox-Stockbridge range and October Mountain consists primarily of quartzite, gneiss schist and is harder than and more resistant to physical and chemical weathering than other areas of Lenox. In the valley, the bedrock consists of less resistant marble (Map 4A.1). Due to the predominance of calcium-based marble and limestone at lower elevations, Lenox's valley soils tend to be very alkaline. Marble bedrock is very rare in New England and supports a unique environment filled with alkaline-loving plants and animals. Alkaline soils also partially offset the negative effects of acid rain.

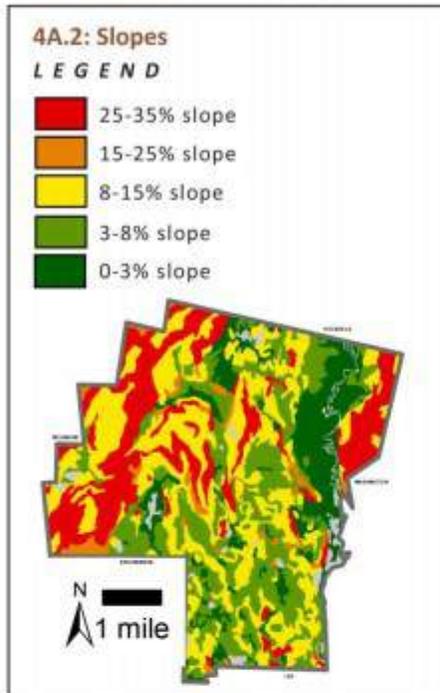


Slopes

Lenox is nestled between two mountainous areas dominated by steep slopes (Map 4A.2). The steepest slopes (greater than 25 percent) are concentrated in the Lenox-Stockbridge Mountain Range to the west and October Mountain on the eastern side of the Housatonic River in the northeast corner, where the land rises steeply to the Berkshire plateau.

The soil on these steep slopes has a high potential for erosion and surface water runoff.

There is also a shallow depth to bedrock on

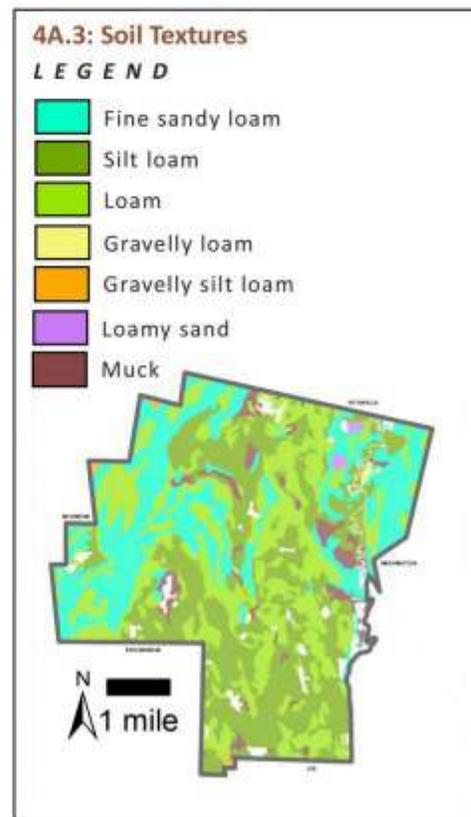


these steep slopes resulting in a slow percolation rate. This means these areas do not drain well and so are not good locations for septic systems, significantly limiting development. The shallow depth to bedrock also creates an impractical foundation for houses. Steep slopes also limit development, but with today's technology and development pressures, such steep slopes are often not a complete deterrent, although they are still more costly to build on. Extensive grading, vegetation clearing and blasting would be needed to accommodate development on the steep slopes. These activities are detrimental to the ecosystem as well as water quality at lower elevations. The removal of vegetation and/or alteration of the soil increases potential for erosion and surface water run-off, causing potential problems to downstream and lower elevation areas. Much of the steepest land is protected from development as town conservation land or as privately held land with

conservation restrictions (see Chapter 5). Slopes of less than 15 percent dominate the central portion of town. This is where most development has already occurred and where slopes make future development more appropriate.

Soils

Fine sandy loams and patches of standard loam are the most prevalent types of soil on steeper slopes (greater than 25 percent) (Map 4A.3). These soils are well-drained; however, a shallow depth to bedrock and a high water table create considerable limitations for septic systems and other development.



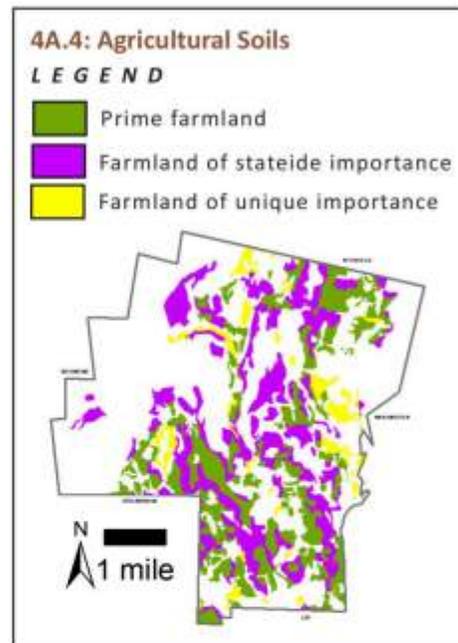
Despite these limitations, current septic and building technologies make building on these marginal soils possible. Throughout the valley there is predominately a mix of loam and silt loam, which are moderately well-drained. Muck soils often surround water bodies in town and are very poorly drained. Development is most suitable in places where the soil is well-drained, but in the case of Lenox, the well-drained soils occur on steep slopes with shallow depth to bedrock. Development in these areas would be difficult, costly, and could disturb plant and animal species that rely on these areas.

The United States Department of Agriculture (USDA) defines three types of important agricultural soils, all of which exist in Lenox (Map 4A.4). First is **prime farmland**, which exists in patches throughout the valley. The USDA defines prime farmlands as “those that have the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and are also available for these uses.” However, some of this land is already developed, making it effectively unavailable for farming.

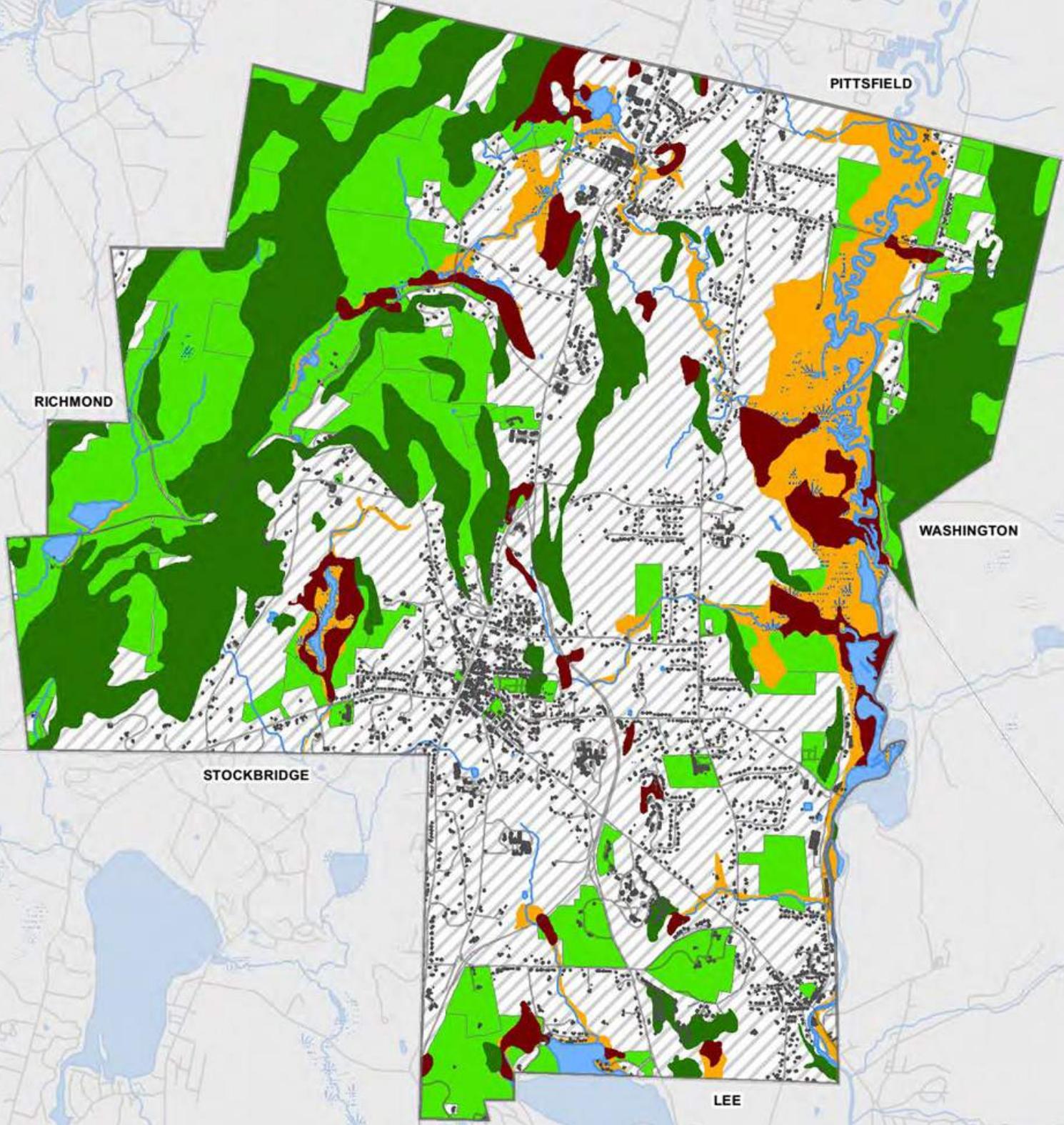
Second, the USDA designates **farmland of statewide importance**, which is “nearly prime farmland that economically produces high yields of crops when treated and managed according to acceptable farming methods.”

Lastly, **farmland of unique importance** is land that could be used to produce specific high-value crops such as tree nuts, fruits, and vegetables.

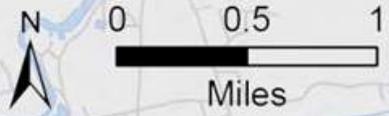
Much of the farmland of unique importance in Lenox is located in wetlands. Except for certain crops such as cranberries, it would most likely be illegal to farm on these lands if they have not been continuously farmed historically.



Prime farmland and farmland of statewide importance should be a priority in locating potential community gardens, which some residents have expressed an interest in.



Map 4A.5
Soils and Geologic Features



Soils and Geologic Features

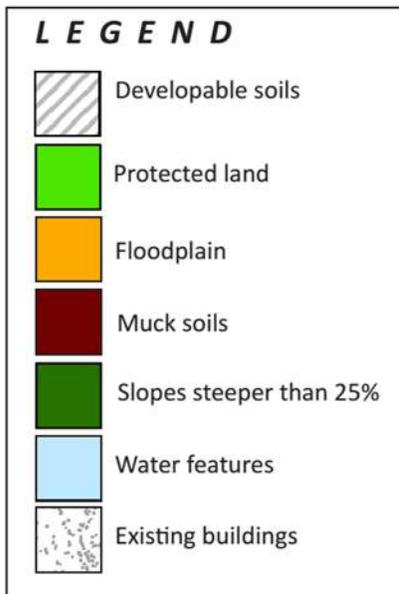
Steep slopes and hydric soils pose fundamental constraints on future residential and commercial development. By mapping out these undevelopable areas together with land that is already protected, the town can identify parcels that are more vulnerable to development.

Various levels of constrained land affect development in Lenox. Legal constraints prevent some land from being developed. Conservation lands protected by town ownership or easements are not allowed to be developed. Development is also not allowed on the 100-year floodplain due to local zoning bylaws.

Practical constraints such as steep slopes and muck soils also constrain development. In Lenox, areas with steep slopes (greater than 25%) are susceptible to erosion and have a shallow depth to bedrock, which make it challenging for building foundations and installing septic systems. Muck soils, which often surround water bodies in Lenox, impede development because they are very poorly

drained. Development in these areas would be difficult, costly, and could disturb plant and animal species that rely on them.

The remaining soils would be the easiest on which to build. As shown earlier in this section (Map 4A.1 and Map 4A.4), these areas are also the location of the rare marble and limestone bedrock and where most of the important agricultural soils exist.



4B: Landscape Character

Lenox's landscape is characterized by a unique blend of natural and cultural features (Map 4F.1). The town is nestled in a valley between October Mountain and the Lenox-Stockbridge Range. The ridge and mountain provide scenic vistas and remain largely untouched by development (Map4F.2). The valley is characterized by calcium-rich limestone bedrock that is rare in New England and provides a substrate for many rare plant and animal species.

The Housatonic River with its impressive oxbows and extensive wetlands is an important aspect of landscape character in the valley. Laurel Lake is also a scenic asset, with two town-owned waterfront properties. Residents of and visitors to Lenox enjoy hiking and recreating on mountains.

4C: Water Resources

Lenox lies entirely within the 1,948 square mile watershed of the Housatonic River, which forms Lenox's eastern boundary with Lee and is the town's major surface water feature. In Lenox, the river is slow-moving, meandering, and lined with wetlands, which means that little development has occurred along its banks. Coordination with towns upstream and downstream is necessary in order to clean and restore the Housatonic River and to preserve its scenic and natural beauty.-

Other important water features in Lenox include Laurel Lake, which houses the town beach, the Upper and Lower Root Reservoirs, and Woods Pond, which is a dammed section of the Housatonic. Substantial wetland areas and vernal pools contribute to the health of the water system, including sub-watersheds and streams that feed into the Housatonic.

Watersheds

The Housatonic's four headwater streams converge in Pittsfield, just north of Lenox, and flow approximately 130 miles south to Long Island Sound at Milford Point, Connecticut. The Housatonic drains twenty-three other towns in Massachusetts, eleven towns in New York, and forty-eight in Connecticut.

Due to Lenox's position near the top of the watershed, activities throughout Lenox can affect water quality in twenty-three towns downstream. However, water quality is also affected by activities upstream, particularly by industry in the city of Pittsfield, where a former GE plant polluted the river with PCBs (Map 4G). Fecal coliform and non-native plants are other known problems in the Lenox section of the river (DEP).

An array of local and state-wide organizations protect streams throughout the watershed. The EPA is working with General Electric to clean

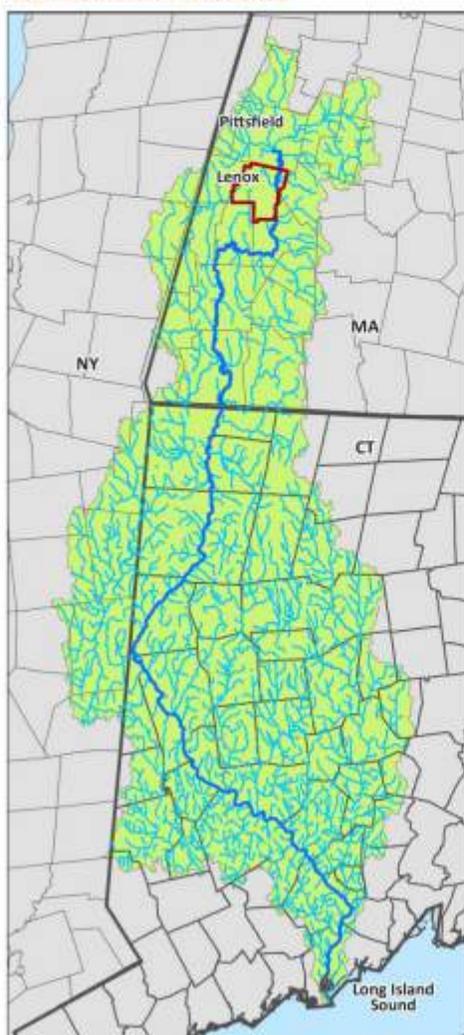
up areas contaminated by PCBs and is currently exploring options to remediate riverbeds, banks, and areas with contaminated soil in Lenox.

The Housatonic is a popular spot for canoeing, kayaking, and observing wildlife. However, in a community meeting held in February 2013, citizens expressed concerns about pollution and the lack of accessibility for people and dogs. Many people do not swim in the river because of pollution. There is some public access to the

river, including canoe access on New Lenox Road Bridge and a pedestrian bridge and new public dock on Housatonic Street.

Tributaries to the Housatonic in Lenox include Yokun Brook, Marsh Brook, Willow Brook, Woods Crossing Brook, Sargent Brook, and Lenox Mountain Brook. All streams in Lenox are defined as high quality streams by the UMass High Quality Stream Map except the upstream half of Willow Creek and Woods Crossing Brook, most of Marsh Brook, and Sargent Brook, which coincide with the most heavily developed areas in Lenox. There is public access to Yokun Brook on Division of Fisheries and Wildlife land, to Woods Crossing Brook on Berkshire Natural Resource Council land, and to Marsh Brook on town land.

4C.1: Housatonic Watershed



Water Supply Areas

Lenox Mountain Brook feeds into the Upper and Lower Root Reservoirs, which serve as the primary public water supply for the Town of Lenox. The watershed that feeds into these reservoirs is owned by the town and regulated in order to preserve drinking water quality. Public access is restricted within 400 feet of the reservoirs and feeder brooks but other non-motorized recreational uses are allowed within the watershed boundary (DPW).

Lenox Mountain Brook is an Outstanding Resource Water, which is a protected waterway under the Massachusetts Surface Water Quality Standards. Surface Water Protection Areas A, B, and C have been mapped for the reservoirs.

The Lenox water treatment plant can treat 1.1 million gallons per day. The town can draw up to 430,000 gallons per day from the Pittsfield water system when demand rises or if there is a need to conserve reservoir water (DPW). Even though the population of Lenox has been on the

decline, high numbers of summer tourists mean high demand during summer months when droughts are likely to occur. The town has been searching for additional water sources. The Woods Pond aquifer is partially located in Lenox along the Lee border. It is considered a medium-yield aquifer with a yield of 100-300 gallons per minute. This water source has not been seriously considered because there are concerns about PCB contamination (Vincent). Aquifer recharge areas have not been mapped.

The town should continue to look for additional water sources, plan for water security, and map aquifer recharge areas.

Lenox has one public water supply well, owned by the non-profit Pleasant Valley Wildlife Sanctuary. This well has an interim wellhead protection area (IWPA) of 624 feet.

Lakes

Laurel Lake is fed by streams from the neighboring towns of Lee and Stockbridge as well as Sargent Brook in Lenox. Activities in all three towns affect water conditions in the lake.

Although Laurel Lake has had less development along its shores than many lakes in Berkshire County, it has problems with high phosphorus levels, dissolved oxygen saturation, non-native aquatic plants, and non-native zebra mussels (DEP).

A watershed management plan should be developed with Lee in order to protect the lake's aquatic inhabitants.

The lake is accessible from a boat ramp, the Lenox Town Beach, and from the sixteen-acre Edith Wharton Park. Popular activities on the lake include swimming, relaxing, socializing, hiking with dogs, paddling, fishing, and ice fishing. At a community meeting in February 2013, residents cited a lack of accessibility to the lake, invasive species, and the lack of trails as evidence that Laurel Lake and the town beach need a “major upgrade,” in one resident’s words.

Woods Pond is a dammed section of the Housatonic River to the north of Lenoxdale. The pond is publically owned, protected, and publically accessible. The area is mainly used for canoeing and nature observation. As with the rest of the Housatonic, there is a Public Health Department Advisory against eating fish from the pond.

Flood Hazard Areas

The Housatonic River flows along the eastern section of Lenox. Fortunately, very few areas within the 100-year floodplain have been developed and so there are significant portions of intact wetlands to absorb and slow floodwaters and provide other benefits to the town.

Wetlands

Wetlands make up about four square miles of the town’s surface area, or about eighteen percent. Along the Housatonic River, wetlands extend to nearly the width of the 100-year floodplain and cover large swaths of land at the mouths of Yokun Brook, Mill Brook, and Willow Creek. Smaller wetland areas are scattered throughout western Lenox, especially along Yokun Brook and Marsh Brook.

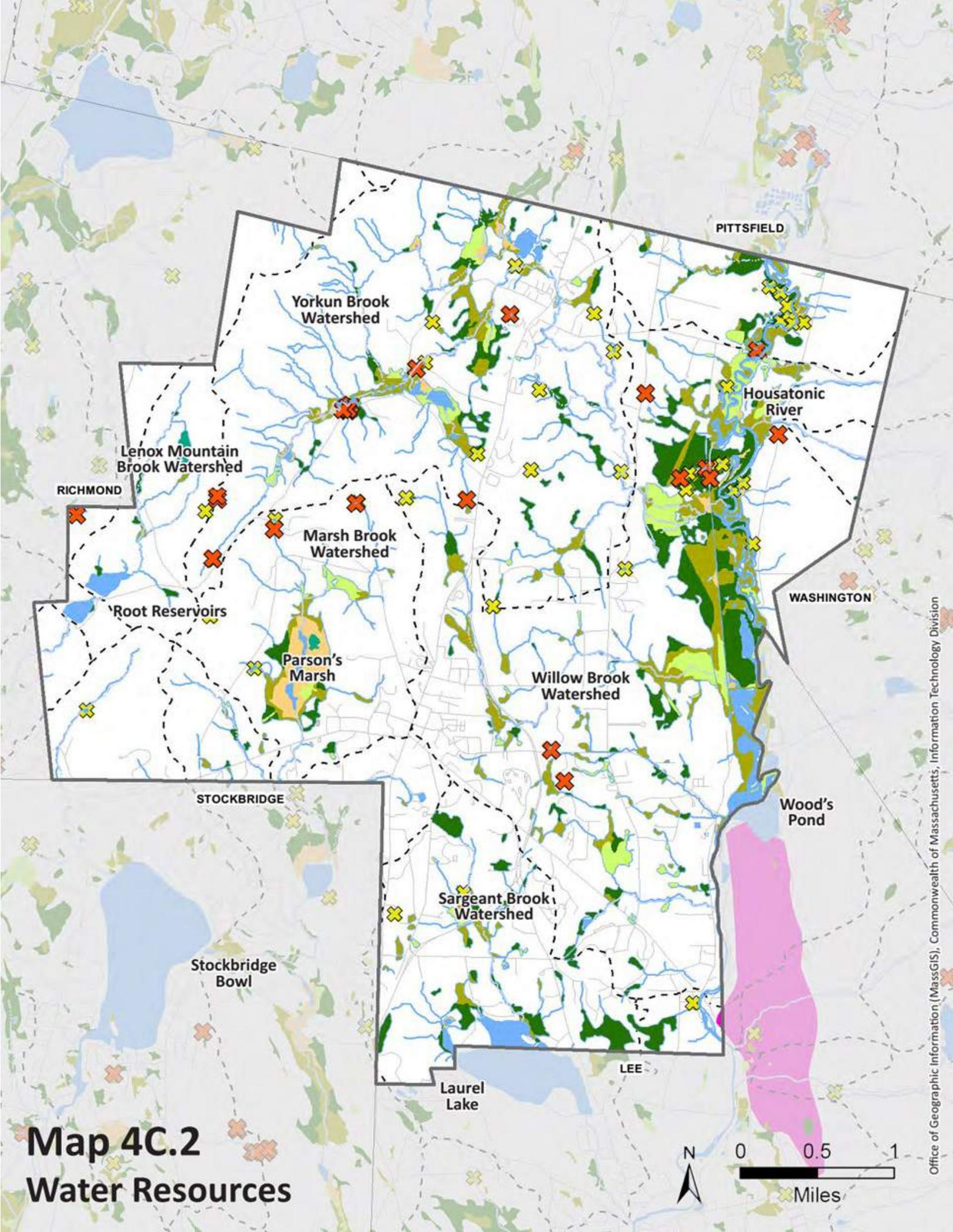
The state Wetlands Protection Act protects wetlands in order to preserve wildlife diversity, purify aquifer recharge areas, reduce and prevent erosion, and absorb and filter runoff. With

increasing climate uncertainty and more severe weather events predicted for New England, wetlands will have an increasingly important role to play in stabilizing natural systems and the human systems that rely on them. There is an extensive mosaic of wetland types in Lenox, including bogs, deep marshes, shallow marshes, shrub swamps, and wooded swamps (see section 4D). These wetlands support many rare and endangered animal species (see section 4E).

Lenox has twenty certified vernal pools and thirty-three potential vernal pools, most of which are along brooks and rivers, according to a GIS layer based on information from the Natural Heritage and Endangered Species Program. These vernal pools play an important role in the hydrologic cycle and the lives of species that depend on them for survival.

Potential vernal pools should be certified if they qualify.

Access to wetlands is fairly limited. Citizens enjoy the vista overlooking Parson's Marsh and some go to that area to observe nature. However, it was reported in the 2013 community meeting that there was little access to the marsh. Attendees also reported that they didn't know where the marsh was located, that it lacked signs, and that trails and a boardwalk over wet areas were needed.



Map 4C.2
Water Resources

Water Resources

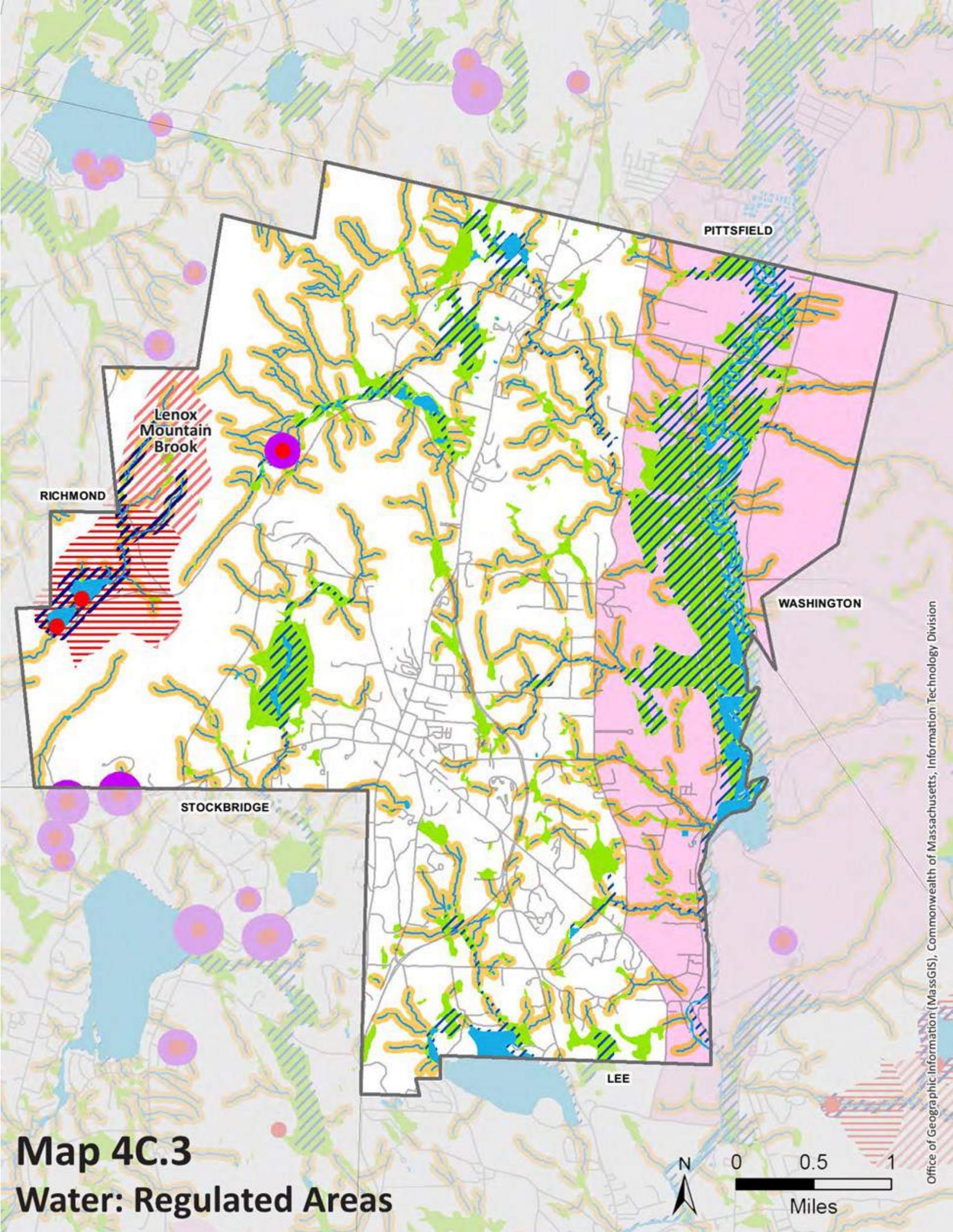
Water resources include wetlands, surface waters such as rivers and lakes, certified and potential vernal pools, and aquifers. Vernal pools are bodies of standing water that typically form in the spring from melting snow and runoff and usually dry out in the summer. They are concentrated in northern Lenox, perhaps because there has been less development in the northern part of town.

The town's water comes from the Root Reservoirs. Because the reservoirs are high in the mountains and are fed with rainwater and streams from the protected Lenox Mountain Brook watershed, they are not contaminated. The aquifer south of Woods Pond (a geologic feature that conducts or contains groundwater) is at a relatively low elevation and because of its location there are concerns about contamination with hazardous materials.



Wetland types in town:

- **Bogs** are characterized by spongy peat deposits, acidic waters, and a floor covered by a thick carpet of sphagnum moss.
- **Deep Marshes** marshes are usually covered in water deeper than six inches and are characterized by floating and submerged plants such as cattails, water lilies, and bulrush.
- **Shallow Marshes, Meadows, or Fens** fens are usually covered with water less than six inches in depth and are characterized by soft-stemmed plants such as cattails.
- **Shrub Swamps** have wet soils during the growing season, standing water during parts of the year, and are covered with shrubby vegetation.
- **Wooded Swamps** have wet soils during the growing season, standing water during parts of the year, and are covered with deciduous, coniferous, or mixed trees.



Map 4C.3
Water: Regulated Areas

Water: Regulated Areas

This map shows areas where use or development is restricted in order to protect the town's water supply and aquatic habitats. These regulated areas significantly restrict development throughout most of town, with significantly larger regulated areas on the eastern and western borders of town. These protect two of the town's most significant water features, the town reservoirs and the Housatonic River.

The Upper Housatonic was designated as an ACEC, or **Area of Critical Environmental Concern**, in 2009. ACECs are places in Massachusetts that receive special recognition because of their resource quality, uniqueness, and significance. ACEC designation requires stricter environmental review of proposed developments under state jurisdiction.

Public Water Supplies are the locations of public water supply wells and intake points for surface water sources.

Interim Wellhead Protection Areas

For public wells that have not had Zone II Wellhead Protection Areas mapped, Interim Wellhead Protection Areas are established based on the pumping rate of the well.

Wetlands Protection Act areas include

- **100' buffer zones** around wetlands
- **200' River Resource Areas** on both sides of rivers
- **The 100-year floodplain** (an area that has a 1% chance of flooding every year)

Surface Water Supply Protection Areas are designated by state law. Zones A, B, and C designate different extents of regulated areas. Lenox Mountain Brook is a Class A water supply from source to outlet in Lenox and as such is classified as an Outstanding Resource Water by the state.

L E G E N D	
	Water feature
	Wetlands
	Areas of Critical Environmental Concern
	Interim Wellhead Protection Areas
	Public Supply Wells
	100 year floodplain
	MA Wetland Protection and River Resource Area
	Surface Water Supply Protection Area A
	Surface Water Supply Protection Area B
	Surface Water Supply Protection Area C

4D: Vegetation

As mentioned in the soil section, the valleys in Lenox are made up of calcium-rich marble bedrock, which creates a richer, more alkaline soil than is found in most of New England. This bedrock supports a large suite of rare plant species, many of them wetland species.

Forest is the dominant land cover in Lenox (Map 4D). The Lenox-Stockbridge range on the western edge of town contains the largest contiguous forested area with more than 1,700 acres designated as forest core by the Biomap 2 report. The forest canopy in this area is dominated by mature sugar maple, northern red oak, American beech, and birch. There are significant forested areas on the steep slopes of October Mountain and in Kennedy Park.

The Conservation Assessment and Prioritization System (CAPS) is an ecosystem-based approach for identifying and prioritizing areas based on natural communities present and the ecological integrity of areas. Areas called Habitat of Importance are the top 50 percent of ecologically healthy lands in the state. The

CAPS model assumes that by preserving intact natural areas, most species and ecological processes will be conserved. CAPS does not consider information on rare species or land-use history.

In 2011, the Massachusetts Natural Heritage and Endangered Species Program completed the BioMap 2, a statewide mapping project. Biomap 2 provides a framework for protection and stewardship of lands and waters that are most important for conserving biological diversity in Massachusetts. Biomap takes CAPS data into account along with rare species and habitats, but it does not include the need for wildlife corridors and land with restoration potential, among other factors.

Fall color graces the landscape. (Photo: Kevin Sprague)



Core Habitat identifies key areas that are important for the long-term persistence of rare species and other species of conservation concern, as well as natural communities statewide. Critical Natural Landscapes identify large natural landscape blocks that are minimally impacted by development. Priority Habitats identify rare community types and the best examples of more common habitat types.

A block of undeveloped forest identified as important habitat by the UMass CAPS program lies between Route 7 and East Street north of East Dugway Road. This currently unprotected area links the forests on the eastern and western edges of town (Map 4E.1)

Lenox has two patches of priority rich, mesic forest in the western part of town (see Map 4D.1. This natural community type is dominated by sugar maples and features a moist, nutrient-rich environment with a diverse herbaceous layer that includes many spring wildflowers.

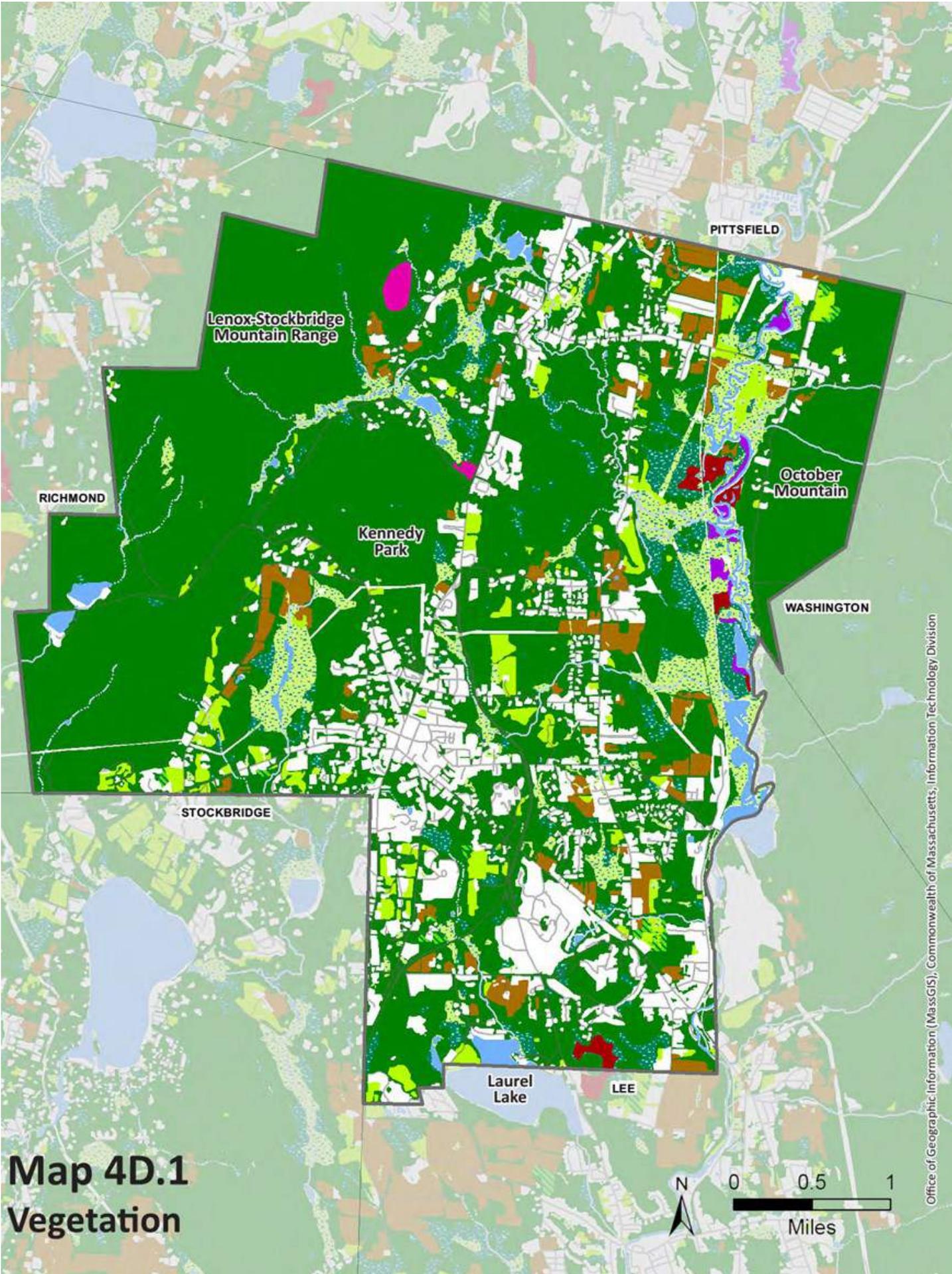
The town plants and maintains public shade trees for the benefit of its residents. To this end, it employs a Tree Warden. In 2012, sixteen trees were planted on Walker and Main Streets, including pears, sugar maples, disease-resistant Dutch elms, and flowering crabapples.

Like much of the northeast, Lenox was largely deforested in the mid-nineteenth century for timber and farmland. Most of the cleared land has reverted back to forest, with few areas currently in a brushland or successional stage. Although there is only one working farm in Lenox today, other cleared areas remain as hayfields or pastures. These areas help preserve the town's pastoral landscape and support goldenrods, grasses, asters, Queen Anne's lace, and other species that require grasslands to survive.

The Housatonic River is one of the town's most significant natural resources. The land along the river supports six priority natural communities including three types of floodplain forest and three types of swamp. Hemlock, red and silver maple, black and green ash, bur oak, and American elm are all common in these swamps. Species of conservation concern found in this area include many sedge types, bristly buttercup, wapato, narrow-leaved spring beauty, and crooked-stem aster (Biomap 2)

A wetland to the east of Laurel Lake supports an additional priority natural community, a deciduous-coniferous swamp that occurs in areas with calcium-rich groundwater seepage. Black ash, red maple, and tamarack are found in this community, which supports many threatened calcium-loving plants.

Lenox has 20 certified vernal pools and 33 more potential vernal pools, most of which are along brooks and rivers. Some plant and animal species depend on vernal pools for their survival.



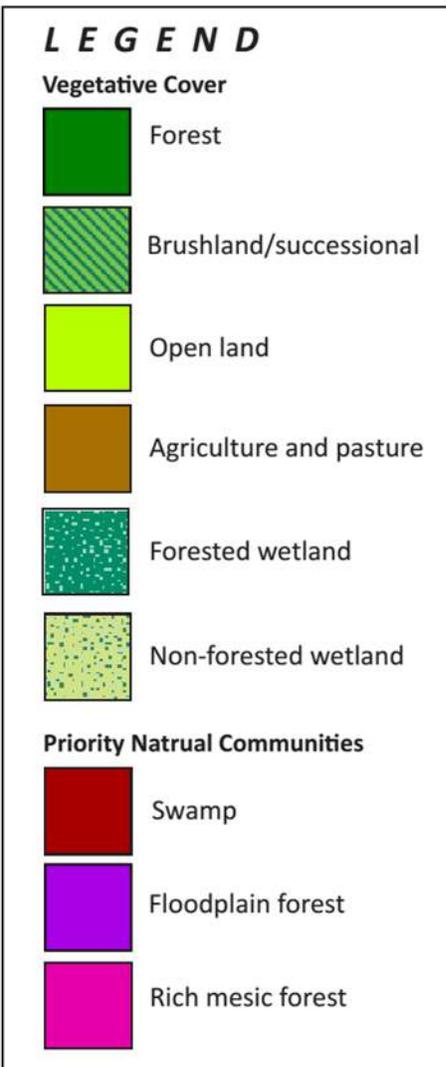
Map 4D.1
Vegetation

Vegetation

All vegetation types exist in a predominant matrix of forest with large blocks of forest found on the eastern and western sides of town. Large areas of wetlands flank the Housatonic River. These areas remain undeveloped because steep or wet terrain has historically restricted development to the center of town.

Agricultural areas, pasture, open land, and developed areas are scattered throughout the valley between the mountains and the river, often along roads. This fragmentation provides greater habitat variety but may not provide large enough blocks for some species to survive and may not provide corridors for species to travel or migrate in response to climate change. Two exceptions to fragmented habitats in the valley are a sizeable block of forest in north-central Lenox and the forested area north of Laurel Lake.

Priority Natural Communities are areas designated by the Biomap 2 project as rare natural communities and the best examples of more common natural community types. In Lenox there are nine types of priority natural community. Eight of these are swamps or floodplains and seven are found along the Housatonic River north of Woods Pond.



Swamps:

- Alluvial red maple swamps
- Black ash- red maple- tamarack calcareous seepage swamps
- Hemlock- hardwood swamps
- Red maple- black ash-bur oak swamps

Floodplain forests:

- Transitional floodplain forest
- High terrace floodplain forest
- Major-river floodplain forest

Upland forest:

- Rich, mesic forest community

4E. Fisheries and Wildlife

The calcium-rich marble bedrock of Lenox supports 41 rare plant and animal species. These species depend on wetlands, uplands, large blocks of undeveloped land, and the corridors that connect these areas (Biomap 2).

Seven types of rare floodplain forest and wetland communities exist in Lenox, with a concentration along the Housatonic River (see section 4D). These communities support a host of species of conservation concern including the American bittern, Northern leopard frog, and mustard white butterfly. Wood turtles and Jefferson salamanders are found in these wetlands but also depend on upland areas for survival.

Lenox has 20 certified vernal pools and 33 potential vernal pools, most of which are along brooks and rivers. These vernal pools play an important role in the hydrologic cycle and the lives of species that depend on them for survival.

The highest concentration of vernal pools is along the floodplains of the Housatonic River and in a wedge to the north of Lenox Center. These vernal pools support populations of rare amphibians such as the four-toed salamander, spring salamander, and leopard frog.

The mountain ridges on the eastern and western side of town are generally made up of non-limestone types of bedrock (see Section 4A) and are less ecologically diverse than the valleys. However, they do support state-listed species including salamanders (BioMap 2). A significant portion of the upland area has been permanently protected but some important areas remain unprotected.

Corridors of open space support wildlife migration. There is an area of undeveloped land in the north-center of town that connects upland habitat on Lenox Mountain with the Housatonic River and October Mountain. The core of this

Pool in Kennedy Park. (Photo: Kevin Sprague)



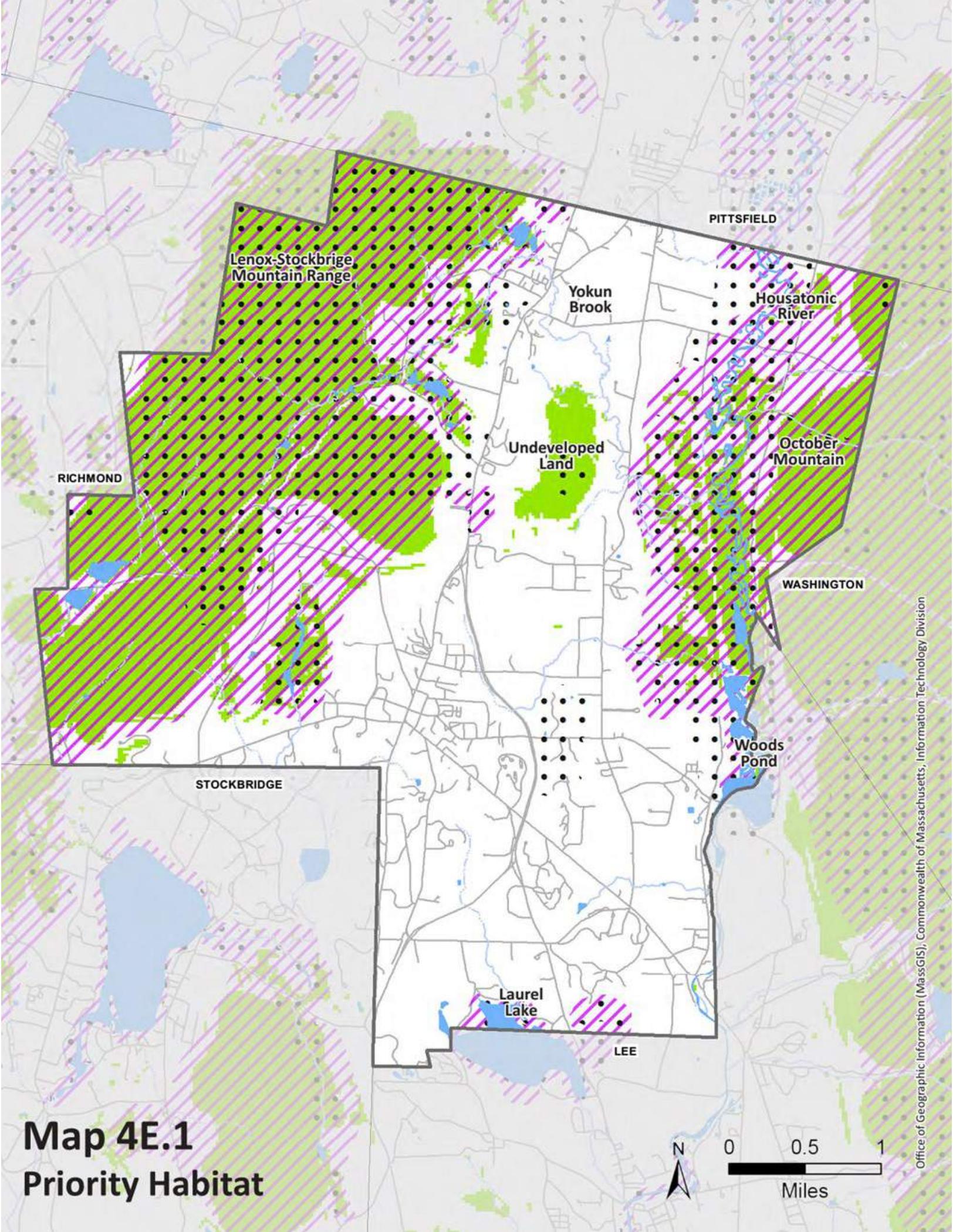
Corridors of open space support wildlife migration. There is an area of undeveloped land in the north-center of town that connects upland habitat on Lenox Mountain with the Housatonic River and October Mountain. The core of this area is designated as a Habitat of Importance by the CAPS program (Map 4E.1). Map 4D.1 shows unbroken forest in the same location. If this area is not protected, development could sever a vital link between habitat in the eastern and western portions of Lenox.

Protecting threatened natural areas identified by the Biomap 2 and CAPS programs will allow rare species to continue to thrive in Lenox.

Brooks and streams also form important corridors for many species. Road crossings can act as barriers to migration of species if bridges or culverts are not well constructed. In Lenox, the Conservation Commission is aware of this problem and working to address it (Flanagan).

Laurel Lake, Yokun Brook, the Housatonic River, and streams throughout town provide residents with recreational fishing opportunities. Yokun Brook and Laurel Lake are stocked with trout. Perch, pickerel, and panfish can also be caught in Laurel Lake, which is used for ice fishing in the winter. The Housatonic River and Woods Pond can be fished, but there is a ban on consumption of fish due to PCBs.

Hunting occurs throughout town on some town and state-protected lands as well as private property.



Lenox-Stockbridge
Mountain Range

PITTSFIELD

Yokun
Brook

Housatonic
River

RICHMOND

Undeveloped
Land

October
Mountain

WASHINGTON

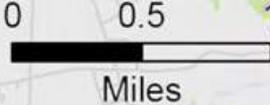
STOCKBRIDGE

Woods
Pond

Laurel
Lake

LEE

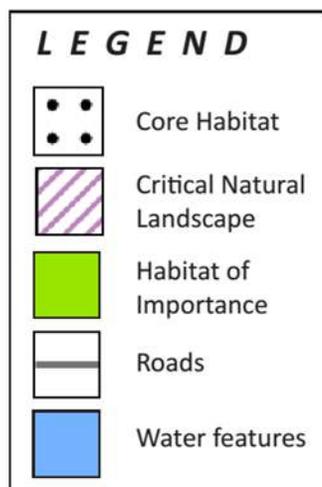
Map 4E.1
Priority Habitat



Priority Habitat

Priority habitat is mostly found on the mountain ranges on the eastern and western sides of town and along the Housatonic River. Steep slopes in the mountain ranges and wet ground and flooding along the Housatonic have funneled development into the center of town.

As a result, most of the center of town is not currently habitat for rare species. The few exceptions are habitat 'islands' which are rare upland habitats on limestone bedrock. These 'islands' are valuable because they support species which might otherwise disappear. They can also provide bridges between more distant habitats.



Core Habitat identifies specific areas necessary to promote the long-term persistence of Species of Conservation Concern (those listed under the Massachusetts Endangered Species Act as well as additional species identified in the State Wildlife Action Plan), exemplary natural communities and intact ecosystems.

Critical Natural Landscape identifies and prioritizes intact landscapes in Massachusetts that are better able to support ecological processes and disturbance regimes, and a wide array of species and habitat over long time frames.

Habitat of Importance represents land shown to have potential regional or statewide importance based on the CAPS model developed by UMass researchers. CAPS stands for Conservation Assessment and Prioritization System and seeks to understand ecological integrity in the Commonwealth.

For more information regarding special and important habitat or landscape areas in Lenox, please see the two BioMap2 report in the appendix.

4F: Scenic Resources and Unique Environments

Lenox's landscape is characterized by a unique blend of natural and cultural features which are shown in Map 4F.1 and 4.F.2 and listed in the table below. Residents and visitors enjoy the scenic mountains, pastoral views, rural setting, and historical and cultural assets of their town. In a 2013 community survey, residents indicated that these views were important to protect.

The town worked to pass the Scenic Mountain Act in 2008, which protects areas in Lenox that are over 1400 feet in elevation and greater than 15 percent slope. These areas are mostly found along the eastern and western borders of town and are mostly already permanently protected through other means.

The Scenic Mountain Act does not prevent development from occurring on these lands, but it controls the form of that development so it will not destroy these scenic vistas.

The Upper Housatonic River Area of Critical Environmental Concern encompasses a thirteen-mile corridor of the Housatonic River from southern Pittsfield to northern Lee (Map 4C.3). Seven Priority Natural Communities exist in this location and support a diversity of plant and wildlife species (Map 4E.1)

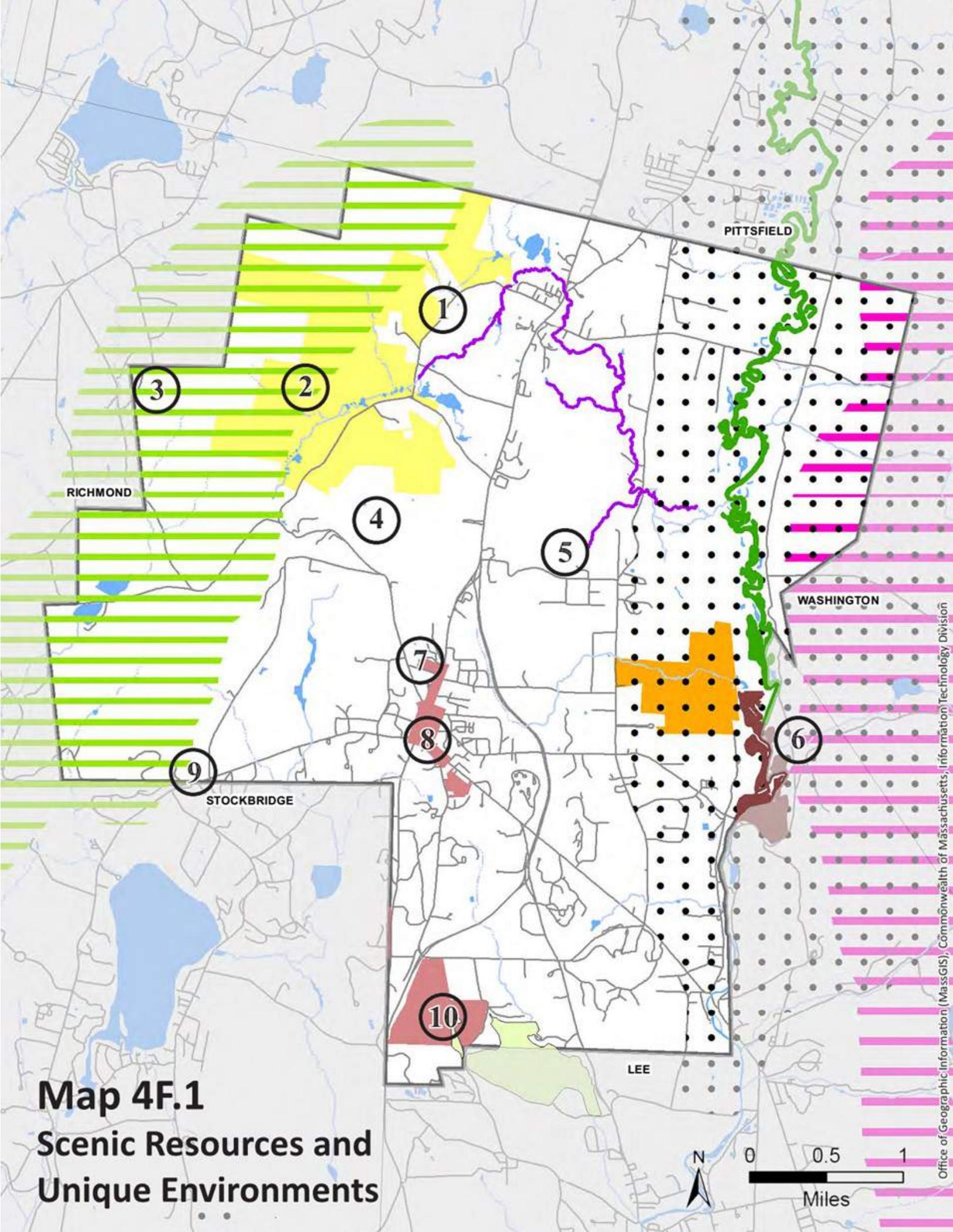
The watershed of Lenox Mountain Brook is designated by the state as an Outstanding Resource Water. This important watershed drains into the Root Reservoirs and provides the drinking water for the town.

Bedrock in Lenox varies by area. In the Lenox-Stockbridge range and October Mountain, the bedrock consists primarily of quartzite, and gneiss schist. In the valley, the bedrock consists of marble. Lenox's calcium-rich bedrock is rare in New England and supports many plant and animal species adapted specifically to this environment (Maps 4A.1). The geology has resulted in four landforms or landscape features notable for their scenic value or unique environments:

- ◆ **Tory Cave:** located on October Mountain, the cave is passed by Roaring Brook. A natural cave, it collapsed in 1900, so that a person can walk only several yards into it. A large pool with a small waterfall in front of the cave.
- ◆ **Pinnacle Cave:** A cave off East Dugway Road.
- ◆ **The Cobble:** Mahanna Cobble is on the northern summit of Lenox Mountain. It takes its name from its formation of exposed bedrock high on the ridge. It is owned by the Berkshire Natural Resource Council, and also has a stone bench perfect for picnicking, with views south to Monument Mountain. The Cobble has grasses and low-lying plants in an open, sunny oak glade.
- ◆ **Balance Rock:** a distinctive rock feature balanced on two other rocks within Kennedy Park.

Scenic Features and Unique Environments

Name	Type of Feature	Public Access	Ownership Status	Protection Status
Lenox-Stockbridge Mountain Range	Natural	Partial	Public, Private, Non-Profit	Partial
Post Farm	Natural	Yes	Public	Permanent
Pleasant Valley Wildlife Sanctuary	Natural	Trail system open to public; access to other areas is prohibited	Non-profit	Permanent
Laurel Lake	Natural	Yes	Public	Partial
Woods Pond	Natural	Yes	Public	Permanent
Housatonic River (and floodplain)	Natural	Yes	Public, Private, Non-Profit	Partial
Yokun Brook	Natural	Partial	Public, Private, Non-Profit	Partial
The Ravine Waterfall	Natural	Partial	Public	Permanent
Stoneover Farm Waterfall	Natural	No	Private	Partial
Blake Estate Waterfall	Natural	No	Private	Partial
Tory Cave	Geologic	Yes	Public	Permanent
Pinnacle Caves	Geologic	Partial	Non-profit	Permanent
The Cobble	Geologic	Only under supervision of Pleasant Valley Wildlife Sanctuary	Non-profit	Permanent
Balance Rock	Geologic	Yes	Public	Permanent
Tanglewood	Historic and Cultural	Yes	Non-profit	None
Great Estates	Historic and Cultural	Partial	Private, Non-Profit	Partial
The Mount	Historic and Cultural	Yes	Non-profit	Permanent
Church on the Hill	Historic and Cultural	Yes	Non-profit	Permanent
Views of Parson's Marsh	Scenic Vista	Partial	Public, Private, Non-Profit	Partial
Views of Stockbridge Bowl	Scenic Vista	Partial	Public, Private, Non-Profit	Partial
Views of Lenox-Stockbridge Mountain Range	Scenic Vista	Partial	Public, Private, Non-Profit	Partial
Views of October Mountain	Scenic Vista	Partial	Public, Private, Non-Profit	Partial

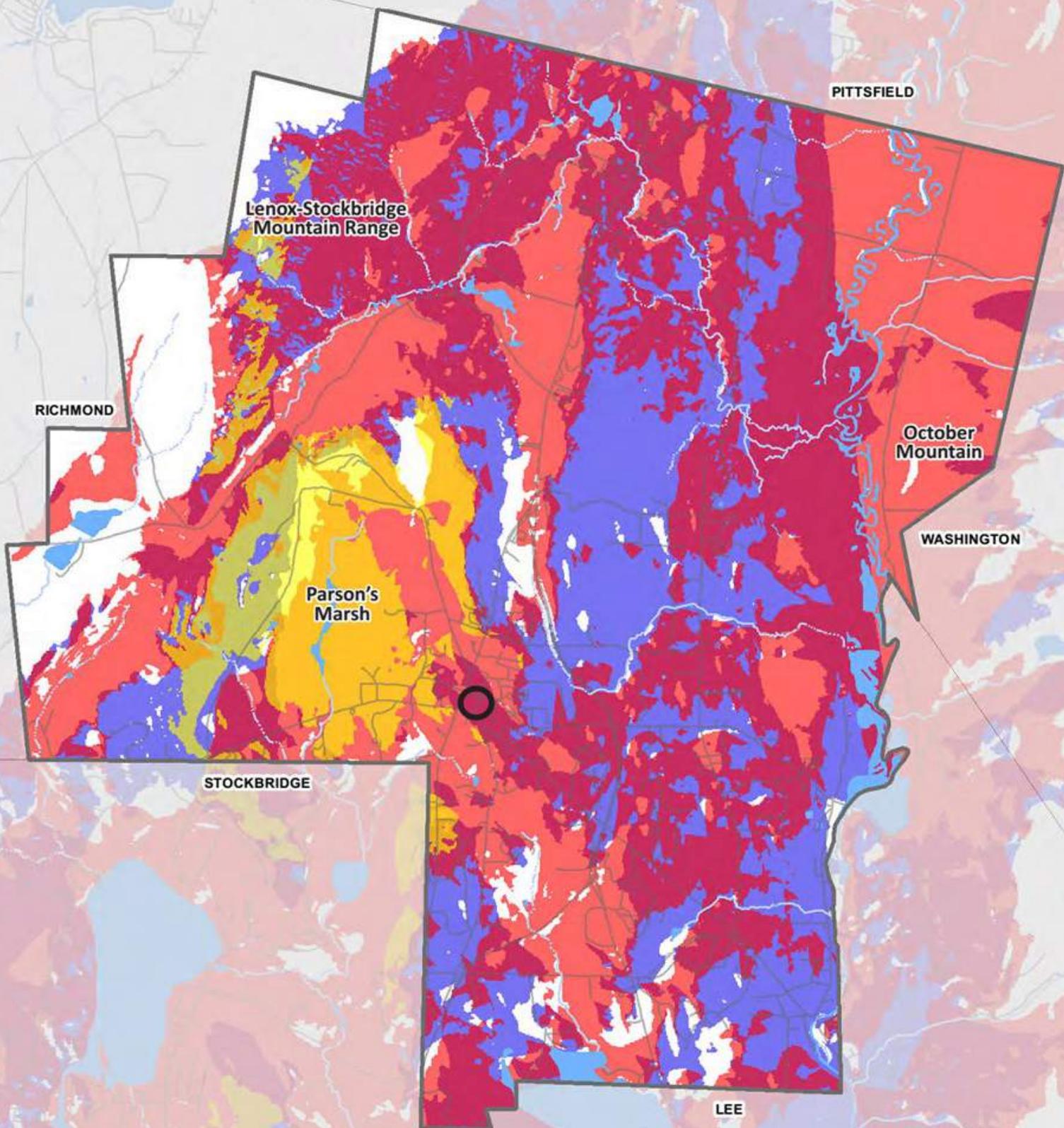


Map 4F.1
Scenic Resources and
Unique Environments

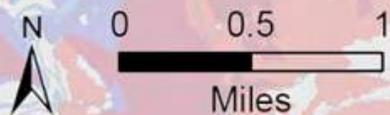
Scenic Resources and Unique Environments

LEGEND

- | | |
|--|---|
| <p>① Falls on Overbrook Trail: 15 foot cascade over mossy ledge, located in Pleasant Valley.</p> | <p> Pleasant Valley Wildlife Sanctuary: This 1200-acre area has an education center, barn studio, ponds and a limited-access trail system.</p> |
| <p>② Tory Cave: This natural cave in October Mountain State Forest, collapsed in 1900; today only the entrance is accessible.</p> | <p> Yokun Brook: This extensive brook and wetland area is six miles long, crosses the north part of town, and flowing into the Housatonic.</p> |
| <p>③ The Cobble: 1,500' peak in the Lenox-Stockbridge Range.</p> | <p> Housatonic River: Lenox's major surface water feature flows from north to south.</p> |
| <p>④ Balance Rock: Large rock in Kennedy Park deposited by glacial movement.</p> | <p> Post Farm: Passive recreation destination and adjacent woodlands.</p> |
| <p>⑤ Pinnacle Cave: Off East Dugway Road.</p> | <p> Woods Pond: Recreationally and ecologically valuable, this dammed portion of the Housatonic is used by canoeists and nature observers.</p> |
| <p>⑥ Schermerhorn Gorge: 30 foot horsetail cascades near Woods Pond.</p> | <p> Historic Properties: Include the historic district and The Mount</p> |
| <p>⑦ Church on the Hill: 1805 Federal Style church. On National Historic Register.</p> | <p> Laurel Lake: Located in both Lenox and Lee. Two adjacent publicly owned properties: Edith Wharton Park and the Town Beach.</p> |
| <p>⑧ Historic District: Designated downtown area preserving historical legacy, many buildings date from late 1700s-1800s.</p> | <p> Lenox-Stockbridge Mountain Range: Distinctive mountain range, highly visible. Peak is Yokun Seat, at 2,100'.</p> |
| <p>⑨ Tanglewood: Summer home of the Boston Symphony Orchestra.</p> | <p> October Mountain: Massachusetts' largest state forest, connects Lenox to the Appalachian Trail.</p> |
| <p>⑩ The Mount: Former home of renowned author Edith Wharton. Site currently hosts a museum and formal gardens.</p> | <p> ACEC: The Housatonic River and surrounding areas receive special recognition because of the quality, uniqueness and significance.</p> |



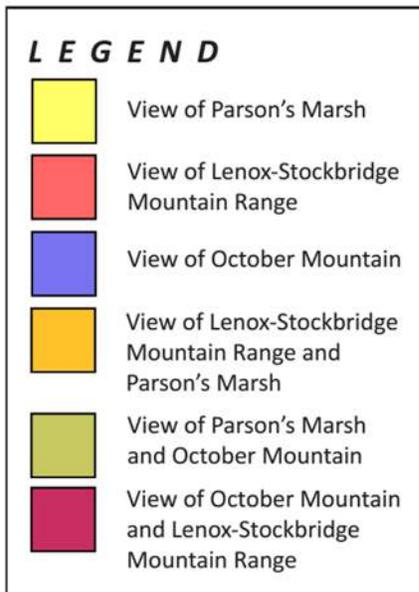
Map 4F.2
Viewshed Analysis



Viewshed Analysis

The viewshed analysis shows areas in town with views of town importance. This map depicts what is visible from different spots in town. For example, someone observing vistas from downtown (see circle on map) would be able to see both the Lenox-Stockbridge Mountain Range and October Mountain.

Mountains to the east and west of the town are a constant reminder of Lenox's place in the Berkshires. Among the views are the Lenox-Stockbridge Mountain range, the October Mountain Range, views of Parson's Marsh, and views of the Stockbridge Bowl in Stockbridge. This viewshed analysis shows that most of the town has views of Lenox's natural surroundings. With regard to the mountain ranges and Parson's Marsh, areas with the most visual variety lie within the west-central part of town, particularly the uplands west of Parson's Marsh, which are currently unprotected. From this area one could potentially view both mountain ranges, the marsh, and the Stockbridge Bowl. Only a few areas do not have vistas. This includes the currently wooded area near the 7/20 and 7A intersection. Because citizens value the town's natural beauty, it is important to consider future development's impact on these vistas.



4G. Environmental Challenges

Housatonic River Pollution

Water quality in Lenox is affected by activities upstream, particularly by industry in the city of Pittsfield. Pittsfield has a dense concentration of sites where oil and/or hazardous wastes have been released. The worst sites, indicated by the red diamonds on Map 4G.1, flank the east branch of the Housatonic River. These are the locations of manufacturing buildings formerly owned by General Electric.

From 1932 through 1977, these facilities released waste oil, PCBs, dioxins, furans, volatile organic compounds, and inorganic compounds such as metals into the Housatonic River (Mass.gov). In the 1940s, the river was straightened in Pittsfield for flood control purposes and eleven former oxbows were filled with material containing PCBs and other hazardous substances (EPA).

PCBs are a group of manufactured chemicals that do not break down easily in the environment. They accumulate in the fatty tissues of fish and animals (including humans) who ingest them and are slowly released into the bloodstream. PCBs can accumulate to a high level, especially if a predator consumes large numbers of contaminated prey (EPA). In humans, PCBs affect the neurological development of children, are harmful to the reproductive and immune systems, act as an endocrine disruptor, and may cause skin and liver cancer (EPA)

The Environmental Protection Agency (EPA) has designated the Housatonic River as a Superfund cleanup site, an abandoned hazardous waste site. An advisory against fish consumption was issued by the Massachusetts Department of Public Health in 1982. This advisory now includes frogs, turtles, wood ducks, and mallards. Recreational activities on the river such as swimming and boating have decreased dramatically due to the perceived risks of contact with the river (Mass EPA).

Woods Pond and areas upstream have a dramatically higher concentration of PCBs than the rest of the river (EPA Rest of River). Eutrophication and water quality are also problems in Woods Pond. These may be related to sewage discharge upstream, as fecal coliform has been found in the river (DEP). North of Woods Pond, PCB soil contamination occurs within the limit of the ten-year floodplain (EPA Rest of River).

The EPA is working with General Electric to clean up areas contaminated with PCBs. Cleanup is complete for the upper two miles of river in Pittsfield and is ongoing in non-river areas. Initial proposals have been developed for the section of the Housatonic that runs through Lenox. These include excavating and capping the bottom of Woods Pond to limit mixing of contaminated sediments and remediating erodible riverbanks (EPA Rest of River Report).

The town should continue to attend public meetings and coordinate with the EPA to come up with the solution that is best for Lenox.

Aquifers

The town's only aquifer lies underneath and south of Woods Pond. The town has not considered it for a water source due to concerns about contamination (Vincent).

According to a study done by the US Geological Survey in 1985, an industrial water-supply well has been causing groundwater recharge of the aquifer through the PCB-contaminated sediments at the bottom of Woods Pond since 1956. In one location, the upper forty feet of the aquifer contained water that had once been in Woods Pond. No PCBs were found in any groundwater or aquifer material (Gay, Frimpter).

Additionally, PCBs were found on the top layer of sediment of Woods Pond, not the bottom, which further indicated that PCBs were not passing through the aquifer material. The aquifer may still be polluted with other substances.

The town should update the 1985 study and further investigate the potential of this aquifer as a drinking water source.

Lake Pollution and Invasive Aquatics

Laurel Lake is fed by streams in Lenox and from the neighboring towns of Lee and Stockbridge. Activities in all three towns affect water conditions in the lake. Although Laurel Lake has had less development along its shores than many lakes in Berkshire County, it has problems with high phosphorus levels, low levels of dissolved oxygen, non-native aquatic plants including Eurasian water milfoil, and non-native zebra mussels (Mass 2010 Integrated List of Waters).

The elevated phosphorus levels, zebra mussels, and excess algal growth found in the Housatonic River below the lake outlet may be due to problems arising within the lake.

A regional watershed management plan should be developed in order to improve water quality.

Zebra mussels and Eurasian water milfoil should be monitored and control techniques should be researched.

The town should continue educating boaters about how they can prevent the spread of invasive species.

Canoeists on the Housatonic. (Photo: Kevin Sprague)



Flooding and Erosion

Almost all of the Housatonic River floodplain is undeveloped. This limits the amount of flood damage that occurs in the town. During extreme floods, some localized areas go underwater but in general flooding is not an issue.

There has been some trail erosion in Kennedy Park due to heavy use and lack of drainage structures. Route 7 was widened north of Lenox Village and the drainage outfalls are now very steep and are eroding into Kennedy Park. After tropical storm

Irene in 2011 there was significant erosion in Kennedy Park and on dirt roads throughout town (Flanagan).

Terrestrial Invasives and Forestry Issues

Hardy kiwi vine, *Actinidia arguta*, is spreading through a wooded northern section of Kennedy Park near the parking area on West Dugway Road. While this species is not state-listed as an invasive species, it is proving invasive in Lenox. Other terrestrial invasive species grow in Lenox but they are not currently such a large concern.

The town should continue the trial program with Mass Audubon and the Forest Service to monitor and reduce the spread of hardy kiwi and work to have the species listed as an invasive plant in Berkshire County.

Other forestry issues include tree pests and pathogens such as hemlock wooly adelgid, beech bark disease, and emerald ash borer.

Landfills and Hazardous Materials Sites

There are two landfills in Lenox. The Lenox landfill was closed in 1998 and a wood waste dump on Plunkett Street has been inactive since 1990. There are two closed landfills across the river in Lee. One was a sludge landfill for the former Schweitzer-Mauduit paper mill and the other was the Lee landfill. None of these landfills are lined but all have been capped except the inactive wood waste dump.

Household trash, recycling, and construction debris is currently processed at the Lenox Valley Waste Transfer Facility on Willow Creek Road.

Within Lenox there are two oil and/or hazardous materials sites, according to the DEP's Bureau of Waste Site Cleanup. One site is designated because there was a spill of fuel oil and required information was not submitted to the DEP on time. Another was designated because lead was released into the environment. Both of these sites are on the east side of East Street bordering the floodplain of the Housatonic River.

There are four areas in Lenox with Activity and Use Restrictions (AULs). These are areas where contamination remains at a site after cleanup and some activities and uses are restricted. One of these is located at the former Schweitzer-Mauduit Centennial paper mill site and is due to releases of chromium, arsenic, cadmium, and lead. Another is due to a gasoline tank at the former Bible Speaks organization.

Development Impacts

New development or the redevelopment of historic sites in Lenox can have impacts on the community's natural and recreational resources. Removal of vegetation on slopes can impact water resources below, resulting sedimentation which can impair habitat quality and also decrease the attractiveness of the resource for recreation such as boating, fishing or swimming. Stormwater run-off can be mitigated with landscaping and permeable materials.

The town should consider adopting Low Impact Development (LID) standards, particularly in sensitive areas. The town should also promote the use of green infrastructure to manage storm water in all zoning districts.

Environmental Equity Issues

The 2010 Census identified an environmental justice (EJ) population in the center of Lenox (see Map 3C). This population lives within easy walking distance to parks including Lilac Park, Ore Bed Park, and the Community Center. Kennedy Park and Schermerhorn Park are approximately a mile away and Post Farm is approximately two miles away.

The EJ census block is not close to landfills or polluted water and is not at risk for flooding. There is one hazardous waste site with an AUL restriction on the border of the EJ block and another a short distance outside of it.

LEGEND

Oil and/or Hazardous Materials

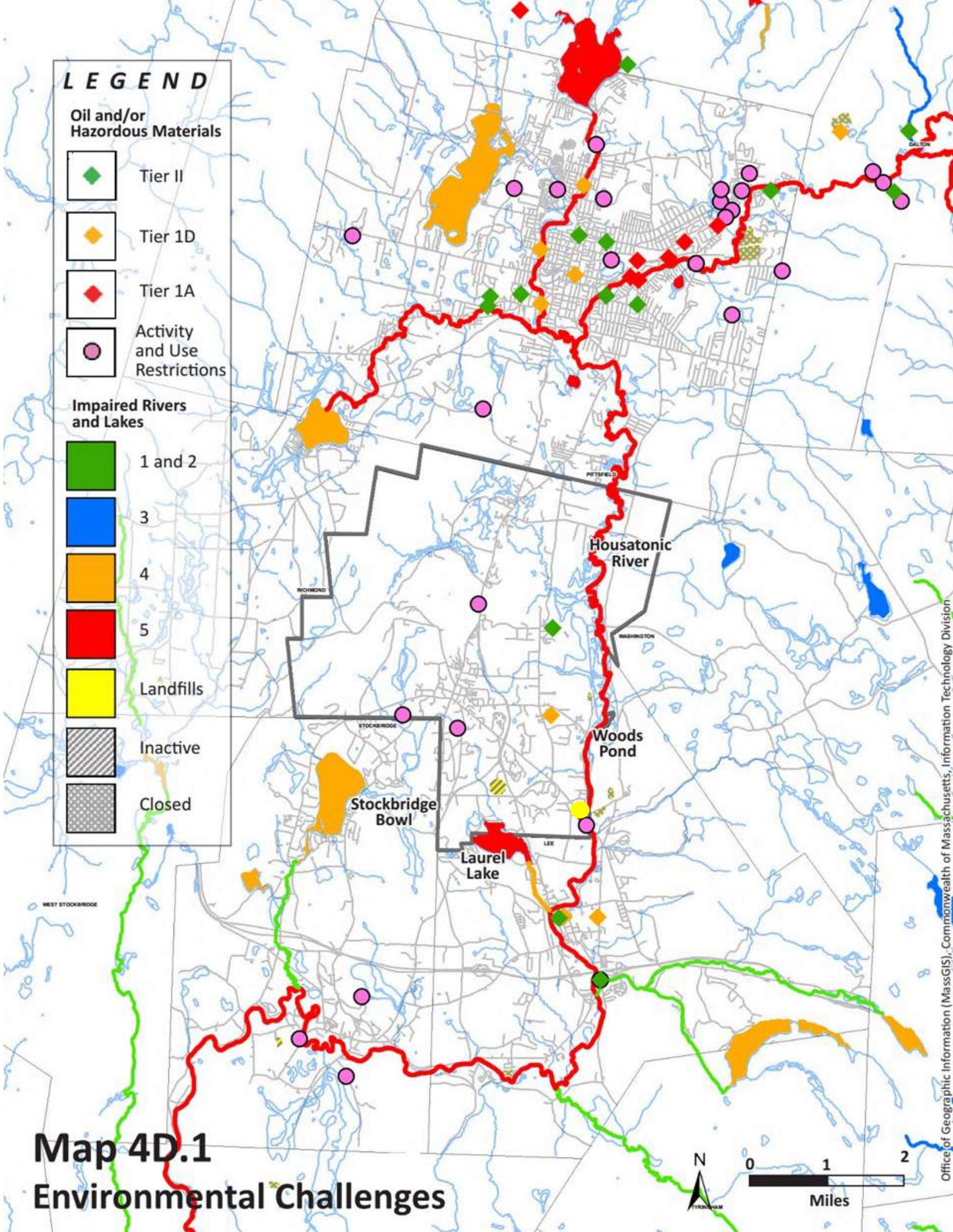
-  Tier II
-  Tier 1D
-  Tier 1A
-  Activity and Use Restrictions

Impaired Rivers and Lakes

-  1 and 2
-  3
-  4
-  5

Landfills

-  Landfills
-  Inactive
-  Closed



Map 4D.1
Environmental Challenges

Environmental Challenges

Lenox is downstream from the city of Pittsfield, which is home to seventeen oil and/or hazardous materials sites, sixteen activity and use restricted sites, and a landfill on the banks of the Housatonic River. These sites have released hazardous materials into the Housatonic River, which are carried south through Lenox. When the river floods, hazardous materials are deposited throughout the floodplain, with a greater concentration of hazardous materials in areas that flood more often.

Oil and/or Hazardous Materials Sites

This layer shows the approximate location of oil and/or hazardous material sites where permanent cleanup is not achieved within a year of being reported.

- **Tier II:** Least contaminated, least complex, and least potential for exposure. No permit required.
- **Tier ID:** A site where required information is not submitted to the Mass DEP by a deadline
- **Tier IA:** Considered the most complicated, complex, and hazardous sites. Require direct Mass DEP oversight. Sites that pose an imminent hazard or affect public water supplies are automatically classified as Tier IA.

Activity and Use Restrictions (AUL)

AUL areas are oil and/or hazardous materials sites where contamination remains at a site after cleanup. In the sites shown, contamination has not been reduced to background levels.

In general, oil and/or hazardous materials sites are clustered in more-developed areas, which in the Berkshires are often near rivers where industries and town centers are located.

The two oil and/or hazardous materials sites in Lenox lie just uphill from the Housatonic River floodplain and may have negative effects on the river and wetlands. The AUL sites lie near the center of town and along a major road.

Impaired Rivers and Lakes

Surface waters in Massachusetts are assessed as to whether they have the capacity to support aquatic life, fish consumption, drinking water, shellfish harvesting, primary contact recreation (swimming, etc.), secondary contact recreation (boating, etc.) and aesthetics.

Rivers and lakes are then categorized as 1-5 based on their ability to support these uses:

- **1 and 2:** Unimpaired for all uses or unimpaired for some uses and not assessed for others
- **3:** Not enough information to make assessments for any uses
- **4:** Impaired for one or more uses by low flow, habitat alterations, or non-native species
- **5:** Impaired by a pollutant such as nutrients, metals, pesticides, solids, and pathogens

Activities in the towns of Lenox and Lee contribute to the pollution found in Laurel Lake, which in turn contributes to the pollution found downstream in the Housatonic.

The most impaired rivers and lakes are usually associated with oil and/or hazardous materials sites. Laurel Lake, which is polluted with phosphorus, is an exception because the phosphorus has not come from a hazardous materials site.

Rivers and lakes that are categorized as level 4 are not necessarily located near hazardous waste sites or developed areas.

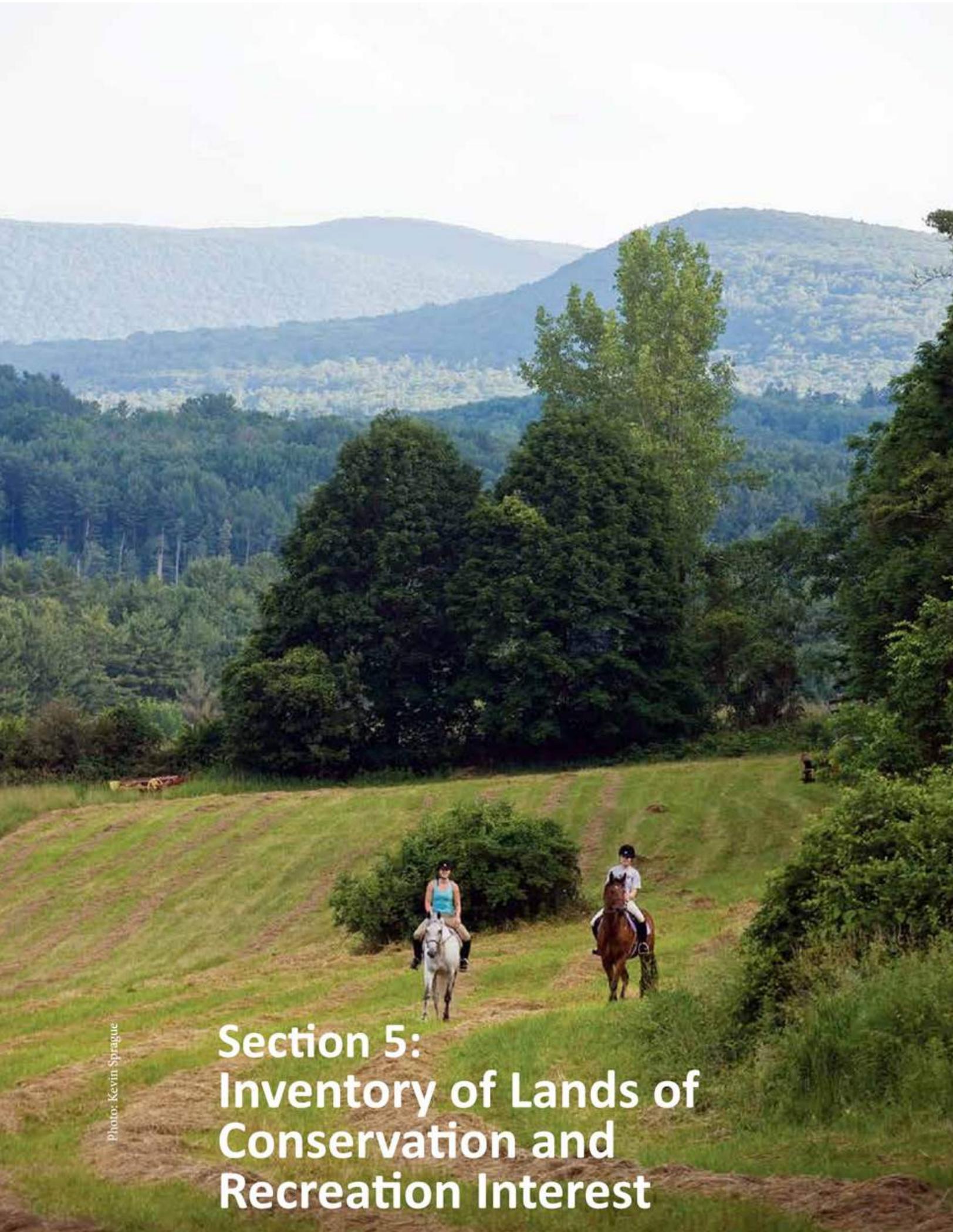


Photo: Kevin Sprague

Section 5: Inventory of Lands of Conservation and Recreation Interest

Open Space and Protected Lands

Open space consists of a wide variety of land including conservation land, forested land, recreation land, agricultural land, undeveloped land with conservation or recreation interest, such as vacant lots and brownfields, and corridor parks and amenities such as small parks and green buffers along roadways. As described in previous chapters, abundant passive and active recreational opportunities, rare plant and animal species, and historic, cultural, and scenic spaces exist in Lenox. Without protecting these lands, it is possible that some day they will no longer exist. Open space and recreational lands have different forms and levels of protection in Lenox. Land has been protected by private landowners and by public entities, including the Town of Lenox and the Commonwealth of Massachusetts.

Article 97 from the Massachusetts Constitution states, "The people shall have the right to clean air and water, freedom from excessive and unnecessary noise, and the natural, scenic, historic, and esthetic qualities of their environment; and the protection of the people in their right to the conservation, development and utilization of the agricultural, mineral, forest, water, air and other natural resources is hereby declared to be a public purpose." This article provides for the protection of land for natural resources. Under Article 97 a city or town can permanently designate conservation land. If protected, the land cannot be converted to other purposes without a unanimous vote of the Conservation Commission, the Park Commission and several other actions to be taken by the town and state. Private property owners can also protect their land permanently by putting a conservation restriction on it or establish temporary protection under tax abatement programs such as Chapter 61.

5A. Private Parcels

The 2009 Lenox OSRP's inventory of lands of conservation and recreation interest was updated for this report. Parcels were checked with the help of the Lenox Assessors Office, land trusts, conservation organizations, and other community members. This inventory should be updated annually to maintain the accuracy of the information. A matrix containing the inventory is provided at the end of this section.

Lands Protected under Chapter 61, 61A, and 61B

Private landowners can manage their properties as open space in exchange for reduced property taxes under Chapter 61 (forested lands), 61A (agricultural and horticultural lands), or 61B (recreation lands). This form of protection is temporary, as landowners can choose to take their property out of Chapter 61, 61A, or 61B at any time. If a landowner decides to sell his/her Chapter 61 property, the town has the right of first refusal. Public access to these properties requires permission. Approximately 1,400 acres of land are managed under Chapter 61, 61A, or 61B.

Privately Owned Recreation and Open Space

More than 2,000 acres of privately owned land in Lenox are used for recreation, and access is by fee only. These properties include the Cranwell and Eastover resorts, the Tanglewood Institute, Edith Wharton Estate and several smaller parcels. Some of the recreational activities offered are golf, indoor swimming, tennis, and indoor games.

This document identifies protection priorities for 727 acres of privately owned land (see Section 7B). These are based on the community's interests, the land's visual appeal, and/or the importance of the land for rare plant and animal habitat.

Private lands can be protected in perpetuity through deed restrictions or conservation easements. These can include a Conservation Restriction, Agricultural Preservation Restriction, Historic Restriction, or Wetlands Restriction. Lands protected in perpetuity are covered under Article 97 of the Articles of Amendment to the State Constitution. Some easements only run for a period of thirty years and those lands are therefore not permanently protected. As of January 2015, there are no lands under an Agricultural Preservation Restriction within Lenox. In terms of Conservation Restrictions, nine were identified in a search of Assessors records.

5B. Public and Nonprofit Parcels

State-Owned Protected Lands

Over 1,500 acres of state land in town are permanently protected as part of the October Mountain State Forest and Housatonic Valley Wildlife Management Area. The state forest, which is managed by the Department of Environmental Management, offers a variety of recreational activities including hunting, camping, fishing, snowmobiling, and cross-country skiing. Areas owned by the State Division of Fisheries and Wildlife are permanently protected for wildlife habitat and flood protection.

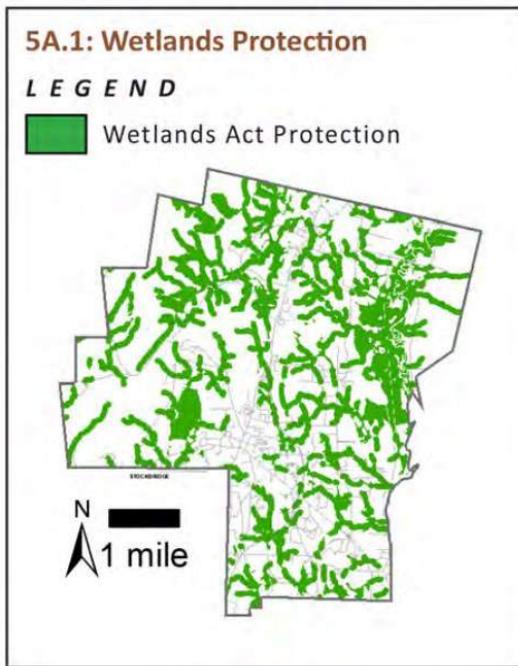
Town-Owned Protected Lands

In order for town-owned lands to be permanently protected, the town must designate them as conservation land. Town-owned lands under some form of protection include properties under the jurisdiction of the Lenox Conservation Commission and town watershed lands. These lands include parcels protected for conservation purposes as well as for recreation opportunities such as hiking trails at Kennedy Park and tennis courts at the Community Center. Approximately 1,800 acres of town lands are permanently protected.

Non-Profit Protected Lands

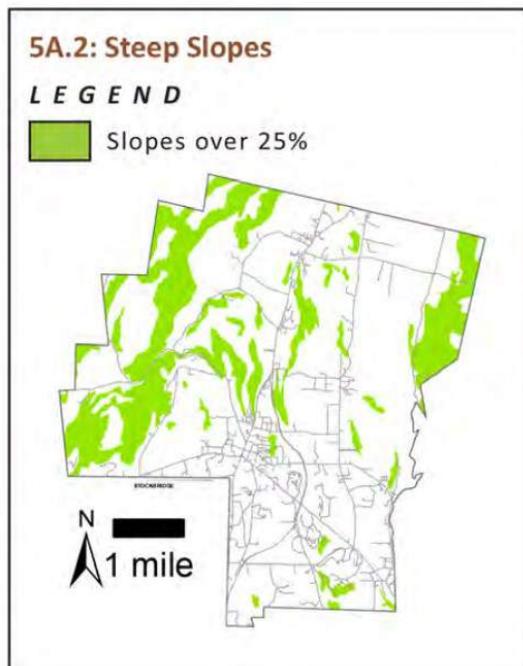
Some privately owned lands in Lenox are permanently protected with conservation restrictions, which are legal agreements that allow individuals or families to keep ownership of their land while placing permanent limitations on development of that land. Lands permanently protected by non-profits account for approximately 1,800 acres in Lenox and contribute significantly to open space and habitat preservation in town. The Pleasant Valley Wildlife Sanctuary, under the auspices of the Massachusetts Audubon Society, encompasses nearly 1,200 acres of woodland and wetland. The Berkshire Natural Resources Commission also owns significant holdings in Lenox of approximately 435 acres.

5C. Other Types of Land Protection



Wetlands Protection Act

The Massachusetts Wetlands Protection Act protects wetlands and 100-foot buffer zones, 100-year floodplains, and 200-foot River Resource Areas. These designations restrict most development, although agriculture is allowed in river resource areas. While protection is permanent, portions of areas protected by the Act can be altered if no other option is available.



Slopes Over 25 Percent

Slopes over 25 percent are not technically protected areas but they do constrain development and construction activities. Development on slopes over 15 percent in Lenox is regulated by the Scenic Mountain Act, which does not prevent development but establishes specific design and location requirements.

Private Recreation Lands

Map and Lot#	Name	Owner/ Manager	Private/ Public	Zoning	Protection Status	Acreage
M43-L127	St. Ann's Cemetery	St. Ann's Church	Private (Non-Profit)	R15	Limited	10
M17-L56	The Pinnacle	Berkshire Natural Resources Council	Private (Non-Profit)	R1A	Permanent	4
M4-L29	Hallowell Property	Berkshire Natural Resources Council	Private (Non-Profit)	R1A	Permanent	65.4
M16-L17	Nash	Berkshire Natural Resources Council	Private (Non-Profit)	R1A	Permanent	1.3
M25-L11	Osceola Notch	Berkshire Natural Resources Council	Private (Non-Profit)	R3A	Permanent	15.31
M10-L1	Berkshire County Land Trust	Berkshire Natural Resources Council	Private (Non-Profit)	R3A	Permanent	8.2
M10-L3	Bald Head	Berkshire Natural Resources Council	Private (Non-Profit)	R3A	Permanent	100
M10-L2	Kripalu	Berkshire Natural Resources Council	Private (Non-Profit)	R3A	Permanent	228
M31-L1	Mahanna Cobble	Berkshire Natural Resources Council	Private (Non-Profit)	R3A	Permanent	193.3
M20-L8	Williams	Berkshire Natural Resources Council	Private (Non-Profit)	R3A	Permanent	32
M5-L2	Shadowbrook Frontage	Berkshire Natural Resources Council	Private (Non-Profit)	R3A	Permanent	10
M5-L3	Stokes Family	Berkshire Natural Resources Council	Private (Non-Profit)	R3A	Permanent	6.2
M27-L7	Pleasant Valley	Massachusetts Audubon Society	Private (Non-Profit)	R1A	Permanent	6.2
M22-L10	Pleasant Valley	Massachusetts Audubon Society	Private (Non-Profit)	R1A	Permanent	75
M21-L3	Pleasant Valley	Massachusetts Audubon Society	Private (Non-Profit)	R1A	Permanent	5.2
M21-L5	Pleasant Valley	Massachusetts Audubon Society	Private (Non-Profit)	R1A	Permanent	42.4
M32-L7	Pleasant Valley	Massachusetts Audubon Society	Private (Non-Profit)	C1A	Permanent	28.1
M32-L4	Pleasant Valley	Massachusetts Audubon Society	Private (Non-Profit)	R1A	Permanent	88
M27-L24	Pleasant Valley	Massachusetts Audubon Society	Private (Non-Profit)	R3A	Permanent	340.4
M21-L1	Pleasant Valley	Massachusetts Audubon Society	Private (Non-Profit)	R3A	Permanent	469
M21-L2	Pleasant Valley	Massachusetts Audubon Society	Private (Non-Profit)	R1A	Permanent	19.9
M21-L4	Pleasant Valley	Massachusetts Audubon Society	Private (Non-Profit)	R1A	Permanent	48.8
M11-L1	Summer Housing	Boston University	Private (Non-Profit)	R1A	None	56
M5-L6	Tanglewood	Boston Symphony Orchestra	Private (Non-Profit)	R3A	None	80
M5-L9	Tanglewood	Boston Symphony Orchestra	Private (Non-Profit)	R1A	None	8.54
M5-L5	Tanglewood	Boston Symphony Orchestra	Private (Non-Profit)	R3A	None	90
M6-L13	Tanglewood	Boston Symphony Orchestra	Private (Non-Profit)	R1A	None	11.57
M6-L15	Tanglewood	Boston Symphony Orchestra	Private (Non-Profit)	R1A	None	8
M6-L21	Tanglewood	Boston Symphony Orchestra	Private (Non-Profit)	R1A	None	10.22
M7-L22	Shakespeare and Company	Shakespeare and Company	Private (Non-Profit)	R1A	None	32.7
M1-L5	Edith Wharton Site	The Mount	Private (Non-Profit)	R1A	Limited	48
M7-L43	Bellefontaine	CR Resorts, LLC	Private	R1A	Limited	97.6
M12-L4	Belvoir Terrace	Belvoir Terrace Inc.	Private	R1A	Limited	25.6
M4-L75	Blantyre	Fitzpatrick Holding LLC	Private	R1A	Limited	87.5
M3-L55	Cranwell (Wyndburst) (Coldbrooke)	Berkshire Cranwell Limited	Private	R1A	Limited	18.74
M3-L55-1	Cranwell (Wyndburst) (Coldbrooke)	Berkshire Cranwell Limited	Private	R1A	Limited	52.65
M12-L2	Ethylwynde	Ethylwynde LLC	Private	R1A	Limited	31.2
M21-L4	Massachusetts Audubon Society	Berkshire Land Trust	Private	R1A	Permanent	48
M3-L54	Cranwell Nominee Trust	Town of Lenox	Private	R1A	Permanent	29.9
M27-L18	Ed and Judy Merritt	Massachusetts Audubon Society	Private	R1A	Permanent	1.41
M13-L27	Jesse and Patricia Spector	Lenox Land Trust	Private	R1A	Permanent	29
M22-L42	Lenox Gateway	Lenox Land Trust	Private	C3A	Permanent	9.36

Chapter 61 Lands

Map and Lot#	Name	Owner	Protection Category	Private/Public	Zoning	Protection Status	Acreage
M1-L10	Celli Land	Celli, Richard	61A	Private	R1A	Temporary	11.3
M3-L84	Celli Land	Celli, Elizabeth	61A	Private	R1A	Temporary	8.2
M8-L95	Roche Land	Roche, Ellen	61A	Private	R1A	Temporary	7.8
M9-L97	Roche Land	Roche, James	61A	Private	R1A	Temporary	13
M12-L3	Lenox Club (Wayside)	Lenox Club	61	Private	R1A	Temporary	87.52
M13-L27	Spector Land	Spector, Jesse	61	Private	R1A	Temporary	25
M16-26	Sprague Land	Sprague	61A	Private	R1A	Temporary	136.9
M18-L12	Eastover Resort	Eastover	61,61A	Private	R1A	Temporary	67.27
M18-L13	Eastover Resort	Eastover	61A	Private	R1A	Temporary	6
M18-L66	Sweeney Land	Sweeney, Richard	61A	Private	R1A	Temporary	14.01
M18-78	October Mountain Estate	October Mountain Estate	61B	Private	R1A	Temporary	0.5
M18-79	October Mountain Estate	October Mountain Estate	61B	Private	R1A	Temporary	7.5
M18-L80	Eastover	Eastover, Jaynes	61, 61A, 61B	Private	R1A	Temporary	39.9
M18-L82	October Mountain Estate	October Mountain Estate	61B	Private	R1A	Temporary	11.7
M18-L83	October Mountain Estate	October Mountain Estate	61A	Private	R1A	Temporary	1.3
M18-L84	October Mountain Estate	October Mountain Estate	61	Private	R1A	Temporary	68
M18-L85	October Mountain Estate	October Mountain Estate	61B	Private	R1A	Temporary	212.34
M18-L86	October Mountain Estate	October Mountain Estate	61,61A	Private	R1A	Temporary	72.5
M18-L75	Winsor Land	Winsor, Dorothy	61A	Private	R1A	Temporary	19.3
M23-L16	Winsor Land	Winsor, Dorothy	61	Private	R1A	Temporary	50
M23-L29	Existential Nominee Trust	Existential Nominee Trust	61	Private	R1A	Temporary	56
M23-L37	October Mountain Estate	October Mountain Estate	61B	Private	R1A	Temporary	142.41
M13-47	Winsor Land	Winsor, Dorothy	61	Private	R1A	Temporary	28.6
M28-L30	Cassavant Land	Cassavant, Peter	61	Private	R1A	Temporary	12.5
M28-L41	Waqqaman Land	Waqqaman, Mackenzie	61	Private	R1A	Temporary	11
M32-L3	Bosworth Land	Bosworth, Thomas	61B	Private	R3A	Temporary	75
M33-L25	Truran Land	Truran, Anna	61B	Private	R1A	Temporary	2.95
M33-L35	Rennie Land	Rennie, Philip	61A	Private	R1A	Temporary	7.76
M33-L40	Hart Land	Hart, Kenneth	61A	Private	R1A	Temporary	87.5
M33-L41	Hart Land	Hart, Kenneth	61A	Private	R1A	Temporary	27
M34-L2	General Electric	General Electric Company	61A	Private	R1A	Temporary	2.6
M36-L1	Scace Land	Scace, Wayne	61	Private	R3A	Temporary	9.545
M39-L31	Vincent Land	Liston, Charles	61B	Private	R1A	Temporary	20
M50-L56	Truran Land	Truran, Anna	61B	Private	R1A	Temporary	21.33
M13-L1	October Mountain Estate	October Mountain Estate	61,61A	Private	R1A	Temporary	32.48
M16-L62	Eastover	Eastover	61B	Private	R1A	Temporary	7.68
M34-L3	Butler Land	Butler, Alice	61A	Private	R1A	Temporary	4.2

Conservation Restrictions						
Map and Lot #	Name	Owner	Protection Category	Zoning	Protection Status	Acreage
M3-L55	Cranwell	Berkshire-Cranwell	Open Space Restriction	R-1A	n/a	18.74
M7-L42	Pinecroft	Pinecroft Homeowners Association	Designated Conservation Area	R-1A	Perpetuity	22.59
M11-L10	Parson's Marsh	Town of Lenox	(Conservation Land, Cons Comm)	R-1A	Perpetuity	84
M13-L27	Hubbard Street	Spector, Jesse and Patricia	CR (Lenox Land Trust)	R1A	Perpetuity	29
M20-L7	West Mountain Road	Williams, Henry and Joan	Conservation Easement (US Forest Service)	R3A	Perpetuity	14.77
M20-L8	West Mountain Road	BNRC	CR (BNRC)	R3A	Perpetuity	32.06
M27-L18	Lime Kiln Road	Merritt, Edward	CR	R-1A	n/a	8.84
M45-L15	East Street	Adams, Gregory and Michelle	CR	R-1A	n/a	5

Private Lands that are Priorities to Protect

Map and Lot#	Owner	Protection Status	Zoning	Acreage	Priority Reason	Current Development
M16-L26	Sprague Trustee of the Family	None	R1A	145.2	Uplands West of Parson's Marsh	Undermountain Farm Stables
M12-L3	Lenox Club	None	R1A	114.62	Uplands West of Parson's Marsh	
M23-L47	Winsor Family Realty Trust	None	R1A	28.6	CAP Area	
M18-L80	Eastover Jaynes Road Nominee	None	R1A	43.5	CAP Area	House
M18-L76	Specialty Minerals Inc.	None	R1A	74.8	CAP Area	
M18-L85	HG October Mountain Estate LLC	None	R1A	215.34	West of Housatonic	Building
M18-86	HG October Mountain Estate LLC	None	R1A	72.5	West of Housatonic	Undeveloped
M13-1	HG October Mountain Estate LLC	None	R1A	32.48	West of Housatonic	

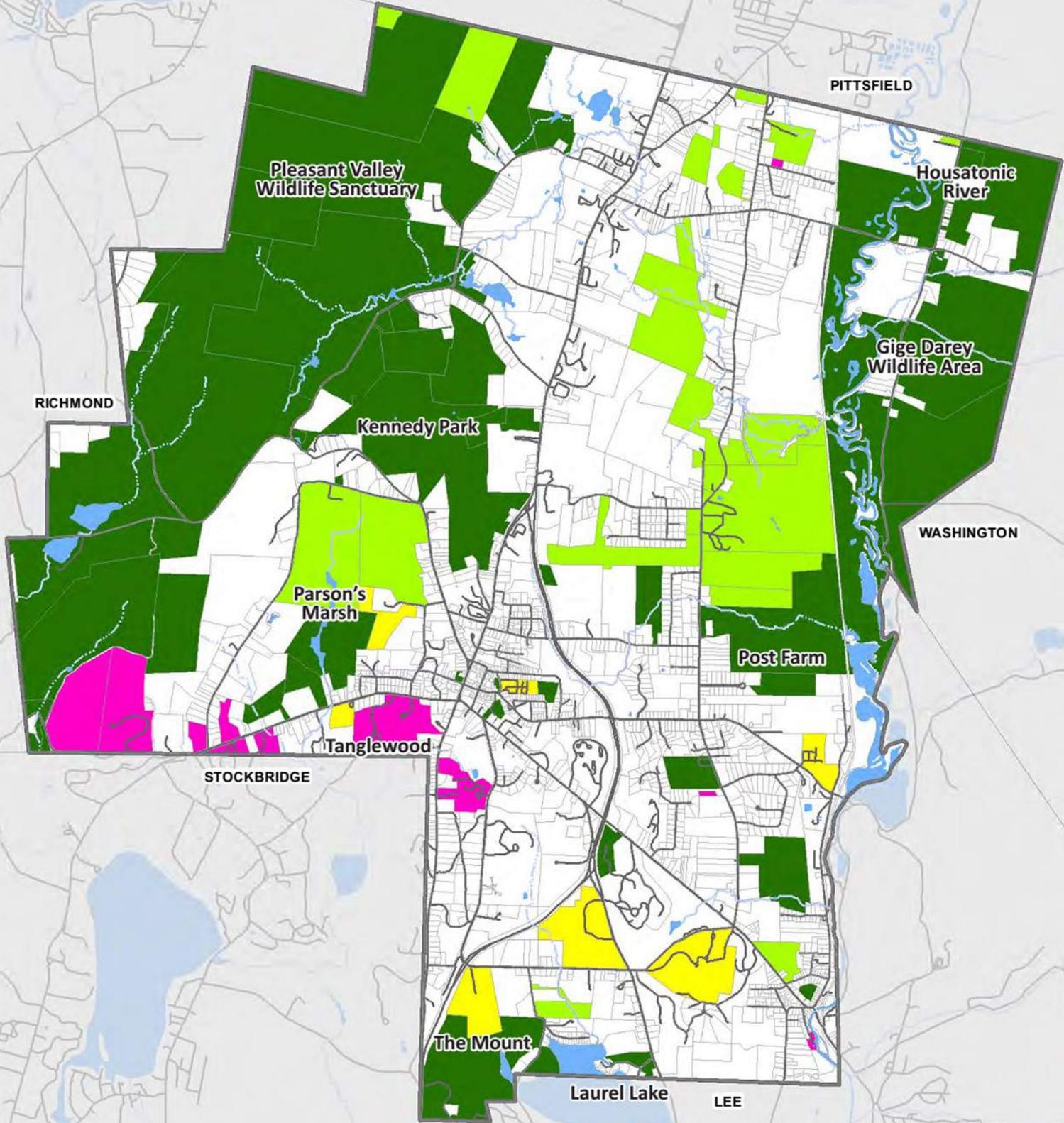
State-Owned Protected Land

State-Owned Protected Land							
Map and Lot#	Name	Owner/ Manager	Private/ Public	Current Use	Zoning	Protection Status	Acreage
M19-L3	George L. Darey Housatonic Valley WMA	Commonwealth of Massachusetts/Division of Fish and Game	Public	Conservation	R1A	Permanent	57
M19-L1	George L. Darey Housatonic Valley WMA	Commonwealth of Massachusetts/Division of Fish and Game	Public	Conservation	R1A	Permanent	167.91
M29-L9	George L. Darey Housatonic Valley WMA	Commonwealth of Massachusetts	Public	Conservation	R1A	Permanent	46
M29-L11	George L. Darey Housatonic Valley WMA	New England Forestry Foundation	Public	Conservation	R1A	Permanent	11.29
M24-L7	George L. Darey Housatonic Valley WMA	Commonwealth of Massachusetts	Public	Conservation	R1A	Permanent	20
M29-L2	George L. Darey Housatonic Valley WMA	Commonwealth of Massachusetts	Public	Conservation	R1A	Permanent	146
M19-L4	October Mountain State Forest	Commonwealth of Massachusetts	Public	Recreation	R3A	Permanent	395.6
M19-L2	October Mountain State Forest	Commonwealth of Massachusetts/Division of Fish and Game	Public	Recreation	R1A	Permanent	17.25
M24-L11	October Mountain State Forest	Commonwealth of Massachusetts Department of Environmental Management	Public	Recreation	R3A	Permanent	121.46
M29-L37	October Mountain State Forest	Commonwealth of Massachusetts	Public	Recreation	R3A	Permanent	138.6
M29-L3	October Mountain State Forest	Commonwealth of Massachusetts/Division of Fish and Game	Public	Recreation	R1A	Permanent	247.6
M29-L30	October Mountain State Forest	Commonwealth of Massachusetts	Public	Recreation	R3A	Permanent	146.14

Town-Owned Protected Land

Map and Lot #	Name	Manager	Public/Private	Current Use	Condition	Public Access	Recreational Potential	Zoning	Protection Status	Grant	Acreage	Ideas for Improvements
M13-L2	Post Farm	Conservation Commission	Public	Conservation	No improvements made	Y	More Hiking	R1A	Permanent	Self-Help	199	Parking lot, viewing stand
M11-L20	Parson's Marsh	Conservation Commission	Public	Conservation	No improvements made	Limited	Hiking Trails	R1A	Permanent		21.62	Boardwalk
M11-L17	Parson's Marsh	Conservation Commission	Public	Conservation	No improvements made	Limited	Hiking Trails	R1A	Permanent		17.38	Boardwalk
M11-L10	Parson's Marsh	Conservation Commission	Public	Conservation	No improvements made	Limited	Hiking Trails	R1A	Permanent	Donated	84.4	Boardwalk
M8-L64	Lenox Memorial School	School Department	Public	Active Recreation	Excellent	Y	Athletic fields	R1A	Permanent		29.6	
M13-L15	Post Farm	Conservation Commission	Public	Conservation	Fair	Y	Hiking trails; bicycle trail; hunting	R1A	Permanent		24.98	Access area, clear signage
M26-L2	School Lot	Conservation Commission	Public	Conservation	Good	Y		R3A	Permanent		105	
M43-L145	Community Center	Lenox Community Center	Public	Recreation	Good	Y	Seasonal skating rink	R15	Permanent	Donated	4.8	Needs grading, drainage, basketball court
M44-L44	War Memorial Park	School Department	Public	Recreation	Good	Y	Nature path	R15	Permanent		7.92	Dog park
M2-L2	Lenox Town Beach	Lenox Community Center	Public	Recreation	Poor	Y	ADA compliant access; walking path	R1A	Permanent		3	Renovations to beach house, ADA compliant access
M2-L6	Lenox Town Beach	Lenox Community Center	Public	Recreation	Poor	Y	ADA compliant access; walking path	R1A	Permanent	Purchased	8	Renovations to beach house, ADA compliant access
M2-L30	Henry Street	Sewer Facility	Public	Sewers	Unknown	Y	Access for river walk	R1A	None		6	
M8-L98	Mountain View Cemetery	Department of Public Works	Public	Historical	Good	N	Walking loop	R1A	Limited	Purchased	22	Dog park in vacant area
M8-L63	Vacant Town Land	Town of Lenox	Public	Vacant	Unknown	Y	Walking loop or nature trail	R1A	Permanent		1.62	Playground
M38-L30	Tilloston Park	Lenox Community Center	Public	Recreation	Recently Renovated	Y	Walking loop; equipment upgrades	R15	Permanent	Donated	4	Enhance pedestrian access
M11-L2	Morris Elementary School	School Department	Public	Recreation	Good	Y	Walking loop	R1A	Permanent	Donated	10.1	Plan to add a picnic area
29-L2	New Lenox Cemetery	Department of Public Works	Public	Historical	Poor	Y	Walking loop	R1A	Permanent		.5	
M33-L46	King William Road Property	Town of Lenox	Public	Vacant	Poor	Y	Walking path; dog park; athletic fields; playground	R1A	Permanent		1.6	May be good for town park
M43-L46	Lilac Park	Select Board	Public	Recreation	Excellent	Y	Passive recreation	R15	Permanent		1	
M43-L198	Triangle Park	Select Board	Public	Recreation	Fair	Y	Hiking Trails	R16	Permanent		.12	
M43-L126	Ore bed Park	Parks and Recreation	Public	Recreation	Good	Limited	Hiking Trails	R17	Permanent		1.244	Plan for new fencing
M15-L5	Watershed Land-Lenox Mountain	Conservation Commission	Public	Watershed Protection	Good	Limited	Hiking Trails	R3A	Permanent		195	
M21-L7	Watershed Land-Lenox Mountain	Conservation Commission	Public	Watershed Protection	Good	Limited	Hiking Trails	R1A	Permanent		34	
M16-L1	Watershed Land-Lenox Mountain	Conservation Commission	Public	Watershed Protection	Good	Limited	Hiking Trails	R1A	Permanent		587.2	
M15-L1	Watershed Land-Lenox Mountain	Conservation Commission	Public	Watershed Protection	Good	Y		R1A	Permanent		32.41	
M11-L10	Kennedy Park	Kennedy Park Commission	Public	Conservation and Recreation	Conditions Vary	Y	Hiking Trails; trailhead or trail side facilities; ADA compliant trail access	R1A	Permanent	Purchased ; Self-Help	84.4	Improve trails; remove and manage hardy kiwi

M21-L8	Kennedy Park	Kennedy Park Commission	Public	Conservation and Recreation	Conditions Vary	Y	Hiking Trails; trailhead or trail side facilities; ADA compliant trail access	R1A	Permanent	Purchased ; Self-Help	29	Improve trails; remove and manage hardy kiwi
M22-L2	Kennedy Park	Kennedy Park Commission	Public	Conservation and Recreation	Conditions Vary	Y	Hiking Trails; trailhead or trail side facilities; ADA compliant trail access	R1A	Permanent	Purchased ; Self-Help	11	
M1-L41	Edith Wharton Park	Conservation Commission	Public	Conservation	Fair	Y	Athletic fields, tennis courts, volley ball courts, beach, boat launch, dog park.	R1A	Limited	Self-Help	1Lenox: 11.8; Lee: 3	
M1-L41	Fox Hollow Conservation	Town of Lenox	Public	Conservation	Fair	Y	Hiking Trails	R1A			11.8	



Map 5A.3
Open Space Inventory

Open Space Inventory

Approximately 25 percent of land in Lenox is permanently protected open space, the majority of which is open and accessible to the public. The vast majority of permanently protected open space and recreation lands in Lenox stretch down the mountainous eastern and western sides of town. On the western side of town, much permanently protected open space lies in the Lenox-Stockbridge Range as well as through Kennedy Park (owned by the town) and lands owned by the Massachusetts Audubon Society (a private, non-profit organization) in Pleasant Valley Wildlife Sanctuary.

Protected open space (having varying levels of protection) is scattered through the valley, with the majority being temporarily protected under Chapter 61, 61A, or 61B. Other open spaces and recreation areas surround the Housatonic River and dot the shores of Laurel Lake. Some private recreation facilities, that are accessible (with a fee) to the public, exist along the Lenox-Stockbridge border and near to Lenox Village.

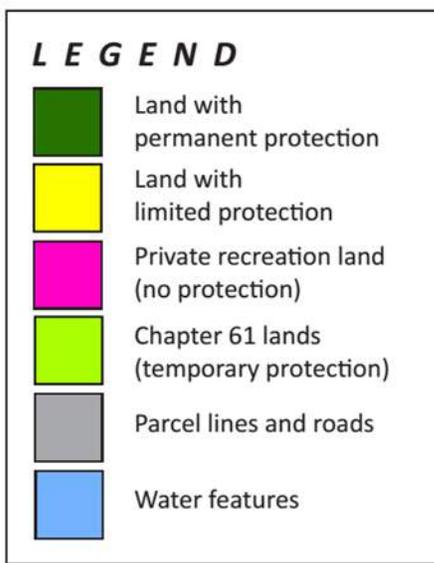




Photo: Kevin Sprague

Section 6: Community Vision

6A. Description of Process

In order to determine what the citizens of Lenox value, two public forums were held and a town-wide survey was distributed to residents. Responses from forums and surveys were used to identify the community's needs and wishes.

The Conway School team held an initial public forum on January 30, 2013. Approximately sixty people attended this meeting, which was advertised on the town website, in local papers, and on flyers posted around town. Conway School team members engaged with business owners in shops where flyers were posted.

Attendees were divided into groups and given maps of their town. They were each asked to identify places they definitely would and would not visit if they were going to spend a great day in town. They were then asked to share with their small group three places they loved and three places they would like to change. Discussion topics included “What do you like or dislike about these places?” and “What would make them better?”

As a group, attendees were asked to decide on three places they loved and three places they would like to change, and to report back to the rest of the room about what their group decided.

The OSRP committee created an online Open Space and Recreation survey with a link that was emailed to residents and posted on the town website. Paper copies were made available in downtown locations, including the Community Center, for those who preferred to fill out hard copies. A laptop was set up in the high school so students' opinions would be heard.

A total of 430 surveys were completed for a total response rate of 9 percent. This is less than the response rate of 14 percent from the 2009 draft OSRP, but the 2013 survey was open for a much shorter period of time. A public findings meeting was held on March 5, 2013, and was attended by approximately forty citizens.

The Conway School team presented preliminary open space and recreation recommendations based on the feedback they heard in the first meeting, their own research, and experts' opinions. They asked Lenox residents to share their opinions, concerns, and ideas. These were incorporated into the final goals, objectives, and action items.

6B. Statement of Open Space and Recreation Goals

Lenox values its rich tradition of cultural resources and high quality amenities and strives to meet the economic and social needs of present and future residents. The residents of Lenox aspire to have a community with healthy ecosystems, a variety of places to recreate, and preserved historical, cultural and visual resources.

Open Space and Recreation Goals:

1. Water resource areas are protected and augmented.
2. Plant and wildlife habitats are protected.
3. Agricultural lands are protected.
4. Critical visual and historic resources are protected.
5. An entity similar to a parks commission is responsible recommending management strategies for all the park lands in town.
6. The public is fully aware of all recreational facilities and public open spaces.
7. Recreation opportunities serve the community's needs.
8. Residents can access open spaces and neighborhoods on foot or by bicycle.
9. A strong constituency of open space and recreation advocates is built through education and collaborative partnerships.
10. Funding is secured in order to support implementation of the actions identified in the Open Space and Recreation Plan Update.



Photo: Kevin Sprague

Section 7: Analysis of Needs

7A. Summary of Resource Protection Needs

The need for resource protection is underscored by the map of developable land in section 3D and the buildout analysis run by the BRPC in 2009. A significant portion of land in town is unbuildable due to current protection, steep slopes, and wetlands and river protection laws. However, approximately 4,481 acres remain for further development, with 1,671 dwellings possible on that land.

Most buildable land in town is zoned for house lots of one acre or more. If multi-home developments occur, cluster development is required, which preserves a minimum of 35% of contiguous open space. This is a step in the right direction but very few multi-home developments are being built in town and single-family development will continue to dominate.

Though recent development has been sluggish, the market may pick up again when the economy recovers. If the town does not act, there is a danger of losing important natural, cultural, scenic, and agricultural areas.

In the community survey, 85% of respondents, or 361 people, felt that it was important to protect or expand water supply and outdoor recreation, followed closely by other water features (84%), forests, (83%), clean air (83%), wildlife habitat and migration corridors (81%), and scenic mountain ridges (77%) When asked what town projects they would support, 77% of respondents said they would support woodlands and wildlife habitat, the most-selected option of fourteen choices. Lenox citizens appear to strongly support resource protection.

Resource protection in town is important for human enjoyment and the continued functioning of ecosystems. It can be achieved through outright purchase and protection of land, conservation restrictions, temporary restrictions in exchange for tax breaks (Chapter 61A and B), and also through promoting concentrated development in and around village centers. Strategies for protecting resources can be separated into two broad categories: land protection and compact development.

Land Protection

Land is protected from development by various methods. Permanently protected open space parcels are owned by the town, state, federal government, or nonprofits and include conservation restrictions (Map 5A.1).

Land is also protected by the Massachusetts Wetlands Protection Act, as shown in map 5C.1. Protecting the town's water resources and water supply was the highest priority identified in the community survey.

Wetlands absorb and slow floodwaters, filter water, and provide critical habitat for a diversity of wildlife and migratory birds. Vegetated buffers around wetlands and rivers perform similar functions and prevent erosion of valuable land. In addition, many state-listed rare species depend on upland areas immediately bordering wetlands for their survival, but these areas are not protected by the state.

It would be in the town's best interest to pass a stricter town wetlands bylaw with a larger buffer around water resources.

The Planning Board should include guidelines in its subdivision regulations for developing riparian buffer zones along streams and rivers.

For human recreational use it may still be important for the town to purchase areas protected by the Wetlands Protection Act if they offer valuable recreational opportunities or linkages that require public access. These areas include the northern half of Parson's Marsh and the portions of the Housatonic River floodplain west of the railroad line and north of Post Farm.

Compact Development

Sprawling development places burdens on the town in terms of increased cost for water lines, sewers, roads, and utilities. It emits far more greenhouse gases than compact development because of residents' dependence on cars. A compact development pattern would create a more pedestrian-friendly town, cost less in terms of infrastructure, and protect undeveloped open spaces. It would increase housing options in town. Smaller housing units in walkable neighborhoods close to cultural activities and shops might attract both young adults and older people, who could age gracefully near friends and family.

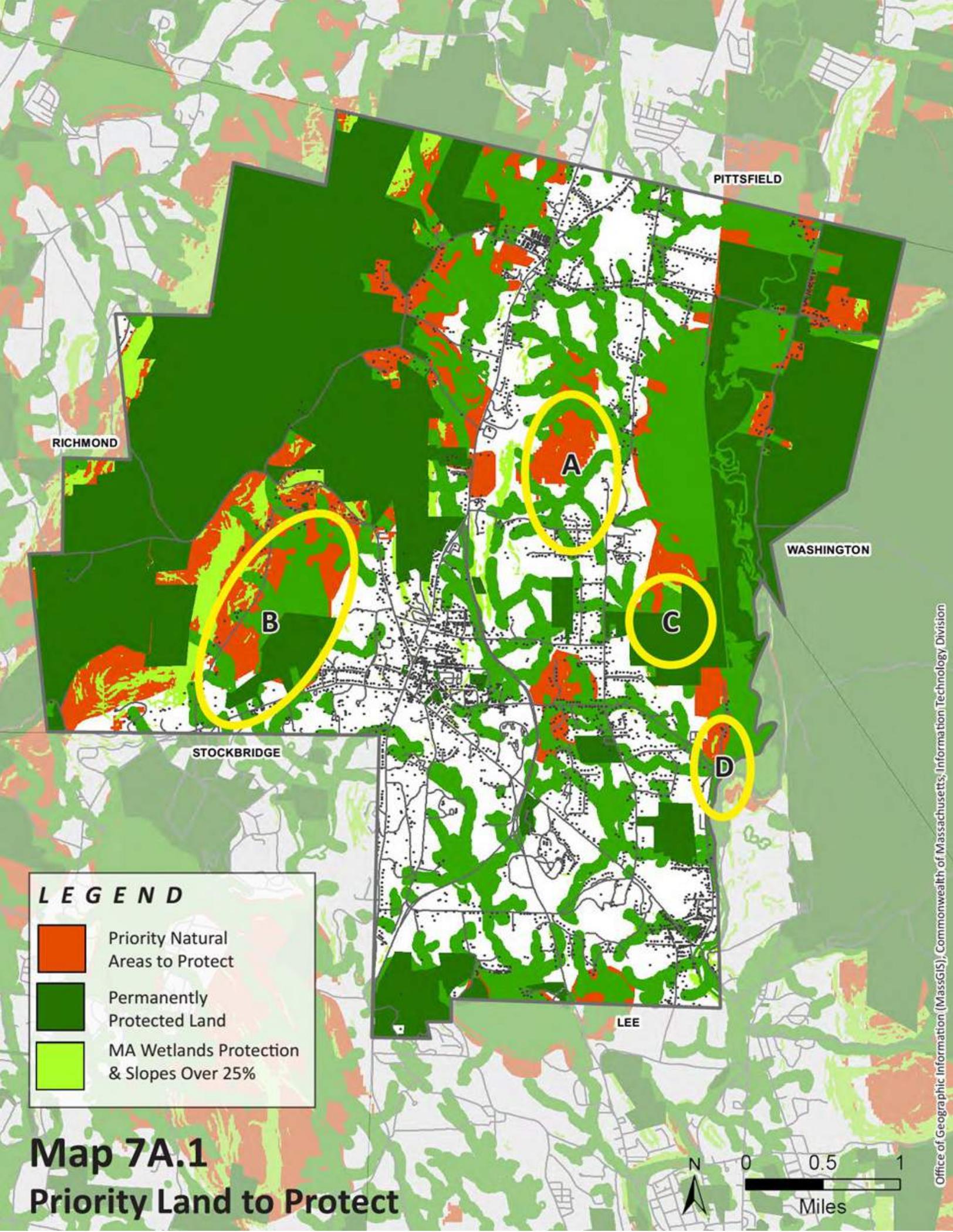
While sprawl was not a question on the community survey or explicitly discussed at the community meetings, some residents felt the need to address the issue in comments sections of the survey.

Comments included, "Ugly, suburbia-esque developments should be avoided at all costs," "Please don't let our beautiful mountains be ruined by development," "Restrict building of condos," "Keep downtown the way it is. Don't overcrowd it and over commercialize," "Develop the village with density in mind, making the most commercially of those two square blocks; leave the open spaces open," and "Curb congested development like that at Lenox Commons [a strip mall-type commercial area] which diminishes the beauty of our environment!"

The comments mostly touched on the need to preserve prime scenic land, avoid sprawl, and avoid certain types of developments (e.g., condominiums). It is somewhat unclear whether residents' objections to condos were due to density, their appearance, current location, or other factors. It seems that there would be support for more compact development if it were aesthetically appealing and preserved the town's beloved open spaces. Compact development should occur in previously developed areas and not in areas that are a priority for ecological protection.

Priority Land to Protect

Priority areas to protect include lands identified by the Biomap 2 and CAPS programs in Section 4E, which were included on map 4E.1. Protecting the areas identified by these two programs together would support the community's goal of protecting water resources as well as woodlands and wildlife habitat.



PITTSFIELD

RICHMOND

WASHINGTON

A

B

C

D

STOCKBRIDGE

LEE

LEGEND

- Priority Natural Areas to Protect
- Permanently Protected Land
- MA Wetlands Protection & Slopes Over 25%

Map 7A.1
Priority Land to Protect



Map 7A: Priority Land to Protect and Current Protection

In this map, permanently protected land is layered over areas protected by the Wetlands Protection Act and slopes over 25 percent. Thus, each area shows only the highest level of protection it receives.

Red areas that remain visible are important ecological areas identified by the Biomap 2 and CAPS projects that are currently under no protection and are in danger of being built upon. In analyzing which of these areas are most important to protect, undeveloped or minimally developed areas were prioritized over areas divided into many small lots. Larger areas were prioritized over smaller, more fragmented areas. Areas that connected with currently protected land were prioritized over isolated “islands” of habitat.

Based on these considerations, three priority areas to protect have been identified.

A. Corridor across Lenox

The Conservation Assessment and Prioritization System (CAPS) program identified a large, undeveloped block of land in the north-center of Lenox that is currently unprotected. Efforts to protect this area should include a link from Route 7/20 to the floodplain on the east side of East Street because of this area’s tremendous value as a wildlife corridor linking the large forested area to the west with wetlands along the Housatonic River and October Mountain. The area also contains core habitat surrounding two vernal pools, and these species need protected uplands as well as wetlands. If this area is not protected it could be developed and wildlife

Marshes can be found throughout Lenox (Photo: Kevin Sprague)



would have no way to cross from one habitat to another.

When determining the specific location for such a corridor, research should be done to determine which areas are most actively used by wildlife.

Strategies for helping wildlife cross Route 7/20 should be investigated based on the types of wildlife that are using the corridor.

In addition to its natural resource and conservation value, this area could meet the recreational needs of New Lenox and serve as a hiking or bicycling connector from Route 7 to East Street.

In the draft 2009 OSRP it was suggested that a wildlife corridor follow the path of Yokun Brook, which would protect habitat for species living there. Most of that area is already developed, particularly the area where New Lenox Road and Route 7/20 meet. Small parcels are owned by many homeowners who live close to the stream and it would be difficult to acquire those parcels. Conservation restrictions or a stricter town wetlands bylaw are more realistic options than outright purchase of those lands. Yokun Brook makes up the north and east borders of the block of undeveloped land discussed in the previous paragraphs and there are opportunities for links between the two.

B. Area North and West of Parson's Marsh Pasture and hayfield connects Parson's Marsh with the upland forest to the west. Grasslands provide homes for birds such as bobolinks and Eastern meadowlarks. These and other bird species are disappearing in Massachusetts as their habitat reverts back to forest or is developed.

The town should open discussions with property owners in this area about protecting forest and open land through conservation restrictions. This will not only protect the land from development and protect species, it will also preserve a scenic and pastoral area.

C. Housatonic River Corridor

There are a few significant unprotected upland areas remaining, particularly a triangle west of Dugway Road and a parcel south of Post Farm.

If the town has additional resources to put toward land protection, it is also important to protect areas that are not completely and permanently protected. Slopes greater than 25% can be built upon, albeit at great expense. Areas of wetlands can be altered to a certain extent and riverbanks can be cleared for agricultural purposes. Though these areas are protected to some extent, the town may wish to ensure their permanent and complete protection.

7B. Summary of Community Needs

In the 2013 Lenox Open Space and Recreation Survey, 95 percent of Lenox residents stated that they appreciate its “natural treasures.” The community has a strong connection to its open space and residents use undeveloped land for many recreational activities.

The online survey uncovered a variety of shared interests within the community. Among the most commonly supported town projects were to protect woodlands and wildlife habitat (76 percent), build bike trails or paths (72 percent), and improve the Laurel Lake Town Beach (64 percent). Residents would like to see more opportunities for biking, boating, swimming, and community gardening.

According to the survey, the most popular activities in town are hiking, walking, jogging, swimming, and indoor fitness activities. Kennedy Park is the most-used public land in town. It offers trails for hiking, dog walking, skiing, snowshoeing, horseback riding and mountain biking. Some residents at the community forum reported concerns about erosion and that the park is “overused.” Many residents reported that they wanted a dog park in town.

Residents use indoor fitness facilities at the Lenox Community Center. The community center also has multi-use rooms available for rental, a basketball court, and hosts after school activities.

Residents enjoy swimming, boating and fishing. This is consistent with the findings in past Open Space Plan questionnaires, where Lenox residents rated swimming as their top priority, and with the 2006 State Outdoor Recreation Plan. In that plan, residents in Berkshire County were surveyed to determine their interests. They said that their greatest need was for more water-based activities including swimming and fishing.

Seventy percent of survey-takers agree that it is important to protect or expand Laurel Lake town beach. The beach is the most popular swimming spot in Lenox and is open to residents free of charge. Although Lenox Beach is designated for resident use, many tourists also use the facilities. There is often a lack of understanding of what areas can be used and what conditions may apply.

The high school has indoor and outdoor recreation venues including fields for soccer and baseball and basketball courts. There are two playgrounds in Lenox. Ore Bed Park is located in Lenox Village and has slides, swings and a small baseball diamond. Tillotson Park in Lenoxdale has a play structure, a baseball diamond and a basketball court. Both parks are near village centers.

Residents of New Lenox must travel to find playgrounds and ballfields. One option for a small park is a town-owned 1.6-acre property on King William Road (M-33 L-46). Although small, this would be large enough for a playground and a basketball, volleyball, or tennis court. Other properties in New Lenox should be investigated for their suitability for a larger park.

It is important to identify neighborhoods that are not close to parks, especially those places where many children live, and develop recreational opportunities there. It is also important to increase the ease of pedestrian access to open spaces.

Other publicly accessible open spaces in town include Lenox Mountain, parts of Pleasant Valley Wildlife Sanctuary, Post Farm, October Mountain, and Laurel Lake. Parks that are oriented toward active recreation are concentrated near Lenox Center and Lenoxdale. Passive recreation destinations are located along the mountain ridges and by water bodies. Seniors make up a large portion (26 percent) of the town's population, and it is important to provide open spaces for them. The average age of residents in Lenox is 49 (the state average is 39), and the percentage of residents aged 75 and over in Lenox is more than twice the state average (2010 US Census).

Residents support building an improved sidewalk system, developing more trails, and creating maps or brochures highlighting the town's natural and recreational assets. The desire for increased connectivity is demonstrated by support for town projects including "Pedestrian walkways/sidewalks" (62 percent) and "Develop more public hiking trails" (61 percent). Residents who live in connected communities can move easily to a variety of destinations without the use of a vehicle. One resident noted: "I don't like that I have to get into my car to get to another park."

There are many locations with isolated trail systems, but there is a lack of non-vehicular connections between these spaces. There are few sidewalks and crosswalks in town, and walking and bike trips can be unsafe.

Schools in Lenox are connected to the downtown and the community center via sidewalks, but the only park accessible by sidewalk is Kennedy Park. New Lenox is not connected to the rest of town with sidewalks or trails. A town-wide loop could connect a variety of users to places in town that are currently disconnected or inaccessible without a car. Route 7/20 bisects the town and residents report it is difficult to cross the road safely. It is important to provide safe crossing areas including sufficient lighting for short winter days.

7C. Management Needs and Potential Change of Use

Staffing

Responsibility for park lands is currently divided between the Kennedy Park Committee, which is only responsible for Kennedy Park; the Community Center, which is responsible for recreation areas; and the Conservation Commission, which is responsible for conservation of certain parcels including Parson’s Marsh. These groups all use different tactics to manage open spaces in Lenox and some parks and trails receive more care and maintenance than others. The Lenox Open Space and Recreation Plan Committee supports creating a Park Commission to strategically manage all of the parks in town.

Special Opportunities

The EPA will be working to clean up and restore the section of the Housatonic River that runs through Lenox. The town could use this cleanup as an opportunity to bring people to the river by designing recreation spaces along the river.

Threats

Even though the economy has slowed in Lenox, the land connecting the east and west sides of town between Route 7 and East Street north of East Dugway Road could be developed. This land crosses Route 7, which is already heavily developed in a commercial strip fashion. This area needs to be protected for the wildlife that relies on it as well as to preserve an east-west connection for people and wildlife. There are three different ways Lenox could protect this land: encouraging a conservation restriction, purchasing the land and then conserving it, or changing zoning bylaws in the area to shape development.



Photo: Kevin Sprague

Section 8: Goals and Objectives

8. Goals and Objectives

These goals, objectives, and action items are derived from the 2009 Open Space and Recreation Plan, the 2013 Community Forums, the 2013 Lenox Open Space and Recreation Survey, suggestions from the Open Space and Recreation Plan Committee and the Lenox Town Planner, and the results of the analyses contained in the previous sections of this OSRP. These recommendations are designed to meet the community's needs while minimizing impacts on the environment.

GOAL 1: Water resource areas are protected and augmented.

- ◆ Maintain an adequate amount of safe, high quality drinking water.
- ◆ Protect wetlands and floodplains.
- ◆ Certify uncertified vernal pools.
- ◆ Reduce harmful runoff through enhanced stormwater management, low impact development, and other means.
- ◆ Improve water quality at Laurel Lake.
- ◆ Create a regional watershed management plan for Laurel Lake.

GOAL 2: Plant and wildlife habitats are protected.

- ◆ Monitor habitats of rare wildlife.
- ◆ Permanently protect core habitats and critical natural landscapes with CPA funds or by encouraging landowners to adopt conservation restrictions.
- ◆ Maintain an up-to-date inventory of lands of conservation interest, including town-owned and private lands.
- ◆ Monitor and reduce spread of hardy kiwi.

GOAL 3: Agricultural lands are protected.

- ◆ Use a variety of methods to encourage conservation of agricultural lands.

GOAL 4: Critical visual and historic resources are protected.

- ◆ Identify and protect cultural landscapes associated with the Great Estates.

GOAL 5: A Parks Commission or similar entity is responsible for recommending policy and actions for all park lands in town.

- ◆ Establish a Parks Commission or similar entity.
- ◆ Coordinate management and maintenance programs for existing park lands.

GOAL 6: The public is fully aware of all recreational facilities and public open spaces.

- ◆ Map and disseminate information about recreational facilities and open spaces.

GOAL 7: Recreational opportunities serve the community's needs.

- ◆ Improve gaps in recreational opportunities.
- ◆ Develop new recreational opportunities.

GOAL 8: Residents can access open spaces and neighborhoods on foot or by bicycle.

- ◆ Develop new connections for walkers between priority spaces.
- ◆ Protect and improve existing trails.
- ◆ Develop new local trails for walking, hiking, and biking and other types of passive recreation.
- ◆ Prioritize paths that connect important destinations in town.
- ◆ Work to ensure that all facilities are compliant with the Americans with Disabilities Act (ADA).

GOAL 9: A strong constituency of open space and recreation advocates is built through education and collaborative partnerships.

- ◆ Hold community-building activities.
- ◆ Educate citizens and landowners.
- ◆ Develop strategic partnerships.

Recruit volunteers to take on projects that most interest them.

GOAL 10: Funding is secured to support implementation of the actions identified in the Open Space and Recreation Plan Update.

- ◆ Apply for grants to assist in town acquisition of properties.
- ◆ Send information to Capital Improvement Committee and Community Preservation Committee for funding.

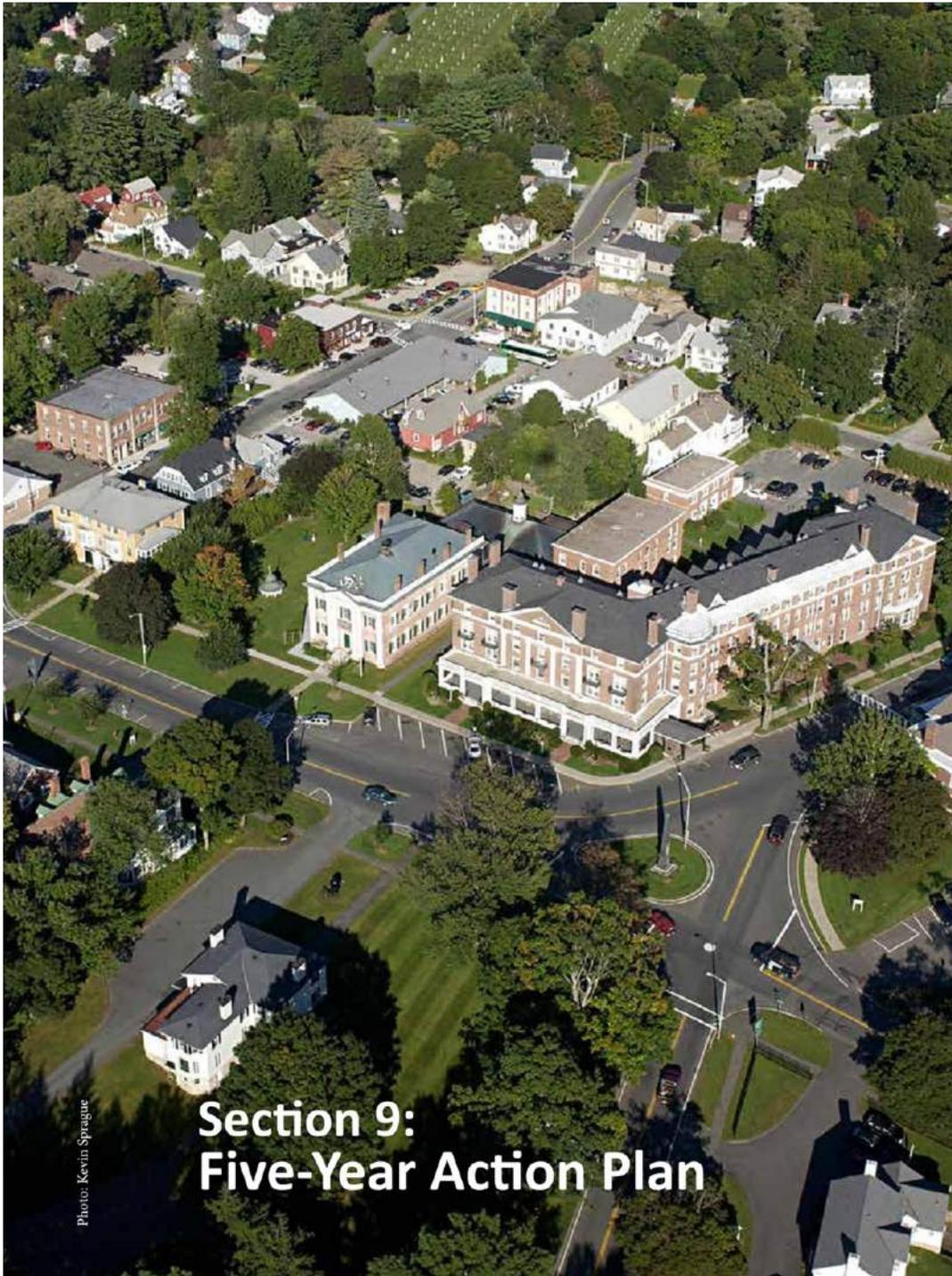
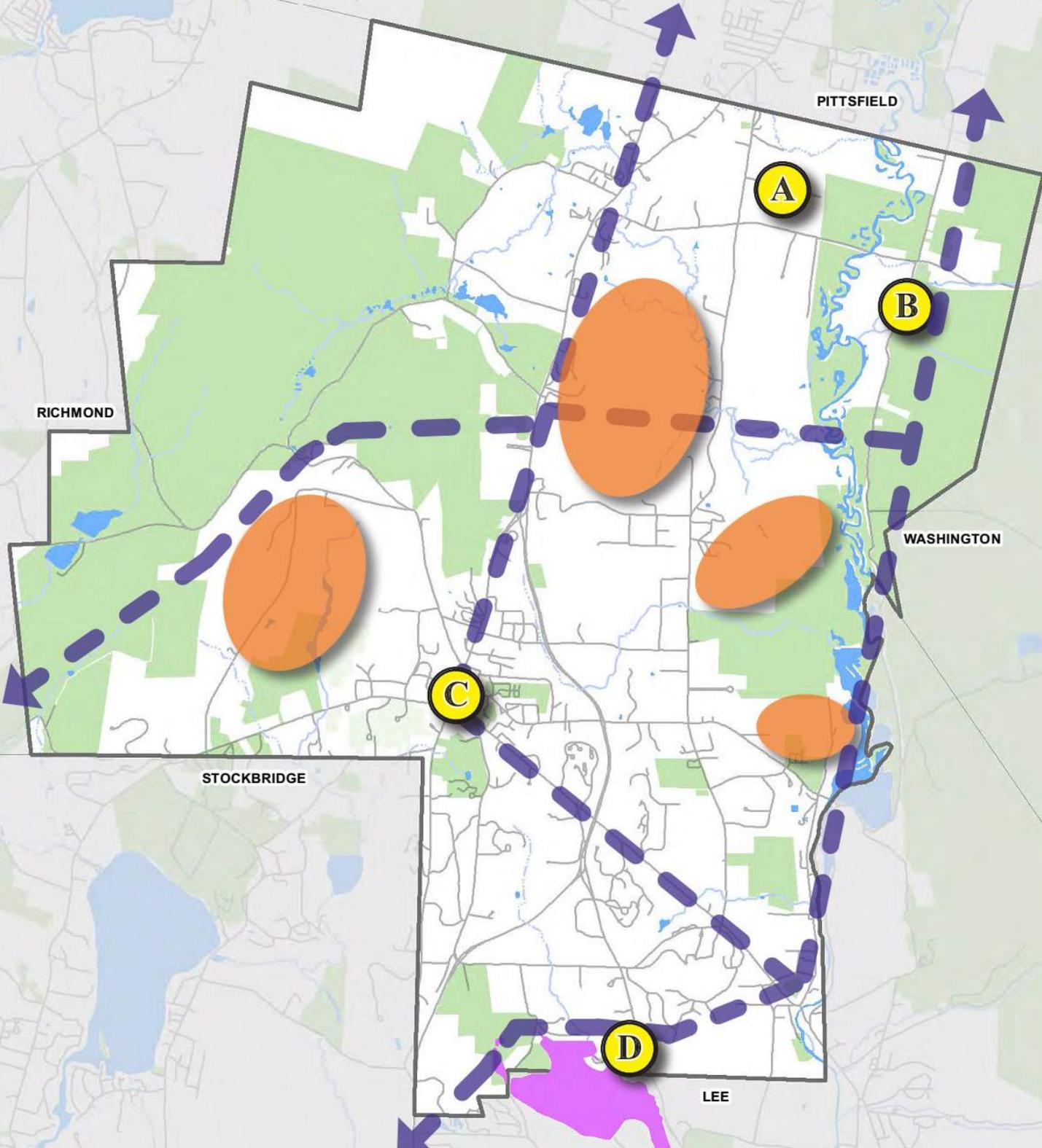
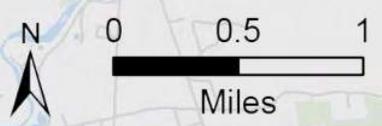


Photo: Kevin Sprague

Section 9: Five-Year Action Plan



Map 9A.1
Action Map



Action Map

This map shows spatial recommendations for Lenox’s open space and recreation. Improving, protecting, and preserving a variety of priority open spaces and recreation in Lenox will serve the plant, animal, and human communities that rely on these places.



1. Improve Water Quality at Laurel Lake

- Control mussels and study conclusions to suggest management solutions
- Continue to test for water quality
- Mitigate for the current annual drawdown by importing sand



2. Permanently protect core habitats

- Wildlife corridor between Route 7 and East Street north of East Dugway Road
- Uplands west of Parson’s Marsh
- Uplands west of Housatonic River



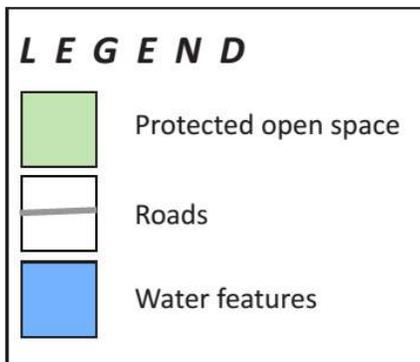
3. Expand and improve recreational opportunities

- A. Playground in New Lenox
- B. River Walk on east side of Housatonic
- C. Lenox Village
 - Install a dog park
 - Install a community garden
 - Improve Community Center’s basketball courts
 - Improve Roche Reading park
- D. Increase access to and improve infrastructure at Laurel Lake



4. Connect neighborhoods, open spaces, and recreational areas

- **Install sidewalks on existing roads.**
- Priorities include:**
 - Between Walker Street and East Street
 - Crystal Street to Housatonic St
 - New Lenox Rd. to King William Rd connecting on East st.
 - Plunkett St. by Laurel Lake
- **Protect and improve existing trails**
 - Use marketing money to collect GPS data on trails
 - Improve trails at Kennedy Park
 - Develop parking areas with clear trailheads and mapboards
- **Develop new local trails**
 - Connect local trails to trail systems in other municipalities
 - Continue working with Berkshire County on a regional trail that goes through Lenox.
- **New priority trails include:**
 - Lenoxdale to Laurel Lake
 - Housatonic River walk along the east side of the river
 - Lenox Loop
 - Create historic walking tours including signs and displays about historic sites and activity in town



Section 9 – Action Plan

This seven-year action plan outlines and prioritizes goals and actions with a proposed timetable for each open space and recreation goal and objective. Potential funding sources are also indicated. Some of the following goals, objectives and actions are subject to funding and appropriation. The actions should be reviewed annually, updated, and reevaluated to ensure consistency with current open space and recreation goals and objectives for Lenox. An action plan map is included at the end of this section.

Key to groups potentially responsible for implementing action items:

A	Assessor	LLW C	Laurel Lake Watershed Protection Association	MiM	Mass in Motion
CC	Conservation Commission	LLT	Lenox Land Trust	CPA	Community Preservation Act
CH	Chamber of Commerce	PB	Planning Board	MCC	Mass Cultural Council
CM	Community Center	TH	Tri-Town Health	EEA	Mass. Executive Office of Energy and Environment Affairs
DPW	Department of Public Works	LM	Land Management Committee	BTCF	Berkshire Taconic Community Foundation
FC	Finance Committee	BoS	Board of Selectmen	MET	Massachusetts Environmental Trust
HC	Historical Commission	VC	Volunteer Committee	EPA	Environmental Protection Agency
HS	Historical Society	TP	Town Planner	DLTA	District Local Technical Assistance
KP	Kennedy Park Committee	MA	Mass. Audubon	BRPC	Berkshire Regional Planning Commission
NHESP	Natural Heritage and Endangered Species Program	LEC	Lenox Environmental Committee	CET	Center for Eco-Technology
BNRC	Berkshire Natural Resources	ToL	Town of Lenox		

Large "X" indicates the action has been implemented or is ongoing.

Key	Goal or Action	Priority	Target Year								Implementation	
			2013	2014	2015	2016	2017	2018	2019	2020	Who	Implementation and/or Potential Funding Sources
G1	Water resource areas are protected and augmented.											
1.1	Maintain an adequate amount of safe, high quality drinking water.											
1.1.1	Enforce appropriate regulations in and around reservoirs, community wellheads, and potential high-yield quality aquifers	High	x	x	x	x	x	x	x	x	DPW	ToL
1.1.2	Locate additional town drinking water sources (DPW)	Low				x	x	x			DPW, SB	ToL
1.1.3	Continue to test drinking water supplies	High	x	x	x	x	x	x	x		DPW	ToL
1.2	Protect wetlands and floodplains.											
1.2.1	Pass wetlands protection bylaw.	Low				x					CC	MET
1.2.2	Coordinate with the EPA about Lenox's wishes regarding the Housatonic River cleanup.	High	x	x	x	x	x	x	x		BoS, TM, BRPC	DLTA
1.2.3	Amend subdivision regulations to include riparian buffer zones along streams and rivers.	Low				x					PB	MET
1.3	Certify uncertified vernal pools											
1.3.1	Train local volunteers in vernal pool certification	High				x	x	x	x		CC	LLT
1.3.2	Work with the Berkshire Environmental Action Team (BEAT)	Med				x	x	x	x		BoS, TM, BRPC	
1.4	Reduce harmful runoff through enhanced stormwater management, low impact development and other means throughout the Town of Lenox.											
1.4.1	Establish reduced road sand/salt and reduced herbicide policy.	Med					x				DPW	
1.4.2	Continue to distribute rain barrels and informational brochures to residents.	High			x	x	x	x	x		DPW, LEC	CET
1.4.3	Continue to hold hazardous waste disposal days to gather empty paint cans and other household pollutants.	Med	x	x	x	x	x	x	x		DPW, LEC	CET
1.4.4	Build a demonstration rain garden around a town facility.	High			x	x					CC, TP, LEC	ToL
1.5	Improve water quality at Laurel Lake											

3.2.1	Promote the Massachusetts Agricultural Preservation Restriction Program for Overmeade Gardens land	High			x	x				LM	DCR
3.2.2	Encourage an agricultural conservation restriction on Undermountain Stables hayfield and pasture	Med			x	x				LM	DCR, BNRC, LLT, CPA
G4	Critical visual and historic resources are protected.										
4.1	Identify and protect cultural landscapes associated with the Great Estates										
4.1.1	Inventory Great Estate Landscapes	High			x	x				HC, TP	EEA, MHC, MCC
4.1.2	Create historic walking tours including signs and displays about historic sites and activity in town	High			x	x	x	x	x	CC, HC, HS, TP	ToL, CH, CPA, MCC
4.1.3	Protect all Great Estates with conservation restrictions	Med			x	x	x	x	x	HC, HS, PB	
4.1.4	Support tourism and appropriate business uses	High	x	x	x	x	x	x	x	BoS, CH	EEA
4.1.5	Continue to support appropriate private business uses in Great Estates	High	x	x	x	x	x	x	x	CH, PB, BoS	
G5	Maintain a management plan for existing recreation facilities.										
5.1	Coordinate management and maintenance program for existing recreation facilities.										
5.1.1	Create or update a management and maintenance plan for each public recreation facility, or alternatively, create a recreational facility master plan for all public facilities within Lenox.	High				x	x	x	x	LM, CM, TP	
5.1.2	Identify responsibilities for management of existing facilities, and clearly identify and express use rules and regulations.	High	x	x	x	x				LM, CM, TP	
G6	The public is fully aware of all recreational facilities and public open spaces.										

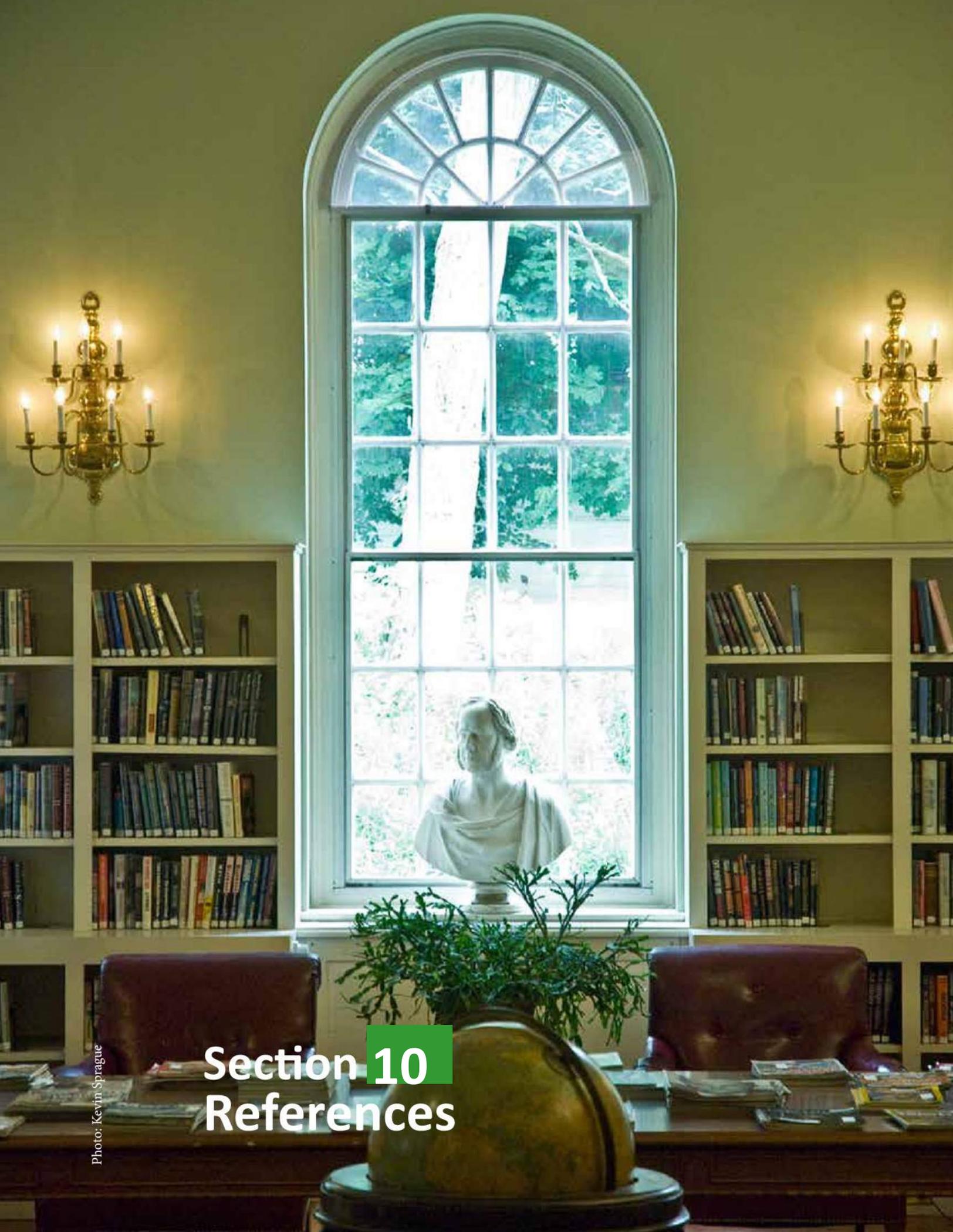
6.1	Inform the public about existing facilities.										
6.1.1	Use economic development funds to inventory and map existing trails in town with GIS.	High			x	x	x			LM, TP	CH, ToL
6.1.2	Evaluate difficulty and condition of existing trails.	Med			x	x				LM	
6.1.3	Use economic development funds to develop a brief, easily reproducible brochure and a page on the town website showing the location of current recreational facilities and parking locations.	High			x					LM, TP	CH, ToL
6.1.4	Update this brochure and webpage as facilities are added and improved.	High				x	x	x	x	LM, TP	
6.1.5	Install trailside displays to educate passers-by on wildlife, ecology, and history of sites throughout town.	Med			x	x	x			LM, TP, CC, HC	ToL, LTT, KP
G7	Recreational opportunities serve the community's needs										
7.1	Expand and improve recreational opportunities where needed and develop new ones										
7.1.2	Prepare a detailed inventory of recreation sites	Med			x	x				LM	
7.1.3	Develop a playground area in New Lenox, possibly on a 1.6-acre town-owned property on King William Rd. (M-33 L-46)	High			x	x				LM, CM, BoS, DPW, TP	ToL, PARC
7.1.4	Research and determine a location for a dog park .	Low		X	X					VC, TP, LM	
7.1.5	Research and determine a location for Community Garden.	Low			x	x	X			LM, TP, TH	
7.1.6	Design Housatonic River Walk to the east of the river.	Med			x	x	x	x	x	LM, CC, BoS,	PARC, ToL, GE

										TP	
7.1.7	Re-Grade basketball courts at the Community Center.	High	X	X						CM	CPA
7.1.8	Enhance beach and access at Laurel Lake.	High		X	X					CM, SB	CPA
G8	Residents can access open spaces and neighborhoods on foot or by bicycle.										
8.1	Connect neighborhoods, open spaces, and recreational areas										
8.1.1	Require new developments to provide pedestrian connections	High			x	x	x	x	x	PB	
8.1.2	Install sidewalks on existing roads: <ul style="list-style-type: none"> Gap between Lenox Dale on Walker Street Continuation of Rt. 7/20 sidewalk along New Lenox Rd. and East St. north to King William Rd. Connecting Tillotson Park in Lenoxdale to Crystal St., Housatonic St., and Mountainview Cemetery 	High	x	x	x	x	x	x	x	DPW, BoS, PB	ToL
8.2	Protect and improve existing trails										
8.2.1	Improve trails at Kennedy Park.	Med	x	x	x	x				KP, BoS	DCR, ToL
8.2.2	Develop parking areas and make trailheads more visible.	Med	x	x						KP, LM	ToL, KP
8.3	Develop new local trails for walking, hiking, and biking and other types of passive recreation										
8.3.1	Prioritize improvements and additions to trails and spaces	High				x	x	x	x	LM, BoS	
8.3.2	Connect local trails to trail systems in other municipalities.	Med			x	x	x	x	x	LM, BoS	DCR
8.3.3	Continue working with Berkshire county on a regional trail that goes through Lenox.	Med			x	x	x	x	x	LM, BoS	DCR, MassDOT
8.3.4	Start new construction on the following paths: <ul style="list-style-type: none"> Lenoxdale Housatonic River walk along east side of the river Trail from Kennedy Park to Post 	Med			x	x	x	x	x	LM, BoS	DCR, ToL, CPA

	Farm										
8.3.5	Contact private landowners to develop trails on private lands using trail easements or use agreements.	Med			x	x	x	x	x		LM, BoS
8.5	Ensure that all facilities are compliant with the Americans with Disabilities Act (ADA).										
8.5.1	Revitalize ADA commission.	High			x						LM, BoS, CM
8.5.2	Identify and prioritize facilities that need upgrading.	Med	X	X	X	X	X	X	X		BoS, LM, CM
8.5.3	Identify and apply to funding sources to make facilities accessible in priority order.	High	X	X	X	X	X	X	X		LM, BoS, CM DCR
8.5.4	Assess condition of access for each trail.	High	x	x	x	x	x	x	x		BoS, LM, CM
8.5.5	Pursue easements, conservation restrictions, or other protective measures on properties which need improved access	Med	x	x	x	x	x	x	x		LM, BoS,
G9	A strong constituency of open space and recreation advocates is built through education and collaborative partnerships										
9.1	Hold community-building activities.										
9.1.1	Continue to hold festivals including craft fairs, apple squeeze, and tub parade.	High	x	x	x	x	x	x	x		BoS, CH ToL, CH
9.2	Educate citizens and landowners										
9.2.1	Send a letter to landowners of priority undeveloped land publicizing the goal of conserving natural and cultural resources for current and future generations of residents.	High			x	x	x	x	x		PB, LLT, LM DCR
9.2.2	Provide landowners with a clear method for contacting and negotiating with the town concerning their land.	High			x	x	x	x	x		BoS, PB, LLT

9.2.3	Provide a minimum of 3 lectures each year on environmental issues such as rare and endangered species, vernal pools, and conservation restrictions, and provide informational pamphlets at town functions.	Low			x	x	x	x	x	CC, LM, TP	DCR, MET, BTCF, BNRC, LLT, ToL
9.2.4	Provide public information about the amount of protected open space in town, how much of the town is at risk of development, and the fiscal advantages of open space.	High			x	x	x	x	x	PB, LM, TP	
9.2.5	Create a page on the town website with information about the OSRP and survey results.	Low			x					LM, PB, TP	
9.3	Develop strategic partnerships										
9.3.1	Partner with local schools, nonprofits, and businesses to preserve open space and increase recreational opportunities.	High			x	x	x	x	x	LM, PB, TP	
9.3.2	Partner with local land conservation organizations to better leverage limited town dollars and volunteer hours toward the conservation of priority resource areas.	High			x	x	x	x	x	LM, LLT, PB, TP	
9.3.3	Partner with open space and recreation committees in surrounding towns to address regional land conservation projects.	Med			x	x	x	x	x	LM	
9.4	Recruit volunteers to take on activities that most interest them.										
9.4.1	Create town Volunteer Coordinator position.	Low				x	x	x	x	BoS	ToL
9.4.2	Identify volunteer opportunities (e.g. funding research, grant writing, trail mapping, park cleanup).	Low			x	x	x	x	x	BoS	
9.4.3	If volunteer recruitment is unsuccessful, seek funding from Massachusetts Cultural Council to fund staff time and direct costs.	Low				x	x	x	x	BoS	

G10	Secure funding to support implementation of the actions identified in the Open Space and Recreation Plan Update.										
10.1	Apply for grants to assist in town acquisition of properties										
10.1.1	Apply for State of Conservation Services PARC (Parkland and Acquisition and Renovations for Communities) program	Med	x	x	x	x	x	x	x	LM, PB, KP, TP, CM	EEA
10.1.2	Apply for Federal Land Conservation fund	Med	x	x	x	x	x	x	x	LM, PB, TM	NPS, MET, EEA (Mass Land and Water Conservation Fund)
10.1.3	Apply for local bank town grant program	Med	x	x	x	x	x	x	x	LM, PB	Berkshire Bank
10.2	Provide information and data to the Capital Improvement Committee to prioritize funding for capital projects listed in this plan.										



Section 10 References

Photo: Kevin Sprague

11. References

- Albertson, Mary. Town Planner, Town of Lenox.
- ArcGIS. <www.esri.com>
- Berkshire Benchmark. <www.berkshirebenchmarks.org/data/>
- BNRC (Berkshire Natural Resources Council). <<http://www.bnrc.net>>
- BPL (Boston Public Library). <www.bpl.org>
- BRPC (Berkshire Regional Planning Commission). <www.berkshireplanning.org/>
- BRTA (Berkshire Regional Transit Authority). <<http://www.berkshirerta.com/schedules.php>>
- City of Pittsfield Public Works and Utilities. <http://www.cityofpittsfield.org/city_hall/public_works_and_utilities/wastewater_treatment_plant.php>
- EPA. Health Effects of PCBs
<<http://www.epa.gov/osw/hazard/tsd/pcbs/pubs/effects.htm>>
- EPA. Housatonic River Cleanup
<http://www.epa.gov/region1/ge/index.html>
- EPA. Rest of River <<http://www.epa.gov/region1/ge/thesite/restofriver.html>>
- EPA. Rest of River Report
<<http://www.epa.gov/region1/ge/thesite/restofriver/reports/508662.pdf>>
- EPA. What You Should Know about Safe Winter Roads and The Environment.
<<http://www.epa.gov/region1/topics/water/pdfs/winterfacts.pdf>>
- Flanagan, Tim. Member of Conservation Commission and OSRP committee
- Foure, Richard. Lenox Department of Public Works.
- Gay, Frederick and Frimpter, Michael. 1985. Distribution of Polychlorinated Biphenyls in the Housatonic River and Adjacent Aquifer, Massachusetts. United States Geological Survey Water-Supply Paper 2266. <<http://pubs.usgs.gov/wsp/2266/report.pdf>>
- Lenox DPW, 2011 Drinking Water Quality Report. May 1, 2012.
<http://www.townoflenox.com/public_documents/lenoxma_dpw/Water%20Quality%20Report%202011.pdf>
- Lenox Historical Society. <<http://lenox.org/lenox-historical-society/>>
- Lenox Open Space and Recreation Plan Committee
- Lenox Open Space and Recreation Plan 2009
- Mallary, R.D. "Lenox and the Berkshire Highlands." 1903.
- Massachusetts Audubon Society. <www.massaudubon.org>

Massachusetts DFW. Wildlife species viewer: Rare species by town.

http://www.mass.gov/dfwele/dfw/nhesp/species_info/species_viewer/species_viewer.htm

Massachusetts DEP. Massachusetts List of Integrated Waters

<http://www.mass.gov/dep/water/resources/10list6.pdf>

Massachusetts DFW and NHESP. BioMap 2 Report.

http://www.mass.gov/dfwele/dfw/nhesp/land_protection/biomap/biomap_home.htm

Massachusetts Geographic Information System: www.mass.gov/mgis

Massachusetts Institute for Social and Economic Research: www.umass.edu/miser/

Mass.gov. General Electric/ Housatonic River RCRA Site NRD Settlement

<http://www.mass.gov/eea/land-use-habitats/antural-resource-damages/mass-nrd-cases/general-electric-nrd-settlement.html>

Open Space Planner's Workbook. www.state.ma.us/envir

Roberts, Cris. Town of Lenox, Administrative Assessor

Thornton, William F. Jr. Building Commissioner, Town of Lenox.

Town of Lenox. www.townoflenox.com

UMass Amherst High Quality Stream Map. http://www.streamcontinuity.org/assessing_crossing_structures/prioritizing_streams.htm

Vincent, Jeff. Department of Public Works, Town of Lenox.

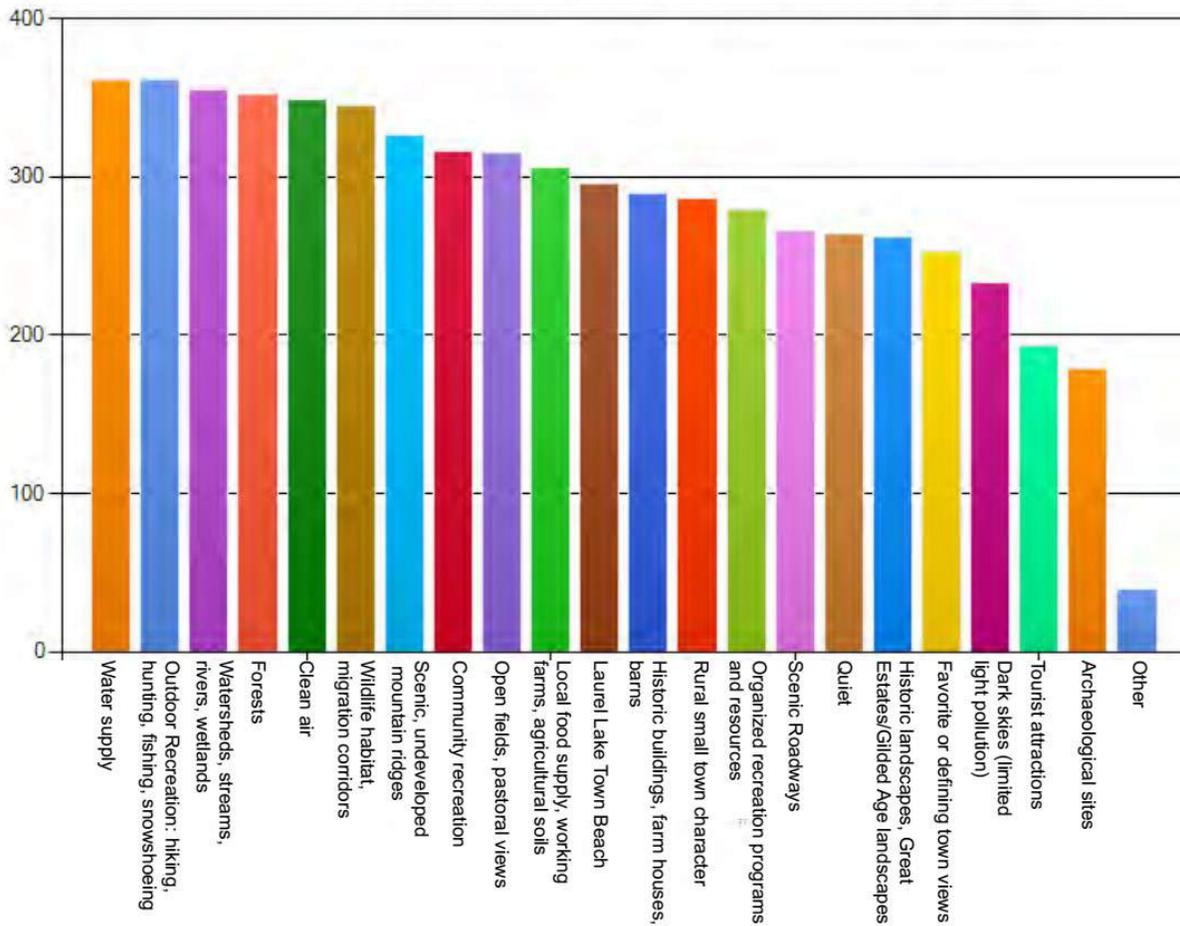


Photo: Kevin Sprague

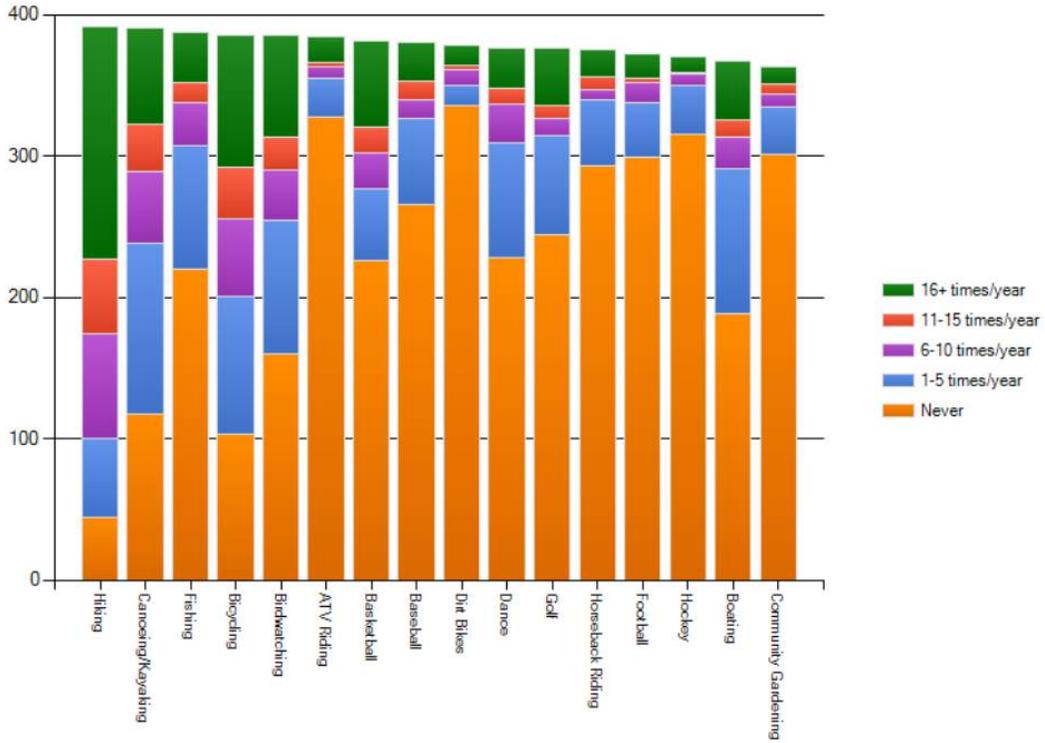
Appendix: Survey Results

Appendix : Lenox Open Space and Recreation Survey 2013 Results

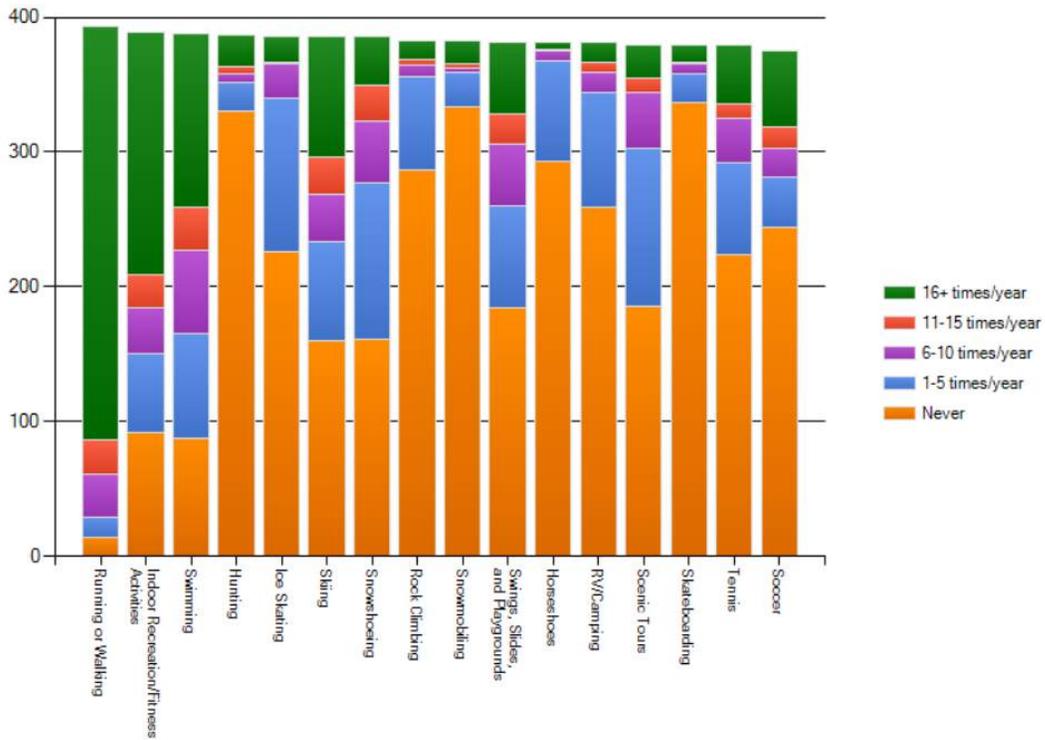
Check all resources in Lenox you consider important to protect or expand:



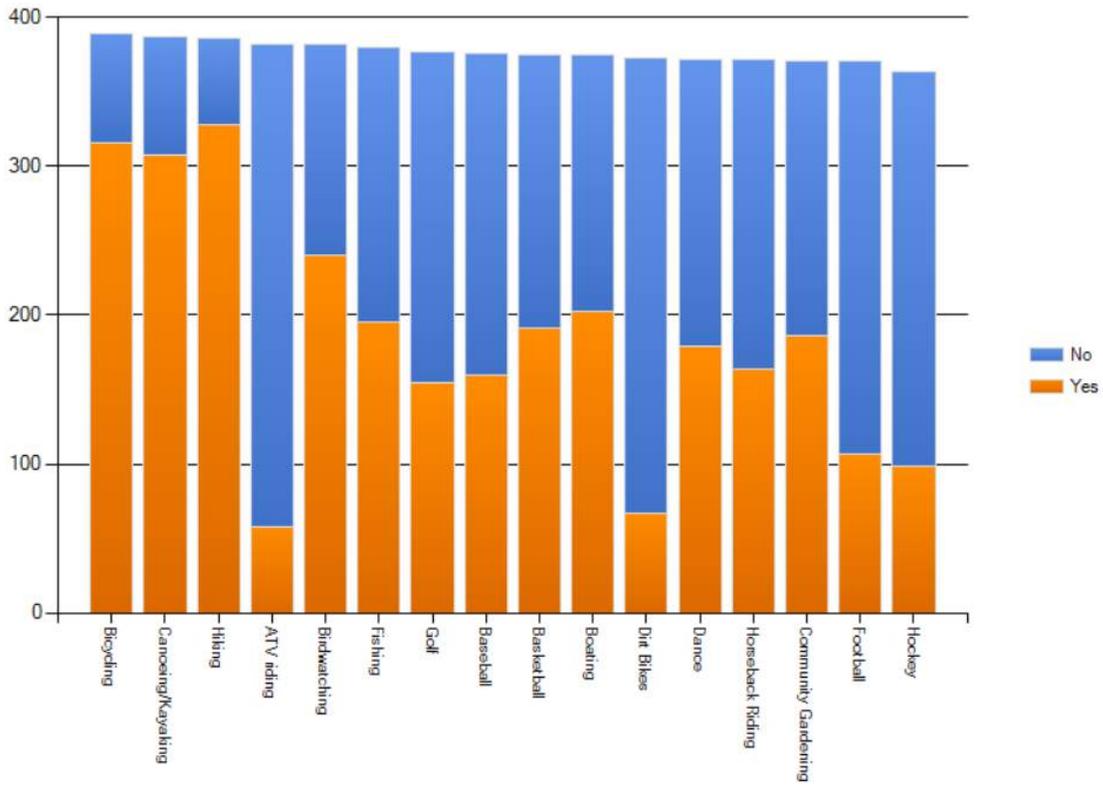
How often do you participate in each of these recreational activities?



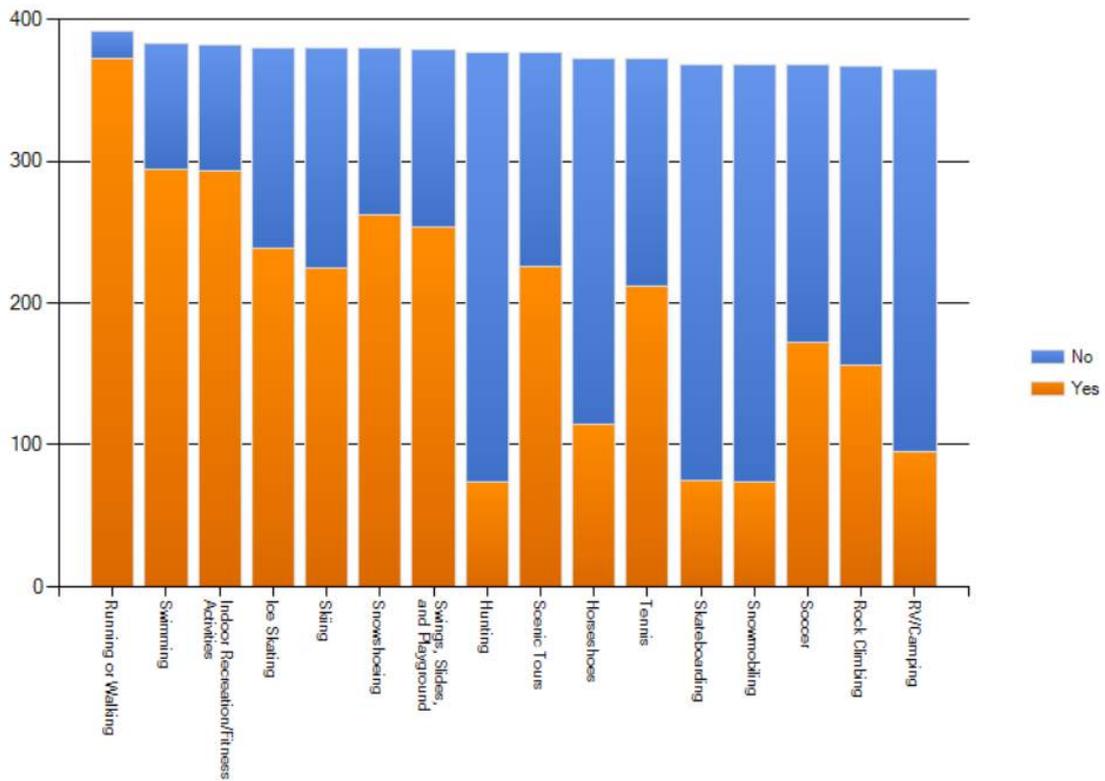
How often do you participate in each of these recreational activities?



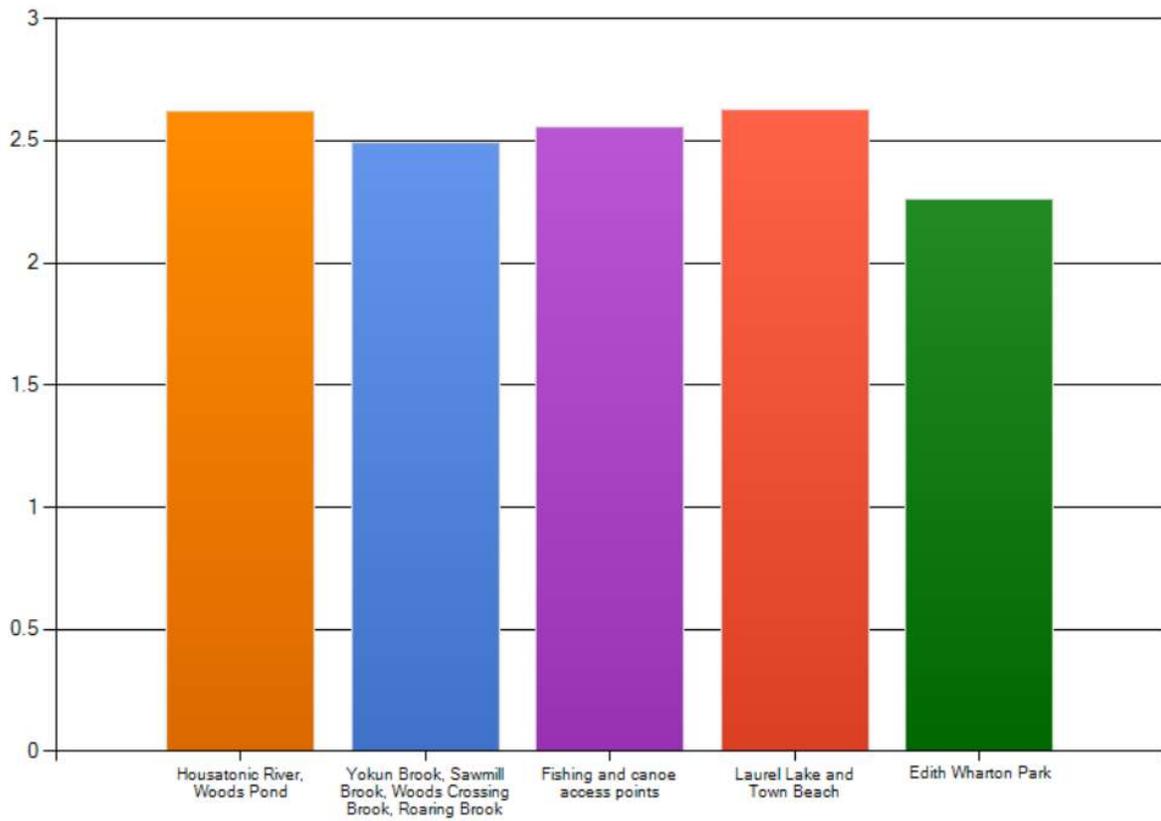
Would you like to do these activities in town?



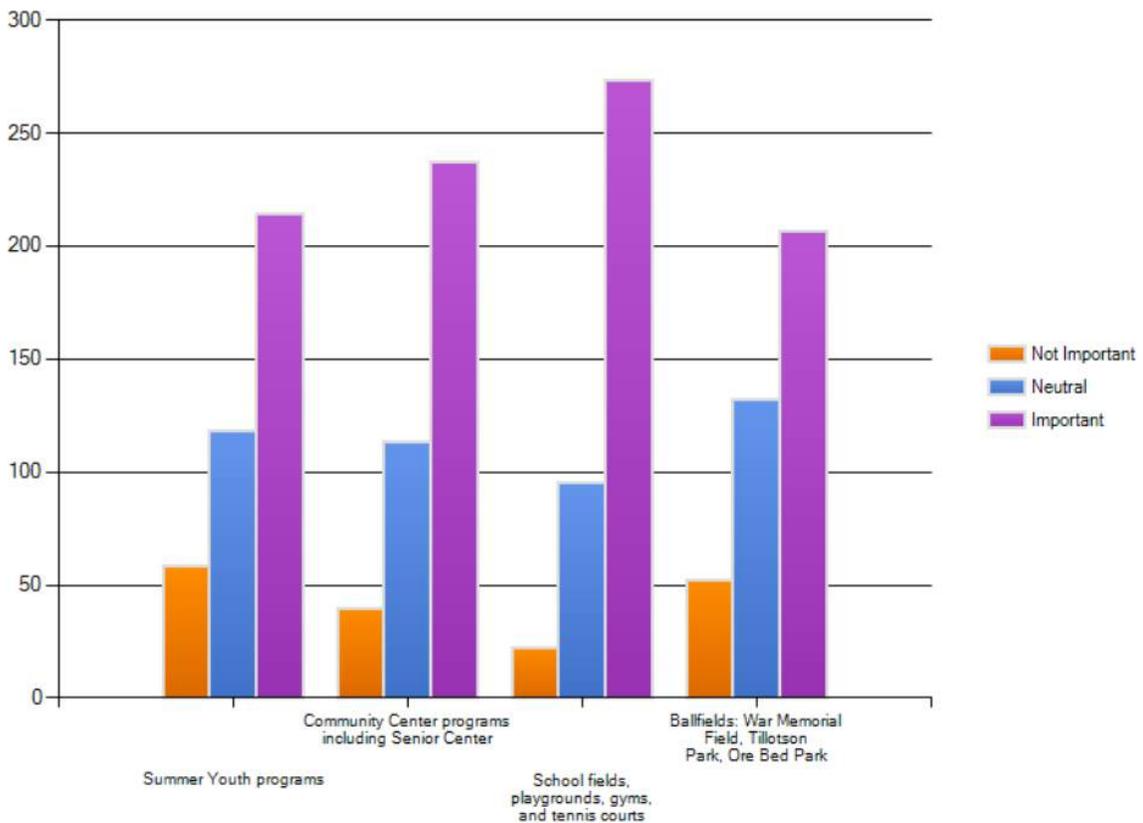
Would you like to do these activities in town?



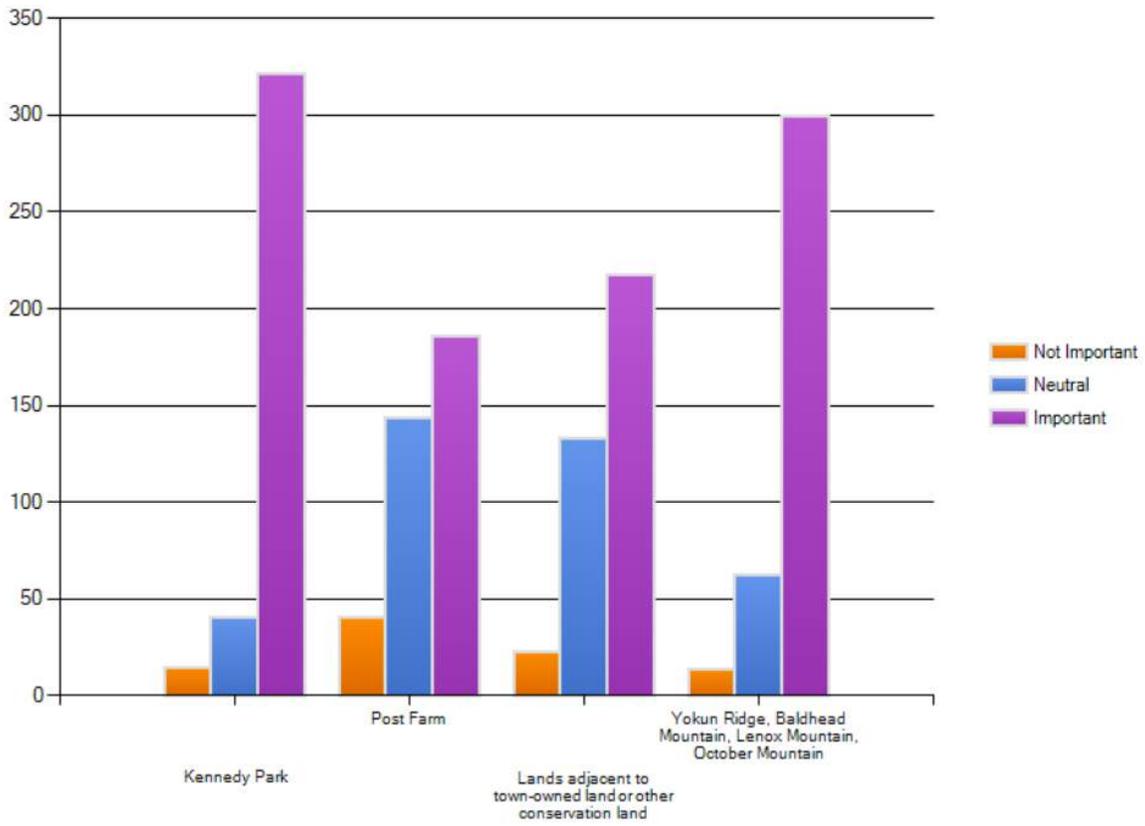
Rank how valuable these water-based resources are to you



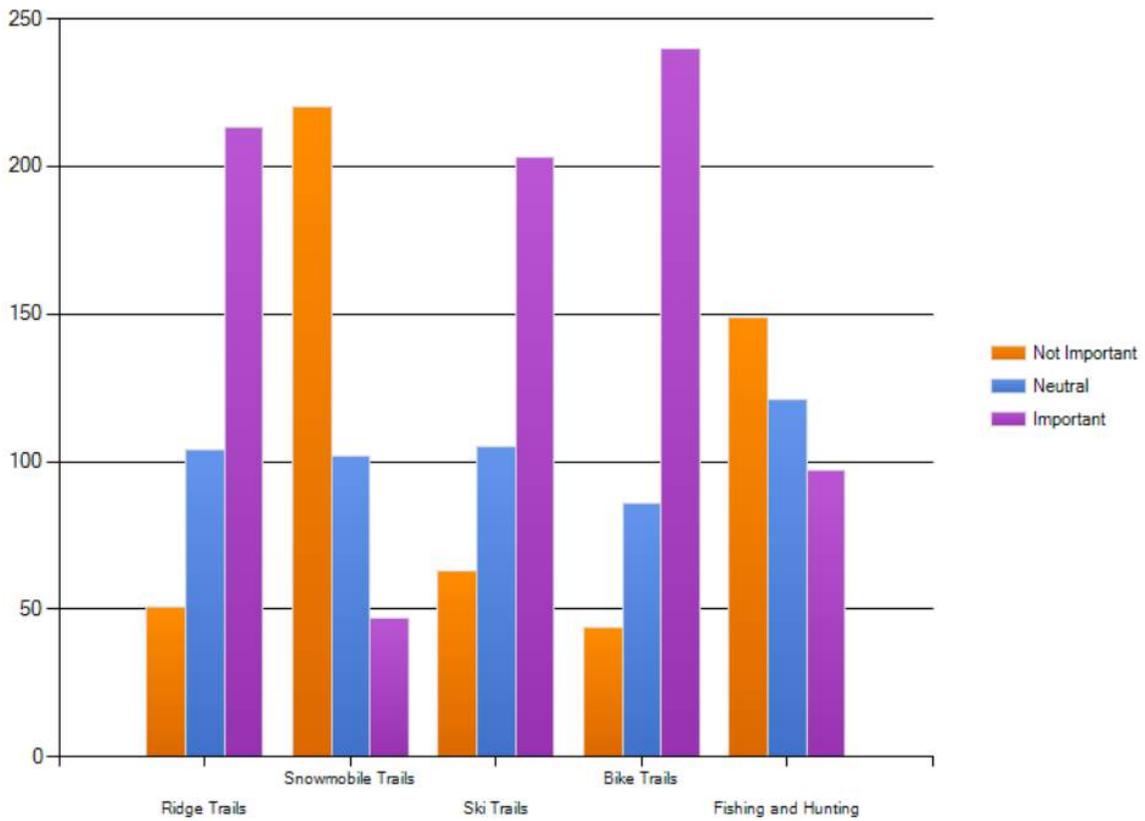
Rank how valuable these organized recreational programs are to you



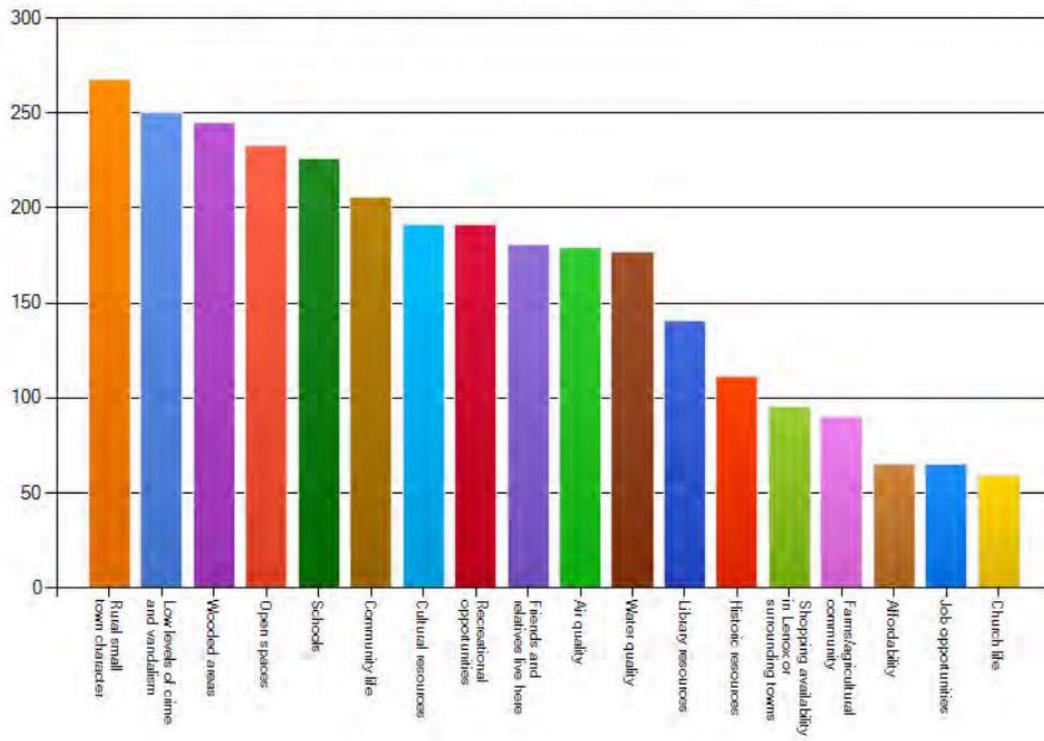
Rank how important these large open space areas are to you



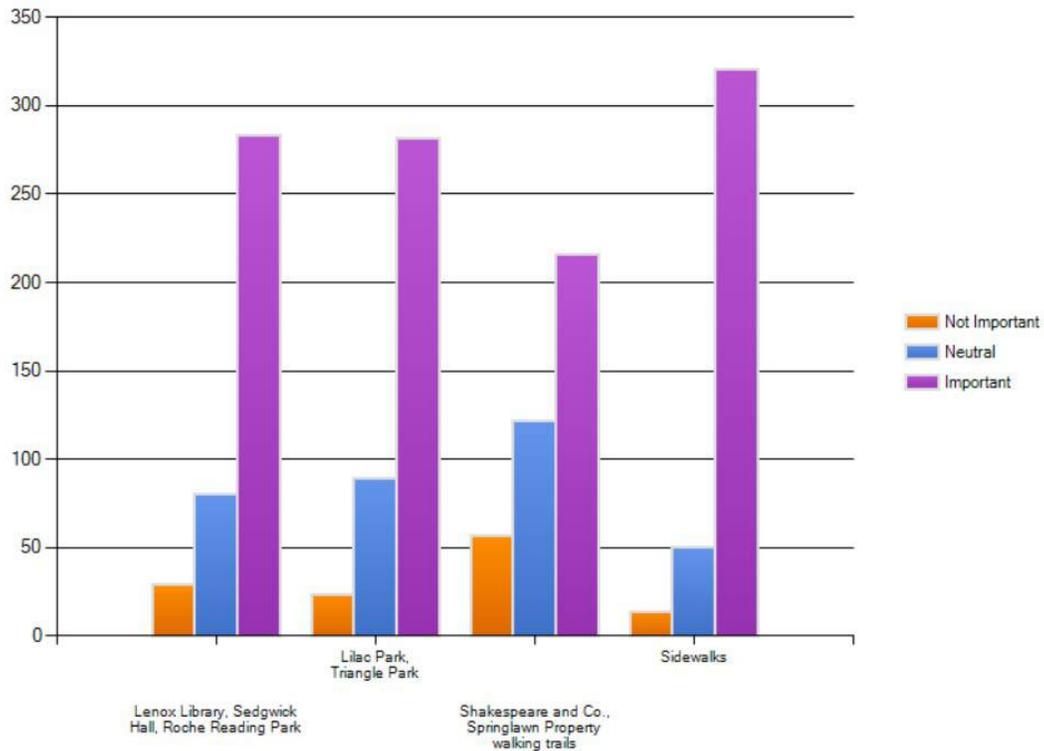
Rank how important these outdoor opportunities are to you



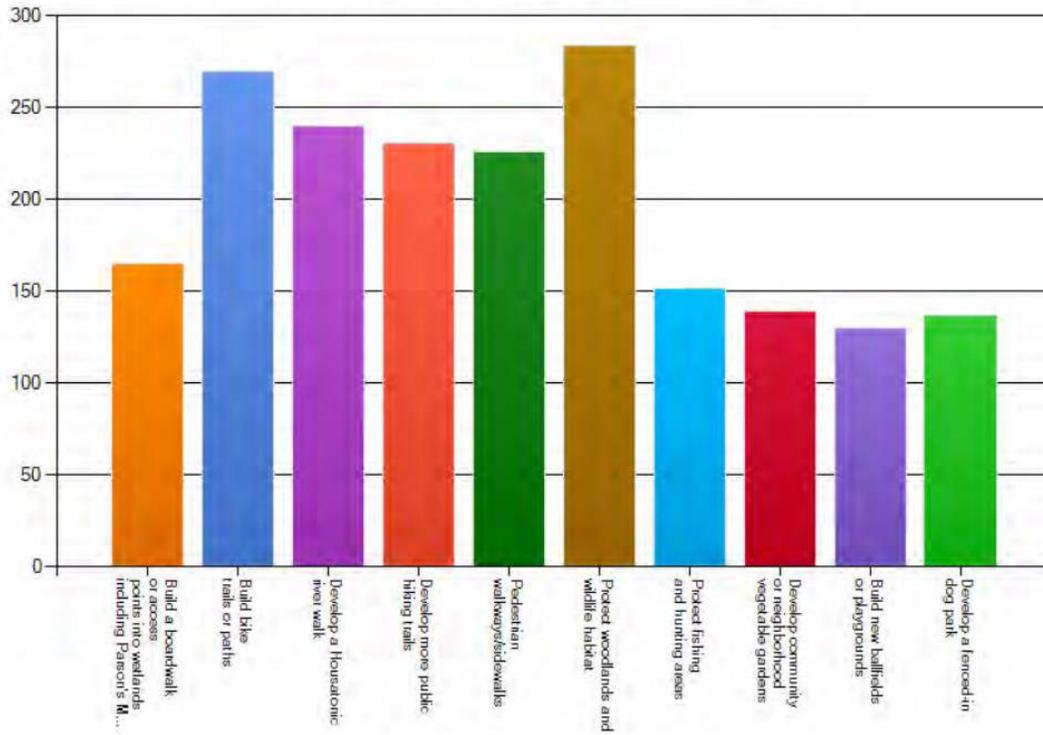
Check all of the reasons you chose to live in Lenox



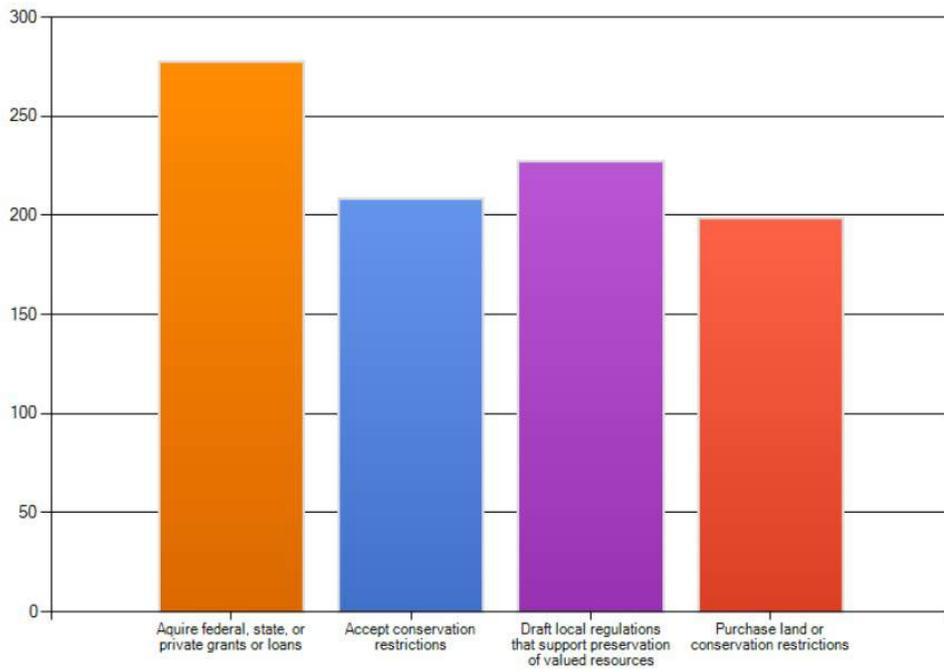
Rank how important these downtown opportunities are to you:



Check all town projects you would support



What town actions do you favor to preserve open space and meet recreational goals?



What actions would you consider taking in order to preserve open space and meet recreational goals?

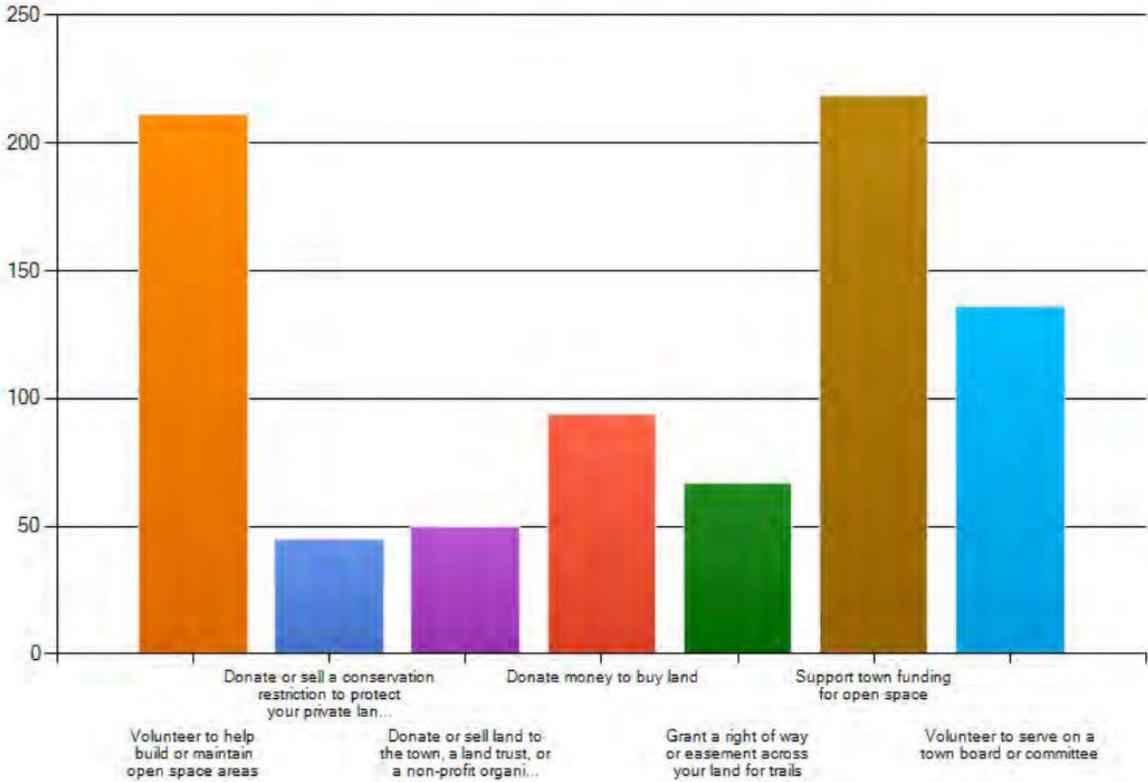




Photo: Kevin Sprague

Appendix: BioMap2 Reports



BioMap2

CONSERVING THE BIODIVERSITY OF
MASSACHUSETTS IN A CHANGING WORLD

Lenox

Produced in 2012

This report and associated map provide information about important sites for biodiversity conservation in your area.

This information is intended for conservation planning, and is not intended for use in state regulations.





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What is *BioMap2* – Purpose and applications

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Sources of Additional Information

Lenox Overview

Core Habitat and Critical Natural Landscape Summaries

Elements of *BioMap2* Cores

Core Habitat Summaries

Elements of *BioMap2* Critical Natural Landscapes

Critical Natural Landscape Summaries





Introduction

The Massachusetts Department of Fish & Game, through the Division of Fisheries and Wildlife's Natural Heritage & Endangered Species Program (NHESP), and The Nature Conservancy's Massachusetts Program developed *BioMap2* to protect the state's biodiversity in the context of climate change.

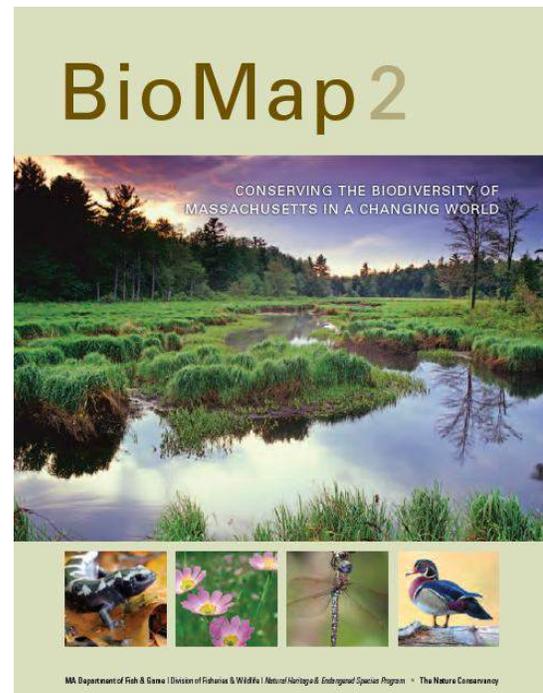
BioMap2 combines NHESP's 30 years of rigorously documented rare species and natural community data with spatial data identifying wildlife species and habitats that were the focus of the Division of Fisheries and Wildlife's 2005 State Wildlife Action Plan (SWAP). *BioMap2* also integrates The Nature Conservancy's assessment of large, well-connected, and intact ecosystems and landscapes across the Commonwealth, incorporating concepts of ecosystem resilience to address anticipated climate change impacts.

Protection and stewardship of *BioMap2* Core Habitat and Critical Natural Landscape is essential to safeguard the diversity of species and their habitats, intact ecosystems, and resilient natural landscapes across Massachusetts.

What Does Status Mean?

The Division of Fisheries and Wildlife determines a status category for each rare species listed under the Massachusetts Endangered Species Act (MESA), M.G.L. c.131A, and its implementing regulations 321 CMR 10.00. Rare species are categorized as Endangered, Threatened or of Special Concern according to the following:

- Endangered species are in danger of extinction throughout all or a significant portion of their range or are in danger of extirpation from Massachusetts.



Get your copy of the *BioMap2* report! Download from www.mass.gov/nhesp or contact Natural Heritage at 508-389-6360 or natural.heritage@state.ma.us.

- Threatened species are likely to become Endangered in Massachusetts in the foreseeable future throughout all or a significant portion of their range.
- Special Concern species have suffered a decline that could threaten the species if allowed to continue unchecked or occur in such small numbers or with such restricted distribution or specialized habitat requirements that they could easily become Threatened in Massachusetts.

In addition NHESP maintains an unofficial watch list of plants that are tracked due to potential conservation interest or concern, but are not regulated under the Massachusetts Endangered Species Act or other laws or regulations. Likewise, described natural communities are not regulated by any law or regulations, but they can help to identify ecologically important areas that are worthy of





protection. The status of natural communities reflects the documented number and acreages of each community type in the state:

- Critically Imperiled communities typically have 5 or fewer documented good sites or have very few remaining acres in the state.
- Imperiled communities typically have 6-20 good sites or few remaining acres in the state.
- Vulnerable communities typically have 21-100 good sites or limited acreage across the state.
- Secure communities typically have over 100 sites or abundant acreage across the state; however, excellent examples are identified as Core Habitats to ensure continued protection.

In 2005 the Massachusetts Division of Fisheries and Wildlife completed a comprehensive State Wildlife Action Plan (SWAP) documenting the status of Massachusetts wildlife and providing recommendations to help guide wildlife conservation decision-making. SWAP includes all the wildlife species listed under the Massachusetts Endangered Species Act (MESA), as well as more than 80 species that need conservation attention but do not meet the requirements for inclusion under MESA. The SWAP document is organized around habitat types in need of conservation within the Commonwealth. While the original BioMap focused primarily on rare species protected under MESA, *BioMap2* also addresses other Species of Conservation Concern, their habitats, and the ecosystems that support them to create a spatial representation of most of the elements of SWAP.

***BioMap2*: One Plan, Two Components**

BioMap2 identifies two complementary spatial layers, Core Habitat and Critical Natural Landscape.

Core Habitat identifies key areas that are critical for the long-term persistence of rare species and other Species of Conservation Concern, as well as a wide diversity of natural communities and intact ecosystems across the Commonwealth. Protection of Core Habitats will contribute to the conservation of specific elements of biodiversity.

Critical Natural Landscape identifies large natural Landscape Blocks that are minimally impacted by development. If protected, these areas will provide habitat for wide-ranging native species, support intact ecological processes, maintain connectivity among habitats, and enhance ecological resilience to natural and anthropogenic disturbances in a rapidly changing world. Areas delineated as Critical Natural Landscape also include buffering upland around wetland, coastal, and aquatic Core Habitats to help ensure their long-term integrity.

The long-term persistence of Massachusetts biological resources requires a determined commitment to land and water conservation. Protection and stewardship of both Critical Natural Landscapes and Core Habitats are needed to realize the biodiversity conservation vision of *BioMap2*.

Components of Core Habitat

Core Habitat identifies specific areas necessary to promote the long-term persistence of rare species, other Species of Conservation Concern, exemplary natural communities, and intact ecosystems.

Rare Species

There are 432 native plant and animal species listed as Endangered, Threatened or Special Concern under the Massachusetts Endangered Species Act (MESA) based on their rarity, population trends, and threats to survival. For





Table 1. Species of Conservation Concern described in the State Wildlife Action Plan and/or included on the MESA List and for which habitat was mapped in *BioMap2*. Note that plants are not included in SWAP, and that marine species such as whales and sea turtles are not included in *BioMap2*.

Taxonomic Group	MESA-listed Species	Non-listed Species of Conservation Concern
Mammals	4	5
Birds	27	23
Reptiles	10	5
Amphibians	4	3
Fish	10	17
Invertebrates	102	9
Plants	256	0
Total	413	62

BioMap2, NHESP staff identified the highest quality habitat sites for each non-marine species based on size, condition, and landscape context.

Other Species of Conservation Concern

In addition to species on the MESA List described previously, the State Wildlife Action Plan (SWAP) identifies 257 wildlife species and 22 natural habitats most in need of conservation within the Commonwealth. *BioMap2* includes species-specific habitat areas for 45 of these species and habitat for 17 additional species which was mapped with other coarse-filter and fine-filter approaches.

Priority Natural Communities

Natural communities are assemblages of plant and animal species that share a common environment and occur together repeatedly on the landscape. *BioMap2* gives conservation

priority to natural communities with limited distribution and to the best examples of more common types.

Vernal Pools

Vernal pools are small, seasonal wetlands that provide important wildlife habitat, especially for amphibians and invertebrate animals that use them to breed. *BioMap2* identifies the top 5 percent most interconnected clusters of Potential Vernal Pools in the state.

Forest Cores

In *BioMap2*, Core Habitat includes the best examples of large, intact forests that are least impacted by roads and development, providing critical habitat for numerous woodland species. For example, the interior forest habitat defined by Forest Cores supports many bird species sensitive to the impacts of roads and development, such as the Black-throated Green Warbler, and helps maintain ecological processes found only in unfragmented forest patches.

Wetland Cores

BioMap2 used an assessment of Ecological Integrity to identify the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Aquatic Cores

To delineate integrated and functional ecosystems for fish species and other aquatic





Species of Conservation Concern, beyond the species and exemplary habitats described above, *BioMap2* identifies intact river corridors within which important physical and ecological processes of the river or stream occur.

Components of Critical Natural Landscape

Critical Natural Landscape identifies intact landscapes in Massachusetts that are better able to support ecological processes and disturbance regimes, and a wide array of species and habitats over long time frames.

Landscape Blocks

BioMap2 identifies the most intact large areas of predominately natural vegetation, consisting of contiguous forests, wetlands, rivers, lakes, and ponds, as well as coastal habitats such as barrier beaches and salt marshes.

Upland Buffers of Wetland and Aquatic Cores

A variety of analyses were used to identify protective upland buffers around wetlands and rivers.

Upland Habitat to Support Coastal Adaptation

BioMap2 identifies undeveloped lands adjacent to and up to one and a half meters above existing salt marshes as Critical Natural Landscapes with high potential to support inland migration of salt marsh and other coastal habitats over the coming century.

The conservation areas identified by *BioMap2* are based on breadth and depth of data, scientific expertise, and understanding of Massachusetts' biodiversity. The numerous sources of information and analyses used to

Legal Protection of Biodiversity

BioMap2 presents a powerful vision of what Massachusetts would look like with full protection of the land most important for supporting the Commonwealth's biodiversity. While *BioMap2* is a planning tool with *no regulatory function*, all state-listed species enjoy legal protection under the [Massachusetts Endangered Species Act \(M.G.L. c.131A\)](#) and its implementing regulations ([321 CMR 10.00](#)). Wetland habitat of state-listed wildlife is also protected under the [Wetlands Protection Act Regulations \(310 CMR 10.00\)](#). The *Natural Heritage Atlas* contains maps of [Priority Habitats](#) and [Estimated Habitats](#), which are used, respectively, for regulation under the Massachusetts Endangered Species Act and the Wetlands Protection Act. For more information on rare species regulations, and to view Priority and Estimated Habitat maps, please see the [Regulatory Review](#) page at <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/>.

BioMap2 is a conservation planning tool that does not, in any way, supplant the Estimated and Priority Habitat Maps which have regulatory significance. Unless and until the BioMap2 vision is fully realized, we must continue to protect our most imperiled species and their habitats.

create Core Habitat and Critical Natural Landscape are complementary, and outline a comprehensive conservation vision for Massachusetts, from rare species to intact landscapes. In total, these robust analyses define a suite of priority lands and waters that, if permanently protected, will support Massachusetts' natural systems for generations to come.





Understanding Core Habitat Summaries

Following the Town Overview, there is a descriptive summary of each Core Habitat and Critical Natural Landscape that occurs in your city or town. These summaries highlight some of the outstanding characteristics of each Core Habitat and Critical Natural Landscape, and will help you learn more about your city or town's biodiversity. You can find out more information about many of these species and natural communities by looking at specific fact sheets at www.mass.gov/nhosp.

Additional Information

For copies of the full *BioMap2* report, the Technical Report, and an [interactive mapping tool](#), visit the *BioMap2* [website](#) via the Land Protection and Planning tab at www.mass.gov/nhosp. If you have any questions about this report, or if you need help protecting land for biodiversity in your community, the Natural Heritage & Endangered Species Program staff looks forward to working with you.

Contact the Natural Heritage & Endangered Species Program

By phone 508-389-6360
By fax 508-389-7890
By email natural.heritage@state.ma.us
By Mail 100 Hartwell Street, Suite 230
West Boylston, MA 01583

The GIS datalayers of *BioMap2* are available for download from MassGIS at www.mass.gov/mgis.





Town Overview

Lenox lies on the border of the Berkshire Highlands/Southern Green Mountains and the Western New England Marble Valleys/Berkshire Valley/Housatonic and Hoosic Valley Ecoregions. The Berkshire Highlands Ecoregion is an area drained by the Deerfield, upper Westfield, Hoosic, and Housatonic Rivers. Lakes and ponds are relatively abundant. This ecoregion has deep soils that support northern hardwoods and spruce-fir forests. The Western New England Marble Valleys Ecoregion is an area drained by the Hoosic and Housatonic Rivers. This ecoregion harbors farms, evergreen forests, transition and northern hardwood forests, and calcareous fens. The limestone-rich bedrock in the area creates alkaline lakes and streams.



Lenox at a Glance

- Total Area: 13,867 acres (21.7 square miles)
- Human Population in 2010: 5,025
- Open space protected in perpetuity: 4,306 acres, or 31.1% percent of total area*
- BioMap2 Core Habitat: 5,033 acres
- BioMap2 Core Habitat Protected: 2,611 acres or 51.9%
- BioMap2 Critical Natural Landscape: 7,065 acres
- BioMap2 Critical Natural Landscape Protected: 3,951 acres or 55.9%.

BioMap2 Components

Core Habitat

- 9 Exemplary or Priority Natural Community Cores
- 2 Forest Cores
- 7 Wetland Cores
- 14 Aquatic Cores
- 3 Vernal Pool Cores
- 13 Species of Conservation Concern Cores**
 - 1 mammal, 4 birds, 1 reptile, 4 amphibians, 5 insects, 1 snail, 26 plants

Critical Natural Landscape

- 2 Landscape Blocks
- 5 Wetland Core Buffers
- 7 Aquatic Core Buffers

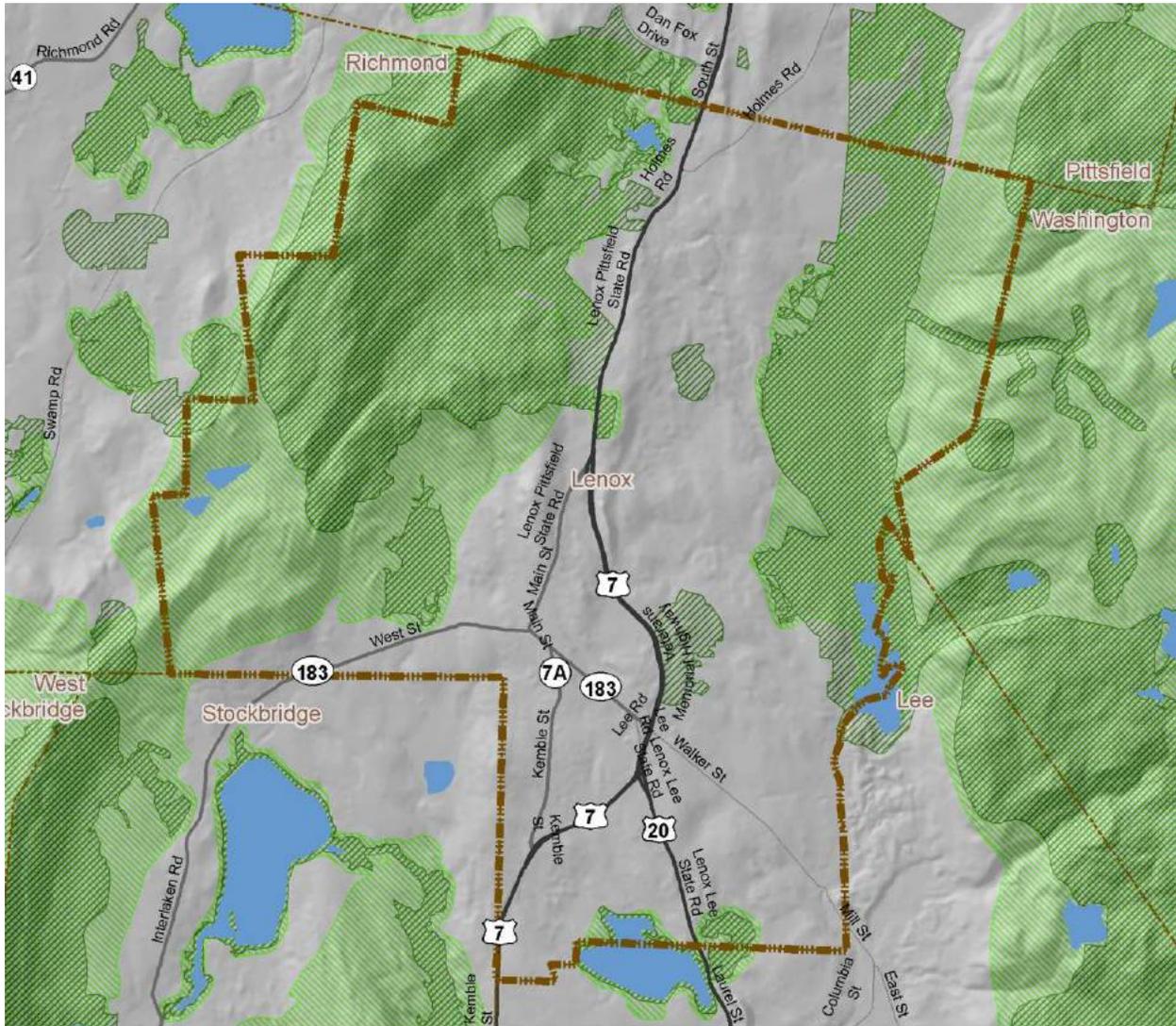
* Calculated using MassGIS data layer "Protected and Recreational Open Space—March, 2012".

** See next pages for complete list of species, natural communities and other biodiversity elements.





BioMap2 Core Habitat and Critical Natural Landscape in Lenox



-  BioMap2 Core Habitat
-  BioMap2 Critical Natural Landscape

1 Mile






**Species of Conservation Concern, Priority and Exemplary Natural Communities,
and Other Elements of Biodiversity in Lenox**

Snails

[Boreal Marstonia](#), (*Marstonia lustrica*), E

Insects

Butterflies

[Early Hairstreak](#), (*Erora laeta*), T

[Mustard White](#), (*Pieris oleracea*), T

Dragonflies

[Rapids Clubtail](#), (*Gomphus quadricolor*), E

[Arrow Clubtail](#), (*Stylurus spiniceps*), Non-listed SWAP species

[Zebra Clubtail](#), (*Stylurus scudderi*), Non-listed SWAP species

Amphibians

[Jefferson Salamander](#), (*Ambystoma jeffersonianum*), SC

[Four-toed Salamander](#), (*Hemidactylium scutatum*), Non-listed SWAP

Northern Leopard Frog, (*Rana pipiens*), Non-listed SWAP

[Spring Salamander](#), (*Gyrinophilus porphyriticus*), Non-listed SWAP

Reptiles

[Wood Turtle](#), (*Glyptemys insculpta*), SC

Birds

[American Bittern](#), (*Botaurus lentiginosus*), E

[Common Moorhen](#), (*Gallinula chloropus*), SC

[Bald Eagle](#), (*Haliaeetus leucocephalus*), T

[Sora](#), (*Porzana carolina*), Non-listed SWAP

Mammals

[Water Shrew](#), (*Sorex palustris*), SC

Plants

[Smooth Rock-cress](#), (*Boechera laevigata*), SC

[Foxtail Sedge](#), (*Carex alopecoidea*), T

[Back's Sedge](#), (*Carex backii*), E

[Bush's Sedge](#), (*Carex bushii*), E

[Chestnut-colored Sedge](#), (*Carex castanea*), E

[Gray's Sedge](#), (*Carex grayi*), T

[Hitchcock's Sedge](#), (*Carex hitchcockiana*), SC

[Fen Sedge](#), (*Carex tetanica*), SC

[Handsome Sedge](#), (*Carex formosa*), T

[Narrow-leaved Spring Beauty](#), (*Claytonia virginica*), E

[Hemlock Parsley](#), (*Conioselinum chinense*), SC





[Intermediate Spike-sedge](#), (*Eleocharis intermedia*), T
[Dwarf Scouring-rush](#), (*Equisetum scirpoides*), SC
[Northern Bedstraw](#), (*Galium boreale*), E
[Labrador Bedstraw](#), (*Galium labradoricum*), T
[Adder's-tongue Fern](#), (*Ophioglossum pusillum*), T
[Pale Green Orchis](#), (*Platanthera flava* var. *herbiola*), T
[Hill's Pondweed](#), (*Potamogeton hillii*), SC
[Bur Oak](#), (*Quercus macrocarpa*), SC
[Bristly Buttercup](#), (*Ranunculus pensylvanicus*), SC
[Wapato](#), (*Sagittaria cuneata*), T
[Long-styled Sanicle](#), (*Sanicula odorata*), T
[Small Dropseed](#), (*Sporobolus neglectus*), E
[Crooked-stem Aster](#), (*Symphotrichum prenanthoides*), SC

Priority Natural Communities

[Transitional Floodplain Forest](#), S2
[Alluvial Red Maple Swamp](#), S3
[Black Ash-Red Maple-Tamarack Calcareous Seepage Swamp](#), S2
[Major-river Floodplain Forest](#), S2
[High-terrace Floodplain Forest](#), S2
[Rich, Mesic Forest Community](#), S3

Exemplary Natural Communities

[Hemlock-Hardwood Swamp](#)
[Red Maple - Black Ash - Bur Oak Swamp](#)

Other BioMap2 Components

[Forest Core](#)
[Aquatic Core](#)
[Wetland Core](#)
[Vernal Pool Core](#)
[Landscape Block](#)
[Aquatic Core Buffer](#)
[Wetland Core Buffer](#)

E = Endangered

T = Threatened

SC = Special Concern

S1 = Critically Imperiled communities, typically 5 or fewer documented sites or very few remaining acres in the state.

S2 = Imperiled communities, typically 6-20 sites or few remaining acres in the state.

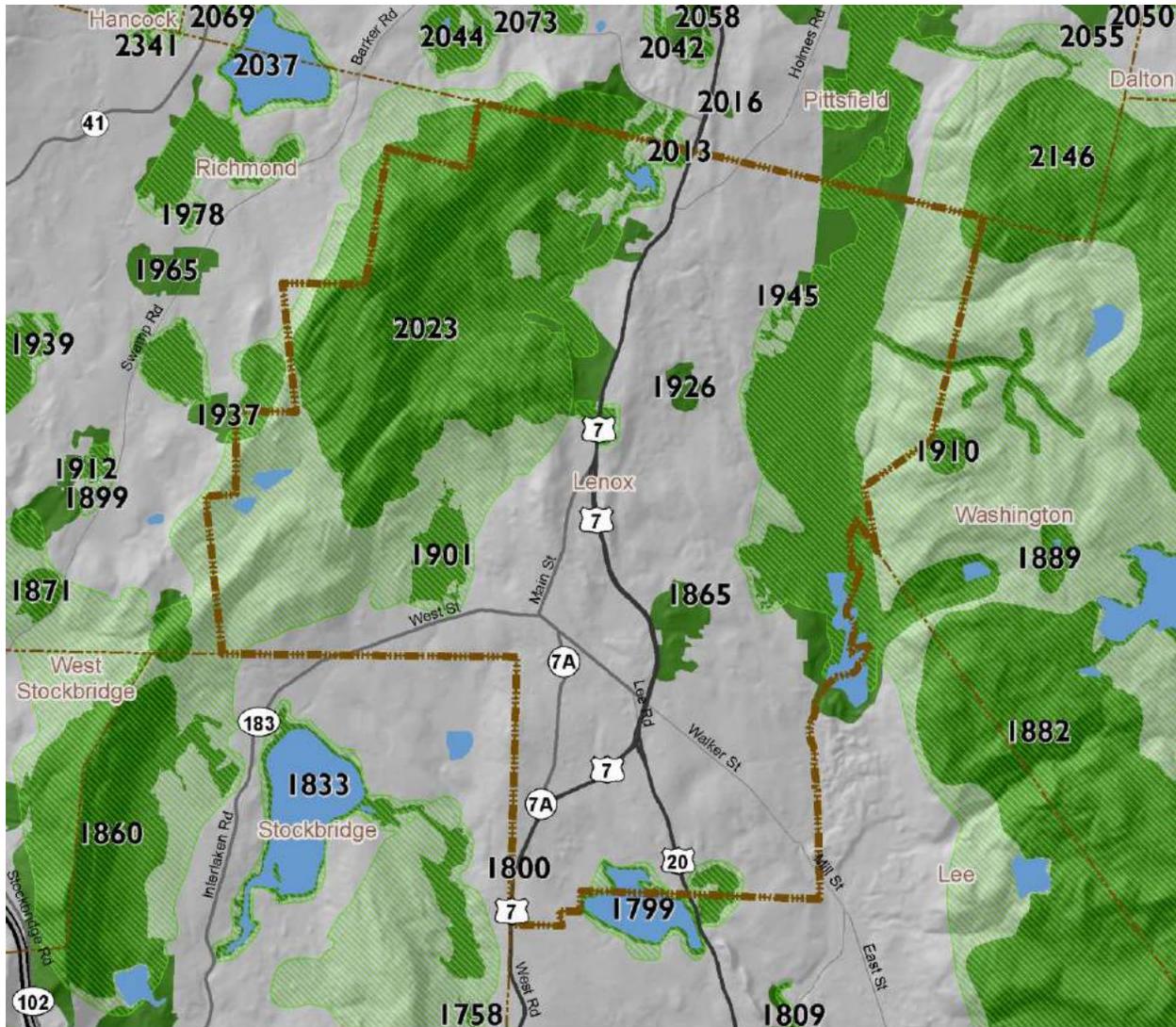
S3 = Vulnerable communities, typically have 21-100 sites or limited acreage across the state.



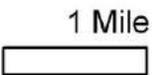


BioMap2 Core Habitat in Lenox

Core IDs correspond with the following element lists and summaries.



-  BioMap2 Core Habitat
-  BioMap2 Critical Natural Landscape





Elements of BioMap2 Cores

This section lists all elements of BioMap2 Cores that fall *entirely or partially* within Lenox. The elements listed here may not occur within the bounds of Lenox.

Core 1793

Species of Conservation Concern

Small Dropseed *Sporobolus neglectus* E

Core 1799

Aquatic Core

Priority & Exemplary Natural Communities

Black Ash-Red Maple-Tamarack Calcareous Seepage Swamp S2

Species of Conservation Concern

Hairy Honeysuckle *Lonicera hirsuta* E

Labrador Bedstraw *Galium labradoricum* T

Boreal Marstonia *Marstonia lustrica* E

Core 1800

Species of Conservation Concern

Small Dropseed *Sporobolus neglectus* E

Core 1865

Species of Conservation Concern

Jefferson Salamander *Ambystoma jeffersonianum* SC

Core 1901

Wetland Core

Core 1910

Vernal Pool Core

Core 1926

Species of Conservation Concern

A data-sensitive species

Core 1937

Aquatic Core

Priority & Exemplary Natural Communities

Black Ash-Red Maple-Tamarack Calcareous Seepage Swamp S2





Calcareous Rocky Summit/Rock Outcrop Community		S2
Calcareous Seepage Marsh		S2
Species of Conservation Concern		
Great Laurel	<i>Rhododendron maximum</i>	T
Hemlock Parsley	<i>Conioselinum chinense</i>	SC
Labrador Bedstraw	<i>Galium labradoricum</i>	T
Woodland Millet	<i>Milium effusum</i>	T
Jefferson Salamander	<i>Ambystoma jeffersonianum</i>	SC

Core 1945

Aquatic Core		
Species of Conservation Concern		
Crooked-stem Aster	<i>Symphotrichum prenanthoides</i>	SC

Core 2013

Aquatic Core		
Species of Conservation Concern		
Crooked-stem Aster	<i>Symphotrichum prenanthoides</i>	SC

Core 2023

Forest Core		
Wetland Core		
Aquatic Core		
Vernal Pool Core		
Priority & Exemplary Natural Communities		
Rich, Mesic Forest Community		S3
Species of Conservation Concern		
Adder's-tongue Fern	<i>Ophioglossum pusillum</i>	T
Back's Sedge	<i>Carex backii</i>	E
Bush's Sedge	<i>Carex bushii</i>	E
Chestnut-colored Sedge	<i>Carex castanea</i>	E
Crooked-stem Aster	<i>Symphotrichum prenanthoides</i>	SC
Dwarf Scouring-rush	<i>Equisetum scirpoides</i>	SC
Fen Sedge	<i>Carex tetanica</i>	SC
Handsome Sedge	<i>Carex formosa</i>	T
Hill's Pondweed	<i>Potamogeton hillii</i>	SC
Hitchcock's Sedge	<i>Carex hitchcockiana</i>	SC
Intermediate Spike-sedge	<i>Eleocharis intermedia</i>	T
Northern Bedstraw	<i>Galium boreale</i>	E
Pale Green Orchis	<i>Platanthera flava</i> var. <i>herbiola</i>	T
Smooth Rock-cress	<i>Boechera laevigata</i>	SC
Early Hairstreak	<i>Erora laeta</i>	T
Mustard White	<i>Pieris oleracea</i>	T





Four-toed Salamander	<i>Hemidactylium scutatum</i>	Non-listed SWAP
Jefferson Salamander	<i>Ambystoma jeffersonianum</i>	SC
Spring Salamander	<i>Gyrinophilus porphyriticus</i>	Non-listed SWAP

Core 2146

Forest Core		
Wetland Core		
Aquatic Core		
Vernal Pool Core		
Priority & Exemplary Natural Communities		
Alluvial Red Maple Swamp		S3
Hemlock-Hardwood Swamp		
High-terrace Floodplain Forest		S2
Level Bog		S3
Major-river Floodplain Forest		S2
Red Maple - Black Ash - Bur Oak Swamp		
Transitional Floodplain Forest		S2
Species of Conservation Concern		
Barren Strawberry	<i>Geum fragarioides</i>	SC
Bristly Buttercup	<i>Ranunculus pensylvanicus</i>	SC
Bur Oak	<i>Quercus macrocarpa</i>	SC
Crooked-stem Aster	<i>Symphotrichum prenanthoides</i>	SC
Culver's-root	<i>Veronicastrum virginicum</i>	T
Fen Cuckoo Flower	<i>Cardamine dentata</i>	T
Foxtail Sedge	<i>Carex alopecoidea</i>	T
Gray's Sedge	<i>Carex grayi</i>	T
Hairy Wild Rye	<i>Elymus villosus</i>	E
Hemlock Parsley	<i>Conioselinum chinense</i>	SC
Intermediate Spike-sedge	<i>Eleocharis intermedia</i>	T
Long-styled Sanicle	<i>Sanicula odorata</i>	T
Narrow-leaved Spring Beauty	<i>Claytonia virginica</i>	E
Straight-leaved Pondweed	<i>Potamogeton strictifolius</i>	E
Tuckerman's Sedge	<i>Carex tuckermanii</i>	E
Wapato	<i>Sagittaria cuneata</i>	T
White Adder's-mouth	<i>Malaxis monophyllos</i> var. <i>brachypoda</i>	E
Triangle Floater	<i>Alasmidonta undulata</i>	Non-listed SWAP
Ostrich Fern Borer Moth	<i>Papaipema</i> sp. 2 nr. <i>pterisii</i>	SC
Mustard White	<i>Pieris oleracea</i>	T
Tule Bluet	<i>Enallagma carunculatum</i>	SC
Arrow Clubtail	<i>Stylurus spiniceps</i>	Non-listed SWAP
Brook Snaketail	<i>Ophiogomphus aspersus</i>	SC
Ocellated Darner	<i>Boyeria grafiana</i>	SC
Rapids Clubtail	<i>Gomphus quadricolor</i>	E





Riffle Snaketail	<i>Ophiogomphus carolus</i>	T
Spine-crowned Clubtail	<i>Gomphus abbreviatus</i>	SC
Zebra Clubtail	<i>Stylurus scudderi</i>	Non-listed SWAP
Four-toed Salamander	<i>Hemidactylium scutatum</i>	Non-listed SWAP
Jefferson Salamander	<i>Ambystoma jeffersonianum</i>	SC
Northern Leopard Frog	<i>Rana pipiens</i>	Non-listed SWAP
Spring Salamander	<i>Gyrinophilus porphyriticus</i>	Non-listed SWAP
Wood Turtle	<i>Glyptemys insculpta</i>	SC
American Bittern	<i>Botaurus lentiginosus</i>	E
Bald Eagle	<i>Haliaeetus leucocephalus</i>	T
Common Moorhen	<i>Gallinula chloropus</i>	SC
Sora	<i>Porzana carolina</i>	Non-listed SWAP
Water Shrew	<i>Sorex palustris</i>	SC





Core Habitat Summaries

Core 1793

A <1-acre Core Habitat featuring a Species of Conservation Concern.

Small Dropseed is an annual grass that grows in calcareous seeps, flat rocks, riverside outcrops, and river shores. It is also found occasionally along roadsides and other disturbed open sites.

Core 1799

A 270-acre Core Habitat featuring Aquatic Core, Priority Natural Communities, and Species of Conservation Concern.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

Black Ash-Red Maple-Tamarack Calcareous Seepage Swamps are mixed deciduous-coniferous forested swamps occurring in areas where there is calcium-rich groundwater seepage. This nutrient enrichment supports many rare calcium-loving plant species. This moderately large example of a Black Ash-Red Maple-Tamarack Calcareous Seepage Swamp is in good condition, despite the presence of some exotic invasive species.

Hairy Honeysuckle, a twining and climbing, somewhat shrubby vine, is found in open to lightly shaded exposures on calcareous rocky slopes or acidic slopes with calcareous till.

Labrador Bedstraw, a slender perennial herb of the madder family, inhabits calcareous fens, wet meadows, and swamps, often on hummocks or tussocks in full or filtered sunlight.

Boreal Marstonia are small snails that live on plants in lakes rich in calcium and magnesium with a well-vegetated shallow zone.

Core 1800

A <1-acre Core Habitat featuring a Species of Conservation Concern.

Small Dropseed is an annual grass that grows in calcareous seeps, flat rocks, riverside outcrops, and river shores. It is also found occasionally along roadsides and other disturbed open sites.

Core 1865

A 133-acre Core Habitat featuring a Species of Conservation Concern.

Adult and juvenile Jefferson Salamanders inhabit upland forests during most of the year, where they reside in small-mammal burrows and other subsurface retreats. Adults migrate during late winter or early spring to breed in vernal pools and fish-free areas of swamps, marshes, or similar wetlands. Larvae metamorphose in late summer or early fall, whereupon they disperse into upland forest.





Core 1901

A 150-acre Core Habitat featuring Wetland Core.

Wetland Cores are the least disturbed wetlands in the state within undeveloped landscapes – those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

The 150-acre Wetland Core is among the largest 20% of Wetland Cores statewide and in this ecoregion.

Core 1910

A 57-acre Core Habitat featuring Vernal Pool Core.

Vernal pools are small, seasonal wetlands that provide important wildlife habitat, especially for amphibians and invertebrate animals that use them to breed. *BioMap2* identifies the top 5 percent most interconnected clusters of Potential Vernal Pools in the state.

Core 1926

A 45-acre Core Habitat featuring a data-sensitive Species of Conservation Concern.

The Natural Heritage & Endangered Species Program does not release information on particularly vulnerable species.

Core 1937

A 300-acre Core Habitat featuring Aquatic Core, Priority Natural Communities, and Species of Conservation Concern.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

Black Ash-Red Maple-Tamarack Calcareous Seepage Swamps are mixed deciduous-coniferous forested swamps occurring in areas where there is calcium-rich groundwater seepage. This nutrient enrichment supports many rare calcium-loving plant species. This is a large example of a good-quality Black Ash - Red Maple - Tamarack Calcareous Seepage Swamp that is associated with several state-listed plant species.

Calcareous Rocky Summit/Rock Outcrop Communities are sparsely vegetated, dry, open communities, typically found on the ridge tops in the marble regions of Berkshire County. Their open aspect is maintained by trees uprooting and falling. This small calcareous rock outcrop has good diversity and moderate landscape context in association with other priority communities.

Calcareous Seepage Marshes are marshy wetlands enriched by calcareous groundwater seepage. Of the three types of calcareous fen communities described in Massachusetts, they are intermediate in richness and in botanical rarities. This large seepage marsh has good native diversity and some patches of non-native invasive species. It is surrounded by another priority community.





Great Laurel, a member of the Heath family, is an evergreen shrub or small tree that grows up to 10 m high. It is a plant of moist woods, swamps, and the edges of ponds.

In Massachusetts, Hemlock Parsley is usually found in swamps, wet meadows, bogs or fens, and marshy forests. It can tolerate shady environments and wet, acidic soils, although it is usually found in less acidic (circumneutral to limy) wetlands.

Labrador Bedstraw, a slender perennial herb of the madder family, inhabits calcareous fens, wet meadows, and swamps, often on hummocks or tussocks in full or filtered sunlight.

Woodland Millet is typically found on steep slopes in rich, mesic forest communities with calcareous soils. Its microhabitat often includes the drier, rocky upper slopes of the woodland.

Adult and juvenile Jefferson Salamanders inhabit upland forests during most of the year, where they reside in small-mammal burrows and other subsurface retreats. Adults migrate during late winter or early spring to breed in vernal pools and fish-free areas of swamps, marshes, or similar wetlands. Larvae metamorphose in late summer or early fall, whereupon they disperse into upland forest.

Core 1945

A 2-acre Core Habitat featuring Aquatic Core and a Species of Conservation Concern.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

Crooked-stem Aster is a perennial herbaceous plant that occurs in open to semi-open conditions along rich rivers, streams, and seeps and along open and semi-open roadsides in the areas of rich streams.

Core 2013

A 32-acre Core Habitat featuring Aquatic Core and a Species of Conservation Concern.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

Crooked-stem Aster is a perennial herbaceous plant that occurs in open to semi-open conditions along rich rivers, streams, and seeps and along open and semi-open roadsides in the areas of rich streams.

Core 2023

A 3,414-acre Core Habitat featuring Forest Core, Wetland Core, Aquatic Core, Vernal Pool Core, Priority Natural Communities, and Species of Conservation Concern.

The Core Habitat of Lenox Mountain and Yokun Brook is home to 20 rare and uncommon species of plants and animals. A Forest Core covers much of Lenox Mountain itself. One of the state's best populations of Jefferson Salamanders is found in the lowlands and lower slopes of the mountain, along Yokun Brook. The rich bedrock here, especially along Yokun Brook and near Mahanna Cobble, supports four Endangered plants, as well as eleven other rare plants.





Rich, Mesic Forests are a variant of northern hardwood forests, dominated by sugar maple with a diverse herbaceous layer that includes many spring wild flowers, in a moist, nutrient-rich environment. This Core has two examples of Rich, Mesic Forest including one that is of moderate size, but in very good condition, with topographical diversity - rock outcrops, gullies, and the like - that provides a rich array of microhabitats for various unusual plant species.

Forest Cores are the best examples of large, intact forests that are least impacted by roads and development. Forest Cores support many bird species sensitive to the impacts of roads and development and help maintain ecological processes found only in unfragmented forest patches.

Wetlands Cores are the least disturbed wetlands in the state within undeveloped landscapes – those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

Vernal pools are small, seasonal wetlands that provide important wildlife habitat, especially for amphibians and invertebrate animals that use them to breed. *BioMap2* identifies the top 5 percent most interconnected clusters of Potential Vernal Pools in the state.

Core 2146

A 7,293-acre Core Habitat featuring Forest Core, Wetland Core, Aquatic Core, Vernal Pool Core, Priority Natural Communities, and Species of Conservation Concern.

The Housatonic River, from Pittsfield south to Lee, flows through rich lowland marshes and forests, including very good examples of Major-river Floodplain Forest, Transitional Floodplain Forest, and High-terrace Floodplain Forest natural communities. Thirty-four rare and uncommon species are found in this Core Habitat, including 17 plants and eight dragonflies and damselflies (three of which are globally rare). The state's best population of the Mustard White butterfly is here, and the floodplain forests host the globally rare Ostrich Fern Borer Moth.

Alluvial Red Maple Swamps are a type of red maple swamp that occurs in low areas along rivers and streams. Regular flooding enriches the soil with nutrients, resulting in an unusual set of associated trees and plants. These good patches of Alluvial Red Maple Swamp occur in a mosaic with other floodplain and wetland communities on protected land. The canopy and subcanopy have good species representation, but diversity in the shrub layer is limited by invasives.

Hemlock-Hardwood Swamps are acidic forested swamps that have hemlock as the dominant canopy species. These forested wetlands occur on saturated soils in poorly drained basins throughout the state. This moderately small Hemlock-Hardwood Swamp is in a large mosaic along the floodplain of the Housatonic with several types of priority natural communities. It has species reflecting more nutrient availability and less acidity than are usual for the community type.

High-Terrace Floodplain Forests are deciduous hardwood forests that occur along riverbanks, above the zone of annual flooding. Although they do not flood annually, they flood often enough for the soil to be





moderately enriched. These patches combine to make a very good, large example of High-terrace Floodplain Forest along the river with other floodplain and wetland forests. There are few invasives.

Level Bogs are dwarf-shrub peatlands, generally with pronounced hummocks and hollows in sphagnum moss. These wetland communities are very acidic and nutrient-poor because the peat isolates them from nutrients in groundwater and streams. This example of Level Bog is small and in fair condition, but is well buffered by extensive natural vegetation.

Major-River Floodplain Forests are dominated by silver maple. This community is found along the floodplains of large rivers. The soils here are enriched with nutrients brought by annual floods, resulting in a diversity of plants and insects. This Core has two examples of Major-River Floodplain Forest including patches with structural and species diversity with areas of a shrubby community variant. Flooding occurs and there are few invasives.

Red Maple-Black Ash-Bur Oak Swamps are mostly deciduous forests of calcium-enriched (circumneutral) wetlands. The trees growing on hummocks form an almost continuous canopy over variable shrub and dense and diverse herbaceous layers. This moderate sized Red Maple-Black Ash-Bur Oak Swamp is our only known example in a floodplain where it is in a mosaic with other priority and more common types of natural communities. The adjacent railroad and scattered exotics detract from the good surroundings.

Transitional Floodplain Forests are riverside silver maple-green ash-American elm forests that experience annual floods. Of the three floodplain forest community types, these communities are intermediate in vegetation and soils. This Core has two moderate-sized Transitional Floodplain Forest examples. One has good diversity of native species, but abundant invasives. Portions of what may have been floodplain forest were lost in construction of a powerline right of way.

Forest Cores are the best examples of large, intact forests that are least impacted by roads and development. Forest Cores support many bird species sensitive to the impacts of roads and development and help maintain ecological processes found only in unfragmented forest patches.

Wetlands Cores are the least disturbed wetlands in the state within undeveloped landscapes—those with intact buffers and little fragmentation or other stressors associated with development. These wetlands are most likely to support critical wetland functions (i.e., natural hydrologic conditions, diverse plant and animal habitats, etc.) and are most likely to maintain these functions into the future.

Aquatic Cores are intact river corridors within which important physical and ecological processes of the river or stream occur. They delineate integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

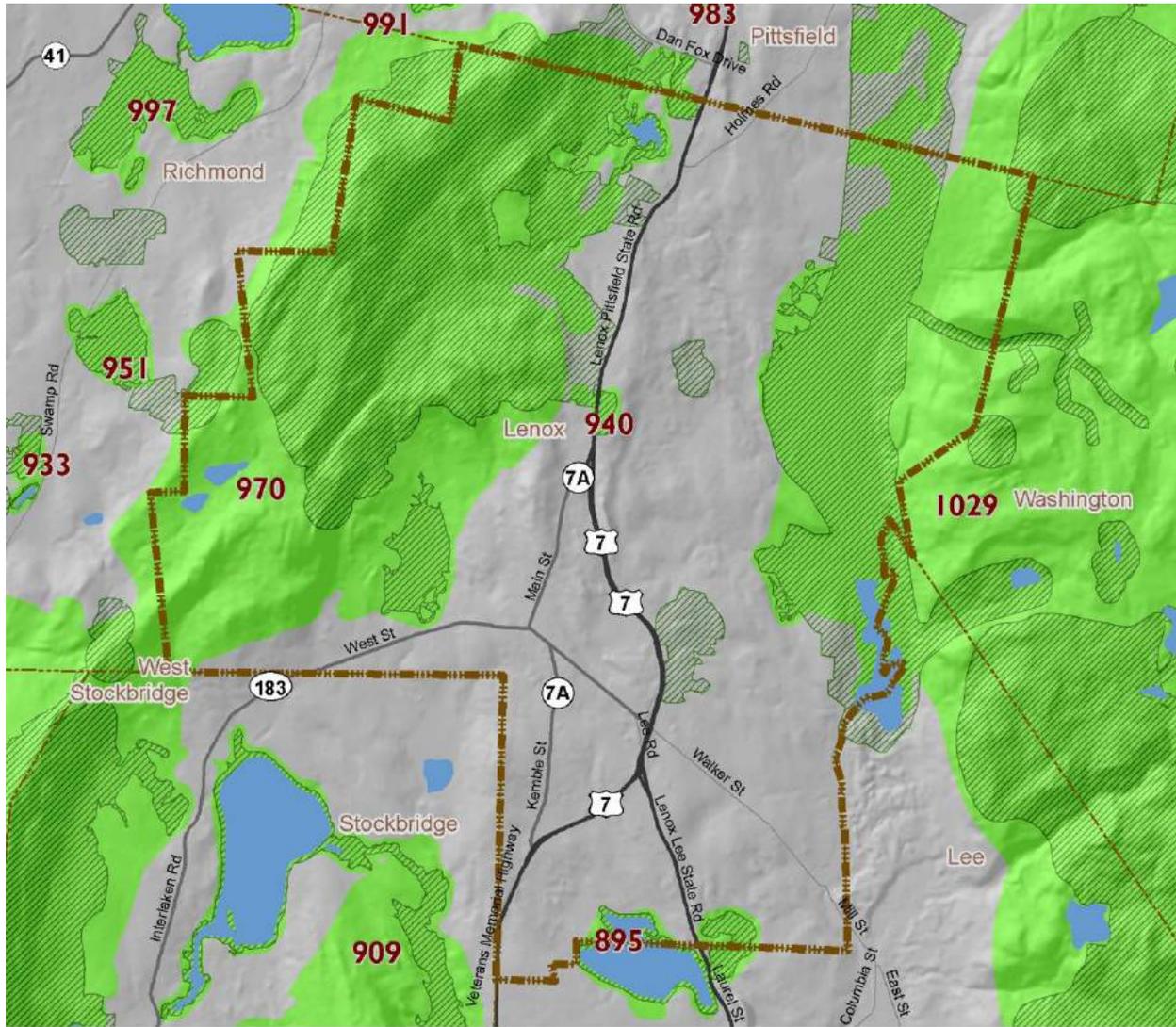
Vernal pools are small, seasonal wetlands that provide important wildlife habitat, especially for amphibians and invertebrate animals that use them to breed. *BioMap2* identifies the top 5 percent most interconnected clusters of Potential Vernal Pools in the state.



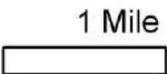


BioMap2 Critical Natural Landscape in Lenox

Critical Natural Landscape IDs correspond with the following element lists and summaries.



-  BioMap2 Core Habitat
-  BioMap2 Critical Natural Landscape



Natural Heritage
& Endangered
Species Program

Massachusetts Division of Fisheries and Wildlife
1 Rabbit Hill Road, Westborough, MA 01581
phone: 508-389-6360 fax: 508-389-7890



Elements of BioMap2 Critical Natural Landscapes

This section lists all elements of BioMap2 Critical Natural Landscapes that fall *entirely or partially* within Lenox. The elements listed here may not occur within the bounds of Lenox.

CNL 895

Aquatic Core Buffer
Wetland Core Buffer

CNL 940

Aquatic Core Buffer

CNL 970

Aquatic Core Buffer
Landscape Block
Wetland Core Buffer

CNL 1029

Aquatic Core Buffer
Landscape Block
Wetland Core Buffer





Critical Natural Landscape Summaries

CNL 895

A 366-acre Critical Natural Landscape featuring Aquatic Core Buffer and Wetland Core Buffer.

A variety of analyses were used to identify protective upland buffers around wetlands and rivers. One, the variable width buffers methodology, included the most intact areas around each wetland and river, by extending deeper into surrounding unfragmented habitats than into developed areas adjacent to each wetland. Other upland buffers were identified through the rare species habitat analysis. In this way, the conservation of wetland buffers will support the habitats and functionality of each wetland, and also include adjacent uplands that are important for many species that move between habitat types.

CNL 940

A 45-acre Critical Natural Landscape featuring Aquatic Core Buffer.

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CNL 970

An 8,426-acre Critical Natural Landscape featuring Aquatic Core Buffer, Wetland Core Buffer and Landscape Block.

A variety of analyses were used to identify protective upland buffers around wetlands and rivers. One, the variable width buffers methodology, included the most intact areas around each wetland and river, by extending deeper into surrounding unfragmented habitats than into developed areas adjacent to each wetland. Other upland buffers were identified through the rare species habitat analysis. In this way, the conservation of wetland buffers will support the habitats and functionality of each wetland, and also include adjacent uplands that are important for many species that move between habitat types.

Landscape Blocks, the primary component of Critical Natural Landscapes, are large areas of intact predominately natural vegetation, consisting of contiguous forests, wetlands, rivers, lakes, and ponds, as well as coastal habitats such as barrier beaches and salt marshes. Pastures and power-line rights-of-way, which are less intensively altered than most developed areas, were also included since they provide habitat and connectivity for many species. Collectively, these natural cover types total 3.6 million acres across the state. An Ecological Integrity assessment was used to identify the most intact and least fragmented areas. These large Landscape Blocks are most likely to maintain dynamic ecological processes such as buffering, connectivity, natural disturbance, and hydrological regimes, all of which help to support wide-ranging wildlife species and many other elements of biodiversity.





In order to identify critical Landscape Blocks in each ecoregion, different Ecological Integrity thresholds were used to select the largest intact landscape patches in each ecoregion while avoiding altered habitat as much as possible. This ecoregional representation accomplishes a key goal of *BioMap2* to protect the ecological stages that support a broad suite of biodiversity in the context of climate change. Blocks were defined by major roads, and minimum size thresholds differed among ecoregions to ensure that *BioMap2* includes the best of the best in each ecoregion.

At 8,079 acres, this is the fourth largest, and one of a few Landscape Blocks in the Berkshire Valleys ecoregion, especially important in an otherwise more fragmented ecoregion. This Block is partially protected.

CNL 1029

A 38,996-acre Critical Natural Landscape featuring Aquatic Core Buffer, Wetland Core Buffer and Landscape Block.

A variety of analyses were used to identify protective upland buffers around wetlands and rivers. One, the variable width buffers methodology, included the most intact areas around each wetland and river, by extending deeper into surrounding unfragmented habitats than into developed areas adjacent to each wetland. Other upland buffers were identified through the rare species habitat analysis. In this way, the conservation of wetland buffers will support the habitats and functionality of each wetland, and also include adjacent uplands that are important for many species that move between habitat types.

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At 37,639 acres, this mostly forested Landscape Block is the fourth largest in the Berkshire Plateau Ecoregion, and the sixth largest in the state. These large forested landscapes provide invaluable wildlife habitat and other ecosystem values such as clean drinking water and absorbing carbon from the atmosphere. Much, but not all, of this Block is protected, largely through October Mountain State Forest and water supply lands.



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Natural Heritage & Endangered Species Fund

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