



OPEN SPACE AND RECREATION PLAN 2019 to 2026

Town of Lunenburg, Massachusetts

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And a very special thanks to the residents of Lunenburg who lent their voice to this process.

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SECTION 1: PLAN SUMMARY

The Open Space and Recreation Plan (OSRP) for the Town of Lunenburg provides both a planning and action framework to address the current and future needs of conservation and recreation land, agricultural land, corridors and parks, and greenways. This OSRP is an update to a plan completed and approved in 2011, and results in a planning document that covers a seven-year window as prescribed by the Massachusetts Executive Office of Energy and Environmental Affairs (EEA, formerly the Executive Office of Environmental Affairs or EOEA) Division of Conservation Services guidelines.

The overarching goals identified in this planning effort include:

- Enhance and promote existing open space and recreation assets
- Preserve the most critical natural resources
- Expand access to conservation and recreation resources
- Diversify funding sources

The Town of Lunenburg is lucky to have a strong backbone of conservation and recreation resources on which to build and improve upon. This planning effort sought to build on those past successes. The process was entirely driven by the townspeople, not consultants, and strove to be as inclusive as possible; the process included a diverse representative committee, public hearings and forums, and broadly distributed surveys to gather the input from citizens, municipal boards and departments.

The result is a revised open space and recreation plan that identifies clear needs and pragmatic solutions for delivering better resources and recreational opportunities to the residents of Lunenburg.

This plan reflects on the geography and demography of Lunenburg, inventories its critical resources, and assesses the needs of townspeople going forward. Most of the information in this plan is summarized in the body of the text and figures, but the appendices should be reviewed carefully. These include detailed information that support the summaries, including an analysis of handicapped accessibility, complete summaries of the community survey data, detailed land inventory, and a series of compelling maps that geographically depict much of the content contained in the rest of the report.

When approved by EEA, this plan will serve as the guide for enhancing Lunenburg's open space and recreation resources through the end of 2026.

SECTION 2: INTRODUCTION

2.A. Statement of Purpose

The purpose of the Open Space and Recreation Plan Update is to review and build upon the successes accomplished as a result of the prior plan, to re-assess and re-align the goals and objectives set out in that plan to meet current challenges and opportunities in Lunenburg, and to develop a plan for the proactive management of Lunenburg's open space areas and recreation facilities.

Updating the 2011 plan represents the continuation of plans dating from 1978, 1985, 1990, and 1998. Lunenburg is proud to continue its long and distinguished record of achievement in providing its residents with a wealth of recreational resources and open space protection, stemming from the creation and implementation of earlier plans.

The successful completion of this plan is a prerequisite milestone in the process of distributing the LAND, PARC, and Land and Water Conservation Fund grant funding by the Massachusetts Executive Office of Energy and Environmental Affairs.

2.B. Planning Process and Public Participation

Updating the 2011 OSRP began in May 2018. The Ad Hoc Open Space Advisory Committee (hereinafter referred to as the "Open Space Committee"), initially established by the Board of Selectmen as an advisory committee to the Planning Board in 2007, had been dormant for some time. The standing members of the committee convened, discussed the need to update the OSRP, and presented a plan to fully "staff" the committee with representatives from various land use boards and members of the community. The Open Space Committee was expanded to seven members, adding two at-large members and a representative from the Parks Commission rounding out Planning Board and Conservation Commission membership.

Feedback from residents was viewed as a core component of the planning process. A kick-off meeting was televised on local cable access and posted on the town's YouTube channel to spread the word that the planning process was underway.

Committee members embarked on an outreach campaign to gather ideas and input from townspeople and other municipal boards to build momentum and support for the plan. These outreach efforts included:

- Survey of residents mailed with all tax bills, available for download on the town website, and available online on SurveyMonkey.
- Newspaper articles.
- Collaboration with Town Manager, Tax Collector, Land Use Director, DPW Superintendent, Conservation Agent, Water District Superintendent, and School Facilities Director.

- Multiple public meetings, including a public planning charette televised on public access and available on the town's YouTube channel
- Coordination with multiple municipal boards and committees (Board of Selectmen, Planning Board, Parks Commission, Conservation Commission, School Committee, Sewer Commission, Water District).
- Consultation with state agencies, regional planning commission, and non-profit partners.

From this effort, a draft plan was written and revised by all members of the Open Space Committee. With edits integrated into the document, the final draft was compiled. Copies were distributed to every Board and Committee and made available to the public through distribution at Town Hall. After integrating additional edits and feedback, the final plan was submitted to the EEA Division of Conservation Services for review and approval.

SECTION 3: COMMUNITY SETTING

3.A. Regional Context

Lunenburg is located in northeastern corner of Worcester County, approximately forty-seven miles northwest of Boston and twenty-seven miles north of Worcester. The Town is bordered on the north by Townsend, on the east by Shirley, on the south by Lancaster and Leominster, and on the west by Fitchburg and Ashby.

Lunenburg is 27.69 square miles in area with open water bodies comprising approximately 2.37 square miles. The Town Hall, located in Lunenburg Center, is at an elevation of 570 feet above mean sea level. The nearest major artery is Route 2, which is approximately six miles from the Town Center.



The Town is both an agricultural community and a bedroom suburb of Fitchburg, Leominster, Worcester, and to a more limited degree Boston and the Route 128 and I-495 employment centers. Residential development is currently displacing agricultural, forest, and natural land. Commercial and industrial development is limited and clustered along Route 2A (Massachusetts Avenue), Route 13 (Chase Road) and in the southeastern section at Leominster-Shirley Road and Route 70. Historically, Fitchburg has served as the employment, retail, business and service center for the region, and it still provides services usually available in a core city.

In the 1980's, 1990's, and 2000's, Lunenburg experienced a change in the intensity and character of development pressures. In 1995, a commercial complex anchored by Wal-Mart increased the autonomy of Lunenburg as well as the level of traffic entering from surrounding communities. Another major retail facility with several major department stores, specialty stores, and chain restaurants opened in 2006 in Leominster on the Lunenburg town line that has had similar effects. This pattern of growth and change continues today.

Major transportation routes have continued to be rebuilt and upgraded, facilitating commuting to the Boston, Worcester and southern New Hampshire areas. Route 2 links commuters to I-190/I-290 or I-495 in about fifteen minutes from the Town center.

Housing prices have been historically lower than in towns within the I-495 metro-west region. Although this has placed considerable residential development pressure on Lunenburg and surrounding communities, raising real estate prices, the relative pricing between metro-west and Lunenburg area real estate continues to widen. This is and will continue to exert considerable development pressure on the Town as the market ebbs and surges. Because most of the current development is moderately priced residential housing, the demands upon Town

services are likely to increase while the additional tax revenue will fall short of covering those actual service costs.

3.B. History of the Community

Lunenburg's first settler was Samuel Page who came from Groton in 1718 and erected a stockade cabin on the south side of Clark's Hill (now Clark's Hill Conservation Area). The following year the General Court Committee began to survey the land. Land grantees began to build in the Town in 1726 and the Township of Turkey Hills was erected (Lunenburg was not "incorporated") in 1728.

It is said that the name Lunenburg was bestowed on the Town by an English lord traveling through the Town in honor of King George II who held the title Duke of Luneburg or Lunenburg, Germany. A bronze bell later sent as a gift by the King was sold to pay its freight at the dock due to the inability of the townspeople to pay cost of bringing it from Boston. The Town Pound, a stone walled structure built in 1750 to hold stray farm animals still stands north of the center and an appointed "pound keeper" oversees the structure to the present.

Among the early land grants were the Woburn Farm consisting of 2,000 acres on the west side of Town and the 1,000-acre Dorchester Farm, part of which lies in present day Fitchburg. Harvard College was also granted 250 acres. The original Proprietor's Lots were surveyed and laid out in rectangles one-half mile long by 45 rods wide. Parallel stone walls, one-half mile apart, are still apparent in areas of the Town depicting the borders of the original Proprietor's Lots. Cellar holes and farm lots are located throughout the remaining woodlands. Fitchburg, named for John Fitch, an early settler in the region was set off in 1764.

There were saw and gristmills erected along Mulpus Brook beginning in the early 19th century. It was noted that flow from many of Lunenburg's brooks was only seasonally sufficient to operate some of the mills. Early local industries included the manufacture of potash and bricks, tanning, bookbinding and printing. Straw hats were manufactured, and watches were made for a time.

Mulberry trees were extensively planted around Clarks Hill in a 19th century attempt to generate a silk industry in Lunenburg. Somewhat more successful endeavors included cabinet making and the manufacturing of shoes and felt hats, which continued through the 19th century.

In 1830, Cyrus Kilburn was commissioned by the General Court to survey the Town and a map showing the early land features and homes present was prepared from his survey in 1833.

In 1848 the Charlestown - Gardner Railroad was completed; a small portion of track passed through Lunenburg. But because the track passed through the extreme southeast of Lunenburg, remote from the Town Center, it did not engender development and progress as in more central locations in other towns. The present-day Town Hall, formerly the Third Unitarian Church, was purchased by the Town and moved to its current location in the Center in 1865. The Fitchburg and Leominster Street Railway serviced the Town Center by electric car from 1901 through 1925 with track up Leominster Road, Massachusetts Ave (Rte. 2A), and Main Street.

Persons of regional or national note include: Botanist/geneticist Luther Burbank who began his work with potatoes in Lunenburg before moving to Lancaster and California, Robert Treat Paine, a signer of the Declaration of Independence, Luther S. Cushing, author of Cushing's Manual of Parliamentary Law, and Governor George S. Boutwell.

The Massachusetts Historical Commission has only a single record of an Archaic Period stone axe which lacks good locality data (Lake Shirley area) for Lunenburg. Due to the Town's historic character and general physiography, however, many undiscovered sites of historic and prehistoric significance are likely found in Lunenburg. Riparian areas that were classically used as encampment areas by Archaic and Woodland period indigenous peoples also remain to be documented and evaluated.

The population of the town of Lunenburg has shown a steady increase over the years (see Section 3.C below) rising from a population of just 1,923 persons in 1930 to over 11,000 recently. This necessitated additional school buildings to accommodate the population of its school age children. The first Junior/Senior High School in town was completed in 1926 and opened that year.

A new elementary school was constructed on a large tract of land acquired by the town on Massachusetts Avenue near the center of town and it opened in 1953. Subsequently, a new Junior/Senior High School was constructed on the property and opened in the year 1957. The old Junior/Senior High School building was used as a primary school for a few years. Additional land was acquired near the new school buildings and a Middle School was constructed there and opened in 1969.

The need for new schools in the 1950's and 1960's coincided with the first large scale residential subdivision developments in town at Hickory Hills Lake and Rolling Acres Road; this time period was a turning point in Lunenburg's history, where development pressure began growing and occupying more of Lunenburg's resources.

In the twenty first century, a new primary school (grades K - 2) was opened in 2005 located off Massachusetts Avenue about 1 mile east of the main school complex. Finally, a new Middle/High School was constructed on the complex and opened in 2016 (grades 6 - 12) and the 1957 school was torn down. The 1968 Middle School is now used as an elementary school (grades 3 - 5).

The main school complex contains several soccer fields, a football field and track field that was constructed with much donated time and materials by Lunenburg businesses and citizens.

In the year 2004 construction was completed on a new 27,000 square foot Public Safety Building housing the town's fire and police departments.

Another important building construction in town, the new Lunenburg Public Library was completed and opened in 2005. It replaced the Ritter Memorial Library that had served the community for 95 years having been dedicated in 1910.

In the year 2000, Whalom Park, an amusement park in Lunenburg, closed down after operating for 107 years since 1893. The area is now occupied by 240-unit apartment/condominium complex known as Emerald Place.

3.C Population Characteristics

The town of Lunenburg has experienced steady yet moderate population growth due in part to growth in infrastructure, especially transportation routes such as I-90, I-190, I-290, I-495, I-95, and Route 128 and Route 2. This population growth is similar to surrounding communities. Lunenburg's historical population, along with Massachusetts Community Preservation Initiative (2001) projections for future growth is included below in Table 1 and is depicted in Figure 1.

Table 1: Established and Estimated Population Changes

Year	Population	Population Increase from Previous Decade	Annual Percentage Change
1950	3,906	77.9%	
1960	6,334	62.2%	6.22%
1970	7,419	17.1%	1.71%
1980	8,405	13.3%	1.33%
1990	9,117	8.5%	0.85%
2000	9,401	3.1%	0.31%
2010	10,086	7.30%	0.72%
2017 ¹	11,312	12.16%	1.22%
Build out ²	22,318	-	-

1. As estimated by the US Census Bureau (2017).

2. As estimated by the MA Community Preservation Initiative (2001).



Figure 1: Lunenburg Population

According to the United States Census of 2010, there were 10,086 people, 3,835 households, and 2,845 families residing in Lunenburg. The population density was 380.9 people per square mile, with 4,133 housing units at an average density of 156.1 per square mile. In 2017, the Census Bureau estimates Lunenburg's population to have increased to 11,312.

As of 2010, Lunenburg's population is comprised of 3,835 households (33.6% had children under the age of 18 living, 60.9% were married couples living together, 8.7% had a female householder with no husband present, and 26.2% were non-families, 20.1% were made up of individuals, and 8.3% had someone living alone who was 65 years of age or older). The average household size was 2.63 and the average family size was 3.04.

The median age of persons living in Lunenburg according to the 2010 census data was 43.7 years (see Table 2). The median age in 1990 and 2000 were 35.7 and 39.4 years, respectively. There were 2.6 persons per household in 2010, down from 2.8 per household in 1990 and 2.7 in 2000. The trend toward smaller households and an aging population indicates that the Town should plan to provide more opportunities for recreation that appeal to middle aged and senior citizens.

Table 2: Age Distribution, 2000 and 2010

Age Range	2000		2010	
	Population	Percent of Population	Population	Percent of Population
Under 10 years	1226	13.0	1104	10.9
10 to 14 years	771	8.2	741	7.3
15 to 19 years	634	6.7	696	6.9
20 to 24 years	320	3.4	444	4.4
25 to 34 years	1004	10.7	858	8.5
35 to 44 years	1793	19.1	1401	13.9
45 to 54 years	1629	17.3	1886	18.7
55 to 59 years	519	5.5	850	8.4
60 to 64 years	376	4.0	722	7.2
65 to 74 years	635	6.8	794	7.8
75 to 84 years	387	4.1	430	4.2
84 years and older	107	1.1	160	1.6
Total Population	9,401		10,086	
Median age (years)	39.4		43.7	

Lunenburg's household income distribution, as reported in the 2010 U.S. Census is graphically depicted in Figure 2. Median household income for families in 2017 was \$87,184 at 122% of the state average. The per capita income in 2017 was reported as \$38,927 at 98% of the state average.

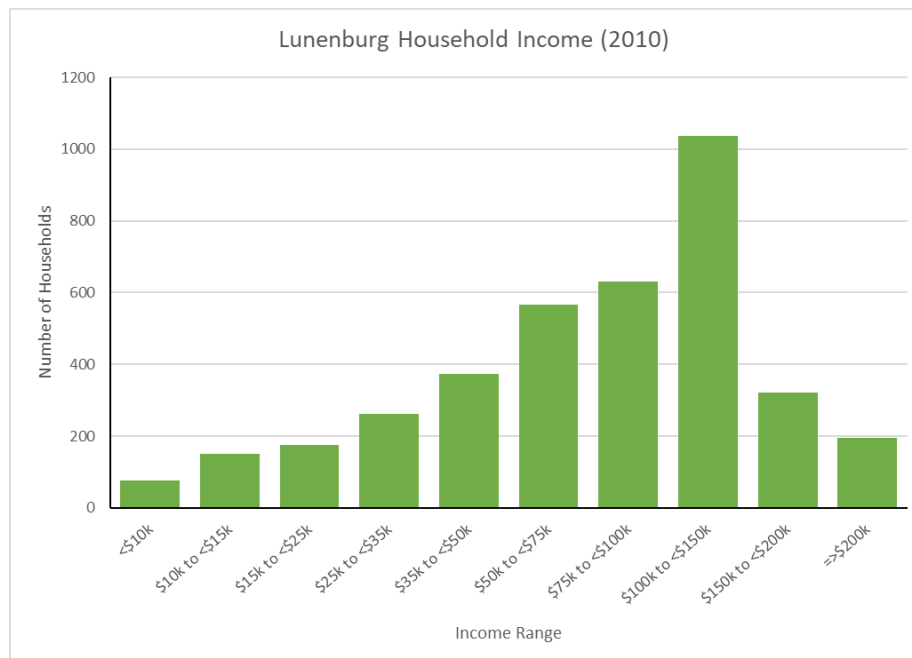


Figure 2: Income Distribution

The recession of the late 2000's impacted Lunenburg's as evidenced by the increase in unemployment by residents during that timeframe. In 2017, Lunenburg has largely recovered. Table 3 depicts Lunenburg's labor force statistics since 2000.

Table 3: Labor Force and Employment

Year	Labor Force	Employed	Unemployed	Unemployment Rate
2017	6456	6223	233	3.6
2016	6347	6108	239	3.8
2015	6287	5996	231	3.7
2014	6231	5880	351	5.6
2013	6077	5674	403	6.6
2012	6022	5602	420	7.0
2011	6034	5588	446	7.4
2010	5743	5263	480	8.4
2009	5313	4837	476	9.0
2008	5312	4993	319	6.0
2007	5325	5062	263	4.9
2006	5356	5075	281	5.2
2005	5320	5037	273	5.1
2004	5410	5097	313	5.8
2003	5422	5087	335	6.2
2002	5397	5089	308	5.7
2001	5278	5092	186	3.5
2000	5233	5089	144	2.8

Approximately 57% of Lunenburg's assessed property value is commercial or industrial as shown in Table 4 below. More than 40% of the commercial/industrial tax base is comprised of retail space in the form of shopping centers/malls and small retail stores. Automotive service makes up the next largest category, with vehicle sales, gas stations, and repair facilities making up over 18% of the commercial/industrial tax base. Manufacturing and other "heavy" industries, like sand, gravel, and rock mining, make up another roughly 15%. Eating and drinking establishments account for nearly 9% of the commercial/industrial tax base. Other services (banks, medical offices, day care centers, etc.) and utilities comprise most of the remainder.

3.D. Growth and Development Patterns

Historically, Lunenburg grew from a strictly agricultural base centered around Fitchburg. As the population of the Town and region has increased, a trend from rural to semi-rural character developed. Although the residential development boom of the 1980's represented the true turning point from rural/agricultural to semi-rural/bedroom community, the Town still maintains a low-density, open feel. Much of the Town is covered by farmland, open, and undeveloped land, providing scenic vistas and imparting upon the Town an open charm suggestive of its semi-

rural character. The attractiveness of these vistas has, however, diminished as they have been lost to private home site development in recent years.

3.D.1 Residential Development

Housing in Lunenburg is predominantly conventional single family, widely dispersed throughout town, at relatively low density. Several large-scale high-density townhouse developments are also present. Concentrations of residential use occur in the Town Center, the Whalom area, and along Route 2A. For a complete breakdown of residential units by type, assessment, and average value, see Table 4.

Table 4: Fiscal Year 2017 Abstract of Assessments

Property Class Code/Description	Accts	Class Valuation (\$)	Average Value (\$)
101 Residential Single Family	3,486	931,301,300	267,155
102 Residential Condominiums	431	91,998,100	213,453
012 – 043 Mixed Use Properties	35	26,157,661	747,361
104 Residential Two Family	88	22,894,300	260,163
105 Residential Three Family	7	1,694,000	242,000
Miscellaneous Residential	37	11,725,000	316,892
111 – 125 Apartments	9	12,212,200	1,356,911
130 – 132, 106 Vacant Land	500	29,509,300	59,019
300 – 393 Commercial	134	53,862,900	401,962
400 – 442 Industrial	30	20,063,300	668,777
501 – 508 Personal Property	223	36,566,467	163,975
600 – 821 Chapter 61, 61A, 61B	91	1,741,142	19,133
Exempt 900's	186	62,363,500	
TOTALS	5,257	1,302,089,170	

The Town has witnessed a significant change in the intensity and character of development pressure over the past decades. For most of the last century, this development pressure was fostered locally by the manufacturing hubs of nearby Leominster and Fitchburg. While those economies faded with globalization, major transportation routes to the area were improved, making it easier for people to live in Lunenburg and commute to work in the major employment centers of eastern Massachusetts and southern New Hampshire. As housing prices in the metropolitan Boston began their rapid rise, lower priced housing in Lunenburg made the Town attractive to homebuyers seeking quality housing in a small-town setting. Land values also rose in towns located east of Lunenburg, making development opportunities in Lunenburg more attractive to real estate developers. The aging population that controls the majority of Lunenburg's remaining privately held undeveloped land has felt increasing pressure to sell.

After a marked increase in the late 1990's and 2000's, building activity declined during the period of 2007 through 2011 caused by the sub-prime mortgage debacle and credit crisis combined with a market correction of the "housing bubble" those issues created. Figure 3 shows that downward trend as well as the recovery seen over the last several years. The housing market began to rebound in 2012 and continues to do so all the way through 2017. A measurable drop in permits issued in 2014 was likely a period of catch-up where issued permits were being finalized and the market absorption was slowing slightly for a number of reasons. The continued upward trend over the last 3 years indicates that the market remains strong on Lunenburg.

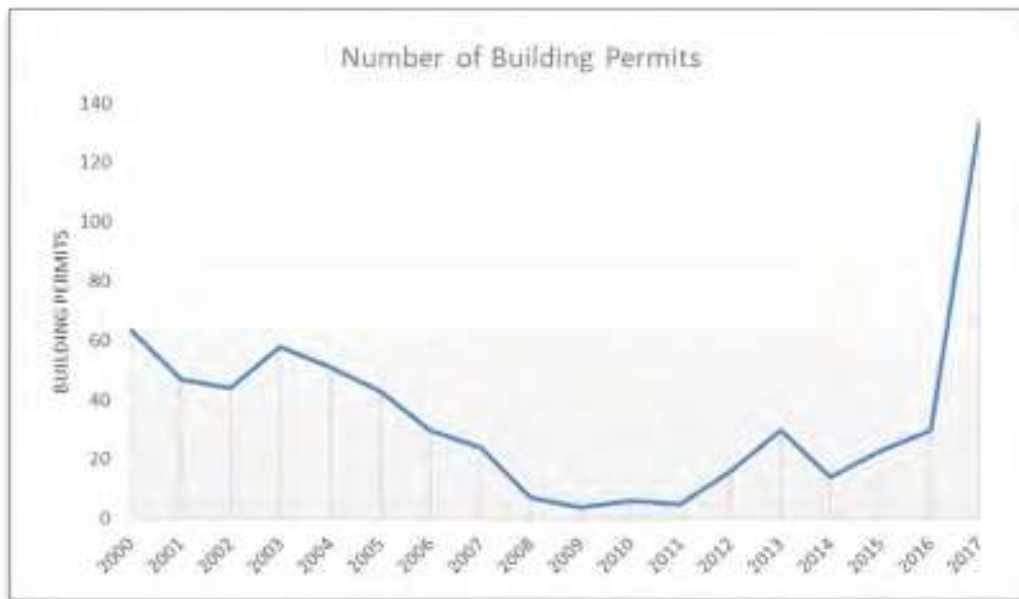


Figure 3: Lunenburg Building Permits

Table 5: New and Proposed Developments through 2018

Project Name	Location	Home Type	# Units	Units over 55	Project Status
Standard Subdivisions					
Benjamin Hill	69 Mass Ave	single family	2		Dormant
Emerald Place At Lake Whalom	10 Lakefront	town house & garden-style (1 & 2 bdrm)	240	38	Complete
Highfield Village	361 Mass Ave	single family	66		Withdrawn
Goodrich Woods	Goodrich St	Single Family	8		Complete
Lena Lane	Lancaster Ave/Gibson St	single family	4		Street Constructed/Some structures
Oak Haven Estates	Arbor St	single family	6		Dormant
Sequoia Drive	341 Howard St	single family	8		Complete
Stone Farm Estates	748 Mass Ave	condo-type		58	Complete
Villages at Flat Hill	Flat Hill Rd	single family	45		Complete
Whispering Pines	Beal Street	single family	19		Dormant
White Tail Crossing	209 & 331 Burrage St	single family	16		Complete
Whites Woods, Ph. 1	Mass Ave & White St	single family	18		Complete
Whites Woods, Ph 2	Mass Ave & White St	condo-type		10	Complete
Whites Woods, Ph 3	Mass Ave & White St	condo-type		18	Complete
Butterfly Lane	50 Elmwood Rd.	Single Family	9		Units Complete/Road under construction
40B Projects					
Lunenburg Estates	1229 Mass Ave	town houses	64		Approval Lapsed
Hollis Hills	Hollis Rd & West St	condo-type (3brm)	146		Approval Lapsed
Lunenburg Village	250 Whalom Rd.	apartments (3brm)	125		Under Construction
40R Projects					
Tri Town Landing	Youngs Rd	apartments 10%, 3 bdrm 70% 2 bdrm, 20% 1 bdrm	133	70	133 Units constructed

3.D.2 Commercial & Industrial Properties

The non-residential uses in Town, exclusive of agriculture, are limited but expanding in scope. Sand, gravel, and stone quarrying occur primarily in the southeast area of Town. The commercial and retail areas of Route 2A and Route 13 in the west and west-central part of Town are expanding in response to the regional economy and growing regional population base. Major industrial uses are confined to the south/southeast area of Town. The commercial sector in Lunenburg continues to evolve as the economy grows. The Town has not significantly expanded the Commercial Zoning District, however, there has been significant investment in new construction and property rehabilitation in these areas.

The Lunenburg Assessor's office reports the combined commercial and industrial properties are valued at approximately \$74 million. Four major sectors account for two-thirds this valuation: retail trade, motor vehicle trades, manufacturing, and mining/quarrying.

Retail trade accounts for over 42% of commercial and industrial property values. This includes businesses such as shopping centers/malls, small retail establishments (under 10,000 square feet), and restaurants. Approximately 30 businesses of this type are valued at nearly \$27 million in total. Almost all are located in the Massachusetts Avenue/Chase Road/Summer Street/Electric Avenue corner of town, nearest to the commercial centers in the neighboring city of Fitchburg, to the south-west. The zoning in this area is classified as Commercial District.

Motor vehicle trades are the second largest commercial/industrial property type. This group comprises more than 18% of the value base, at just under \$12 million, and represents approximately 30 businesses. Most of these properties are in the same general area as the retail trade businesses.

Manufacturing and mining/quarrying are each valued at approximately more or less \$8 million of the total valuation, comprising 10 manufacturing properties and 5 quarry properties. Both sectors are concentrated in the southern section of town at Pioneer Park and the Leominster-Shirley road area. The zoning in this area is classified as Office Park and Industrial District.

The remaining commercial and industrial properties are composed of much smaller types of businesses, ranging from office buildings to warehouses. See Appendix 6 for the detailed analysis.

3.D.3 Infrastructure

Lunenburg is bisected by Route 2A (Massachusetts Ave.) that, prior to the construction of Route 2, was the principal thoroughfare through the region. Route 2 is now the principal artery providing access for commuters to the interstate highway system and points in Worcester and Boston.

Six miles of state-numbered highways cross Lunenburg: Route 2A (east-west) and Route 13 (north-south). These provide linkages to larger roadways and serve as commuter corridors. With the development of Lunenburg Crossing, these roads also serve as feeder roads for retail shoppers from within Town and adjacent communities (e.g. Leominster, Townsend, Fitchburg, and Ashby).

Approximately 100 miles of accepted town roads are located throughout town, varying from paved, well-traveled streets to unpaved, rolling dirt roads in the outlying regions. New commuter rail stations in Fitchburg and North Leominster and another smaller stop in Shirley link Lunenburg residents with employment and retail services in Greater Boston.

The regional transportation system makes it possible for people seeking relatively low housing prices to locate in Lunenburg and commute to the employment centers along I-495 and Route 128, and to the cities of Worcester and Boston. Thus, the highway and commuter rail system contributed to the growth pressure facing the Town in recent decades.

The Montachusett Area Regional Transport (MART) services Lunenburg Crossing and Town Center/Eagle House Senior Center from Fitchburg, allowing patrons access to this commercial center without the use of automobiles. This commuter link has become more critical to the urban residents of Fitchburg and residents of west Lunenburg.

Lunenburg adopted its “MassDOT Complete Streets Prioritization Plan” in June of 2018 in accordance with its Complete Streets Policy adopted in April 2017. From the Policy’s Vision and Purpose section: “The purpose of Lunenburg’s Complete Streets policy is to accommodate all road users by creating a road network that meets the needs of individuals utilizing a variety of transportation modes. The Town of Lunenburg will, to the maximum extent practicable, design, construct, maintain, and operate all streets to provide for a comprehensive and integrated street network of facilities that are safe for all users of all ages and abilities, including children, families, older adults, and individuals with disabilities, as a matter of routine. This policy directs decision-makers to consistently plan, design, and construct streets to accommodate all anticipated users including, but not limited to pedestrians, bicyclists, motorists, emergency vehicles, and freight and commercial vehicles.”

The Complete Streets Plan is comprehensive and has a detailed prioritization plan and should be referenced for complete information. Prioritization plan maps from the Complete Streets Plan are included in Appendix 8 for reference.

3.D.4 Water

The Town of Lunenburg is served by the Lunenburg Water District, an entity created by an act of the General Court in 1939 to be independent of the Town. The Lunenburg Water District provides service to approximately 6,800 people, or 70 percent of Lunenburg's population. Lunenburg Water district usage is shown in Figure 5 below.

The District has seven wells, six of which are in the Catacunamaug Brook sub-basin and one in the Mulpus Brook sub-basin. The wells are sand and gravel ranging in depth from 31 to 93 feet.

Five of the six wells in the Catacunamaug Brook sub-basin are currently active. Wells 1, 2, 3, 4, and 5 are located at 671 Lancaster Avenue. Well 3 is inactive; it was last used in 1983. These wells have a capacity of 1.1 million gallons per day. A new water supply well, also within the Catacunamaug basin, was developed in 2010. Known as the Keating Well, it is located in the very southeastern corner of town at 500 Leominster Shirley Road near the Shirley and Lancaster town boundaries. This well has a capacity of 1.44 million gallons per day.

The one well in the Mulpus Brook sub-basin is located on Hickory Hills Lake at 100 Wintergreen Court and is identified as either the Hickory Hills Well or Well 6. The capacity of this well is 0.72

million gallons per day, though this well is on standby; it is available if only if needed in extreme circumstances. The well has high levels of iron and manganese, which causes taste and staining issues. A treatment plant will be required to bring this well back into regular use.

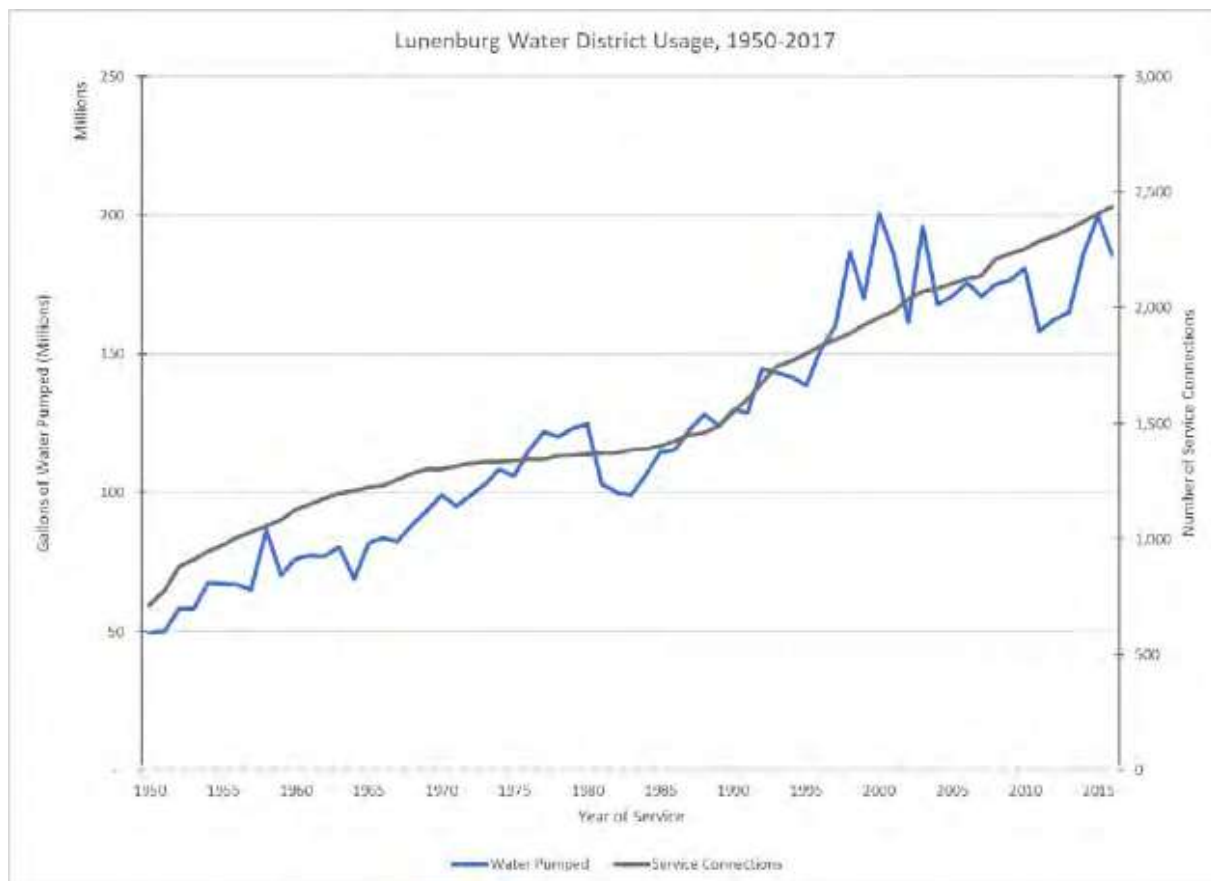


Figure 4: Water Usage

The Town has adopted a water supply protection bylaw as part of its zoning bylaws. The bylaw serves to protect not only the well sites and potential well sites, but also the aquifer in which they are located, and the drainage area in which the aquifer is located. The protective bylaw delineates three zones within the Water Supply Protection District. These zones coincide with the aquifer boundaries defined in 310 CMR 22.00 – Massachusetts Drinking Water Regulations.

Zone I is the area 400 feet around the well site; Zone I is either owned by the Water District or has a very restrictive easement that controls access to the site. Zone II is generally the aquifer itself. Uses permitted in Zone II include low density detached dwellings and public utilities/facilities. Zone III is the upland area that directly recharges the aquifer. Uses in this zone are not as restrictive as the previous areas; however, pesticide application and runoff are controlled so as to limit the impact on the aquifer. In addition to the permitted uses, a list of uses that are prohibited in the District, and performance standards, are included in the Bylaw. It should be noted that a portion of the aquifer recharge area (Zone 3) extends into Leominster and is beyond the control of the Town of Lunenburg.

The Water Supply Protection Bylaw also protects the surrounding communities Zone IIs. The Town of Townsend and the Shirley Water District are shown in the bylaw. In addition, the DEP has approved Zone II wellhead protection areas associated with the Town's primary well sites.

3.D.5 Sewer

For many years, the primary method of wastewater disposal in the town of Lunenburg was through individual on-site wastewater disposal systems. These systems serviced approximately 98 percent of Lunenburg's residential, commercial, and public buildings. The remaining properties were serviced by two nearly 75-year-old gravity sewer systems located in the Whalom Lake and Summer Street areas, conveying flow to Leominster and Fitchburg, respectively. The City of Leominster constructed approximately one mile of sewer around 1930. The approximately 75-year-old Summer Street sewer, which flows to Fitchburg, was discovered in the late 1990s. It serves a number of properties in the southwest corner of Lunenburg, which until that point were not known to be connected to the Fitchburg sewer system. After the discovery of this line, the properties served have been billed by the Town of Lunenburg for sewer service in order to reimburse Fitchburg.

In response to environmental and health concerns over failing individual systems, as well as public interest in connecting to the existing sewers, the Town completed a Facilities Plan in 1999. The Plan recommended a three-phase construction plan for a sewer system expansion with connections to Fitchburg through Summer Street and Massachusetts Avenue (Route 2A) and creating a new connection to Leominster on Graham Street. The Town entered into an Intermunicipal Agreement (IMA) with Fitchburg in 1994 allowing Lunenburg to discharge up to 500,000 gallons per day (average monthly flow) of wastewater to the Fitchburg sewer system. The Town entered into a similar agreement with Leominster in 1999.

The most critical areas of need, as determined by the 1999 Facilities Plan, were addressed in Phase I. Upon recent completion of Phase I sewer construction, Lunenburg postponed Phase II construction pending further investigation into the areas of need. At the completion of Phase 1, Lunenburg sewer collection system discharged approximately 37,000 gpd to Fitchburg and approximately 56,000 gpd to Leominster. Approximately 7.1 percent (336 parcels) of Lunenburg's 4,700 parcels of land were connected to the sewer system, while an additional 9.6 percent (451 parcels) had been assessed betterments and are therefore entitled to connect to the existing sewer system. The current Intermunicipal Agreements (IMA's) with Leominster and Fitchburg allow for a total system output capacity of roughly 650,000 gpd, approximately 150,000 gpd to Fitchburg and 500,000 gpd to Leominster.

No sewer expansion is currently planned in Lunenburg. Based on public input, the construction of the Phase II sewers as recommended in the 1999 Facilities Plan was put on hold until a Comprehensive Wastewater Management Plan (CWMP), funded at Town Meeting, was completed. The CWMP engineering study consisted of four phases over roughly three years with the final recommendations completed in 2010 and approved at that Town Meeting. This study identified twelve of the twenty-four sub-zones of Town to be areas of need. These areas were incorporated into the formal Sewer Service Area Map (included in the Appendix 7). Only

areas within these needs-zones have the ability by right to connect to sewer via an extension. A Town Meeting vote is required to change the Sewer Service Area. Since the completion of the CWMP there have been four new areas sewered within the Sewer Service Area in Town. All of these were resident-initiated. The CWMP was updated in 2016 and approved at Town Meeting. As of September 2018, 882 are parcels connected to sewer and another 331 that have been bettered and could connect. There are currently no new extensions planned.

Two areas in town are serviced by small packaged wastewater treatment facilities. One facility is located at Woodlands Village and the other is located at the Village at Flat Hill. The Woodlands Village facility is located on the west side of Hickory Hills Lake on Royal Fern Drive. The privately-owned condominium complex was previously called Lakeshore Village. The Village at Flat Hill facility is located at the property formerly known as the Sweeney Property between Arbor Street and Flat Hill Road.

Although public sewer brought much needed service to critical need areas, including several municipal facilities, the routing of sewer lines through the community can have profound effects on the character of town. Many sites in Town are marginally or not developable due to poor soils, shallow ledge and high groundwater. Sewer service could allow such sites to be developed. This has the potential to not only impact the aesthetic character and quality of life in Town, but also to subtly and incrementally impact natural resources such as wetlands, woodlands, open space and wildlife habitat.

To address this concern, the Sewer Commission adopted a Development Policy that states: *A guiding principle of the Sewer Commission is to determine the most effective method of providing service to existing and new developments where alternate, on-site solutions are not able to meet local and state health and environmental requirements. It is not the intention or goal of the Commission to control or enable development.*

As such, it is the practice of the Sewer Commission to support residents that are interested in pursuing new extensions within the Sewer Service Area, but not to actively plan or advocate for further expansion. The commission will entertain any petitions to expand the Sewer Service Area (SSA) for a sewer extension by any property owner(s); however, any expansion to the SSA will require Town Meeting approval.

3.D.6 Build-out Analysis

The Massachusetts Executive Office of Environmental Affairs (now known as Executive Office of Energy and Environmental Affairs, or “EEA”) prepared a series of estimates to determine the future build-out of Massachusetts cities and towns during the early 2000’s. The community data profiles prepared by EEA and based on statistics that analyze available land in each zoning district. Projections were made for additional housing units and non-residential land development based on available land.

The EEA Build-out Analysis for Lunenburg was completed in 2001 and utilized the 2000 U.S. Census. Full build-out projects a total population of 22,318 total residents (double today's population) and 8,713 residential units. Additional buildout impacts are included in Table 6. Although the build out projections and impacts are based on available land and then-current zoning, this is not considered realistic due to available resources and restrictions. Build-out impacts are considered a worst-case scenario and are intended to be illustrative only.

Table 6: Build-out Impacts

Additional Residents	12,917
Additional Residential Units	5,045
Additional Developable Land Area (acres)	6,644
Additional Commercial/Industrial Buildable Floor Area (sq ft)	14,435,585
Additional Water Demand at Build out (gallons/day)	2,051,446
<i>Residential</i>	968,777
<i>Commercial and Industrial</i>	1,082,669
Additional Solid Waste (tons/yr)	5,989
<i>Non-Recyclable</i>	4,712
<i>Recyclable</i>	1,277
Additional Roadway at Build out (miles)	49

3.D.7 Long-term Development Patterns

As detailed above, Lunenburg has been changing and growing over the years, and that growth is fully expected to continue at a relatively high rate as compared to other communities the Commonwealth. Located proximate to Route 2 and with access to commuter rail options, employment centers of Boston and the I-495 corridor are all easily within reach. With easy access to the I-190 corridor south to Worcester and various routes north to employment centers in southern New Hampshire, Lunenburg's location is expected to remain convenient and attractive to residential development. It's good schools and quiet country appeal only adds to that development pressure. Commercial development, particularly retail and service-related industries that will meet the needs of that growing residential population, will also continue to flourish and expand.

How communities change in response to long-term growth pressure is largely a function of zoning. To a lesser degree, those long-term development patterns are also shaped by physical constraints such as water courses and wetlands, ledge, and other environmental factors. However, the right economics can support highly engineered solutions to environmental limitations, allowing development to push to the regulatory limits when driven by underlying value. In the long run, zoning is a critical component to shaping a community's character.

Currently, Lunenburg's zoning consists mostly of residentially dominated districts, with portions of town set off in various forms of mixed-use or commercial/industrial use types. See the Zoning Map in Appendix 8, and refer to the use table found in Lunenburg's Zoning Bylaw §250-4.1(G) for a complete understanding of the permitted and prohibited uses in the various districts.

SECTION 4: ENVIRONMENTAL INVENTORY & ANALYSIS

4.A. Geology, Soils and Topography

4.A.1 Topography

The topography of Lunenburg is predominantly hilly terrain, with primarily gradual elevation changes. However, steep slopes are found in the northeast and central portions of Town. The majority of the Town slopes west to east, with elevations ranging from approximately 700 feet above sea level in the northwest portion of the Town to less than 330 feet above sea level in the southeastern portion of the Town in the area of Lake Shirley. This topography is a result of the glacial action that spread over much of North America several times in the geologic past. The rolling hills, kettles, kames, eskers, moraines, outwash plain, ponds and wet areas are remnants of the retreat of the last glacial ice flow that began approximately ten to eleven thousand years ago. Whalom Pond and Massapoag Pond are naturally-occurring, glacially-carved depressions that filled with water.

4.A.2 Surficial Geology

The surficial geology of the Town is one of two categories: sand and gravel, and till or bedrock. The Town's surficial geology is somewhat divided between east and west. The western portion of the Town is predominantly till or bedrock except for the following areas consisting of sand and gravel: Pearl Hill Brook/Paige Lake area that extends along the western boundary; an isolated pocket north of Northfield Road at the intersection of Chase Road; and, areas in the vicinity of Hickory Hills Lake. The sand and gravel deposits, within the eastern portion of the Town, tend to coincide with the aquifers and lakes with a depth to 50 feet. A sand and gravel band extends from the north central area of Hickory Hills through the east central portion of Town to the Lake Shirley southeastern portion of the Town. Some isolated floodplain alluvium pockets are present in the eastern half of the Town and a small band in the southwest corner of the Town extends to a depth from 50 to 100 feet.

The geologic features do provide some development opportunities. The glacial topography is conducive to sand and gravel mining; one such large operation is in the southern portion of Lunenburg by the Leominster and Lancaster town lines. Metamorphic rock deposits consisting of shale and phyllite also provide value for use in light-weight aggregate and road surfacing production. The supply of materials present in the one active quarry in town appears to be sustainable for the foreseeable future.

4.A.3 Soils

The Natural Resources Conservation Service (NRCS) published the Soil Survey of Worcester County, Massachusetts: Northern Part in 1985. There are four major soil types found in Lunenburg: Paxton-Woodbridge-Canton, Chatfield Hollis, Hinckley-Merrimac Windsor, and Urban.

4.A.3.1 Paxton-Woodbridge-Canton: This soil group is formed in glacial till and covers a major portion of the Town. It runs in a band from the northwest-central boundary to the south-central portion of the Town. It is also found in a band from the northeastern corner and along the eastern-central boundary of the Town. Paxton soils are well drained, gently to steep sloping, and have slow to very slow permeability. Woodbridge soils are moderately well drained, nearly level to sloping, with slow to very slow permeability, and are often found on the top of hills and drumlins. Canton soils are well drained, gently to steep sloping and have moderately-rapid to rapid permeability. The minor soils are poorly drained Ridgebury and very poorly drained Whitman and Swansea, which are found in depressions and low-lying areas.

4.A.3.2 Chatfield-Hollis: This soil group is formed in glacial till. It is found in two smaller isolated areas north and east of Hickory Hills Lake and north of Lake Shirley. The soils in both the Chatfield and Hollis groups are moderate to moderately-rapid permeability. Chatfield is found on the lower slopes of ridges and Hollis soils are found on the upper slopes. The minor soils are well drained Canton and very poorly drained Swansea, Freetown, and Whitman soils. The minor Canton soils are found on the lower slopes, and other minor soils are found in depressions or low-lying areas.

4.A.3.3 Hinckley-Merrimac-Windsor: The Hinckley-Merrimac-Windsor soil type is found along the western boundary of the Town and runs in a band from the north-central boundary to the southeastern portion of the Town. The Hinckley soils are generally deep and level, have rapid permeability in the subsoil and very-rapid permeability in the substratum. Hinckley soils typically have a loamy surface layer underlain by stratified sand and gravel. Merrimac soils are nearly level to moderately steep, are somewhat excessively drained, and have moderately rapid or rapid permeability. Typically, the Merrimac soils consist of two feet of loamy material over sand and gravel. Windsor soils are generally sandy, excessively drained and are in the lower areas of the outwash plains; they range from nearly level to moderately steep; and, they have rapid to very rapid permeability.

4.A.3.4 Urban: Soil texture and other soil properties vary significantly within short distances on urban landscapes. This variation is caused by the movement and mixing of soil materials during construction activities or changes in any of the soil-forming factors. The combinations of different textures may improve or limit the soil for a specific use. Table 8 illustrates the three main agriculturally significant soils groupings in the Town. The Hinckley-Merrimac-Windsor soils cover much of the Town. According to the Soil Conservation Service Soil Survey (1), the soils formed in water-sorted deposits of glacial outwash. These deposits are generally more porous than glacial till and sometimes provide water supply aquifers. Hinckley soils are generally deep and level and have rapid to very rapid permeability. Merrimac soils are level to moderately steep and have moderate to rapid permeability. Windsor soils are generally sandy, range from nearly level to moderately steep, and have rapid to very rapid permeability.

4.A.3.5 Agriculturally Significant Soils: Lunenburg is fortunate to have a high percentage of agriculturally significant soils. Over 41% of our town contains soils so-designated as shown in Table 7.

Table 7: Agriculturally Significant Soils

High-Quality Agricultural Soils	Acres	Percent of Total
Prime Farmland	3,323	18.7%
Farmland of Statewide Importance	3,124	17.6%
Farmland of Unique Importance	889	5.0%

Prime Farmland is: Land that has the best combination of physical and chemical characteristics for economically producing sustained high yields of food, feed, forage, fiber, and oilseed crops, when treated and managed according to acceptable farming methods.

Farmland of Statewide Importance is: This is land, in addition to prime and unique farmlands, that is of statewide importance for the production of food, feed, fiber, forage, and oil seed crops, as determined by the appropriate state agencies. Generally, these include lands that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods.

Farmland of Unique Importance is: Land other than prime farmland or farmland of statewide importance that might be used for the production of specific high value food and fiber crops. Examples of such crops are tree nuts, cranberries, fruit, and vegetables. In Massachusetts, Unique soils are confined to mucks, peats, and coarse sands. Cranberries are the primary commercial crop grown on these soils. The presence of other crops on these soils is usually, possibly always, limited to small, incidental areas.

4.B. Landscape Character

Although located in an urban area, the Town of Lunenburg maintains a small-town, rural character. The green rolling hills, ponds, wetlands, and vegetated areas contribute to the pastoral sense that one feels driving through much of the Town. The undeveloped and rural ambiance of the Town is enhanced by the large tracts of land devoted to state- and town-owned conservation areas and significant tracts of permanently-protected farmland. Narrow, winding roads also contribute to the Town's semi-rural character.

The rolling topography provides the Town with scenic views across hills and valleys, and over farm and pasture land. This is especially true along Lancaster Avenue as one travels to and from the Town center to Route 2. The scenic vistas along this stretch of roadways as one views the landscape from the crests of hills is especially beautiful in the fall. Views across the many ponds and wetland areas also impart a scenic quality to the natural landscape.

The man-made landscape is also important to the Town. The village-type development gives the Town a New England appearance and historic structures, e.g., Town Hall, instill a sense of permanency and stability to the built environment.

The natural and built landscape has suffered from increased development in prime locations, affecting some of the scenic views. Residential development has been built on former farmland on Leominster Road, impacting the view along the road that formerly consisted of contiguous farmland leading to the top of Cherry Hill. Commercial development and associated signage along Route 2A has increased. Continued development could lead to a significant loss of green space and a change from the rural, small-town character to a more suburban one.

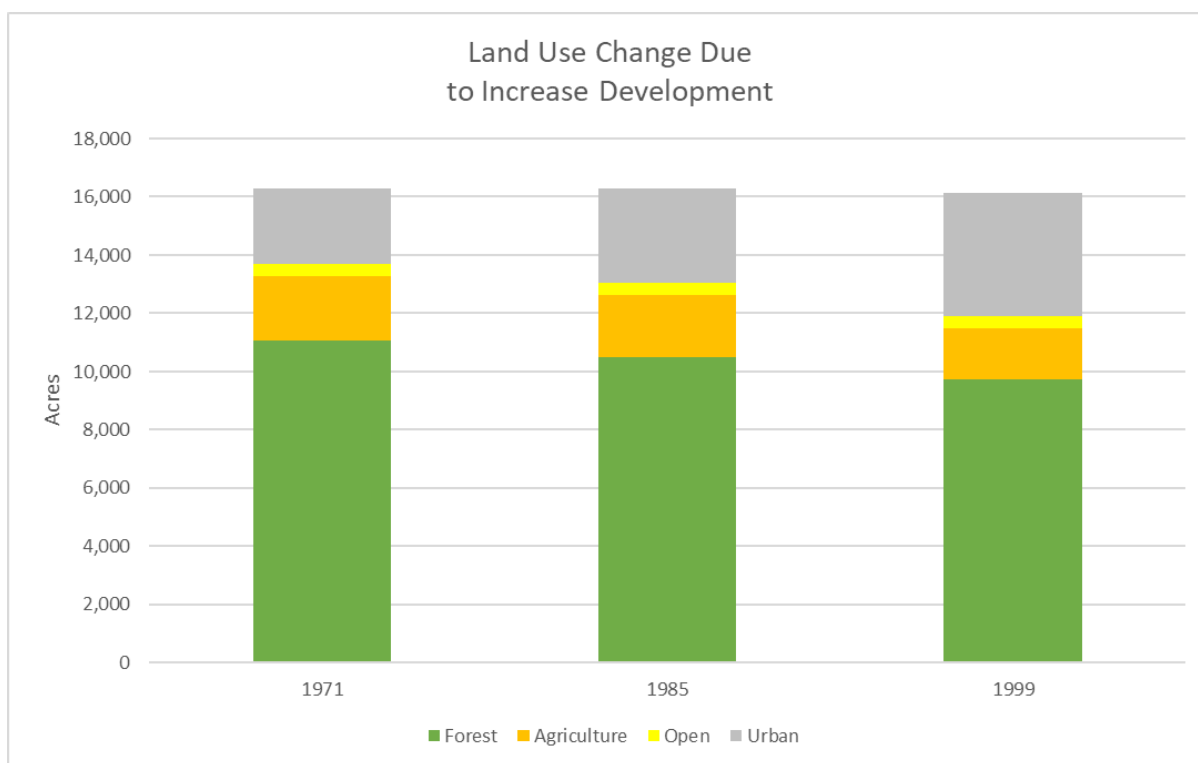


Figure 5: Land Use Change 1971-1999

4.C. Water Resources

4.C.1 Watersheds and Sub-basins

The town of Lunenburg lies within the Nashua River Watershed Basin, which serves 31 watershed communities in north central Massachusetts and southern New Hampshire. The watershed of the Nashua River is a basin in which all precipitation that falls geographically within the basin ultimately flows down gradient to the river. The Nashua's watershed encompasses 538 square miles. The majority of the Town lies within three sub-basins: Catacunamaug Brook, Mulpus Brook, and Falulah/Baker Brook. The very northwestern and northeastern sections of town are in the Squanancook River sub-basin.

The Nashua River Watershed Association works to maintain and improve the water quality in our rivers through a Water Monitoring Program where dedicated volunteers help to gather water quality data, monthly from April through October. This year (2018) marks the twenty-sixth season that volunteers have monitored water quality and reported conditions and observations at over 44 sites throughout the Nashua River watershed. The Water Monitoring Program builds community awareness of water issues, helps identify and restore problem sites, promotes advocacy for our watershed, and increases the volume of information available on our waters.

4.C.1.1 Catacunamaug Brook Sub-basin: The Catacunamaug Brook sub-basin extends to state highway Route 2A as much of the northern boundary, state highway Route 2 along the southern boundary, and state highway Route 13 along the western boundary defined by a ridgeline. The Catacunamaug sub-basin extends into the town of Leominster to the southwest, the town of Lancaster to the south, and the town of Shirley to the east. More than half of Lunenburg is located within the Catacunamaug sub-basin.

The Catacunamaug sub-basin lies within the Southern New England Coastal Plains and Hills ecoregion, which is geologically comprised of glacial till and outwash deposits. This sub-basin drains to the southeast into the mainstream of the Nashua River. The stream flow of Catacunamaug Brook, as well as contributory stream flows, has significant seasonal changes as expected in the northeast.

The land use for this sub-basin is primarily forest or wetland. There are some small portions of residential, agricultural, open-protected, or limited protection-land. Approximately 10 percent is classified as a total impervious area, which indicates that issues of compromised stormwater and other non-point sources of contaminants (pesticides, fertilizers, oils, asphalt, pet wastes, salt, sediment, human litter and other debris) may exist or impact this sub-basin.

The Catacunamaug sub-basin has been recognized as a good source for both water supply and recreation for the Town. The Catacunamaug Brook provides excellent riparian, wildlife and aquatic habitat. Man-made threats to the brook and related water bodies include: storm drain discharges, road runoff, agricultural practices, and construction activities.

The major water bodies in this sub-basin include the Massapoag Pond, Lake Whalom and Lake Shirley. Massapoag Pond, located in southern Lunenburg, is without significant shoreline development. The Harris Farm APR protects the entire eastern half of Massapoag Pond and large wetlands surround the entire western half. Lake Whalom contains non-native plants. Lake Shirley is in a eutrophic state, enriched by nutrient loading that in turn stimulate plant growth and the deplete oxygen in the lake. Lake Shirley is noted for having noxious and non-native plants, and high turbidity.

Numerous minor water bodies are tributaries to the Catacunamaug sub-basin. Dams within this sub-basin are located in Bow Brook and Lake Shirley. No apparent negative impacts from these impoundments are known. The area underlying Lake Shirley is

classified as a high-yield aquifer with a medium-yield aquifer abutting and extending along the southeastern Town boundary, into Lancaster.

4.C.1.2 Mulpus Brook Sub-basin: The majority of the Mulpus Brook sub-basin lies within Lunenburg. The sub-basin extends into the town of Shirley on the east, and a small portion extends into the town of Townsend to the north. The state thoroughfares Route 13, Route 2A, and Route 225 travel through the Mulpus sub-basin.

The Mulpus sub-basin lies within the same ecoregion as the Catacunamaug sub-basin, where the geology consists of glacial till and outwash deposits, and drains to the southeast into the mainstream of the Nashua River. Mulpus Brook is impounded behind the Hickory Hills Dam and forms the Hickory Hills Lake.

The land use for this sub-basin is primarily forest or wetland, with some portions of residential, and agricultural, open-protected or limited protection- land. Approximately 7 percent of the sub-basin is impervious land, which indicates possible storm water and other non-point sources of contaminants. A portion of the Squannassit ACEC lies within this sub-basin, including the Cowdrey Conservation Area.

In 2000, the Shirley Greenway Committee conducted a shoreline survey of Mulpus Brook in Shirley. Several problems were noted, including septic discharge at a mobile home park and sedimentation build-up at multiple road crossings. However, the brook was noted as having a good buffer between the brook and development, and having high water quality.

In this sub-basin, the major water body is Hickory Hills Lake. The feeder streams to Mulpus Brook include Beaver Pond Brook, which has its source in a wetland at the western base of Chaplins Hill in the town of Shirley. There is a wetland complex at the confluence of Beaver Pond and Mulpus Brooks at the base of Deacon Hill.

4.C.1.3 Falulah/Baker Brook Sub-basin: The majority of the Falulah/Baker Brook sub-basin lies in the community of Fitchburg, with portions extending north into the communities of Ashby and Ashburnham and to the east into the town of Lunenburg. Approximately one fifth of this sub-basin extends into Lunenburg. Route 31 bisects this sub-basin and Routes 2A and 13 pass through a portion.

The Falulah sub-basin lies within the same ecoregion as the Catacunamaug sub-basin and Mulpus sub-basin, where the geology consists of glacial till and outwash deposits. The Falulah sub-basin begins at higher elevation points in the towns of Ashby and Ashburnham. Considerable watershed supply lands for the city of Fitchburg protect the headwaters. Falulah Brook flows southeasterly through the city of Fitchburg, paralleling the commercial strip of the John Fitch Highway, where it is affected by urban influences before entering the town of Lunenburg.

The land-use pattern for the Falulah sub-basin is predominantly forest or wetland. The

majority of residential development is low density; however, concentrated residential settlements and commercial development along major roads and in subdivisions exist in the city of Fitchburg. Approximately 5 percent of land area is agriculture, open-protected or limited-protected.

Major water bodies in this sub-basin include the Falulah, Fitchburg, Lovell, and Scott Reservoirs; and Greenes, Paige and Putnam's Ponds, which contain noxious and non-native plants. Feeder streams to Falulah Brook include Saima Pond and Greenes Pond. Pearl Hill Brook runs through Paige Pond in the town Lunenburg. Bakers Brook begins at the confluence of Falulah and Pearl Hill Brooks.

4.C.1.4 Squannacook River Sub-basin: Only the very northwest and very northeast corners of town lie within the Squannacook River sub-basin. Most of the land in these areas is permanently conserved. Waters of the Squannacook River sub-basin are afforded Outstanding Resource Water (ORW) protection under the Massachusetts Surface Water Quality Standards, 314 CMR 4.00 (WQS). According to 314 CMR 4.04(3): "Certain waters are designated for protection under this provision in 314 CMR 4.06. These waters include Class A Public Water Supplies (314 CMR 4.06(1)(d)1.) and their tributaries, certain wetlands as specified in 314 CMR 4.06(2) and other waters as determined by the Department [of Environmental Protection] based on their outstanding socio-economic, recreational, ecological and/or aesthetic values. The quality of these waters shall be protected and maintained." The Squannacook sub-basin has been so designated for these latter purposes.

4.C.2 Surface Water

Lunenburg has a number of streams, ponds and lakes within its boundaries. Surface waterbodies account for 2.37 of the Town's 27.69 square miles of total area. Of the four large lakes in Lunenburg, the two largest, Lake Shirley and Hickory Hills Lake, are man-made.

Lake Shirley, located in the southeastern portion of the Town, covers 366 acres and has an average depth of eight feet and a maximum depth of thirty-eight feet. Lake Shirley has no meaningful public access to the water (i.e. public boat ramp, designated car-top access, or beach). However, the privately-held Shady Point Campground provides access to the lake for recreation and allow launching of boats for a fee. Water quality tests indicate that the Lake water is suitable for swimming, although water quality has suffered recently, as indicated by high turbidity. The lack of meaningful public access to the Lake limits the use of the resource for public recreation purposes.

Hickory Hills Lake is located in north central Lunenburg. The approximately 331 acre Lake is owned and maintained by Hickory Hills Landowners, Inc., and is used for recreation by residents abutting the water. Hickory Hills Lake has no public access. The average and maximum depths of the Lake are ten feet and twenty feet, respectively. The water quality is suitable for swimming. Like Lake Shirley, the lack of public access limits use of the water for public recreation.

Lunenburg has two bodies of water officially considered to be “Great Ponds”, defined as any pond or lake that contained more than 10 acres in its natural state. The first is the 103-acre Lake Whalom, located in the southwestern portion of Town at the Leominster border, is safely used for recreational purposes including boating and swimming. The City of Leominster manages a public access boat ramp that is available just over the town line in Leominster, providing trailered access for motorboats and canoe/kayak launching. Whalom is spring fed, making it cold and clear (average depth is 19 feet with a maximum depth of 44 feet and water clarity is generally good with an average transparency of 17 feet). The following fish species were found during MassWildlife surveys: Bluegill, Pumpkinseed, Yellow Perch, Smallmouth Bass, Largemouth Bass, Rock Bass, Chain Pickerel, Banded Killifish, Yellow Bullhead, and Brown Bullhead. Whalom Lake is also stocked with trout each spring, and occasionally with landlocked salmon. The Lunenburg Parks Commission manages Town Beach that provides access to the Lake Whalom for Lunenburg residents, though use of the beach is significantly constrained due to limited parking. The town also owns a significant stretch of developed shorefront on Lakefront Avenue, with sidewalks, benches, and kiosks where many people fish and otherwise congregate to enjoy the views of the Lake. Emerald Place, a large development recently completed at the location of the former Whalom Park, also manages a private beach available to the development’s residents.

Massapoag Pond is Lunenburg’s second Great Pond, located in south central Lunenburg near the Leominster border. The 56-acre pond has no formal public access. Historically, people accessed where Catacunamaug Brook exits the pond near Lancaster Avenue, but that access has since been restricted. Most of the shoreline is undeveloped agricultural land and vegetated wetland. Massapoag Pond averages 11.0 feet with a maximum depth of 15.0 feet. A variety of pond weeds offer excellent hiding cover to fish. White water lily is common along the southern, eastern, and western shores. Sedges, arrowhead, buttonbrush, sweetgale, and knotweed are scattered throughout the southern portion of the pond. A transparency of only 4.5 feet indicates rather dark colored water. The water quality has not been tested. Gamefish present include largemouth and chain pickerel. Yellow perch, white perch, black crappie, bluegill, pumpkinseed, brown bullhead, and yellow bullhead comprise the panfish fauna. Rough fish are represented by white suckers and golden shiners. The lack of public access limits uses of Massapoag Pond for public recreation purposes.

Numerous streams, ranging from small flows to larger streams draining into wetlands and ponds, flow through and within the Town, e.g. Mulpus, Pearl Hill and Catacunamaug Brooks. These brooks are too small for active recreation. In 1996 the Rivers Protection Act became law, providing additional protection to the town’s perennial streams. The regulations generally preclude development within 200 feet of the mean annual high-water mark of a perennial stream unless that development will result in no significant impact on the stream and there is no practical and substantially equivalent economic alternative.

Four of Lunenburg’s brooks have been identified by the Massachusetts Division of Fisheries and Wildlife as Coldwater Fisheries Resources (CFRs). These include Mulpus Brook, Pearl Hill Brook, Catacunamaug Brook, and Easter Brook. CFRs are important habitat for a number of cold-water species, including brook trout. Coldwater species are typically more sensitive than other species

to alterations to stream flow, water quality and temperature within their aquatic habitat. Identification of CFRs is based on fish samples collected annually by MassWildlife staff biologists and technicians. New streams are sampled and evaluated yearly.

No surface water drinking water supplies or contributing watersheds are located in Lunenburg.

4.C.3 Flood Hazard Areas

The 1981 Federal Emergency Management Agency (FEMA) Flood Insurance Study of the Town of Lunenburg identified flood hazard areas in the Town and are shown on the flood insurance rate maps (FIRM) of the Town of Lunenburg prepared by the Federal Emergency Management Agency, June 15, 1982. Lunenburg's flood data has not yet been updated to the new National Flood Hazard Layers. The Study indicated that low-lying areas of the Town are subject to periodic flooding from Baker Brook, Pearl Hill Brook, Mulpus Brook, Catacunamaug Brook, Lake Shirley, and Lake Whalom.

Flood hazard areas identified on the Flood Insurance Rate Map are identified as a Special Flood Hazard Area (SFHA). SFHA are defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. In Lunenburg, we have Zone A (an area inundated by 100-yearflooding, for which no base flood elevations [BFE's] have been determined) and Zone AE (an area inundated by 100-year flooding, for which BFE's have been determined).

Moderate flood hazard areas are also shown on the FIRM and are the areas between the limits of the base flood and the 0.2-percent-annual-chance (or 500-year) flood. In Lunenburg, we have Zone X500 (an area inundated by 500-year flooding; an area inundated by 100-year flooding with average depths of less than 1 foot or with drainage areas less than 1 square mile; or an area protected by levees from 100-year flooding).

The areas of minimal flood hazard, which are the areas outside the SFHA and higher than the elevation of the 0.2-percent-annual-chance flood. Table 8 summarizes the total flood zone by type.

Table 8: FEMA Flood Zones in Lunenburg

FEMA Flood Zone	Acres
A	886.2
AE	732.6
X500	599.7

The Town has taken steps to minimize encroachment in the floodplain and damage to life and property due to flooding by adopting a Flood Plain District as part of the Zoning Bylaw. The Town has limited uses in the Floodplain District to low intensity, low impact uses, e.g., agriculture, and has prohibited encroachments in the District which would increase flood levels during the one-hundred-year flood. Outdoor recreational uses, conservation of water, plants and wildlife, and

forestry and nursery use are permitted within the Flood Plain District. The Massachusetts Wetlands Protection Act and Lunenburg Wetlands Protection Bylaw also regulate work in the floodplain.

4.C.4 Wetlands

The Town has large areas of wetlands. Wetlands provide valuable natural drainage and flood control, groundwater recharge, natural water purification, wildlife habitat, and nature-based recreational opportunities. Table 9 describes the types of wetlands found in Lunenburg and the estimated acreage for each type.

Table 9: Wetlands by Type in Lunenburg

Wetland Type	Acres
Bog	33.5
Deep Marsh	431.1
Shallow Marsh Meadow or Fen	118.0
Shrub Swamp	247.9
Wooded Swamp (Coniferous)	15.9
Wooded Swamp (Deciduous)	300.7
Wooded Swamp (Mixed Species)	137.7
Open Water	935.4

The “BioMap2” report was produced by the Massachusetts Division of Fisheries and Wildlife Natural Heritage Program (NHESP) and the Massachusetts Chapter of the Nature Conservancy (TNC, 2010). 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 “wetland core habitats” 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. Four wetland core habitats and six associated wetland buffer “critical natural landscapes” were identified by BioMap2 in Lunenburg.

Historically, land developers avoided wetland areas due to the cost of development on such land; however, as the more easily developed land has been built upon and land development engineering practice has advanced, land developers have turned to construction on marginal lands to meet the residential, commercial, and industrial space demand.

Much of the wetlands in Lunenburg are on privately-owned land and subject to development within the parameters of the Massachusetts Wetlands Protection Act (M.G.L. Chapter 131, Section 40) and its associated regulations (310 CMR 10.00) as well as the Lunenburg Wetland Protection Bylaw. Through these measures, coupled with greater authority granted by the passage of the Rivers Protection Act, the Town’s wetlands are being offered the highest level of protection in the Town’s history.

The Lunenburg Conservation Commission, as part of its authority under the Wetlands Protection Act and the Town of Lunenburg Wetlands Protection Bylaw, reviews development within wetland areas (and associated buffer zones) and issues mitigation measures for work within regulated wetland resource areas. The Commission's active members and full-time conservation administrator coordinate with other departments to ensure that enforcement of the Act and Bylaw are consistent.

4.C.5 Aquifer Recharge Areas

The Lunenburg Water District, described in detail in Section 3.D.4, has performed test borings over much of the Town to locate potential sources of groundwater. The tests indicate that the most suitable sites for exploitation are located in an area of deep stratified drift deposits bounded by Lancaster Avenue, Shirley-Leominster Road, Burrage Street, and Page Street. The District's wells are located in this area and steps have been taken to protect the natural resource for its groundwater potential.

The aquifer covers a large portion of the Town, and, therefore, affects development in the community. Recreation use within the resource areas are also affected by the restrictions in the Water Supply Protection District; however, such strong regulations are required in order to assure a safe drinking water supply for the Town's residents.

4.D. Vegetation

4.D.1 General Inventory

Lunenburg retains an open character, with undeveloped forests, pasture land, productive farm fields, and orchards lending to the rural ambiance of the Town. Approximately three-quarters of the town are of this rural nature.

4.D.2 Public Trees

Important trees in Lunenburg include historical and public shade trees, as follows:

- Buttonwood tree at Buttonwood Place, the tree has a current circumference of 228 inches for a diameter of 72.57 inches measured at 3 ft. The plaque placed by the 250th Town Anniversary Committee reads, "Planted by Capt. John Fuller in 1776"
- Evergreens behind the Historical Society planted by Mr. Cruikshank in 1892 when the center school was built
- Sugar Maples on Northfield Avenue, 1800's
- Ginkgo on Lower Common
- Trees over 54" in diameter: Oak on Page St. west of Flat Hill, Sugar Maple on Townsend Harbor Rd. east of Mass. Ave., Oak at North Cemetery on Holman St near south entrance, White Oak at Proctor Park 2000' south of east end, White Oak on Rolling Acres (south end), Maple on White Street near Fitchburg line.

4.D.3 Forest Land

Forest land is a valuable resource. In general, forested land provides many attributes to the community including wildlife habitat, wind breaks, pollution mitigation, recreation, and character and aesthetics.

According to 1999 land use data, over 54% of the Town is forested primarily with white pine, oak, maple, hemlock and birch trees. Although the increase in development that the Town has faced has destroyed some of the forested land in Town, abandonment of farmland has allowed a significant portion of the Town's land to become reforested. The Town maintains several large parcels of forest land managed by the Town Conservation Commission.

The largest blocks of contiguous forest land also adjoin similar blocks in neighboring towns, especially along Lunenburg's northern and eastern boundaries. As a result, these large blocks of contiguous forests have been identified as "Forest Cores" of statewide significance in NHESP's and TNC's BioMap2 report. Lunenburg has four such forest cores. Forest core habitats include 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.

In 2017, the Conservation Commission used grants from the Massachusetts Department of Conservation and Recreation to develop forest stewardship plans for the Small Town Forest, the Large Town Forest, the Lane Property, the Cowdrey Conservation Area, and the Robbs Hill Town Forest. The Town practices forest management. Selected clearing is allowed to stimulate the growth of existing trees and to foster new growth. The clearing fosters the growth of a variety of tree and animal species and provides income to the Town. In 2018, the Conservation Commission executed a forest cutting plan in the Small Town Forest that focused on the removal of diseased hemlock trees. Many private landowners also manage their forest land with forest cutting plans, approved by the Department of Environmental Management. Some landowners also choose to put their land under Chapter 61, which provides a substantial tax benefit.

As previously indicated, developers are increasingly turning to land that was once considered uneconomic to develop. This has resulted not only in the loss of the forest itself, but also the loss of the wildlife associated with the forest.

The Town of Lunenburg has taken steps to reduce the loss of forested land. A planned residential area bylaw was adopted to allow for development that maintains as much of the land in its natural state as is feasible. Furthermore, the Town's subdivision regulations call for re-vegetation of cleared areas to prevent erosion, the planting of street trees, and the retaining of the natural vegetation on the site wherever possible. As mentioned previously, the Town has also made several land acquisitions that will preserve key parcels of undeveloped land.

4.D.4 Rare, Threatened and Endangered Plants

Lunenburg is home to only one known threatened vascular plant, as described in Table 10 below.

Table 10: Observed Rare, Threatened, and Endangered Plant Species in Lunenburg

Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
Vascular Plant	<i>Platanthera flava var. herbiola</i>	Pale Green Orchis	T	n/a	1938

T = threatened

4.E. Fisheries and Wildlife

4.E.1 Inventory

Lunenburg is fortunate to still have a wide variety of habitats that support a diversity of wildlife and plants. Lunenburg has preserved more of its open fields and farmlands than some surrounding communities and both upland and forests abound. The marshes and wetlands of the Mulpus Brook and the open water habitat of its lakes and ponds add to the diverse habitats in Town.

The varied landscape of Lunenburg – comprised of a mosaic of forests, fields, wetlands, streams, and ponds – provides many different habitats for wildlife, making it host to most of Massachusetts’ most common inland fish and wildlife species.

With such diverse habitats, Lunenburg is also the home to many of the Species of Greatest Conservation Need as listed in the Massachusetts State Wildlife Action Plan. Fish like the white sucker, creek chubsucker, longnose dace, and brook trout, reptiles like the spotted turtle, Blanding’s turtle, wood turtle, eastern hog-nosed snake, birds like eastern whippoorwill, upland sandpiper, roughed grouse, broad-winged hawk, Canada warbler, chimney swift, common nighthawk, bald eagle, wood thrush, American woodcock, chestnut-sided warbler, field sparrow, barn owl, and white-throated sparrow, and mammals like moose, big brown bat, little brown bat, bobcat, and black bear. A number of invertebrate species of conservation interest as well, especially dragonflies, damselflies, and butterflies and moths, are present in our woodlands, wetlands, fields, and backyards.

In addition to the Species of Greatest Conservation Need listed above and the rare species listed below in Table 11, Lunenburg’s varied habitats host common mammals from the large – white-tailed deer, coyote, red and gray fox, fisher, mink, river otter, beaver, skunk, opossum, eastern cottontail rabbit, snowshoe hare – to the smaller mammals like white-footed mice, southern red-backed voles, short-tailed shrews, star-nosed moles, red, gray, and flying squirrels, striped chipmunks, and many other small mustelids and rodents.

With such diverse habitats, we also host many species of birds. We are home to many large species of raptors, including a wide variety of hawks (red-tailed, red-shouldered, Coopers, sharp-shinned, kestrels, to name a few) and owls (great-horned, barred, screech, among others).

Massive kettles of migrating hawks can be seen every September forming in thermal updrafts over the hills in the center of town. A wide array of neotropical songbirds occupy our deep interior forests, our agricultural fields and edge habitats, and successional habitats, finding ample places to nest, forage, and raise their young after long northerly migrations in the springtime. Large flocks of nighthawks can be seen soaring over Lunenburg at dusk during spring and summer migrations. Similarly, waterfowl – from the common Canada geese and mallards, to the less common species of hooded mergansers and goldeneyes - fill our ponds during (and feed in the corn stubble of our fields in the case of the geese) migration. Great blue herons and wood ducks are common in our wetlands.

Amphibians and reptiles are abundant in Lunenburg. Wood frogs and peepers in our vernal pools, pickerel frogs, green frogs, and bull frogs in our ponds, and gray tree frogs and American toads serenading us all summer long with their telltale trills. Painted turtles and snapping turtles can be found sunning themselves every spring. Two-striped salamanders, spotted salamanders, and spotted newts are common in our woodlands. A variety of common snake species – milk, garter, and water snakes, to name a few – can be observed, often when least expected it seems.

Fish species common to Lunenburg are covered in Section 4.C.2 Surface Water above.

4.E.2 Vernal Pools

Vernal pools are small, shallow ponds characterized by a lack of fish and annual or semi-annual periods of dryness. Vernal pool habitats are extremely important to a variety of wildlife species, including some amphibians that breed exclusively in vernal pools, and other organisms such as fairy shrimp that spend their entire life cycles confined to such locales.

The Massachusetts Natural Heritage and Endangered Species Program "certifies" the occurrence of vernal pools based on documentation of the pool's use by one or more groups of species that rely on vernal pools. This process relies on volunteers to identify vernal pools, and to collect and submit documentation. Official certification provides a vernal pool, and up to 100 feet beyond its boundary in some cases, certain protections under several state and federal laws. Lunenburg contains 18 certified vernal pools scattered throughout the community, though there are certainly many more vernal pools in Lunenburg than those that have been officially documented.

NHESP identified the locations of another 134 potential, unverified, vernal pool habitats visible on aerial photographs in Lunenburg. All of these "potential vernal pools" are not *necessarily* actual vernal pools, nor does this list *necessarily* include every vernal pool in Town. Many vernal pools were not identified in this process due to unfavorable conditions in the landscape topography, pool physiography and/or photograph quality. Furthermore, vernal pool habitats occur in a wide variety of landscape settings, including forested swamps, bogs, and other wetlands. Vernal pools existing within these settings are nonetheless legitimate and valuable vernal pools. Field verification and/or certification of all potential vernal pools would identify errors such as the inclusion of features that are not actually vernal pools.

4.E.3 Corridors

Many species of wildlife use contiguous natural lands and riparian corridors to make their way across the landscape. Lunenburg residents will recognize the value of these spaces by some of our more uncommon (yet increasingly visible) wildlife that have returned. Moose and black bear, once extirpated, are again regularly spotted in Lunenburg as their ranges have expanded southerly and easterly to re-populate areas. These animals have made wide use of the natural corridors that connect Lunenburg to the habitats of northern New England where these species had been relegated to in decades past.

As the Town and its neighbors develop, reducing their usual habitat, birds and animals are becoming more prevalent in residential areas and/or are moving to less developed areas. The Town has made an effort to preserve contiguous parcels of land, especially in the western portion of town, to provide corridors for wildlife. In addition, the passage and enforcement of the Wetlands Protection Act and Rivers Protection Act should protect remaining corridors along the town's streams.

4.E.4 Rare, Threatened and Endangered Wildlife Species

A number of rare species protected under the Massachusetts Endangered Species Act (MESA) are found in Lunenburg. In order to protect them from collectors, the exact locations of rare flora and fauna observations are not listed. All of these species are listed in the Massachusetts State Wildlife Action Plan as Species of Greatest Conservation Need.

The NHESP has identified "Priority Habitats for Rare Species" representing the geographic extent of Habitat of state-listed rare species in Massachusetts based on observations documented within the last 25 years. Priority Habitats are the filing trigger for proponents, municipalities, and other stakeholders for determining whether or not a proposed project must be reviewed by the NHESP for compliance with MESA. The NHESP has also identified "Estimated Habitats for Rare Wildlife" for use with the Wetlands Protection Act regulations (310 CMR 10.00). The Estimated Habitats are a subset of the Priority Habitats of Rare Species based on occurrences of rare wetland wildlife observed within the last 25 years. They do not include those areas delineated for rare plants or for rare wildlife with strictly upland habitat requirements.

Table 11: Observed Rare, Threatened, and Endangered Wildlife Species in Lunenburg

Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
Bird	<i>Haliaeetus leucocephalus</i>	Bald Eagle	T	n/a	2018
Bird	<i>Caprimulgus vociferus</i>	Eastern Whip-poor-will	SC	n/a	2016
Reptile	<i>Emydoidea blandingii</i>	Blanding's Turtle	T	n/a	2012
Reptile	<i>Glyptemys insculpta</i>	Wood Turtle	SC	n/a	2005
Bird	<i>Botaurus lentiginosus</i>	American Bittern	E	n/a	1990
Mammal	<i>Sorex palustris</i>	Water Shrew	SC	n/a	1914
Mammal	<i>Synaptomys cooperi</i>	Southern Bog Lemming	SC	n/a	1898
Bird	<i>Bartramia longicauda</i>	Upland Sandpiper	E	n/a	1892
Bird	<i>Cistothorus platensis</i>	Sedge Wren	E	n/a	Historic

E = endangered, T = threatened, SC = special concern

Often rare species are obscure and will not be noted unless actively searched out. Potential habitat for these species should be evaluated. Vernal pools in particular may turn up additional rare species. Many of the state-listed species that occur in Lunenburg require the open habitat of fields.

In particular, the stretch of Mulpus Brook from Hickory Hills Lake to the Shirley border is an important resource for wildlife. The area around the Lake supports many of the Town's rare species. The NHESP recommends focusing on protections of those areas as well as the North Cemetery wetland area which also supports rare species habitat. Maintaining normal water level fluctuations in wetlands and connections between resources are vital in maintaining habitat as well as water quality. The removal of non- native species is another important maintenance requirement of rare species habitat. Regional coordination should protect linked corridors.

As described earlier, NHESP's and TNC's BioMap2 report identifies several critical areas for habitat in Lunenburg, mostly concentrated in the northerly and easterly sections of town. Eleven areas of Core Habitat include three Aquatic Cores, four Forest Cores, two Vernal Pool Cores, four Wetland Cores, and areas for five Species of Conservation Concern. Adjacent to and overlapping some of these Core Habitats in Lunenburg are six areas of BioMap2 Critical Natural Landscape, including two Aquatic Buffers, three Landscape Blocks, and six Wetland Buffers.

4.F. Scenic Resources and Unique Environments

4.F.1 Scenic landscapes

The Town's semi-rural nature provides for some very scenic views. Mentioned previously was the view of the open fields, wooded areas, and hilltops from Lancaster Avenue. In a cooperative effort between the Towns of Lunenburg, Shirley, and the Department of Fisheries and Wildlife, a

broad and scenic grassland area in the northeastern portion of Town has been preserved adjacent to Hunting Hill.

Also important to the character of the Town are the scenic tree-lined roadways with pastoral vistas. Lunenburg has four roads designated as scenic, affording them the protection of Massachusetts General Laws Chapter 40, Section 15C as determined by Town Meeting: Leominster Road, Lancaster Avenue, Flat Hill Road, and Northfield Road. In 1982, the Massachusetts Department of Conservation and Recreation (formerly Department of Environmental Management) conducted a scenic inventory defining “distinctive” and “noteworthy” landscapes. These viewsheds correspond with the town’s designated scenic roads.

4.F.2 Farms and Agriculture

Lunenburg has always been a farming community. You don’t have to look any further than the Town’s official seal to see the evidence. Farmers and their farms are cornerstones of our community and keystones of our pastoral and rural landscape. The Open Space and Recreation Plan survey results and recent actions at the community level (i.e. support creation of Agricultural Commission, passage of Right to Farm by-law, etc.) demonstrate that Lunenburg’s non-farming residents clearly place a high value on the role that local agriculture plays in our town, making Lunenburg a vibrant agricultural community.

Lunenburg’s farms are both a reflection of the past and a model of the future of the agricultural economy. In a state that has seen dairy production plummet and dairy farms nearly disappear, Lunenburg still hosts two of Massachusetts’ most successful dairy operations. Larger-scaled vegetable truck farms take their produce direct-to-market, supplying high-quality, locally-sourced ingredients to the finest restaurants and larger farmer’s markets in Boston and Worcester. Several farms in Lunenburg offer direct retail opportunities on-farm: from honor-system pay-as-you-take roadside stands, to pick-your-own and cut-your-own, to community supported agriculture (“CSA”) share-based produce, to full-scale farm stands and stores that offer a wide variety of farm products to customers. Non-farmers further support our local farms by hosting hayfields, cornfields and sugar-bushes on their property (several town-owned properties also have agricultural use agreements). Backyard farming has also boomed with many residents growing modest gardens and keeping small flocks of chickens to supplement their own food supplies. A local farmer’s market is also held weekly in the center of town during the growing season.

Lunenburg’s ability to maintain such a diverse and successful agricultural economy is driven by the ingenuity and hard work of its farmers and the support given to them by the local community. Other contributing factors have helped foster that success. Many of Lunenburg’s largest farms have partnered with the Massachusetts Department of Agricultural Resources to permanently protect their farmland with Agricultural Preservation Restrictions (APRs). Lunenburg has one of Massachusetts most dense concentrations of APR-protected farmland as a result – approximately 750 acres of Lunenburg’s farmland is conserved with APRs. Another contributing factor to Lunenburg’s agricultural success is the quality of Lunenburg’s soils –

almost 40% of Lunenburg's soils are considered agriculturally significant. However, you measure it, Lunenburg has deep agricultural roots.

4.F.3 Major Features

Unique geologic features in the Town are a result of the glaciations that covered North America tens and hundreds of thousands of years ago. These features include the previously described eskers, kames and moraines, which provide hiking and nature exploration recreation opportunities. Many of these features are evident in the eastern portion of town in and around Lake Shirley. To the east of Lake Shirley, a kettle pond is in a large portion of the Town's undeveloped land. Unique boulder rock formations, referred to locally as Table Rock and Diamond Rock, provide opportunities for appreciation of the randomness of nature.

4.F.4 Cultural and Historic Areas

Lunenburg's Town center has a classically-New England flavor. The Town Hall, local churches, and many locally important structures dominate the center. The Town created a 102-acre Historic District listed with the National Register of Historic Places administered by the National Park Service that includes many buildings within the Town Center. Table 12 lists the structures and sites within the Historic District.

Table 12: Structures and Sites in the Historic District

Name	Address	Name	Address
Bellows House	Memorial Dr.	Franklin S. Francis House	944 Mass. Ave.
Putnam Store	Town Ctr.	Susan Brown House	950 Mass. Ave.
Town Hall	17 Main St.	Ritter Memorial Library	960 Mass. Ave.
Congregational Church	Town Ctr.	Simon Heywood House	993 Mass. Ave.
Jones House	42 Main St.	Brooks House	1033 Mass. Ave.
Methodist Church	50 Main St.	Lane House	1091 Mass. Ave.
John Howard House	58 Main St.	A.K. Francis House	3 Lancaster Ave.
Wooldredge House	76 Main St.	Richardson House	19 Lancaster Ave.
Locke House	94 Main St.	No.1 School House	23 Lancaster Ave.
Elwin Marshall House	91 Main St.	Benjamin Whiting House	43 Lancaster Ave.
Marshall Cottage	3 Oak Ave.	William Harrington house	53 Lancaster Ave.
Barney House	78 Oak Ave.	Cushing House	73 Lancaster Ave.
Gilchrest House	13-15 Oak Ave.	Elmdale House	125 Lancaster Ave.
Town Pond	Highland St.	Cunningham House	86 Lancaster Ave.
Passios House	72 Highland St.	Bandstand	Lower Common
1730 House	795 Mass. Ave.	Stone Watering Trough	Lower Common
Hildreth House	876 Mass. Ave.	Clifton House	53 Whiting St.
Jewett House	920 Mass. Ave.		

Some of the structures need repair, including the Town Hall. In addition to the need for repair, new development within the District should be designed in a manner that enhances the integrity the unique architecture and character of the area.

4.F.5 Area of Critical Environmental Concern, Squannassit Designation

More than 4,000 acres of the Squannassit Area of Critical Environmental Concern (ACEC) lie within the town of Lunenburg. These areas are primarily in the Mulpus Brook and Catacunamaug Brook sub-basins; however, there is a portion in the northwest corner of the Town that lies within the Squannacook sub-basin.

This ACEC was designated in December 2002. The Nashua River corridor is the central resource for this ACEC. The contributing resources for the Squannassit ACEC include water supplies, habitat resources, land use and open space. All three of these supporting categories exist within the portion of the ACEC within Lunenburg.

The ACEC program regulates designations of ACECs and directs the EEA to take action, administer programs and revise regulations to preserve, restore, and enhance the natural and cultural resources of the ACECs. The ACEC program does not regulate development within the boundaries; however, the purpose and goals of the designations are implemented through a variety of state agency programs and regulations.

4.G. Environmental Challenges

As previously discussed, one of the largest environmental challenges continuing to face Lunenburg is continued pressure from development. Loss of habitat and open space, increased pressure on municipal services, detrimental effects of stormwater runoff on water quality, increased traffic, congestion, and pollution all contribute to decreased quality of life.

Some drainage issues that have occurred in town as development has proceeded. The town has developed a "Stormwater Task Force" to address these issues and work on managing the nonpoint source runoff and drainage issues that have arisen as impervious surfaces have become more common in town. The Storm Water Task Force is charged with developing a comprehensive storm water management plan that complies with state and federal regulations, provides a storm and surface water system that controls damage from storms, protects surface water quality and the environment.

There are two active lake organizations in Lunenburg that address stormwater and erosion issues. In 2006 the Lake Shirley Improvement Corporation (LSIC) in partnership with the Town of Lunenburg applied for and received a 319 Grant to assist with the removal of pollutants from sediment and excessive nutrients. Low impact development controls were installed at five locations around the lake:

1. **76/84 Sunset Lane** - Constructed sinuous flow path for water using coir fiber logs and live stake plantings to promote vegetative filtering and nutrient uptake by establishing dense shrub and herbaceous plant growth just upstream of the tributary's confluence with Lake Shirley.
2. **398 Sunset Lane** - Created rain garden to control storm water runoff. Garden replaced a direct pipe discharge to Lake Shirley.

3. **Oakes Landing Development** - Installed 400' of vegetative buffer along shoreline.
4. **53 Pearl Street** - Constructed a rain garden and vegetated water quality swale to treat runoff discharging to the lake from Pearl Street.
5. **833 Flat Hill Road** - Stabilized an unnamed tributary with eroding/un-stabilized banks and an associated un-stabilized settling pond by installing a sediment forebay, channel stabilization and constructed wetland.

In addition to the work on the lake, the 319 Grant included funding for public outreach and education. A low impact development guidebook was created for the Town of Lunenburg and use by the LSIC in newsletters, meetings and on their website.

The shallow nature of Lake Shirley (much of the lake is less than 10 feet deep, except for a few deep basins) tends to make the lake susceptible to overgrowth by invasive weeds, especially Eurasian Milfoil. The LSIC conducts regular vegetation surveys and utilizes herbicide treatment and drawdown as part of their lake management strategy.

Hickory Hills lake is a 319-acre private lake owned by the Hickory Hills Landowners Inc. (HHL). The Corporation is managed by an eleven-member Board of Directors. In 2009, the Board voted to establish a Lake Management Group to evaluate the quality of the lake ecosystem, identify potential issues, review options to address those issues and to recommend the best courses of action. Periodically HHL submits a lake management plan to the Lunenburg Conservation Commission. The 2016 plan identified several issues on the lake including the presence of invasive species, sedimentation, erosion, and increasing native vegetation.

According to the 2007 Stormwater Report prepared for the Town of Lunenburg, there are 23 stormwater structures within the Hickory Hills area. To date four plunge pools have been installed to address contamination from stormwater outfalls. In December of 2019 HHL obtained permission to install 2 additional plunge pools. There are ongoing sedimentation issues in isolated coves on the lake and significant sedimentation can be observed in the Mulpus Brook inlet, which is the main water flow to the lake.

Annually the Lake Management Group coordinates volunteer efforts to address eroded shoreline utilizing a variety of methods included the installation of coconut coir logs, native plantings and stones. To date approximately 1,250 feet of shoreline has been restored.

Areas around the various waterbodies in Lunenburg are within the flood plain. Due to the high hazard rating of the dams on Hickory Hills Lake and Lake Shirley, Emergency Management Plans are required and are filed with Public Safety Officials in accordance with State Regulations. Major flooding has not occurred in Lunenburg. In recent years there have been two relatively minor documented cases of flooding within the public right of way. In the area of 554 Lancaster Avenue drainage issues were causing damage to agricultural fields, impeding traffic flow and causing damage to the structural integrity of the roadway. A drainage system was installed on the north side of the property which incorporates drainage swales and piping to capture surface water runoff. Roadway flooding has been reported in the vicinity of 377 Flat Hill Road, this flooding may be caused by runoff from an adjacent property and is under investigation.

Lunenburg is fortunate to have over 1900 acres of Conservation Land that support an expansive trail system. A recreational club in Lunenburg, the Lunenburg Snow Riders (LSR), have partnered with the Conservation Commission to continually improve and maintain the trail system and to address flooding and erosion. The LSR has obtained several grants to further trail improvements within Lunenburg and has completed the following erosion control projects to date:

- **Old Tote Road & Muskrat Swamp Trail, Lunenburg Cowdrey Lot** - To mitigate eroded trails the LSR installed hard pack to raise the trail bed to cover exposed roots and rocks. This is a corridor trail that connects the Cowdrey Lot situated between Mulpus Road and Massachusetts Avenue (Route 2A) to Robbs Hill Conservation land off Burrage Street. Trail accommodates horses, mountain bikes, cross country skiers, hikers and snowmobiles.
- **Lunenburg Conservation Land, Harold Harley Monument** - This property was originally a gravel pit donated by its owner to the Lunenburg Conservation Commission as it abuts the existing Cowdrey Lot on Townsend Harbor Road. The LSR improved the existing road by adding hard pack and installing drainage. Beaver deceivers were installed to reduce water level back to original state
- **Town Forest Trail** - Erosion and drainage issues on the main trail in the Large Town Forest located off Valley Road mitigated by installing processed gravel, rip rap and a culvert to control stormwater run-off.
- **New connector trail between Cowdrey Lot and Small Town Forest** - Erosion issued on a new connector trail between the Cowdrey Lot and the Small Town Forest off Mulpus Road addressed by installing processed gravel and rip rap.

As part of their goal to enhance wildlife habitat and actively manage the forests under their control, the Lunenburg Conservation Commission has developed five forest stewardship plans in order to:

- Enhance both the quality and quantity of future timber products
- Enhance wildlife habitat by diversifying tree age and species
- Protect the water quality of the Mulpus Brook Watershed
- Maintain existing trails and create a self-guided stewardship trail for public education and enjoyment
- Protection of State listed Endangered Species (Blandings Turtle) and Vernal Pools

Forest stewardship plans completed to date are on the Town of Lunenburg's website. In 2017, timber harvesting was completed on the Small Town Forest, a 252 Acre parcel.

A Woodland Enhancement Plan was developed for the 60.80-acre Hawes parcel on Hollis Hill Road. The Conservation Commission has partnered with Mass. Audubon to promote diversified bird habitat on this parcel and the goals of the plan are to:

- Enhance Bird Habitat
- Improve Timber Resources

- Promote Biological Diversity
- Enhance recreation and aesthetics
- Enhance other native wildlife habitats
- Provide Educational Opportunities for the Public

In 2019 the Lunenburg Conservation applied for and received several grants from the Department of Conservation and Recreation's Working Forest Initiative cost-sharing program for additional plans to be completed in FY2020. With the assistance of a licensed forester, the Conservation Commission will be developing three additional 10-year forest stewardship plans for parcels under the care and custody of the Conservation Commission. The plans will allow the Conservation Commission to identify management techniques that will lead to productive and healthy forests.

New England is an important region for the breeding of birds because of its deciduous forests. There has been a decline in the populations of birds that depend on forest habitat and knowing how to modify forest structure to meet habitat needs will hopefully mitigate this decline. DCR in partnership with MassAudubon has developed a cost-sharing program to assist landowners with evaluating and identifying suitable bird habitat and habitat enhancement strategies. The Commission also received grants to conduct bird habitat assessments on several parcels.

Table 13 shows which Town parcels have Management Plans and/or Bird Habitat Assessments intended to be developed in FY2020.

Table 13: Management Plans for Town Properties

Parcel	Acreage	Plans to be Developed
Pleasant Street Conservation Area	68	Forest Stewardship Plan Bird Habitat Assessment
215 Chase Road	58	Forest Stewardship Plan Bird Habitat Assessment
Off Howard Street -various properties 970 New West Townsend Road -166 acres 573 West Townsend Road Rear-39 acres 260 Howard Street - 15.08 acres 573 West Townsend Road Rear-35 acres	258	Forest Stewardship Plan Bird Habitat Assessment
Cowdrey Conservation land (Mass. Avenue)	313	Bird Habitat Assessment

According to the DEP Searchable Database, Lunenburg has 3 hazardous Waste sites, (1) 100 Summer Street (2) 925 Massachusetts Avenue and (3) 110 Burrage Street. The first 2 sites are considered Tier 1D by DEP; this indicates that the owners have not properly responded to the release or potential release and will ultimately be sanctioned by DEP. The third is in Remedy Operation Status (REMOPS), which means there is a remedy operation in place that requires regular Operation and Maintenance and is working toward a permanent solution. REMOPS is considered an active open site as the remediation has not been completed.

Furthermore, over the past 30 years, there are records of an additional 85 reported releases in the Town. These have either been closed to the satisfaction of the DEP or required no additional action.

Two solid waste disposal sites once operated in the Town of Lunenburg. The first dumping ground was located on a 43 acres site off Townsend Harbor Road and was operated until 1981. According to the DEP list of Inactive and Closed landfills and Dumping Grounds, the site is classified is a non-lined closed dumping ground and the total tons per day is not known.

The second site in Lunenburg, located at 27 Youngs Road, operated from 1981 to 1994 and handled 8 tons per day on a 53-acre site, 8 acres of which were utilized for solid waste disposal. In 2005 the Department of Environmental Protection issued a Notice of Noncompliance to the Town due to unsecured area, erosion by dirt bikes and all-terrain vehicles, non-maintenance of drainage swales, leachate staining of wetlands and non-performance of inspections and environmental monitoring. In 2006, the Town entered an administrative Consent Order with DEP and completed the post closure environmental monitoring and maintenance plan. In July of 2008 DEP issued the Landfill Closure Permit Certificate of Compliance with ongoing conditions for monitoring and semi-annual reporting.

The site remains in compliance with the inspection protocol mandated by DEP. The site is monitored regularly for excessive methane gas as well as the possibility of groundwater contamination. The frequency of the testing was reduced through a special permit acquired as a result of consistently favorable results. The landfill site including the perimeter fencing is inspected on a regular schedule by DPW personnel. Adjacent to the "cap" is a storage area for catch basin materials and street sweepings both determined by the EPA to be hazardous waste. Lunenburg is permitted to store these materials through the procurement of a (BUD) Beneficial Use Determination permit. The DEP requires yearly testing of these materials. During the Spring and Fall, DPW personnel oversee and manage the annual composting of brush, leaves and other organic debris for residents at this site.

4.H Environmental Equity

As shown in the maps in Appendix 8, Lunenburg does not have any state-designated "environmental justice" neighborhoods as designated by the state's Executive Office of Energy and Environmental Affairs' for compliance with its Environmental Justice Policy. According to the agency, "Environmental justice is based on the principle that all people have a right to be protected from environmental pollution and to live in and enjoy a clean and healthful environment. Environmental justice is the equal protection and meaningful involvement of all people with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies and the equitable distribution of environmental benefits." Environmental justice neighborhoods represent areas across the state with high minority, non-English speaking, and/or low-income populations.

Although Lunenburg is not home to any defined “environmental justice” neighborhoods, our neighbors in Leominster, Fitchburg and Shirley do have such populations adjoining our mutual borders. See the “Environmental Justice” map in Appendix 8. Though Lunenburg does not have any areas that meet all the criteria for environmental justice as defined by the state, several areas of town do have some of the defining characteristics. Regardless of the specific definition or qualification of neighborhoods, environmental equity is a laudable goal for and should be a consideration with every open space and recreation objective. We want to make sure that our residents have equal opportunities to enjoy public open spaces and recreation areas convenient to where they live and work in town.

Several areas of town are more densely populated than others, which may be the easiest way to think about equitable access to recreation. Areas in the western part of town, nearest the Leominster border in the Whalom District and at the western end of Massachusetts Avenue near Fitchburg, are densely populated and also have a higher degree of commercial and/or industrial development than do other parts of town. Lake Shirley and Hickory Hills Lake are densely developed on the lake shores and in their immediate vicinities. And, not surprisingly, the town center has a higher density of residential development.

Lunenburg is fortunate that its network of existing open space and recreational resources are well-distributed geographically throughout the town. Luckily, too, the more densely populated areas of town also have a series of sidewalks and/or rural low-traffic roads that allow people to get out of their homes and get to some of those open spaces safely and conveniently. Still, more can be and should be done to continue to improve this access equitably for all. Therefore, this plan recommends that environmental justice should be a core consideration of all future open space and recreation resource improvements, expansions, or additions.

SECTION 5: INVENTORY OF CONSERVATION & RECREATION LANDS

Open space refers to conservation land, greenways, recreation land, parks, and other undeveloped areas. Open space is critical to the value Lunenburg's residents place on the rural beauty of the town. People value open space for different reasons: some may appreciate the aesthetic beauty, others may like the peace and tranquility open space offers, others may use it more actively for outdoor recreation, and some open space lands may still be working forests and farms that produce important resources for the community. Open space has been shown to add value to communities both intrinsically for these reasons, but also measurably in terms of property values because open space is a desirable community quality or feature that new residents seek out when choosing a new place to live.

Protected open space means lands that are permanently protected from being converted to non-conservation or non-open space uses. "Protected" means there are actual legal restrictions placed on the use of the property that limits or completely prohibits future development. Lands owned by state conservation agencies and the Conservation Commission are protected by Article 97 of the Massachusetts Constitution, as are lands managed and controlled by the Parks Commission. The town also has privately-owned acreage that is permanently protected under agricultural preservation restrictions (APR), conservation restrictions (CR); these instruments are permanent deed restrictions, held by conservation organizations or agencies over lands owned and managed by others, that restrict certain activities on the property to protect its conservation values. Certain non-profit conservation organizations also own land for conservation purposes, which is typically considered permanently protected due to the legal organizational status of those organizations.

Some open land is of conservation or recreation interest but not protected or less-than-fully protected. "General municipal" land is not typically protected and can be converted to other uses. Other municipal lands are not easily convertible to other uses as a result of their current uses (cemeteries, for example). Private recreation areas, like golf courses or rod and gun clubs, are not necessarily protected unless they have placed conservation restrictions on their property. Some private properties are enrolled in temporary current-use protection for forestry (Chapter 61), agriculture (Chapter 61A), or open space (Chapter 61B); these programs provide landowners property tax incentives to keep the property in their current use and give the town a brief opportunity to consider acquisition of the property should that use be changed in the future. More information about Chapter 61 programs is listed in the corresponding section below.

See Appendix 7, Land Inventory for a complete matrix of details.

5.A. Municipal Land

The town of Lunenburg owns over 2,400 acres of land throughout town, under the care and management of various municipal boards and departments.

5.A.1 Land Managed by the Conservation Commission

An Article was placed on the warrant for the 1961 Town Meeting calling for the acceptance of certain chapters of the General Laws that would permit the establishment of a Conservation Commission “for the promotion and development of the Town’s natural resources.” To date, the Town has made significant progress to preserve the natural characteristic of the Town, totaling approximately 1,924 acres.

- 1) *Cowdrey Conservation Area*. 313 acres-located between Massachusetts Avenue and Mulpus Road that are very accessible and visible via three roadside parking areas with large signs. The land has a dedicated guidebook with associated number signs in the field. Cowdrey has enjoyed significant maintenance. There is new access area off Townsend Harbor Road that provides parking and a trail to a viewing platform over the Mulpus Brook.

The topography is flat and could be upgraded to become handicap accessible. There is currently a grant submission for money to improve a trail for accessibility and an improved parking spot. The Lunenburg Conservation Commission intends to explore the feasibility of adding a parking lot at the frontage on Woodlands Drive in order to improve public access to the wildlife viewing platform.

- 2) *Large Town Forest*. 280 acres. 842 Chase Road - This site has developed marked trails and off-street parking available on abutting Lane Property. It is maintained as a wildlife habitat. This property has little access from the street and development of ADA compliant access is under review, but not expected due to its significant interior distance.
- 3) *The William H and Saundra B Lane Property at Lunenburg Town Forest*. 168 acres. Holman St — This is a newly acquired property that abuts the Large Town Forest. It has a developed off-street parking area with a developed trail system. There is ADA complaint HP parking and an ADA compliant main trail. There is a grant currently submitted to rehabilitate the parking spot for van accessibility and to improve the already accessible trail head.
- 4) *NW Town Forest*. 260 acres- located at west of West Townsend Road and north of Howard St. It has no developed access from the street and has no signage or parking, though the town does hold an undeveloped right of way that could provide public access. Several of the parcels are non-contiguous. An adjoining parcel of generally-held municipal land adjoins the NW Town Forest and is managed as part of the conservation area; the acreage is not counted here.

The area is maintained as a wildlife habitat. It is not suitable for handicap accessibility.

- 5) *Small Town Forest*. 295.5 acres. – 255 Mulpus Road, located north of the Cowdrey Conservation Area. This area is currently being upgraded to provide ADA compliant

parking and access trail to a viewing area. The recent forestry management activities have provided several access trails through the property that are currently being cleaned and mapped. The lot is forested, has numerous wetlands areas and contains mountain laurel. The lot has high value as a wildlife area. Horses and mountain bikers use the trail frequently. An adjoining parcel of generally-held municipal land adjoins the Small Town Forest and is managed as part of the conservation area; the acreage is not counted here.

The area is hilly with numerous wetland areas. It has some potential for use by the disabled, provided some minor grading for slope and root barrier are accomplished. The Conservation Commission is exploring adding a trail along the western side of the property in order to create a "loop" trail within the property.

- 6) *Robbs Hill Conservation Area*. 129 acres. - 470 Burrage Street and 103 Robbs Hill Rd- small rolling hills and valleys with assortment of hardwoods and pine cluster. Off street parking, trails made by dirt bikes, all-terrain vehicles and horseback riders. Could be used for hiking, mountain biking and cross-country skiing.

Due to the hills and valleys, the area is not feasible for handicap access, however, there is some limited potential for a small picnic area at the trail head on Robbs Hill.

- 7) *Harris Conservation Area*. 64 acres-located at 650 Reservoir Road-small stream, pond and swamp area. The area contains hardwoods and pines. There are deer, fox, raccoon and skunks, trout in the stream. There is no parking or access to this property at this time.

This property needs to be reviewed for development of public access. This area has potential for creating an accessible trail. Modification for accommodating elevations may involve some minor regrading.

- 8) *Laurel Bank Conservation Area*. 68 acres. Accessed directly from Pleasant Street. A dirt road goes from the gate at Pleasant Street to the end of the property. The field is suitable for parking. Off street parking for three cars is available. There is a small pond, cranberry bog and wildlife habitat on the property.

The area is hilly, but could become handicap accessible with some minor grading. Access is in the planning stage.

- 9) *Clark's Hill Conservation Area*. 17.4 acres-located at 301 Lancaster Avenue. There is no off-street parking. The land is historic, owned by the first settler, Samuel Page in 1718. Lot is suitable for hiking though access off Lancaster Ave is steep with old timber steps sporadically present.

Area is too hilly to make it feasible for handicapped accessibility. In order to comply with slope standards, it would be financially prohibitive.

- 10) *Hawes Conservation Area*. 61 acres-located at 123 Hollis Road with scenic vistas of Mount Wachusett. Contains public access, enjoys natural wooded, scenic and open space values, habitat for rabbits, foxes, deer, wild turkeys, birds, bears and etc. Land contains some wetlands. Existing trails marked by orange slashes are used for hiking and cross-country skiing. Conservation Restriction held by North County Land Trust. Passive recreation is allowed, but camping, fishing, snowmobiling or hunting is prohibited.

The area has potential to become handicap accessible, but is in the planning stage. Emphasis can be concentrated on an accessible trail and sitting area within the butterfly habitat that is currently being developed.

- 11) *Hunting Hill Wildlife Management Area*. 120 acres-located north of Mulpus Road- bordering between Lunenburg and Townsend. There is public access from 99 Hunting Hill with established trails and wildlife habitat. There is a large flat parking area that is being evaluated for ADA compliant parking and trail access into the field for wildlife viewing.

The area has the potential to become handicap accessible for both trails and a small picnic area, but is in the planning stage.

- 12) *Rayno Conservation Area*. 57.8 acres. - Chase Road - visibility and access is limited from Chase Road down a steep embankment, and the property has no signage or parking. Rayno contains a perennial stream and vegetation is characterized as a mature northern hardwood. There are no developed trails on this lot and current use is either limited or nonexistent.

Due to the steep access off the road, there is neither signage nor parking on very busy Route 13. It is not feasible for the disabled as development of a slope form mobility accommodation is financially prohibitive.

- 13) *Hirsch Conservation Area*. 6.1 acres. - 801 Northfield Rd. - This property was a recent gift to the Conservation Commission. It abuts Rayno Conservation Area and provides the possibility of parking and access to the property that does not exist along Chase Road.

This property needs to be reviewed for public access development; this could open nearly 65 acres of conservation area to public access.

- 14) *Proctor Park*. 24 acres. - Elmwood Road - excellent access-one major trail that bisects the lot. Parking is limited to roadside. Park is forested with red oak and hickory, mixed with mountain laurel understory and a small section of wetlands. Proctor is well marked and with little new development other than trail clearing and brush removal.

Slightly hilly, this area could become accessible and picnic tables could be provided to allow access. A wide path bisects the area. There is a small parking area at the trail head

that may need some minor regrading to become handicap accessible and is worth further exploring.

- 15) *Fairbanks Conservation Area*. 9 acres - 781 REAR Page St – No Access from the Street. Are should be further analyzed for an access.
- 16) *White Rabbit Swamp*. 11.4 acres. - north of Page St. and west of Arbor St.-designated as the White Rabbit Swamp on the USGS maps. Land is wetland with infrequent upland ridges. There is no access, parking or signage for this lot. An adjoining parcel of generally-held municipal land adjoins the White Rabbit Swamp and is managed as part of the conservation area; the acreage is not counted here.

The area is virtually all wetland. It is not accessible for the general public or the disabled.
- 17) *Hopkirk Conservation Area*. 8.9 acres. This area has no access from the street. This area is unlikely to become accessible due to its limited potential.
- 18) *Brown Conservation Area*. 3.6 acres - 24 REAR West Townsend Rd – No access from the street. This area is unlikely to become accessible due to its limited potential.
- 19) *General Builders*. 1.4 acre. No trails or off-street parking. This are is too small to create a meaningful accessible area. It was meant more as a buffer area.
- 20) *Kuiju Conservation Area*. 1.3 acres. - 1000 REAR Flat Hill Rd –Property is entirely wetlands. No Access from the Street.
- 21) *Whalom Waterfront*. 0.7 acre. - Lakefront Ave – This a is a developed strip along the seawall/sidewalk of Lake Whalom. It is paved with level walking and fishing access to the lake. This area is ADA compliant with HP parking spots.
- 22) *Rodrigues Conservation Area*. 2 acres. – 30 Rennie St – This property is a recent gift and has not been reviewed. It has wetlands and is on a dead-end street. The topography is flat and may be possible to install a short ADA compliant trail, picnic area and parking. Further review is required.

5.A.2 Managed by the Parks Department

- 1) *Marshall Park and Pond*. 27.8 acres located between Massachusetts Avenue, Chestnut Street and Highland Street with a primary entrance off Massachusetts Avenue and a secondary entrance off of Chestnut Street. Marshall Park is Lunenburg’s centerpiece park property. Marshall Park includes multiple baseball/softball diamonds, an exercise track, a playground, and other abandoned recreation facilities. There is a drinking fountain, concession stand and small storage building. Parking is available for approximately 60 vehicles. No ADA compliant parking spots are designated. Field access is ADA complaint with proper gate opening and packed dirt paths.

- 2) *Town Beach*. 0.2 acre located off of Prospect St. Facilities include a tot-lot playground, recreation building with restrooms, and a beach area. Roadside parking space is limited; no ADA-compliant marked spaces. The exterior of the building has a ramp for handicap access into the building. Handicap beach access is via the street side gate.
- 3) *Wallis Park*. 2.1 acres located off of Whalom Road. There are approximately 20 parking spaces without handicap designated spaces. It has 2 fenced basketball courts and a playground (fully renovated in 2018) that are both ADA accessible and compliant. Picnic tables are available, and two of five tables are wheel chair accessible.
- 4) *McNally Park*. 2.4 acres located on the corner of Whalom Road and Lesure Ave. Baseball diamond. There are approximately 20 parking spaces in a small unpaved lot and no ADA-compliant spaces. The park has a concession stand with running water but no permanent restrooms at this location.
- 5) *Fitzgerald Field at Ben Normand Park*. 3 acres mainly used for baseball. Parking alongside the road for approximately 25 cars and no ADA compliant spaces.
- 6) *Veteran's Memorial Park*. 0.3 acres. Located off Memorial Drive and Massachusetts Ave. Small memorial park with ADA-compliant walkways and parking available along Memorial Drive, at Kid's Kingdom playground, and the Eagle House senior center.

5.A.3 Lunenburg Public Schools (74.3 acres total)

- 1) Lunenburg Primary School Playground and athletic field located at 1401 Mass Ave. This playground has a toddler section for ages 2-5 and a section for older children 5-12. Installed in 2005 and manufactured by Miracle Recreation Equipment Company, it is fully accessible. The cushioning material on the playground is kid-safe wood chips. The athletic field is used primarily for physical education classes and by Lunenburg Youth Soccer.
- 2) Connor Loren Memorial Playground located at 1025 Mass Ave, was replaced in 2006. The playground has two sections, one for age 2-5 and one for 5-12, manufactured by Miracle Recreation Equipment Company. It is fully accessible. The playground has a swing, two slides, and a climbing apparatus. Kids Kingdom playground formerly occupied this location and was completely redone through memorial funding. It is located to the south of the former Passios Elementary School and adjacent to the Eagle House Senior Center. The playground provides a play area for children on roughly 1/4 of an acre.
- 3) Turkey Hill playground located at 129 Northfield Road, also known as the Jane Doyle Community Playground, was installed in 2016 for ages 5-12. It is fully accessible with equipment manufactured by Miracle Recreation Equipment Company. This

playground supports the Turkey Hill Elementary School and is open during non-school hours for use.

- 4) Lunenburg Middle- High School located at 1079 Mass Ave has three grass fields for soccer, football, field hockey, and lacrosse. Each field is roughly 80,000 SF field. One grass field has stands, and a press box that are fully accessible. All three fields have an in-ground sprinkler system and two fields have lighting for night games.
- 5) Lunenburg Middle High School Artificial Turf and Track was constructed through a primarily volunteer effort completed in 2005. The track and artificial turf were renewed in 2017. The complex has bleachers, a concession stand, and restrooms. The bleachers do not provide handicapped seating. The restrooms are not accessible due to thresholds being too high and inadequate signage. The concession stand has picnic tables for outdoor dining, which includes handicap seating. The AJ Robbins Memorial field house was completed in 2017 and it fully accessible. The complex is scheduled to be dedicated in 2018 as the Mulligan – McCarron Track and Field.
- 6) Practice Field behind Turkey Hill Elementary is an athletic field that is used for a variety of purposes including physical education.

5.A.4 Cemetery Department (53 acres total)

- 1) The North Cemetery, which lies in the northern part of town on Holman Street.
- 2) The South Cemetery, which lies in the southern part of town off Page Street.

5.A.5 Other General Municipal Lands (301.3 acres total)

The town of Lunenburg owns a wide variety of properties scattered throughout town as “general municipal” property. These range from town offices, to lands taken for non-payment of taxes, to large vacant tracts originally purchased for other municipal purposes but ultimately not used or dedicated to any department or use currently.

- 1) The Lunenburg Public Library offers a full suite of traditional library services as well as a wide array of programming serving residents of all ages including discounted/free passes to area attractions. The facilities are state-of-the-art, built in the early 2000’s, with two community rooms as well as outdoor patio space. The library is governed by a Board of Trustees and is supported by an active Friends group.
- 2) The Boys & Girls Club of Lunenburg opened in 2005 under the name of the Chester Mossman Teen Center. A result of a grass roots community organization, this initiative recognized the need for a safe and constructive after-school program for Lunenburg youth. This concern about our youth arose after a survey taken in 1997 cited the need for a teen after-school program as a top priority for the community. The Club focuses on kids and kids alone in a facility where kids learn and play in a facility that is dedicated to

them. The Club does not house other programs or groups. The Club's professional staff take part in year-round training and professional development in five core areas: Social Recreation, Sports & Fitness, The Arts, Personal & Educational Development, and Health & Life Skills. The Club is open daily during the critical after-school hours from 2-6:30 pm and is affordable to all youth. The majority of Club revenues come from grants, pledge drives, fund raising events and corporate sponsorships. The town of Lunenburg generously pays Club utilities. The building at 15 Memorial Drive was completed in July of 2005 with the generous support of local contractors, residents and their in-kind donations. The house-like structure has many amenities including a full kitchen, four computers, a pool table, a ping pong table, foosball and air hockey. There is also a conference room for meetings and tutoring. The Lunenburg Family Lions Club constructed a half basketball court a few years after the Center's construction.

- 3) The Eagle House Senior Community Center is a source of service and a place of opportunity – a focal point in the community – open to all people age 50+ in Lunenburg and surrounding communities. The Eagle House is run by the Lunenburg Council on Aging and is supported by the Eagle House Supporters Inc, a private, non-profit 501-c-3 corporation, formed to provide assistance for items and programs not funded by the Council on Aging town budget. The Eagle House offers programs and services that are diverse and inclusive, promote dignity and well-being, support independence and encourage involvement in community life. In addition to the indoor community space, bocce courts are available on the grounds as well.
- 4) In 2016, the Town transferred the care and control of the former T.C. Passios Elementary School from the School Committee to the Board of Selectmen to be re-purposed. In addition to a wide array of community spaces, T.C. Passios also has a multi-purpose gymnasium.

5.B. Other Protected Lands

5.B.1 Lunenburg Water District (158.9 acres total)

The Lunenburg Water District is a private agency separate from the town government as described in detail in Section 3.D.4. It owns approximately 131 acres of land between Lancaster Avenue and Reservoir Road at its primary wellfield. The land consists of open fields and wooded areas. Catacunamaug Brook runs through the property. The wells at Hickory Hills Lake are not on the Water District property but it has a land use restriction. The Keating well sits on 17.4 acres. There are no trails or parking areas available to the public.

5.B.2 Commonwealth of Massachusetts

- 1) *Willard Brook State Forest*. The very northwest corner of town is owned and managed by the Massachusetts Department of Conservation and Recreation as part of Willard Brook State Forest. Approximately 127 acres of the state forest is in Lunenburg, sharing significant boundary with the Town's Northwest Town Forest (including along the

Townsend town boundary). The state forest consists of hardwood and laurel. Scatterings of small and large stones distributed by the ice age are present. Old stone walls dissect the landscape and an old cellar hole is located in the area.

- 2) *Mulpus Brook Wildlife Management Area*. Approximately 2.2 acres, owned by the Massachusetts Division of Fisheries and Wildlife, are located in the northeast part of town.

5.B.3 Conservation Restrictions and Agricultural Preservation Restrictions

A conservation restriction (CR) allows a property owner to maintain ownership while permanently protecting land from development in perpetuity if the Commonwealth approves it. Most of the land in Lunenburg that is protected by CRs, however, is not privately-owned property. Rather, the CR's are an added layer of protection over public conservation land. Of the 203.3 acres of CR-protected property, 66.7 acres remains privately owned.

Like CRs, agricultural preservation restrictions (APRs) permanently conserve agricultural land for agricultural use. Lunenburg is fortunate to have a high density of APR-protected farmland (751.3 acres in total), mainly along the Lancaster Road and Leominster Road corridor.

5.B.4 Land Trust Properties

Two private, non-profit land conservation organizations own property in Lunenburg. North County Land Trust owns the Peabody Conservation Area (21.5 acres off Northfield Road) and Lancaster Land Trust owns the Turner Pond Conservation Area (31.4 acres on the Lancaster town line).

5.C. Private Recreation Areas (464 acres total)

Lunenburg also has numerous privately-owned and managed recreation areas throughout town. Some are open to the public, others are private or members-only. Lunenburg is home to two rod and gun clubs, a 9-hole golf course, a driving range with mini-golf and batting cages, and a campground, to name a few.

5.D. Chapter 61 Parcels

Chapter 61 lands are privately held properties governed for tax purposes by Massachusetts General Law (MGL) Chapter 61. Landowners who maintain their property in certain current uses and meet other basic criteria may enroll their property Chapter 61 (Forestry), 61A (Agriculture), or 61B (Open Space). See Table 13 for current enrollments.

Table 14: Chapter 61 Property in Lunenburg

Chapter Program	Acreage Enrolled FY 2017
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61 (Forestry)	628.1
61A (Agriculture)	1,265.2
61B (Open Space)	953.6

The law is designed to encourage the preservation and enhancement of the Commonwealth's forests, valuable farmland and recreational open space. It offers significant local property tax benefits to property owners willing to make a long-term commitment to forestry, farming, and preserving land for outdoor activities. In exchange for these benefits, the city or town in which the land is located is given the right to recover some of the tax benefits afforded the owner when the land is removed from classification. The town is afforded a right of first refusal or right of first option should the property be sold or used for non-classified uses for a set duration of time.

The owner of classified-lands must notify, by certified mail the mayor or city council or the selectmen, assessors, planning board and conservation commission of the city or town, of any intention to sell or convert the land to other uses. If the owner plans to sell the land, the city or town has the right to match a bona-fide offer to purchase it. If the owner plans to convert it, the city or town has the right to purchase it at its fair market value, which is determined by an impartial appraisal. The city or town may also assign its option to a nonprofit conservation organization. The owner cannot sell or convert the land until at least 120 days after the mailing of the required notices, or until the owner has been notified in writing that the option will not be exercised, whichever is earlier. Owners may choose to withdraw from the program without triggering the town's right of first refusal or roll-back tax penalty.

The Lunenburg Board of Selectmen adopted a procedure for Town review of Chapter 61, 61A, and 61B withdrawals, which is attached as Appendix 9.

SECTION 6: COMMUNITY VISION

6.A. Description of Process

As described in detail in Section 2.B, updating and revising this Open Space and Recreation Plan has been a long and involved process months in the making. The Open Space Committee viewed feedback from residents as a core component of the planning process, as was having involvement from key town boards and departments. Committee members embarked on an outreach campaign to both gather ideas and input with outreach including:

- Survey of residents mailed with all tax bills, available for download on the town website, and available online on SurveyMonkey. See Appendix 5 for detailed information about the survey results.
- Newspaper articles.
- Collaboration with Town Manager, Tax Collector, Land Use Director, DPW Superintendent, Conservation Agent, Water District Superintendent, and School Facilities Director.
- Multiple public meetings, including a public planning charette televised on public access and available on the town's YouTube channel.
- Coordination with multiple municipal boards and committees (Board of Selectmen, Planning Board, Parks Commission, Conservation Commission, School Committee, Sewer Commission, Agricultural Commission, Water District).
- Consultation with state agencies, regional planning commission, and non-profit partners.

6.B. Statement of Open Space and Recreational Goals

Lunenburg seeks to meet the open space and recreation needs of its residents by enhancing and promoting its existing open space and recreation assets, preserving the most critical natural resources, expanding access to conservation and recreation resources, and doing so in a fiscally conservative manner.

These themes, expanded upon below, rang clear through the planning process. Specific goals and objectives for addressing these needs are outlined in Section 8.

6.B.1 Enhance and promote existing open space and recreation assets

We need to do a better job of utilizing the assets we already have and sharing information about those assets with the public. This includes re-development or re-use of existing facilities, access improvements like parking expansion, ADA accessibility, and trail marking. It also includes public outreach, such as trail maps and making other information readily available online.

6.B.2 Preserve the most critical natural resources

Lunenburg residents highly-value conservation of the most significant wildlife habitats, drinking

water resources, farmland, and recreation areas. The town should continue to consider conservation of these resources, including but not limited to acquisition of important land leaving Chapter 61 status to maintain use of current open space lands.

6.B.3 Expand access to conservation and recreation resources

Whether we're linking population centers to conservation and recreation resources with sidewalks or bike lanes, re-purposing other municipal lands as pocket parks or community gardens, or acquiring new lands to fulfill unmet needs, expanding access will help meet the needs of all Lunenburg residents.

6.B.4 Diversify funding sources

Updating this plan alone helps to meet this goal by making the town eligible to receive certain state grants for open space and recreation needs. Creating a dedicated funding source, such as passage of the Community Preservation Act, would also be an important step to make the town able to be more pro-active in meeting its open space and recreation goals. Having conservation and recreation at the table for long term capital planning is also fiscally responsible, because these are capital assets that lend tremendous value to the quality of life in town after all.

SECTION 7: ANALYSIS OF NEED

7.A. Summary of Resource Protection Needs

The environmental inventory described in detail in Section 4 presents clear patterns of the most important areas of town to conserve drinking water, scenic areas, important agriculture lands and significant wildlife habitats. These areas coincide with the acquisition priority areas defined in the 2011 Open Space and Recreation Plan.

The citizens survey demonstrates that people live in Lunenburg primarily for its rural atmosphere; over 73% of respondents chose this characteristic over Lunenburg's good schools (39%) and easy commute (23%). It's not surprising, then, to find that nearly 75% of survey respondents said they value conservation of drinking water, scenic areas, important agriculture lands and significant wildlife habitats. Residents also appear ready to take action to continue to do so. To protect open space, over 70% would vote for zoning changes, nearly 65% would support municipal acquisition of additional open space, and almost 60% of residents would support adoption of the Community Preservation Act.

7.B. Summary of Community's Needs

The citizens' survey asked residents to assess the greatest open space and recreation needs in town. Refer to the survey results (Appendix 5) for a complete accounting of the responses. Residents were also asked to describe how they use various recreation resources in town. The top five resources are described in Table 14 by overall popularity and level of use.

Table 15: Top 5 Resources Used by Residents

Rank	Most Popular Recreation Resource	Most Heavily Used Recreation Resource
1	Public Library	Public Library
2	Pick-your-own/Farmer's Market	Existing Sidewalks/Paved Paths
3	Town Conservation Land/Trails	Town Conservation Land/Trails
4	Existing Sidewalks/Paved Paths	Pick-your-own/Farmer's Market
5	Bandstand/Gazebo	(tied) Playgrounds and Boating

When asked what new facilities or improvements to existing facilities should be made, the top five answers were trail maps (38.1%), hiking trails (33.1%), conservation areas (31.1%), bike trails/lanes (30.6%), and town beach improvements (26%).

Residents also believe that adults and seniors are in greatest need of new open space and recreational facilities by a margin of nearly 2:1.

Linkages between existing trails, sidewalks, and conservation/recreation areas were identified by a multitude of the open-ended responses in the survey, during public hearings, and within information sessions.

Residents also want the town to focus on making better use of existing open space and recreation resources. Enhancing and more fully utilizing the resources the town already owns is another theme found in the open-ended survey responses and public forums.

In addition, the committee analyzed the needs of special groups including the elderly and teens by reviewing the responses to the free response questions on the citizen's survey and by consulting the Executive Director of the Boys and Girls Club and the Director of the Eagle House Senior Community Center.

Specific needs for seniors identified by this process included senior housing, no increase in taxes to pay for improvements, more sidewalks that connect to destinations, add benches by green spaces and sidewalks, wheel chair access to hiking trails, more adult/senior education classes/workshops such as yoga, Pilates, cooking, arts and crafts, advertising the existing pickleball program, and the formation of a senior golf league.

The Boys and Girls Club program is presently spread across three buildings: The Boys and Girls Clubhouse, the Library for homework and study, and the gym at the T.C. Passios building. Access to the Passios gym is limited to the early afternoon due to the need to share it with a after school program beginning at 4:00. The need to staff three building and the transitions required when teens move from building to building pose challenges and costs to the program. In Therefore, the program would benefit from being housed in one location. In addition, the program serves grades six through ten in one large common room. The program would benefit from separate rooms for arts and crafts, science/STEAM, music, etc. The program would also benefit from the rehabilitation of Marshall Park's facilities such as the basketball court and the exercise track as that facility is within walking distance. Other teen needs identified from a review of the responses to the free response questions on the citizen's survey include building a skate board park, more town financial support for the Boys and Girls Club, more recreation programs for kids, a formal parks & recreation summer program, a kayak/canoe dock at Lake Whalom and Lake Shirley, more activities for girls at the middle school level (field hockey, lacrosse), and more multi-sport rectangular recreation fields.

7.C. Management Needs, Potential Change of Use

This planning process identified several areas of need from a management perspective.

7.C.1 Equitable use of playing field space

The Parks Commission has no rectangular playing fields, whereas the Public Schools do. Likewise, the Public Schools do not have any baseball/softball diamonds, but the Parks Commission does. The number of people, especially children, who play baseball/softball are

vastly outnumbered by those who play other rectangular-field based sports (such as soccer and lacrosse). These resources need to be shared and utilized equitably.

7.C.2 Parks Commission capacity

Our Parks Commission has limited capacity as only a 3-person board with no personnel dedicated to management of park parcels. Parks are managed by the Department of Public Works, but current staffing levels and other pressing public works priorities limits the resources invested in managing and improving Lunenburg’s park properties. Likewise, funding for parks is limited to a line item underneath an overburdened DPW, and both could use additional support. While there is a great need in town for recreational capacity, the Parks Commission is unable to expand access to recreation resources without a revision of the current funding and personnel structure.

7.C.3 Revitalization of Marshall Park.

Marshall Park was once a focal point of Lunenburg. It was a space where townspeople gathered for all sorts of events to recreate and enjoy being outside. Despite being located in the center of town, with access from multiple streets, good parking, adequate sidewalks and also being in walkable and bikeable distance from many of the town center’s other resources (Eagle House senior center, teen center, schools, public library, and town center business district), the park is now woefully underutilized due to its disrepair. A cinder walking track and exercise stations have fallen out of use, basketball courts have been abandoned, and a beautiful pond is now disconnected and inaccessible from the rest of the park. Most of the space has been dedicated to diamond-based ball sports, which leaves the park unused for much of the year and by a majority of Lunenburg’s residents. Marshall Park needs master planning and redevelopment to revitalize this amazing resource.

7.C.4 Re-purpose “general municipal” land

As seen in the Land Inventory (Section 5), the town owns a wide array of properties throughout town. These “general municipal” lands were either previously acquired with purposeful intentions that never came to fruition, or they have been taken during tax title seizures. In both cases, these lands are potentially resources that could meet some town needs. The town should develop a mechanism for stakeholders to review this land for potentially repurposing it. The town also needs to assign responsibility and a budget for the care and maintenance of these properties as assets Lunenburg already owns. This will enable different town departments and commissions to address the goals identified in section 6.

7.C.5 ADA accessibility

Several of the town’s most prominent conservation and recreation resources could be improved quite simply to enhance their accessibility. From identifying and marking sufficient handicapped parking areas, to minor improvements to trails and walkways, most of the improvements necessary are relatively inexpensive and straightforward to implement.

7.C.6 Enhance public awareness and information

Of greatest need is promotion of recreation assets and expansion of access to recreation resources. Several ways to do this have been identified, which include: better trail marking and trail maps, improved signage, partnerships and interconnection with local businesses, and making information available on multiple platforms, especially the internet.

7.D. Lunenburg Priorities vs. Statewide and Regional Priorities

The Massachusetts Statewide Comprehensive Outdoor Recreation Plan (SCORP) was updated in 2017, providing data and recommendations regarding public open space needs as well as valuable guidance for local town open space planning.

As was done in support of this Open Space and Recreation Plan update, the SCORP process measured public desires for new and existing recreational resources via surveys of residents by region; Lunenburg is in the Central Region. The SCORP identifies several needs in the Central Region and established priorities based on them. These priorities include: increasing access to underserved populations, improving trail access and connectivity, improving water recreation opportunities, and creating neighborhood parks where none had previously existed. The SCORP plan provides specific data on Central Massachusetts residents' participation rates and satisfaction levels with specific outdoor activities. This regional data tracks well with the priorities Lunenburg has identified.

The SCORP analysis in the Central region placed respondents' highest priority on maintenance and improvements of existing outdoor areas and in the ability to access them. Along with improvements in walking and hiking trails, citizens would like more access to water recreation opportunities. Lunenburg's priorities align well with those identified in the SCORP.

SECTION 8: GOALS AND OBJECTIVES

This section identifies several modest objectives that will help the town address the needs identified by this plan. Mindful that much of this work will be done by the town's small but dedicated professional staff and committee volunteers, these objectives are intended to be relatively low-cost and simply implemented in order to make them achievable during the next seven years.

Goal 1: Enhance and promote existing open space and recreation assets

We aim to maximize the utility, access to, and awareness of Lunenburg's wealth of existing open space and recreation areas and facilities, and to make improvements or additions where it is necessary, efficient, and cost-effective.

Objective 1.A: Improve community awareness of existing open space/recreation assets

- Promulgate and disseminate clear rules for the use of municipal conservation and recreation areas
- Conspicuously mark and/or sign formal trails, parking areas and other access points.
- Create trail maps for existing conservation areas and/or create a guide to public recreation facilities available.
- Continue to lead organized outings, such as hikes or interpretive walks, at municipal open space and recreation facilities.
- Improve information available at the library and on the town website.

Objective 1.B: Master plan restoration and enhancement of key recreation resources

- Marshall Park. This resource was once the centerpiece of Lunenburg's recreation and civic activities. Today, it mostly serves as baseball and softball fields for a limited portion of the year and serves a small segment of the town's population. Thoughtful and coordinated revitalization of this unique resource could meet many identified town needs. A master plan should be developed to guide the revitalization of Marshall Park to maximize its use.
- Town Beach. Like Marshall Park, Town Beach is a unique resource located in one of Lunenburg's dense residential centers (Whalom district) but is significantly underutilized. Substantial portions of the facility (a dock area, a tot lot) are unused, parking is woefully insufficient, ADA accessibility is substandard, and hours and season of operation are limited. A comprehensive approach to restoring and enhancing this resource is needed.

Objective 1.C: Seek management assistance

- Contract professional, licensed foresters to create "Forest Stewardship Plans" for several town conservation areas to identify management needs and opportunities, including potential timber harvests.

- Establish a “volunteer steward” program for the town’s open space properties and encourage community and/or individual projects (such as school-led or Eagle Scout projects) to implement management needs.
- Continue successful partnerships with organizations such as the Lunenburg Snowriders.

Objective 1.D: Expand capacity of Parks Commission

- As a 3-member board, the Parks Commission is limited in its effectiveness in part due to the limited number of working members and in part due to open meeting law constraints (i.e. two members cannot collaborate outside of duly-posted meetings because of quorum). The town should undertake efforts to expand the Parks Commission to be a 5-member board in accordance with M.G.L. Chapter 45 Section 2.

Goal 2: Preserve the most critical natural resources

Some important places in town are not adequately protected, and some areas of town and segments of the population are underserved for open space and recreation opportunities.

Objective 2.A: Provide easy access to information about conservation options to private landowners

- Links to local land trusts, conservation organizations and state agencies
- Links to information about Chapter 61, 61A and 61B enrollment

Objective 2.B: Acquire or protect via permanent restriction additional priority properties

- Focus on identified priority areas for resource protection
- Continue to utilize adopted open space acquisition criteria to evaluate individual opportunities
- Develop a process for reaching out to owners of the highest-priority, unprotected lands, and implement direct dialogue with such owners
- Continue to use the coordinated process for reviewing Chapter 61 withdrawals for open space and recreation needs
- Engage assistance of non-profit partners for conservation such as: North County Land Trust, Nashua River Watershed Association, and other local organizations

Goal 3: Expand access to conservation and recreation resources

This goal furthers the themes of improving utilization of resources already available, leveraging those resources to maximize value, and making critical investments where it’s needed most.

Objective 3.A: Link conservation and recreation resources

- Enhance connectivity between existing conservation and recreation resources, especially in densely populated areas such as Whalom district and the town center, with sidewalks and/or bike lanes.
- Support regional trail initiatives that connect Lunenburg’s conservation and recreation resources beyond town lines.
- Consider zoning changes, incentives, or other ways to link Lunenburg’s businesses with its conservation and recreation resources.

Objective 3.B: Re-purpose “general municipal” land

- Convene a multi-disciplinary review of vacant undesignated lands owned by the town.
- Identify those parcels that meet specific municipal needs, including, but not limited to, conservation and recreation.
- Take necessary steps to formally designate care and control to appropriate boards/committees.
- Leverage certain designations as mitigation (if statutorily required for certain changes in use) or as non-cash match (for grant applications) if possible.

Objective 3.C: Make ADA accessibility enhancements

The Self-Evaluation contained in this plan identifies several relatively simple steps that can be taken to improve ADA accessibility enhancements to certain conservation and recreation facilities. These improvements will make Lunenburg’s assets more accessible to larger segments of our population.

Objective 3.D: Add rectangular playing fields/green spaces

A clear need has been identified for additional “green space” (i.e. open, maintained grass fields) for recreation. These multi-purpose spaces could be used as rectangular playing fields for organized sports (such as soccer and lacrosse) or for general recreation (walking, picnicking, “pick-up” games, temporary seasonal ice-skating surface) during various times of year.

Objective 3.E: Acquire and/or develop meaningful access to NW Town Forest

The town owns a substantial conservation resource at the NW Town Forest, but is isolated and landlocked, and only accessible by a poorly defined right of way across private lands. Steps should be taken to acquire and develop meaningful access to the NW Town Forest, both for public access and for land management purposes.

Goal 4: Diversify funding sources

Objective 4.A: Integrate open space and recreation needs into the Capital Plan

Conservation and recreation lands are significant capital assets that lend tremendous value to the quality of life in town. Like any other capital asset, some long-term investments need to be made in these assets to maintain their value to the community. Conservation Commission and Parks Commission should be integrated into Lunenburg's regular capital planning efforts to assure these assets do not suffer neglect.

Objective 4.B: Pass Community Preservation Act

The Community Preservation Act (CPA) is a smart growth tool that helps communities preserve open space and historic sites, create affordable housing, and develop outdoor recreational facilities. CPA also helps strengthen the state and local economies by expanding housing opportunities and construction jobs for the Commonwealth's workforce, and by supporting the tourism industry through preservation of the Commonwealth's historic and natural resources.

CPA allows communities to create a local Community Preservation Fund for open space protection, historic preservation, affordable housing and outdoor recreation. Community preservation monies are raised locally through the imposition of a surcharge of not more than 3% of the tax levy against real property, and municipalities must adopt CPA by ballot referendum. As part of the vote to accept the provisions of CPA, a community may adopt and offer to property owners up to four different exemptions to the CPA surcharge in order to protect economically vulnerable tax payers. To date, 175 municipalities in the state have adopted CPA.

The CPA statute also creates a statewide Community Preservation Trust Fund, administered by the Department of Revenue (DOR), which provides distributions each year to communities that have adopted CPA. These matching dollars serve as an incentive for communities to pass CPA.

Each CPA community creates a local Community Preservation Committee (CPC) upon adoption of the Act, and this five- to nine-member board makes recommendations on CPA projects to the community's legislative body.

Objective 4.C: Apply for state grants

This Open Space and Recreation Plan makes the town eligible for several state grants administered by the Executive Office of Energy and Environmental Affairs, Division of Conservation Services, including programs such as Local Acquisitions for Natural Diversity (LAND), Parkland Acquisitions and Renovations for Communities (PARC), Land and Water Conservation Fund, and MassTrails Grant Program.

Objective 4.D: Utilize dedicated/trust funds

Several accounts exist within town coffers that can be utilized to make needed improvements, especially to town conservation lands. These resources could be further leveraged as match dollars to state grants, for instance, to maximize the funds' impacts while minimizing or eliminating burdens to town budgets.

Also, the Conservation Commission has begun receiving revenues from sustainable forestry conducted on town-owned property. These funds should be similarly re-invested for conservation and/or recreation uses.

SECTION 9: SEVEN-YEAR ACTION PLAN

As the Open Space and Recreation Plan planning process winds down, the Ad Hoc Open Space Advisory Committee will transition to support plan implementation. However, this committee will continue to serve an “advisory” role to support the primary decision-making and regulatory bodies and associated staff within town government – namely, the Select Board, the Planning Board, the Conservation Commission, the Parks Commission, the Finance Committee, and Town Meeting. This will be critical to making meaningful progress on our open space and recreation goals and objectives.

It is important to recognize that open space and recreation opportunities are not luxuries – these are critical to the quality of life in Lunenburg. However, the town’s staff and volunteer capacities aren’t without limits. The same is true for our municipal budget. These realities underscore the need to keep this action plan relatively simple, straight-forward, and cost-effective.

The most important thing that this plan and its implementation can produce is positive momentum. Therefore, the action items in this plan start small, require little or no investment, and are intended to create successes on which to build incrementally. Dedicated staff and volunteer time has produced this plan, and most of the action items identified in this plan would be accomplished in a similar manner. The objective is to build upon our past successes and to be better positioned for future opportunities.

This action plan is organized according to Goals and Objectives listed in previous sections:

Goal 1: Enhance and promote existing open space and recreation assets

Objective	Action Item (Year)	Responsible Party	Funding Source
A) Improve community awareness of existing open space/recreation assets	<ol style="list-style-type: none"> Promulgate and disseminate clear rules for the use of municipal conservation and recreation areas. (Year 1) Conspicuously mark and/or sign formal trails, parking areas and other access points. (ongoing) Create trail maps for existing conservation areas and/or a guide to public recreation facilities available. (Year 1-3) Continue to lead organized outings, such as hikes or interpretive walks, at municipal open space and recreation facilities. (ongoing) Improve information available at the library and on the town website. (ongoing) 	<ol style="list-style-type: none"> Conservation Commission, Parks Commission, School Committee Conservation Commission, Parks Commission Conservation Commission, Parks Commission, School Committee Conservation Commission Conservation Commission, Parks Commission, School Committee 	<ol style="list-style-type: none"> n/a trust funds, state grants state grants n/a state grants
B) Master plan restoration and enhancement of key recreation resources	<ol style="list-style-type: none"> Convene sub-committees to begin master planning process for both Marshall Park and Town Beach. (Year 1) 	<ol style="list-style-type: none"> Parks Commission Select Board, Fin. Comm., Town Meeting 	<ol style="list-style-type: none"> n/a town meeting, state grants

	<ol style="list-style-type: none"> 2. Seek funding for professional design services. (Year 2) 3. Acquire adjoining lands at Town Beach. (ASAP) 4. Complete master plans for Marshall Park and Town Beach. (Years 3-4) 5. Begin implementation of master plans. (Years 5-7) 	<ol style="list-style-type: none"> 3. Open Space Committee, Parks Commission, Town Meeting 4. Parks Commission 5. Open Space Committee, Parks Commission, Select Board, Fin. Comm., Town Meeting 	<ol style="list-style-type: none"> 3. town meeting, state grants 4. n/a 5. capital plan, state grants
C) Seek management assistance	<ol style="list-style-type: none"> 1. Contract professional, licensed foresters to create "Forest Stewardship Plans" for several town conservation areas to identify management needs and opportunities, including potential timber harvests. (ongoing) 2. Establish a "volunteer steward" program for the town's open space properties and encourage community and/or individual projects (such as school-led or Eagle Scout projects) to implement management needs. (Year 1) 3. Continue successful partnerships with organizations such as the Lunenburg Snowriders. (ongoing) 	<ol style="list-style-type: none"> 1. Conservation Commission 2. Conservation Commission 3. Conservation Commission 	<ol style="list-style-type: none"> 1. revolving funds 2. n/a 3. n/a
D) Expand capacity of Parks Commission	<ol style="list-style-type: none"> 1. Amend Town Charter to mimic M.G.L. Chapter 45 Section 2 	<ol style="list-style-type: none"> 1. Charter Review Committee, Select Board, Town Meeting 	<ol style="list-style-type: none"> 1. n/a

Goal 2: Preserve the most critical natural resources

Objective	Action Item (Year)	Responsible Party	Funding Source
A) Provide easy access to information about conservation options to private landowners	<ol style="list-style-type: none"> 1. Update website to provide links to local land trusts, conservation organizations and state agencies (Year 1) 2. Update website to provide information about Chapter 61, 61A and 61B enrollment (Year 1) 	<ol style="list-style-type: none"> 1. Open Space Committee, Conservation Commission, Assessor, Webmaster 2. Open Space Committee, Conservation Commission, Assessor, Webmaster 	<ol style="list-style-type: none"> 1. n/a 2. n/a
B) Acquire or protect via permanent restriction additional priority properties	<ol style="list-style-type: none"> 1. Develop a process for reaching out to owners of the highest-priority, unprotected lands, and implement direct dialogue with such owners (Year 2-3) 2. Continue to utilize the coordinated process for reviewing Chapter 61 withdrawals for open space and recreation needs (ongoing) 3. Acquire/protect most critical 	<ol style="list-style-type: none"> 1. Open Space Committee, Conservation Commission 2. Open Space Committee, Conservation Commission, Planning Board, Select Board 	<ol style="list-style-type: none"> 1. n/a 2. n/a 3. town meeting, state grants

	properties (as available)	3. Open Space Committee, Conservation Commission, Select Board, Town Meeting	
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Goal 3: Expand access to conservation and recreation resources

Objective	Action Item (Year)	Responsible Party	Funding Source
A) Link conservation and recreation resources	<ol style="list-style-type: none"> Enhance connectivity between existing conservation and recreation resources, especially in densely-populated areas such as Whalom district and the town center, with sidewalks and/or bike lanes. (ongoing) Support regional trail initiatives that connect Lunenburg's conservation and recreation resources beyond town lines. (ongoing) Consider zoning changes, incentives, or other ways to link Lunenburg's businesses with its conservation and recreation resources. (Year 1-3) 	<ol style="list-style-type: none"> Open Space Committee, Public Works Open Space Sub-Committee, Conservation Commission Planning Board, Town Meeting 	<ol style="list-style-type: none"> capital plan state grants n/a
B) Re-purpose "general municipal" land	<ol style="list-style-type: none"> Convene a multi-disciplinary review of vacant undesignated lands owned by the town. (Year 1) Identify those parcels that meet specific municipal needs, including but not limited to conservation and recreation. (Years 2-3) Take necessary steps to formally designate care and control to appropriate boards/committees. (Years 3-7) Leverage certain designations of care and control of certain parcels as mitigation (if statutorily required for certain changes in use) or as non-cash match (for grant applications) if possible. (Years 3-7) 	<ol style="list-style-type: none"> Select Board, Open Space Committee, various other boards Select Board, Open Space Committee, various other boards Select Board, Open Space Committee, various other boards, Town Meeting Select Board, Open Space Committee, various other boards, Town Meeting 	<ol style="list-style-type: none"> n/a n/a town meeting town meeting
C) Make ADA accessibility enhancements	<ol style="list-style-type: none"> Make ADA enhancements to conservation lands as deemed necessary and reasonable (ongoing) Make ADA enhancements to recreation lands as deemed necessary and reasonable (ongoing) 	<ol style="list-style-type: none"> Conservation Commission Parks Commission 	<ol style="list-style-type: none"> grant funds, capital plan capital plan, town meeting
D) Add rectangular playing fields/green spaces	<ol style="list-style-type: none"> Evaluate opportunities (ongoing) Acquire and/or build on existing resources new rectangular fields (as available) 	<ol style="list-style-type: none"> Open Space Committee, Parks Commission Open Space Committee, Parks Commission, Town Meeting 	<ol style="list-style-type: none"> n/a capital plan, town meeting

E) Acquire and/or develop meaningful access to NW Town Forest	<ol style="list-style-type: none"> 1. Investigate existing rights of access derived from current title ownership (Year 1) 2. Evaluate opportunities for expanding access (Year 2) 3. Negotiate and acquire improved access (Years 2-7) 	<ol style="list-style-type: none"> 1. Open Space Committee, Conservation Commission 2. Open Space Committee, Conservation Commission 3. Open Space Committee, Conservation Commission, Town Meeting 	<ol style="list-style-type: none"> 1. n/a 2. n/a 3. town meeting, capital plan
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Goal 4: Diversify funding sources

Objective	Action Item (Year)	Responsible Party	Funding Source
A) Integrate open space and recreation needs into the Capital Plan	<ol style="list-style-type: none"> 1. Integrate open space and recreation needs into the Capital Plan (Year 1) 	<ol style="list-style-type: none"> 1. Fin. Comm., Conservation Commission, Parks Commission, Select Board 	<ol style="list-style-type: none"> 1. n/a
B) Pass Community Preservation Act	<ol style="list-style-type: none"> 1. Canvass boards and commissions for interest; share information (Year 2) 2. Conduct outreach, public survey, to develop proposed adoption language, including suggested rates and exemptions (Year 2-3) 3. Seek town meeting approval (Year 3) 	<ol style="list-style-type: none"> 1. Open Space Committee 2. Open Space Committee, various boards 3. Open Space Committee, various boards, Town Meeting 	<ol style="list-style-type: none"> 1. n/a 2. n/a 3. n/a
C) Apply for state grants	<ol style="list-style-type: none"> 1. Apply for state grants for eligible projects (ongoing) 	<ol style="list-style-type: none"> 1. Open Space Committee, Parks Commission, Conservation Commission 	<ol style="list-style-type: none"> 1. n/a
D) Utilize dedicated/trust funds	<ol style="list-style-type: none"> 1. Determine available funds/accounts, balances, and define restrictions (Year 1) 2. Appropriate as needed to eligible projects, and leverage with state grants whenever possible (ongoing) 	<ol style="list-style-type: none"> 1. Treasurer, Town Manager, Conservation Commission, Trust Fund Commission 2. Conservation Commission, Town Meeting 	<ol style="list-style-type: none"> 1. n/a 2. trust funds, town meeting, state grants

SECTION 10: PUBLIC COMMENTS

This Open Space and Recreation Plan is the culmination of highly-collaborative and integrated eight-months long process involving all pertinent municipal boards and departments. This plan was written entirely by the Town; it was not the product of a highly-paid consultant, but rather the effort of many volunteers working countless hours.

As a result, this plan has been developed and overseen by numerous individuals from all corners of town government. Section 2 and Section 6 of this document clearly outline the planning process and the efforts made to secure community involvement.

A draft plan was then circulated to various boards, departments, regional planning commission, non-profit and state agency partners for review and comment. Their letters are attached in Appendix 8.

Finally, the plan was submitted to the Massachusetts Division of Conservation Services. Their approval letter is also attached in Appendix 8.

SECTION 11: REFERENCES

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Community Preservation Coalition. <http://www.communitypreservation.org/>

APPENDIX 1: SECTION 504 SELF-EVALUATION

PART 1: ADMINISTRATIVE REQUIREMENTS

The Board of Selectmen officially designated Town Manager as the ADA Coordinator for the Town. Attached is the required documentation. The office is located at the Lunenburg Town Hall, 17 Main Street, Lunenburg. 978-582-4144.

Attached to this document are the following documents pertaining to the Town of Lunenburg's ADA administrative policies and procedures:

1. ADA Policy
2. ADA Committee By-law
3. ADA Grievance Procedure
4. Public Notice of Non-discrimination

PART 2: PROGRAM ACCESSIBILITY

Attached to this Appendix 1 are the ADA Self-Evaluation Forms for the Town of Lunenburg's properties under the care and control of its Conservation Commission and its Parks Commission.

PART 3: EMPLOYMENT PRACTICES

The Town of Lunenburg's Board of Selectmen maintain a set of policies and procedures; Section 7.06 of those policies pertain to equal opportunity employment practices. That section reads as follows:

The Town of Lunenburg is an equal opportunity employer. The Town does not unlawfully discriminate on the basis of race, color, age, sex, genetic information, sexual orientation, religion, national origin, ancestry, disability, military status, or any other legally protected classification with regard to any term or condition of employment including, but not limited to, hiring, firing, promotions, discipline changes in compensation or benefits.

The Town will make reasonable accommodations to qualified individuals with disabilities to enable them to perform the essential functions of the job(s) they are holding or seeking unless doing so would result in an undue hardship. The Town will also make reasonable accommodations in the hiring process. Accommodation requests are evaluated on a case-by-case basis. All employees are expected to support and participate in any reasonable accommodation determined by management.

TOWN OF LUNENBURG
AMERICANS WITH DISABILITIES ACT (ADA) POLICY

In order to promote an environment free of discrimination and harassment for individuals with disabilities and to ensure that the Town complies with all federal and state laws concerning qualified individuals with disabilities, the Town is establishing these uniform guidelines and policies which apply to all employees.

MISSION STATEMENT

The Town is committed to providing reasonable accommodations for qualified individuals with disabilities in accordance with applicable federal and state law unless doing so represents an undue hardship for the Town.

DEFINING DISABILITY AND THE TOWN'S OBLIGATION

A. Disability

According to the ADA, a "disability" means:

- A physical or mental impairment that substantially limits one or more of the major life activities of the individual.
- Having a record of such an impairment
- Being regarded as having such an impairment

B. Qualified Individual with a Disability

A person with a physical or mental impairment that substantially limits one or more major life activities who is able to perform the essential functions of their job with or without a reasonable accommodation is considered a qualified individual.

C. Reasonable Accommodation

The Town will provide reasonable accommodations to qualified individual with disabilities upon request unless doing so would create an undue hardship.

D. Undue Hardship

A requested accommodation may constitute an undue hardship and can be denied where it:

- Requires significant difficulty, expense, and disruption, both financial and administrative.
- Would result in a fundamental alteration of the Town's operations and/or the nature of the job

PROCEDURE FOR OBTAINING AN ACCOMMODATION

If an employee has a disability, is a qualified individual with a disability and believes s/he needs a reasonable accommodation, s/he should initiate the request by contacting either their department head or the Town Manager who acts as the the Town's ADA Coordinator. An interactive process will get underway and all appropriate parties will work together to identify whether a reasonable accommodation is available. Department heads should confer with the the

ADA Coordinator/Town Manager before addressing any request for an accommodation. The Town has the right to request medical documentation supporting the employee's request for an accommodation from the employee and/or to send the employee to be examined by a Town-appointed medical professional to determine what, if any, accommodation may be necessary or appropriate.

Confidentiality Will Be Maintained to the Fullest Extent Practical

In accordance with the ADA, the Town will protect and maintain the confidentiality of any medical information received in connection with the reasonable accommodation process. Information will only be shared on a need-to-know basis and documentation will be maintained separately and securely.

Heather Lemieux
ADA Coordinator
978-582-4134
hlemieux@lunenburgonline.com

*Town of Lunenburg, MA
Wednesday, September 26, 2018*

Chapter 12. Boards, Commissions and Committees

Article VII. Americans with Disabilities Committee

[Adopted 4-10-1993 (Art. XXVIII of the Town Bylaws)]

§ 12-19. Membership and appointment.

There shall be an Americans with Disabilities Committee which shall be composed of five members serving three-year terms appointed by the Board of Selectmen; one shall be a representative of the Board of Selectmen and shall be initially appointed for a one-year term, one shall be the Building Commissioner initially appointed for a three-year term, one shall be the Superintendent of Buildings and Grounds for the school system and shall be initially appointed for a three-year term, and two at-large members initially appointed for a one- and a two-year term respectively.

§ 12-20. Powers and duties.

It shall be the responsibility of the Americans with Disabilities Committee to make recommendations to the Town, enabling compliance with the provisions of the Americans with Disabilities Act of 1992.

TOWN OF LUNENBURG
AMERICANS WITH DISABILITIES ACT (ADA) GRIEVANCE PROCEDURES

In adherence and in conformance with the ADA Policy, the ADA Coordinator will follow the following procedure when an ADA complaint, grievance, request for program policy interpretation or clarification is received, either in writing or through a meeting or telephone call:

- 1) The department receiving the complaint, grievance, request for program policy interpretation, or clarification will make every effort to create a record regarding the name, address, and telephone number of the person making the complaint, grievance, request for program policy interpretation or clarification.
- 2) Within ten working days after the complaint has been received, the department receiving the complaint, grievance, request for policy interpretation, or clarification will attempt to meet with the complainant in order to resolve the complaint. Within ten working days after the meeting a response will be sent to the complainant (if the person making the complaint is identified) in a format that is sensitive to the needs of the recipient (i.e. verbally, enlarged type face, etc.). Copies of the complaint, grievance, request for program policy interpretation or clarification and response will be forwarded to the applicable Town Departments. If the grievance is not resolved at this level, it will progress to the next level to the ADA Coordinator.
- 3) The complainant making the appeal must file a written grievance to be submitted to the ADA Coordinator within ten working days that the response was received. Assistance in writing the grievance will be available to all individuals. The ADA Coordinator must respond to all written grievances within ten working days in a format that is sensitive to the needs of the recipient (i.e. verbally, enlarge type face, etc). If the grievance is not resolved at this level, it will progress to the next level.
- 4) If the grievance is not satisfactorily resolved by the ADA Coordinator, the individual making the complaint, grievance, request for program policy interpretation, or clarification will be informed of the opportunity to meet and speak with the Board of Selectmen, with whom local authority for final grievance resolution lies.

TOWN OF LUNENBURG TOWN MANAGER

Jamie Toale, Chairman
Robert Ebersole, Vice Chairman
Damon McQuaid, Clerk
Phyllis Luck, Member
Katey Adams, Member



17 Main Street
P. O. Box 135
Lunenburg, MA 01462
Phone 978-582-4144
Fax 978-582-4175

Heather R. Lemieux, Town Manager

PUBLIC NOTICE UNDER THE AMERICANS WITH DISABILITIES ACT

In accordance with the requirements of title II of the Americans with Disabilities Act of 1990 ("ADA"), the **Town of Lunenburg** will not discriminate against qualified individuals with disabilities on the basis of disability in its services, programs, or activities.

Employment: **Town of Lunenburg** does not discriminate on the basis of disability in its hiring or employment practices and complies with all regulations promulgated by the U.S. Equal Employment Opportunity Commission under title I of the ADA.

Effective Communication: **Town of Lunenburg** will generally, upon request, provide appropriate aids and services leading to effective communication for qualified persons with disabilities so they can participate equally in **Town of Lunenburg** programs, services, and activities, including qualified sign language interpreters, documents in Braille, and other ways of making information and communications accessible to people who have speech, hearing, or vision impairments.

Modifications to Policies and Procedures: **Town of Lunenburg** will make all reasonable modifications to policies and programs to ensure that people with disabilities have an equal opportunity to enjoy all of its programs, services, and activities. For example, individuals with service animals are welcomed in **Town of Lunenburg** offices, even where pets are generally prohibited.

Anyone who requires an auxiliary aid or service for effective communication, or a modification of policies or procedures to participate in a program, service, or activity of **Town of Lunenburg**, should contact the office of **Heather Lemieux, Town Manager** at

hlemieux@lunenburgonline.com as soon as possible but no later than 48 hours before the scheduled event.

The ADA does not require the **Town of Lunenburg** to take any action that would fundamentally alter the nature of its programs or services, or impose an undue financial or administrative burden.

Complaints that a program, service, or activity of **Town of Lunenburg** is not accessible to persons with disabilities should be directed to Heather Lemieux, Lunenburg Town Manager at **hlemieux@lunenburgonline.com**.

Town of Lunenburg will not place a surcharge on a particular individual with a disability or any group of individuals with disabilities to cover the cost of providing auxiliary aids/services or reasonable modifications of policy, such as retrieving items from locations that are open to the public but are not accessible to persons who use wheelchairs.

Americans with Disabilities Act (ADA) for Lunenburg Open Space Lands:

Cowdrey Conservation Area

Note: The entire original form was evaluated. Only the elements found at each site are included and reported.

PARKING			
Total Spaces	Required Accessible Spaces		
8 Spaces	1 space		
Specification for Accessible Spaces			
Accessible space located closest to accessible entrance	Yes	No	Comments/Transition Notes
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.	X		Not Applicable
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle	X		
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.	X		
Sign with international symbol of accessibility at each space or pair of spaces	X		
Sign minimum 5 ft, maximum 8 ft to top of sign	X		
Surface evenly paved or hard-packed (no cracks)	X		Stone Dust
Surface slope less than 1:20, 5%	X		
RAMPS – Harold Harley Wildlife Viewing Platform			
Specification	Yes	No	Comments/Transition Notes
Slope Maximum 1:12	X		
Minimum width 4 ft between handrails	X		
Handrails on both sides if ramp is longer than 6 ft	X		
Handrails at 34" and 19" from ramp surface	X		
Handrails extend 12" beyond top and bottom	X		
Handgrip oval or round		X	
Handgrip smooth surface	X		
Handgrip diameter between 1 1/4" and 2"	X		
Clearance of 1 1/2" between wall and wall rail			Not Applicable
Non-slip surface		X	
Level platforms (4ft x 4 ft) at every 30 ft, at top, at bottom, at change of direction	X		
SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	Yes	No	Comments/Transition Notes
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance	X		
Disembarking area at accessible entrance	X		
Surface evenly paved or hard-packed	X		Stone Dust
No ponding of water	X		
Path of Travel			
Path does not require the use of stairs	X		
Path is stable, firm and slip resistant	X		Stone Dust
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	X		
Continuous common surface, no changes in level greater than 1/2 inch	X		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane			Not Applicable
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"			Not Applicable
Curb on the pathway must have curb cuts at drives, parking and drop-offs			Not Applicable

Americans with Disabilities Act (ADA) for Lunenburg Open Space Lands:

Small Town Forest

Note: The entire original form was evaluated. Only the elements found at each site are included and reported.

PARKING			
<i>Total Spaces</i>		<i>Required Accessible Spaces</i>	
3 spaces		1 space	
<i>Specification for Accessible Spaces</i>	Yes	No	<i>Comments/Transition Notes</i>
Accessible space located closest to accessible entrance	X		
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.			Not Applicable
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle	X		
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.	X		
Sign with international symbol of accessibility at each space or pair of spaces	X		
Sign minimum 5 ft, maximum 8 ft to top of sign	X		
Surface evenly paved or hard-packed (no cracks)	X		Stone Dust
Surface slope less than 1:20, 5%	X		
SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
<i>Specification</i>	Yes	No	<i>Comments/Transition Notes</i>
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance	X		
Disembarking area at accessible entrance	X		
Surface evenly paved or hard-packed	X		Stone Dust
No ponding of water	X		
Path of Travel			
Path does not require the use of stairs	X		
Path is stable, firm and slip resistant	X		Stone Dust
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	X		
Continuous common surface, no changes in level greater than 1/2 inch	X		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane			Not Applicable
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"			Not Applicable
Curb on the pathway must have curb cuts at drives, parking and drop-offs			Not Applicable

Americans with Disabilities Act (ADA) for Lunenburg Open Space Lands:

Lane Conservation Property

Note: The entire original form was evaluated. Only the elements found at each site are included and reported.

PARKING			
<i>Total Spaces</i>	<i>Required Accessible Spaces</i>		
20 spaces	1 space		
<i>Specification for Accessible Spaces</i>	Yes	No	<i>Comments/Transition Notes</i>
Accessible space located closest to accessible entrance	X		
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.			Not Applicable
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle	X		
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.	X		
Sign with international symbol of accessibility at each space or pair of spaces	X		
Sign minimum 5 ft, maximum 8 ft to top of sign	X		
Surface evenly paved or hard-packed (no cracks)	X		Stone Dust
Surface slope less than 1:20, 5%	X		
SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
<i>Specification</i>	Yes	No	<i>Comments/Transition Notes</i>
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance	X		
Disembarking area at accessible entrance	X		
Surface evenly paved or hard-packed	X		Stone Dust
No ponding of water	X		
Path of Travel			
Path does not require the use of stairs	X		
Path is stable, firm and slip resistant	X		Stone Dust
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	X		
Continuous common surface, no changes in level greater than 1/2 inch	X		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane			Not Applicable
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"			Not Applicable
Curb on the pathway must have curb cuts at drives, parking and drop-offs			Not Applicable

Americans with Disabilities Act (ADA) for Lunenburg Open Space Lands:

Whalom Lakefront

Note: The entire original form was evaluated. Only the elements found at each site are included and reported.

PARKING			
<i>Total Spaces</i>		<i>Required Accessible Spaces</i>	
26 Spaces		4 spaces	
<i>Specification for Accessible Spaces</i>	Yes	No	<i>Comments/Transition Notes</i>
Accessible space located closest to accessible entrance	X		
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.			Not Applicable
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle	X		
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.	X		
Sign with international symbol of accessibility at each space or pair of spaces	X		
Sign minimum 5 ft, maximum 8 ft to top of sign	X		
Surface evenly paved or hard-packed (no cracks)	X		Paved
Surface slope less than 1:20, 5%	X		
SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
<i>Specification</i>	Yes	No	<i>Comments/Transition Notes</i>
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance	X		
Disembarking area at accessible entrance	X		
Surface evenly paved or hard-packed	X		Paved
No ponding of water	X		
Path of Travel			
Path does not require the use of stairs	X		
Path is stable, firm and slip resistant	X		Paved
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	X		
Continuous common surface, no changes in level greater than 1/2 inch	X		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane			Not Applicable
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"			Not Applicable
Curb on the pathway must have curb cuts at drives, parking and drop-offs			Not Applicable

Americans with Disabilities Act (ADA) for Lunenburg Open Space Lands:

The following conservation properties have trails that are not handicapped accessible:

Clarks Hill Conservation Area, Hawes Conservation Area, Hunting Hill Wildlife Management Area, Large Town Forest, Proctor Park, Robbs Hill Conservation Area, Laurel Bank Conservation Area

Note: The entire original form was evaluated. Only the elements found at each site are included and reported.

PARKING			
<i>Total Spaces</i>		<i>Required Accessible Spaces</i>	
1 - 3 spaces		0 spaces	
<i>Specification for Accessible Spaces</i>	Yes	No	<i>Comments/Transition Notes</i>
Accessible space located closest to accessible entrance		X	No handicapped access or parking
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		X	
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle		X	
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		X	
Sign with international symbol of accessibility at each space or pair of spaces		X	
Sign minimum 5 ft, maximum 8 ft to top of sign		X	
Surface evenly paved or hard-packed (no cracks)		X	
Surface slope less than 1:20, 5%		X	
SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
<i>Specification</i>	Yes	No	<i>Comments/Transition Notes</i>
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance		X	None/Not Applicable
Disembarking area at accessible entrance		X	
Surface evenly paved or hard-packed		X	
No ponding of water		X	
Path of Travel			
Path does not require the use of stairs		X	None/Not Applicable
Path is stable, firm and slip resistant		X	
3 ft wide minimum		X	
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).		X	
Continuous common surface, no changes in level greater than 1/2 inch		X	
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane		X	None/Not Applicable
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"		X	None/Not Applicable
Curb on the pathway must have curb cuts at drives, parking and drop-offs		X	None/Not Applicable

Americans with Disabilities Act (ADA) for Lunenburg Open Space Lands:

The following conservation properties do not have any access trails:

Brown Conservation Area, Fairbanks Conservation Area. General Builders, Harris Conservation Area, Rayno Conservation Area, Hirsh Conservation Area, Rodrigues Conservation Area, White Rabbit Swamp, Hopkirk Conservation Area, Kuiju Conservation Area

Note: The entire original form was evaluated. Only the elements found at each site are included and reported.

PARKING			
<i>Total Spaces</i>		<i>Required Accessible Spaces</i>	
0 spaces		0 spaces	
Specification for Accessible Spaces			
	Yes	No	Comments/Transition Notes
Accessible space located closest to accessible entrance		X	No handicapped access or parking
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.		X	
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle		X	
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		X	
Sign with international symbol of accessibility at each space or pair of spaces		X	
Sign minimum 5 ft, maximum 8 ft to top of sign		X	
Surface evenly paved or hard-packed (no cracks)		X	
Surface slope less than 1:20, 5%		X	
SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
<i>Specification</i>	Yes	No	Comments/Transition Notes
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance		X	None/Not Applicable
Disembarking area at accessible entrance		X	
Surface evenly paved or hard-packed		X	
No ponding of water		X	
Path of Travel			
Path does not require the use of stairs		X	None/Not Applicable
Path is stable, firm and slip resistant		X	
3 ft wide minimum		X	
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).		X	
Continuous common surface, no changes in level greater than 1/2 inch		X	
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane		X	None/Not Applicable
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"		X	None/Not Applicable
Curb on the pathway must have curb cuts at drives, parking and drop-offs		X	None/Not Applicable

Americans with Disabilities Act (ADA) for Lunenburg Open Space Lands:

The Lunenburg Park Commission, together with the Department of Public Works, is working towards modifying park property to be ADA compliant. The town is committed to using available funds to become ADA compliant in the areas of parking and park accessibility. Parking concerns are being addressed and signage and handicap space designations, where possible, will be worked on in 2020.

Marshall Park

Note: The entire original form was evaluated. Only the elements found at each site are included and reported.

PARKING			
Total Spaces:		Required Accessible Spaces	
50		2	
Specification for Accessible Spaces			
Accessible space located closest to accessible entrance	Yes	No	Comments/Transition Notes
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.	X		signage in process
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle			Not Applicable
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.	X		
Sign with international symbol of accessibility at each space or pair of spaces		X	in process
Sign minimum 5 ft, maximum 8 ft to top of sign		X	in process 2020
Surface evenly paved or hard-packed (no cracks)	X		paved and hard packed
Surface slope less than 1:20, 5%	X		
SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification		Yes	No
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance	X		The Park has access from surrounding street
Disembarking area at accessible entrance	X		
Surface evenly paved or hard-packed	X		
No ponding of water	X		
Path of Travel			
Path does not require the use of stairs	X		
Path is stable, firm and slip resistant	X		Packed ground
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	X		
Continuous common surface, no changes in level greater than 1/2 inch	X		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane			Not Applicable
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"			Not Applicable
Curb on the pathway must have curb cuts at drives, parking and drop-offs			Not Applicable

Americans with Disabilities Act (ADA) for Lunenburg Open Space Lands:

McNally Field

Note: The entire original form was evaluated. Only the elements found at each site are included and reported.

PARKING			
<i>Total Spaces</i>		<i>Required Accessible Spaces</i>	
15		1	
<i>Specification for Accessible Spaces</i>	Yes	No	<i>Comments/Transition Notes</i>
Accessible space located closest to accessible entrance	X		
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.	X		
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle	X		
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.			in process 2020
Sign with international symbol of accessibility at each space or pair of spaces			in process
Sign minimum 5 ft, maximum 8 ft to top of sign			in process 2020
Surface evenly paved or hard-packed (no cracks)	X		paved
Surface slope less than 1:20, 5%	X		
SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
<i>Specification</i>	Yes	No	<i>Comments/Transition Notes</i>
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance	X		
Disembarking area at accessible entrance	X		
Surface evenly paved or hard-packed	X		hard packed
No ponding of water	X		
Path of Travel			
Path does not require the use of stairs	X		
Path is stable, firm and slip resistant	X		Packed Ground
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	X		
Continuous common surface, no changes in level greater than 1/2 inch	X		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane		X	
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"		X	
Curb on the pathway must have curb cuts at drives, parking and drop-offs			not applicable

Americans with Disabilities Act (ADA) for Lunenburg Open Space Lands:

Fitzgerald Field

Note: The entire original form was evaluated. Only the elements found at each site are included and reported.

PARKING			
<i>Total Spaces</i>	<i>Required Accessible Spaces</i>		
15	1		
Specification for Accessible Spaces			
Accessible space located closest to accessible entrance	Yes	No	Comments/Transition Notes
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.	X		Not applicable
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle	X		in process
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.	X		in process
Sign with international symbol of accessibility at each space or pair of spaces			in process
Sign minimum 5 ft, maximum 8 ft to top of sign			in process
Surface evenly paved or hard-packed (no cracks)	X		
Surface slope less than 1:20, 5%	X		
SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
<i>Specification</i>	Yes	No	Comments/Transition Notes
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance	X		
Disembarking area at accessible entrance	X		
Surface evenly paved or hard-packed	X		hard packed
No ponding of water	X		
Path of Travel			
Path does not require the use of stairs	X		
Path is stable, firm and slip resistant	X		Packed ground
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	X		
Continuous common surface, no changes in level greater than 1/2 inch	X		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane		X	
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"		X	
Curb on the pathway must have curb cuts at drives, parking and drop-offs			Not Applicable

Americans with Disabilities Act (ADA) for Lunenburg Open Space Lands:

Lunenburg Town Beach

Note: The entire original form was evaluated. Only the elements found at each site are included and reported.

PARKING			
Total Spaces			Required Accessible Spaces
8			1
Specification for Accessible Spaces	Yes	No	Comments/Transition Notes
Accessible space located closest to accessible entrance	X		
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.			Not Applicable
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle			Street side Parking
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.		X	
Sign with international symbol of accessibility at each space or pair of spaces		X	
Sign minimum 5 ft, maximum 8 ft to top of sign		X	
Surface evenly paved or hard-packed (no cracks)			paved
Surface slope less than 1:20, 5%	X		
SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	Yes	No	Comments/Transition Notes
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance	X		street side
Disembarking area at accessible entrance	X		
Surface evenly paved or hard-packed	X		paved
No ponding of water	X		
Path of Travel			
Path does not require the use of stairs	X		
Path is stable, firm and slip resistant	X		wooden ramp
3 ft wide minimum			
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).			
Continuous common surface, no changes in level greater than 1/2 inch	x		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane			Not Applicable
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"			Not Applicable
Curb on the pathway must have curb cuts at drives, parking and drop-offs			No curbs
Entrances			
Primary public entrances accessible to person using wheelchair, must be signed, gotten to independently, and not be the service entrance	X		
Level space extending 5 ft. from the door, interior and exterior of entrance doors		X	
Minimum 32" clear width opening (i.e. 36" door with standard hinge)	X		
At least 18" clear floor area on latch, pull side of door	X		
Door handle no higher than 48" and operable with a closed fist		X	
Vestibule is 4 ft plus the width of the door swinging into the space	X		
Entrance(s) on a level that makes elevators accessible			Not Applicable
Door mats less than 1/2" thick are securely fastened	X		
Door mats more than 1/2" thick are recessed			Not Applicable
Grates in path of travel have openings of 1/2" maximum			Not Applicable
Signs at non-accessible entrance(s) indicate direction to accessible entrance			Not Applicable
Emergency egress – alarms with flashing lights and audible signals, sufficiently lighted		X	
Stairs and Doors			
Stairs	X		
No open risers		X	

Nosings not projecting		X	
Treads no less than 11" wide	X		
Handrails on both sides	X		
Handrails 34"-38" above tread	X		
Handrail extends a minimum of 1 ft beyond top and bottom riser (if no safety hazard and space permits)		X	
Handgrip oval or round		X	
Handgrip has a smooth surface	X		
Handgrip diameter between 1 1/4" and 1 1/2"		X	
1 1/2" clearance between wall and handrail	X		
Doors			
Minimum 32" clear opening	X		
At least 18" clear floor space on pull side of door	X		
Closing speed minimum 3 seconds to within 3" of the latch		X	
Maximum pressure 5 pounds interior doors		X	
Threshold maximum 1/2" high, beveled on both sides			Not applicable
Hardware operable with a closed fist (no conventional door knobs or thumb latch devices)		X	
Hardware minimum 36", maximum 48" above the floor	X		
Clear, level floor space extends out 5 ft from both sides of the door	X		
Door adjacent to revolving door is accessible and unlocked			not applicable
Doors opening into hazardous area have hardware that is knurled or roughened			not applicable
Restrooms			
5 ft turning space measured 12" from the floor		X	
At least one Sink:			
Clear floor space of 30" by 48" to allow a forward approach		X	
Mounted without pedestal or legs, height 34" to top of rim		X	
Extends at least 22" from the wall		X	
Open knee space a minimum 19" deep, 30" width, and 27" high		X	
Cover exposed pipes with insulation		X	
Faucets operable with closed fist (lever or spring activated handle)		X	
At least one Stall:			
Accessible to person using wheelchair at 60" wide by 72" deep			No stalls - bathrooms are free standing
Stall door is 36" wide	X		
Stall door swings out			not applicable
Stall door is self closing		x	
Stall door has a pull latch Lock on stall door is operable with a closed fist, and 32" above the floor	X		
Coat hook is 54" high			not applicable
Toilet 18" from center to nearest side wall	X		
42" minimum clear space from center to farthest wall or fixture	X		
Top of seat 17"-19" above the floor			
Grab Bars			
On back and side wall closest to toilet		X	
1 1/4" diameter		X	
1 1/2" clearance to wall		X	
Located 30" above and parallel to the floor		X	
Acid-etched or roughened surface		X	
42" long		X	
Fixtures			
Toilet paper dispenser is 24" above floor	X		
One mirror set a maximum 38" to bottom (if tilted, 42")		X	
Dispensers (towel, soap, etc) at least one of each a maximum 42" above the floor	X		
Floors, Drinking Fountains, Telephones			
Floors			

Non-slip surface	X		
Carpeting is high-density, low pile, non-absorbent, stretched taut, securely anchored	X		
Corridor width minimum is 3 ft	X		
Objects (signs, ceiling lights, fixtures) can only protrude 4" into the path of travel from a height of 27" to 80" above the floor	X		
SIGNS, SIGNALS, AND SWITCHES			
Switches, Controls and Signs			
Switches and controls for light, heat, ventilation, windows, fire alarms, thermostats, etc, must be a minimum of 36" and a maximum of 48" above the floor for a forward reach, a maximum of 54" for a side reach	X		
Electrical outlets centered no lower than 18" above the floor	X		
Warning signals must be visual as well as audible		X	
Signs			
Mounting height must be 60" to centerline of the sign			not applicable
Within 18" of door jamb or recessed			not applicable
Letters and numbers at least 1 1/4" high			not applicable
Letters and numbers raised .03"			not applicable
Letters and numbers contrast with the background			not applicable
color			not applicable
Picnicking			
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access.		X	
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.		X	
Top of table no higher than 32" above ground.	X		
Surface of the clear ground space under and around the table must be stable, firm and slip-resistant, and evenly graded with a maximum slop in all directions.		X	Sand
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter		X	

Americans with Disabilities Act (ADA) for Lunenburg Open Space Lands:

Wallis Park

Note: The entire original form was evaluated. Only the elements found at each site are included and reported.

PARKING			
Total Spaces	Required Accessible Spaces		
14	1		
Specification for Accessible Spaces	Yes	No	Comments/Transition Notes
Accessible space located closest to accessible entrance	X		
Where spaces cannot be located within 200 ft of accessible entrance, drop-off area is provided within 100 ft.			Not Applicable
Minimum width of 13 ft includes 8 ft space plus 5 ft access aisle	X		
Van space – minimum of 1 van space for every accessible space, 8 ft wide plus 8 ft aisle. Alternative is to make all accessible spaces 11 ft wide with 5 ft aisle.	X		
Sign with international symbol of accessibility at each space or pair of spaces		X	In process
Sign minimum 5 ft, maximum 8 ft to top of sign		X	In process
Surface evenly paved or hard-packed (no cracks)	X		paved
Surface slope less than 1:20, 5%			
SITE ACCESS, PATH OF TRAVEL, ENTRANCES			
Specification	Yes	No	Comments/Transition Notes
Site Access			
Accessible path of travel from passenger disembarking area and parking area to accessible entrance	X		
Disembarking area at accessible entrance	X		
Surface evenly paved or hard-packed	X		
No ponding of water	X		
Path of Travel			
Path does not require the use of stairs	X		
Path is stable, firm and slip resistant	X		Paved, packed ground
3 ft wide minimum	X		
Slope maximum 1:20 (5%) and maximum cross pitch is 2% (1:50).	X		
Continuous common surface, no changes in level greater than 1/2 inch	X		
Any objects protruding onto the pathway must be detected by a person with a visual disability using a cane		X	
Objects protruding more than 4" from the wall must be within 27" of the ground, or higher than 80"		X	
Curb on the pathway must have curb cuts at drives, parking and drop-offs		X	
Picnicking			
A minimum of 5% of the total tables must be accessible with clear space under the table top not less than 30" wide and 19" deep per seating space and not less than 27" clear from the ground to the underside of the table. An additional 29" clear space (totaling 48") must extend beyond the 19" clear space under the table to provide access.	X		
For tables without toe clearance, the knee space under the table must be at least 28" high, 30" wide and 24" deep.	X		
Top of table no higher than 32" above ground.	X		
Surface of the clear ground space under and around the table must be stable, firm and slip-resistant, and evenly graded with a maximum slop in all directions.	X		
Accessible tables, grills and fire rings must have clear ground space of at least 36" around the perimeter	X		

APPENDIX 2: 2011 PLAN EVALUATION OF ACHIEVEMENTS

The 2011 Open Space and Recreation Plan had an ambitious set of goals and objectives. Action items completed are shown as stricken through, with notes of interest listed in bold face type. Incomplete items are plain text font.

Goal 1: Maintain Rural Character

Objective	Action Item (Year)
A) Keep Lunenburg's Farms Viable	<ol style="list-style-type: none"> 1. implement a tracking process to prevent issuance of local permits for unauthorized construction on protected farmland (Complete list compiled with updated OSRP) 2. Resolve Woodruff Property 3. Explore the role of an Agricultural Commission or like entity to address the needs of the agricultural community, and consider establishing such entity 4. identify/inventory/map farmland to be protected (Instead of specifically identifying parcels of interest, the town adopted an open space acquisition evaluation criteria to weigh all conservation opportunities) 5. enact a municipal Right to Farm bylaw, and review/revise existing agricultural bylaws as needed 6. promote local and regional direct marketing opportunities, including but not limited to enhancing Lunenburg's newly established farmers' market
B) Conserve the most important wildlife habitats and drinking water resources	<ol style="list-style-type: none"> 1. Create a policy and process for responding to Chapter 61(A,B) opportunities across municipal boards and departments 2. Provide detailed information for citizens on land conservation techniques, such as conservation restrictions, bargain sales, Chapter 61(A,B) enrollment, etc. 3. identify/inventory/map properties of highest resource value (Instead of specifically identifying parcels of interest, the town adopted an open space acquisition evaluation criteria to weigh all conservation opportunities) 4. Develop a process for reaching out to owners of the highest-priority, unprotected lands, and implement direct dialogue with such owners (The town successfully negotiated and purchased 168 acres of land from the Lane family, received grants for acquisition and recreation enhancement of Lane property, and acquired several other parcels for conservation via donations.) 5. Engage assistance of non-profit partners for conservation such as North County Land Trust, Nashua River Watershed Association, and other local organizations

Goal 2: Enhance and Promote Existing Open Space and Recreation Assets

Objective	Action Item (Year)
A) Improve community awareness of existing open space/recreation assets	<ol style="list-style-type: none"> 1. Create trail maps for existing conservation areas and/or a guide to public recreation facilities available 2. Lead organized outings, such as hikes or interpretive walks, at municipal open space and recreation facilities 3. Communicate regularly with various press outlets regarding open space and recreation opportunities and successes 4. Improve information available at the library and on the town website, including trail maps and assessor's information
B) Assure adequate access to all conservation areas	<ol style="list-style-type: none"> 1. Conduct assessment of all access points to existing conservation areas (parking areas, trail access, handicap accessibility, right of ways, signage, visibility)
C) Manage existing open space/recreation assets to maximize community benefit	<ol style="list-style-type: none"> 1. Contract professional, licensed foresters to create "Forest Stewardship Plans" for several town conservation areas to identify management needs and opportunities, including potential timber harvests 2. Identify/inventory/map shade tree of highest community value along public ways

	and on public spaces, and develop a by-law to protect them 3. Conduct assessment of all active recreation facilities to identify management needs and opportunities for enhancement 4. Establish a “volunteer steward” program for the town’s open space properties, and encourage community and/or individual projects (such as school-led or Eagle Scout projects) to implement management needs 5. Adequately mark trails and boundaries of existing town conservation areas to maintain integrity of those areas 6. Provide regular maintenance to access points to assure clean, safe, and visible access to all properties
D) Improve funding for open space and recreation needs	1. Integrate open space and recreation needs into the Capital Plan 2. Dedicate revenues from sustainable forestry conducted on town-owned properties for conservation and/or recreation uses 3. Encourage and secure local business and individual donations for open space and recreation projects 4. Explore passage of Community Preservation Act to establish funding source for open space/recreation needs and to provide match dollars to grant-funding opportunities

Goal 3: Provide New Open Space and Recreation Opportunities

Objective	Action Item (Year)
A) Improve adult recreation programming	1. Establish/enhance adult intramural teams/leagues for organized sports 2. Cooperate with local groups to lead periodic outings in town or on town-owned properties
B) Evaluate potential for new open space/recreation facilities	1. Investigate/evaluate potential site(s) for an ice-skating facility/area 2. Investigate/evaluate potential site(s) for bike/passive use trails within the town 3. Evaluate Chapter 61(A,B) “right of first refusal” opportunities as they arise for potential open space/recreation acquisition according to new policies and identified priorities, and acquire such priority properties as reasonable and prudent

In addition to these accomplishments, the town also completed construction of the new Lunenburg Middle High School in 2016. The project entirely re-vitalized the main school campus and associated recreation facilities in place of the former High School. Numerous new multi-purpose recreation fields, outdoor basketball and tennis courts, and connected sidewalks and walkways add tremendous recreational opportunity to the center of town. These enhancements were augmented by construction of a new outdoor basketball court and playground at the adjoining Turkey Hill Elementary School (part of the same campus facility).

In 2018, the town Parks Commission along with an army of volunteers completely renovated the playground at Wallis Park. The renovations included installation of fully-accessible playground equipment by Miracle Recreation Equipment Company.

Currently, a group of 8th grade students at the Lunenburg Middle School have embarked upon an effort to build a permanent, concrete, skate park in the center of town so Lunenburg’s youth can have a safe place to skate. The group is organizing public outreach and an ambitious fundraising campaign, looking to build local support for the project.

APPENDIX 3: OPEN SPACE ACQUISITION CRITERIA

The 2011 Open Space and Recreation Plan identified two areas zones within town where open space acquisitions should be prioritized for 1) water quality protection, scenic landscape preservation, and agricultural protection, and 2) important wildlife habitats. To evaluate and rank acquisition opportunities within those areas, the town later identified a series of six criteria; the town should acquisition and/or protection of properties that meet ***at least three*** of these criteria:

- Parcel is ≥ 50 acres in size
- Contains important habitat resources
- Provides public access and/or recreation
- Important for scenic vistas and/or maintaining rural character
- Contiguous to other protected open space or recreation resources
- Supports local agricultural viability

APPENDIX 4: LUNENBURG'S EARLY HISTORY

Lunenburg's first settler, Sam Page, came from Groton in 1718, erected his house on the south side of Clark's Hill, and dwelt there until his death in 1747. Today he would be labeled a squatter, an unknown "American" term then. The home of Sam Page may have been the first "bed and breakfast" in the area. Turkey Hill's surveyor's accounts of 1719 list expenses incurred at the Page residence.

The surveying was done by a committee appointed by the Massachusetts Bay Colony Great and General Court. In 1718, Jonathan Higginson (of Salem Massachusetts) petitioned the Court on behalf of himself and 80 others for a territorial grant west of Groton that would become a town. The Court appointed the committee to create such a community. That committee named the overall territory "Turkey Hills," defined the conditions that grantees would have to satisfy, interviewed potential grantees, surveyed and granted the "house lots" in 1721 and managed the territory until Lunenburg was erected in 1728. "Turkey Hills South Town" became the area now known as Lunenburg and Fitchburg: Fitchburg having been set off from Lunenburg in 1764. "Turkey Hills North Town" became the area now known as Townsend and Ashby.

Seventy-nine would be settlers purchased 81 grants in Turkey Hills South Town (for themselves and some for others) by paying 6 pounds 15 shillings for each grant on May 23, 1721. The grants were not to exceed 250 acres and carried conditions that if not met forfeited the grant. Each settler was first allotted a 50-acre house lot. Most of the rest of the territory was "common land" owned collectively by the grantees (when they became "Proprietors") and used for grazing, wood lots etc. The 50-acre house lots were laid out by surveying $\sqrt{2}$ mile ranges and then measuring off 50 rod wide lots between those ranges. Note: a rectangle 1 rod wide by $1/2$ -mile-long = 1 acre. Some grantees moved to Turkey Hills within a year. A report to the Legislature in 1726 stated that 26 houses had been raised, 10 of which were occupied.

Most of these original house lots lie on each side of Northfield Road. Original stone walls defining the range lines and many of the original lot lines can easily be observed by the interested walker. Note: an original wall is one that has no machining of the stones.

Lunenburg was "Erected" (not incorporated) by the Massachusetts Bay Colony Great and General Court on August 1, 1728. The first time the name "Lunenburg" was used in Massachusetts's records is on that date. It appears to have been used in honor of King George II (originally of Germany) who was also the "Duke of Luneburg." Not all of Turkey Hills South Town belonged to the Lunenburg Proprietors upon erection of the town.

The Massachusetts Bay Colony Great and General Court had satisfied a debt to Woburn with a 2,000-acre grant and a debt to Dorchester with a 1,000-acre grant. The eastern bound of these two contiguous grants is a line from Kilburn Street through the east side of Marshall park, with a southern line that goes west from Lancaster and Kilburn into Fitchburg and a northern line that is the "range line" $1/2$ mile south of Northfield Road. The western line of these two grants is partly in Lunenburg and partly in Fitchburg. Boardman Farm (a large tract that included most of Lake Shirley) has yet to be documented. A 250-acre grant to Harvard College made by the Lunenburg

Proprietors on December 26, 1729 completed an original condition of the grants made in 1721. A 150-acre property known as the Kibby farm had been granted in the territory around 1670.

Farming was the labor of most breadwinners for the first 150 years. Very early there were two industries supporting these farmers. Captain Josiah Willard's sawmill was producing lumber in 1726. That sawmill, located about 1.5 miles south of the center, was near the NW corner of Lancaster Road and Kilburn Street. During the farming years many small mills, both grist and lumber, were built in Lunenburg, mostly along the Mulpus River. Lunenburg is not blessed with abundant hydropower, so the mills could only operate seasonally. Other local industries included manufacturing of potash, bricks, straw hats, and watches as well as tanning, bookbinding, printing, and recreational living.

APPENDIX 5: COMMUNITY SURVEY DATA

The Open Space Committee developed a survey to assess the needs and gather input from town residents. 4,866 surveys mailed with second-quarter FY 2018 tax bills. The survey was also available online on Survey Monkey, electronic copies were available on the Town's website for download, and hardcopies available at town hall. Surveys were available until August 1, 2018.

Questions in the survey included:

- 1) How long have you lived in town?
- 2) Why do you live in Lunenburg? Check all that apply.
- 3) What recreational areas in town do you or your family use and how often per year?
- 4) What new recreational areas or improvements to existing recreational facilities are needed? Check all that apply.
- 5) Would you like to see additional recreational facilities for: Check all that apply.
- 6) Is it important to you to protect any of the following? Check all that apply.
- 7) To preserve open space in the Town would you: (please answer each question)
- 8) What is the best way for the Town to inform you of recreational opportunities?
- 9) What recreational programs would you like to see offered in Lunenburg in the future?

438 responses were received and tabulated. The data for each question is summarized on the charts in displayed later in this Appendix 5.

The survey also included room for open responses to give residents an opportunity to provide more detailed feedback for several of the questions. That feedback is detailed here:

Question 3: "Other" recreation used	<ul style="list-style-type: none"> • horseback riding, street jogging • Ice skating • Shady Point? • Dog walking • UNDERDEVELOPED LAND FOR WALKING • SWIMMING • Local Businesses • very little labeled - I have to go to other towns. Did not know a lot of these places were available - not advertised so not sure I would know about them. • SNOWSHOWING/XCTRY SKI • WALKING ON STREETS • HIKING ON LAND WITH NO EXISTING TRAIL • WALK THE ROADS I LIVE NEAR - NO SIDEWALKS • ATV ONLY FROM LAKE - WANT TRAILS • X COUNTRY SKI • SNOW SHOEING
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	<ul style="list-style-type: none"> • ICE FISHING, ICE SKATING, CROSS COUNTRY SKIING • LOCAL FARM STANDS • THERE ISN'T ANY EXISTING SIDEWALKS • CROSS COUNTRY SKIING, SNOWSHOEING HIKING • MY OWN BACKYARD • HORSE TRAILS • RUNNING ON ROADS • CROSS COUNTRY SKIING • METAL DETECTING • HICKORY HILLS LAKE NOT OPEN TO PUBLIC? • AFTER SCHOOL ADULT ED • TENNIS COURTS ARE LOCKED! • CROSS COUNTRY SKIING • LIVE ON H. HILLS • HOLLIS HILL CONSERVATION AREA HAD GREAT SNOWSHOEING / HIKING TRAILS THAT HAVE BEEN INACCESSIBLE SINCE THE ICE STORM DUE TO MANY FALLEN TREES. • WALKING ON ROADS/STREETS, SOCCER FIELDS • OLD TURNPIKE RD
Question 4: "Other" recreation areas and improvements needed	<ul style="list-style-type: none"> • Safe accessible community event space. i.e. concerts, day festivals, etc. • guide to PUBLIC access of boats (ie kayaks) • Sidewalks (ie oak to main and main to chestnut • Snowshoeing trails and more sidewalks • trails for ATV's • Tee ball field • Private Land offered for hiking/kayaking • trail maps on town web site • basketball courts at Wallis need updating. re-furbish and re-open use of gym at TC Passios. Town Beach parking and expansion. Most important: improved communication. Single web page for finding recreation opportunities rather than scouring multiple spots (schools/parks/conservation/etc.). • It would be neat to see the Marshall Park fitness circuit resurrected. • I think a skate park is a TERRIBLE idea to have at T.C.Passios school. It limits the use of that future property, and it's going to be expensive to maintain, for something a very small segment of the population will ever utilize. • Marshall Park needs some love. It's underutilized due to neglect. The basketball court is unusable and most people don't realize it there. There is no real way to walk from chestnut street to the other field without walking through poison ivy. I'm not sure what the restroom facility is for. There is also a old workout circuit that could be fixed. • I think there are quite a few offerings in town already

	<ul style="list-style-type: none"> • Expanded town green on new safer site • Increased safety measures for those who use Lake Shirley as recreation • continued growth of snowmobile trails • ATV trails, public access to lake Shirley, Town center greenspace • Dog park • SIDEWALKS • Snow ATV trails • green space around lakes like walden pond • DIRT BIKE TRAILS • ASSIST LAKE SHIRLEY RESIDENTS WITH FUNDING FOR WEED CONTROL • AVOID DEVELOPING UNTOUCHED LAND • TRAIL MAPS - A GOOD EAGLE SCOUT PROJECT! • DOG PARK • AMUSEMENT PARK, DRIVE IN MOVIE, SKATING RINK, ICE RACING • MORE SIDEWALKS • MORE SIDEWALKS • MARKED, INTERCONNECTED TRAIL SYSTEM FOR DOG WALKING, HIKING, BIKING, XCOUNTRY SKIING AND ALTERNATE TRANSPORTATION • EXPAND SIDEWALKS • ATV TRAILS • SIDEWALKS • A NICE PARK WITH WALKING, BIKING PATH, BENCHES. AREA FOR CONCERTS AND OTHER COMMUNITY GATHERINGS • SIDEWALKS • COWDREY PARKING LOTS SHOULD BE CLOSED DUSK TO DAWN WITH VIOLATORS TICKETED. EVIDENCE OF ILLEGAL ACTIVITY (CONDOMS, NEEDLES, ETC. TOO FREQUENT) • HORSE • NONE WE HAVE ENOUGH ALREADY! JUST IMPROVE THAT (CLEAN UP ETC.) • DOG PARK
Question 5: Suggestions for additional recreational facilities	<ul style="list-style-type: none"> • More sidewalks to allow better access to the wonderful things in town! • It would be nice to have a paved trail through woods and wildflower fields for wheelchairs • Town center sidewalks, crosswalks, etc. improved and mapped to connect infrastructure like Marshall Park, schools, gazebo, library etc. to Eagle House. • I like what we have currently. • Maybe a bocce court next to eagle house. • More sidewalks on all roads within 2 miles of town center • Dog park

	<ul style="list-style-type: none"> • ADULT/SENIOR EDUCATION CLASSES/WORKSHOPS; CLUBS OF SHARED INTEREST; MORE TOWN SUPPORT (FINANCIAL) FOR THE TEEN CENTER - ? PASSIOS BUILDING. • I LOVE LUNENBURG - I AM PASSIONATE (LIFE HERE) ABOUT GREEN SPACE - BEAUTIFUL LAKES - ALL PRIVATE OWNERS SEE 10 FEET OF BEACH (SILLY IN MY MIND) - NEED PUBLIC LAKE FRONTAGE LIKE WALDEN POND. • SENIOR HOUSING • BIKE PATH WOULD BE AWESOME • MORE RECREATION KEEPS KIDS BUSY • EVERYONE • I WOULD LOVE TO SEE MORE HIKING TRAILS • HI, IMPROVEMENTS ARE AND WILL ALWAYS BE NEEDED BUT NOTHING IS URGENT. I BEG YOU TO REFRAIN FROM RAISING MY TAXES. MINE HAVE INCREASED TREMENDOUSLY. • LET'S MAINTAIN WHAT WE HAVE • WE NEED MORE ATHLETIC FIELDS! THE SCHOOL REPLACEMENT PROJECT WAS REDUCTION OF ONE FIELD. THE NEW FIELDS ARE GREAT BUT WE DID LOSE ONE TO FIT THE SCHOOL ON THE SCHOOL CAMPUS. YOUTH SPORTS NEED HELP WITH FIELDS. • SHADE AT TOWN BEACH, ADD'L TOWN BEACH (NO BOATS) AT LAKE SHIRLEY • SPEED BUMPS ON WALLIS PARK - TRAFIC HAS INCREASED WITH MORE RISK TO CHILDREN • NOT A SKATEBOARD PARK! SOMETHING THAT BRINGS TOGETHER INCLUDING FAMILIES. THERE IS NO SENSE OF COMMUNITY IN LUNENBURG NO REAL TOWN CENTER! • HAPPY WITH WHAT WE HAVE • ALL GOOD • A TOWN POOL WITH LIFE GUARDS AND SWIMMING LESSONS • LARGE AREA FOR TOWN GATHERINGS, FAIRS, ACTIVITIES OPEN • LIVED OUT OF STATE AND WANTED TO BE NEAR FAMILY IS WHY I LIVE HERE. • ALL TOWN FACILITIES SHOULD BE 100% ADA COMPLIANT. NO EXCUSES THAT THEY AREN'T - ESPECIALLY TOWN HALL! • I'M TOO OLD TO DO ANYTHING BUT WOULD LIKE AN INDOOR POOL • I HAVE VERY YOUNG CHILDREN AND AM JUST STARTING TO UTILIZE TOWN OFFERINGS. WE HOPE TO DO MORE OF WHAT IS LISTED ON THE REVERSE SIDE. • AS IN 4) WE HAVE ENOUGH. MARK YOUR TRAILS. PUT MAPS IN TOWN HALL. KEEP THINGS CLEAN. • DO NOT DEVELOP NEW SKATEBOARD PARK. FIX THE OLD ONE!! WE HAVE DECAYING BASKETBALL COURTS AND SKATEBOARDING AREA IN MARSHALL PARK - FIX THESE! ALSO FIX THE INDIVIDUAL WORKOUT
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	<p>AREAS AT MARSHALL PARK</p> <ul style="list-style-type: none"> • WE ENJOY IT THE WAY IT IS • UNLOCK TENNIS COURTS • NEED TO LOWER TAXES • NO MORE SOLAR FARMS
Question 8: “Other” communication methods	<ul style="list-style-type: none"> • Town website, email and papers • The town website is a horrible. I can't find the information I need. • FACEBOOK • Cell Phone Texts • LEDGER • SENTINAL AND ENTERPRISE • SCHOOLS • FACEBOOK PAGE • DON'T BOTHER • MAPS • LUNENBURG LEDGER • POST AT LIBRARY
Question 9: Open-ended responses	<ul style="list-style-type: none"> • LUNENBURG NEEDS TO FOCUS ON BEING FISCALLY RESPONSIBLE WHILE MAINTAINING WHAT WE HAVE. WE DON'T NEED TO “GROW” WE ARE NOT A CORPORATION! WE ARE A COMMUNITY • PICKLEBALL - • MUSIC - PERFORMANCES, JAM SESSIONS, ETC. COMMUNITY DANCES - EG CONTRA DANCING (PROBABLY NOT YOUR DOMAIN!) • NONE! WE HAVE ENOUGH ALREADY. CUT TRAILS PEOPLE CAN WALK ON. CUT THE GRASS. PUT UP SIGNS. PRINT AND DISTRIBUTE MAPS, ETC. • GROOMED CROSS COUNTRY SKI TRAILS, GROUP BIKE EXCURSIONS • FIX THOSE AREAS THAT YOU'VE LEFT TO DECAY IN MARSHALL PARK: BASKETBALL, SKATEBOARD AREA AND THE INDIVIDUAL WORKOUT STATIONS THAT ARE NOW OVERGROWN. DON'T CHEW UP THE OPEN LAND WE HAVE. FIX WHAT WAS THERE! • WE HAVE EVERYTHING WE NEED! WE WOULD LIKE TO SEE GROWTH IN HOUSING AND POPULATION SLOWED. THANK YOU. • BOTH MY WIFE AND I ARE DISABLED SENIORS. WITH REAL ESTATE TAXES GOING UP A MINIMUM OF 2 1/2% PER YEAR AS A MINIMUM EVERY YEAR. ANY THING ELSE TO INCREASE TAXES IS UNACCEPTABLE. ANY INCREASES TO TAXES DUE TO LEISURE ACTIVITIES SHOULD NOT BE PASSED ON TO THE SENIOR DISABLED OF THE TOWN. PLEASE MAKE THIS POINT A MANDATORY CONSIDERATION IN WHAT EVER DECISION IS PRESENTED. THANK YOU. • BIKE TRAILS, DOG PARK • MORE ADULT EDUCATION PROGRAMS (EVENING) YOGA, PILATES, LEARN TO CLASSES (LIKE COOKING, BUILDING SOMETHING ETC.) • EVERYONE IN THIS HOUSE WOULD LOVE TO SEE A FORMAL PARKS &

	<p>REC SUMMER PROGRAM OFFERED.</p> <ul style="list-style-type: none"> • TENNIS LEAGUE AND OR LESSONS • ICE SKATING, 4TH OF JULY BONFIRE, HALLOWEEN SPOOKFEST • MORE ABOUT NATURE AND LESS ABOUT SPORTS! MORE CONNECTION TO COMMUNITY WITH FARMS! • INCREASED ACCESS FOR HUNTING • SAILING HOURS • EXERCISE PROGRAMS FOR ADULTS, WALKING OR BIKE PATHS • ARTS AND CRAFTS FESTIVAL, MUSEUM QUALITY FAIRS, MORE ENTERTAINMENT • PICNIC AREA WITH TABLE SOMEWHERE NEAR COMMON (CENTER OF TOWN) • BIKE / WALKING TRAILS THAT CONNECT TO OTHER TOWN TRAITS. • CONTINUED ACCESS TO CONSERVATION LAND FOR HUNTING. • I WOULD LOVE TO SEE MORE SIDEWALKS • 1) CURLING FACILITY 2) BEACH PLAYGROUND AREA IMPROVEMENTS 3) BONFIRE 4) ADDITIONAL SCHOOL NON BASEBALL FIELDS NOT IN SCHOOL CONTROL 5) SKI HILL AT CLARK HILL 6) PUBLIC DOCK AT LAKE SHIRLEY 7) HIKING CLUB 8) ATV TRAILS 9) TOWN SQUARE WITH RESTAURANTS 10) FOOD TRUCK PARKING • Sailing lessons on lake Whalom • Ice skating area, more sidewalks, bike/rail trail • Disc golf • 5K, more trails, info. on water access, craft brew festival, a dog park • Outdoor yoga/boot camp/fitness group. More adult sports programs. Obstacle course for kids. Nature class for kids. • Summer camps run by the town • Drive in movie theatre. • ATV riding allowed on the snowmobile trails in the winter on certain weekends or use odd or even days to allow ATV's and snowmobiles share the trails. • We need to preserve our agricultural/rural town. Time to start protecting! Far too much focus on new housing = taxing infrastructure and ecosystems. Perhaps we need to start more eco management programs (Mass Audubon, Wildlife etc) to promote awareness. How about tax incentives for those willing to donate land for conservation or preservation? • This survey assumes that preserving open space is an absolute virtue. Preserving "rural character" is one way to discriminate against poor people. We need to BALANCE open space with adequate housing. Take a look at how Ireland does it--small clusters of housing with private small yards that abut each other. We need far greater economic and social diversity in our town to improve our quality of life as a community! I do NOT support zoning that separates us from
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	<p>each other by acreage requirements. We don't even know our neighbors, in many cases! I would like to see more community walking groups and road biking safety features. Our north-south roads serve as a conduit for traffic through town, but there are no REASONS to STOP and spend time or money in Lunenburg. These roads are dangerous for cyclists.</p> <ul style="list-style-type: none"> • Ice skating, easy kayak access to conservation land with water. • a hiking "club" with scheduled walks. more recreation classes for adults • History tours • Continue to expand the adult recreational leagues (co-ed volleyball?). Some single-day or single-weekend tournament-style sporting events would be fun, too (like a 3-on-3 basketball tournament). • We are self-sufficient. We take our kids to the playgrounds and parks that we have. We don't really need anyone to entertain them. • back when I was a kid, there was summer programs at Wallis playground and in the center (The old senior center building was used for summer recreation program) where local kids could go for the morning and afternoon to play with others in a supervised and organized events and crafts. would like to see maps of hiking trails that could be bought that show the trails, points of interest and parking area to help fund these programs. promote specialized events (a flora highlighting walking trail event, and animal focused walking trail event, a photography walking trail event, etc that encourages hobbyists to get out there. would like to see an adult softball, volleyball or other organized pick up leagues and along with kid versions that focus on the fun and playing with one another versus leagues where the focus is winning. community garden space where people can rent a 10x10 or 4x8 space to grow things with guidance from others. People can sponsor a space where vegetables can be grown to donate to the local food bank. • More walking/hiking programs. • A town green where the old primary school is • Yoga, tai chi, adult nite program courses like masonry, ceramics, flower arranging, painting • Soccer league for adults • Arts and crafts adult education. Yoga classes, meditation. Plant animal bird identification walks • Animal and habitat protections and programs. Non-motorized vehicle trails. • More older/adult fitness • Tennis lessons • Most importantly I would like to see what we already have cared for. There is already lots of trash at the new Wallis Park
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	<ul style="list-style-type: none"> • Town fairs, walking/jogging paths • I would love to see the development of an appropriate Park and Rec department that would coordinate all town sports so each sport isn't responsible for individually coordinating all fundraisers, fields, coaches etc and that it would function under one Lunenburg Youth Sports. I would also like to see a Park and Rec dept run a summer camp for students grades k-5. Something similar to what Townsend does. We would need to hire people to work in this dept but apart from the money that would be needed up front to start the program it would eventually become a self-funded program paid for by sports fees and camp tuitions. This would be a huge asset for the community. • Expanded farmers markets in a larger market area • Outdoor games/leagues for adults. Bocce, Cornhole, frisbee, basketball, tennis & pickleball. • A public ice-skating area on Whalom Lake would be wonderful. • Pickle ball • Camps for kids • Exercise opportunities for seniors. Well maintained trails in conservation areas for walking, snowshoeing. • Anything besides solar and more houses. Less pandering to noisy neighbors adjacent to large properties offering recreation! • More adult sporting events. Revival of Marshall park life course and tennis courts. • CX skiing, hiking, cycling... • I've gone on conservation committee sponsored walks and snowshoes in past. I enjoyed and would go on more if I knew about them. I have DirectTV so do not get access to local TV channel and I don't do social media (except email!) • Historic Homes / Talks and Walking Tours • I walk daily with my dog at Coolidge park. It's a little over a 1-mile loop. Its off the road. The park is also made for good use by kids of all ages that include playing baseball, softball, swimming, soccer, basketball, hockey. You can picnic, ride bikes, etc. The park is made for good use. It is maintained well. I would love to see Lunenburg offer something like this for the town. • THE PUBLIC SHOUDL HAVE BETTER FREE ACCESS TO LAKE SHIRLEY FOR BOATING. THERE SHOULD BE PUBLIC ACCESS TO HICKORY HILLS LAKE FOR LUNENBURG RESIDENTS. • WALKING TRAILS AND A DOG PARK. • NO MARIJUANA IN THE TOWN OF LUNENBURG, MASS. • PLEASE PARTNER WITH LARGE ORGANIZATIONS, EG TRUSTEES, MASS AUDUBON AND SEC STATE/FED AID. HIKING TRAILS / CONSERVATOIN AREAS THAT ARE CLEARLY MARKED. NO AMBIGUITY WITH
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	<p>CONSERVATION LAND (SEEN ELSEWHERE) - PUBLIC EITHER HAVE ACCESS OR THEY DON'T. MY SUGGESTION WOULD BE TO LOOK BEYOND TOWN RESOURCES - GET STATE OR FEDERAL AID- ALSO TRUSTEES AND RESERVATIONS (FARANDNEAR, SHIRLEY) AMAZING EXAMPLE OF RECREATIONAL FACILITY DONE RIGHT - THEY HAVE THE \$\$ RESOURCES AND EXPERTISE. PARTNER WITH TRUSTEES.</p> <ul style="list-style-type: none"> • ADULT SPORTS LEAGUES • PLAYGROUNDS FOR YOUNGER CHILDREN! • SKATEBOARD PARK OR REC PARKS FOR KIDS • I WANT YOU TO STOP DREAMING UP IDEAS THAT RAISE MY TAXES. I HAVE MEDICAL EXPENSES THAT ARE MY PRIORITY - MY INCOME NEVER GOES UP TO COVER TAX INCREASES. • THIS IS FUNNY. OWNED HOUSE SINCE THE 1960'S HAD NONE OF THIS STUFF FOR MY FAMILY ONLY WHALOM PARK. LIVED ON THE WHALOM LAKE SINCE THEN. IN MY 80'S NOW AND TAXES OVER 6,000.00 AND I NEVER HAD ANY OF THIS STUFF. AND YOU WANT MY \$ - SORRY NOT MUCH LEFT! • ICE SKATING RINK AT TOWN CENTER OR MARSHALL POND WITH HOT CHOCOLATE AVAILABLE, BRING FAMILIES OUT, BRING BACK COMMUNITY BONFIRE IN AUGUST - GREAT COMMUNITY COME TOGETHER • MORE OPEN TIME AT THE TOWN BEACH. SHAMEFUL NOT TO KEEP SUCH A NICE PLACE OPEN MORE. • PLEASE, TO CONTINUE FROM ABOVE, DO YOU KNOW, IF YOU HAD A PERIOD OF 2 YEARS WHERE YOU DO NOT RAISE TAXES AND ELIMINATE ANY WASTE OUR TOWN WOULD BE A "MODEL" FOR MASS. THAT IS LEADERSHIP. I AM WORRIED TAXES AND THOSE OTHER SECRET BYLAWS + WAYS TO RAISE MONEY WILL FORCE ME TO MOVE SOMEDAY. IS EVERY TEACHER AND TOWN OFFICIAL PAYING THEIR FAIR SHARE AND INDUSTRY STANDARD OF HEALTHCARE ETC...VERY IMPORTANT. THANKS FOR LISTENING! • WALKING TRACK, PLAYGROUPS AT PLAYGROUND, TOWN POOL • I ENJOY KAYAKING BUT DO NOT HAVE ACCESS TO ANY OF THE BODIES OF WATER IN TOWN - ALL ACCESS IN PRIVATE. OUR "TOWN BEACH" HAS STATED THERE IS NO CRAFT ENTRANCE VIA THE BEACH....??? BVERHULST1@YAHOO.COM THANKS BETTY • WE SHOULD HAVE ADOPTED COMMUNITY PRESERVATION ACT 10 YEARS AGO. • IF I BUY A BIG PIECE OF LAND FOR MY VETERINARY HOSPITAL, I WOULD LOVE TO DONATE A PORTION OF IT TO THE TOWN FOR A DOG PARK AND POSSIBLY A SHELTER/POUND AND RECRUIT A VOLUNTEER ARMY TO MAKE IT HAPPEN. • I WOULD LOVE TO SEE A DOCK AT WHALOM LAKE (HANDICAP ACCESSIBLE) AND ALSO A CANOE / KAYAK LAUNCH ON RESERVOIR RD INTO LAKE SHIRLEY. (THERE IS A SMALL MUDDY ACCESS - NO DOCK!)
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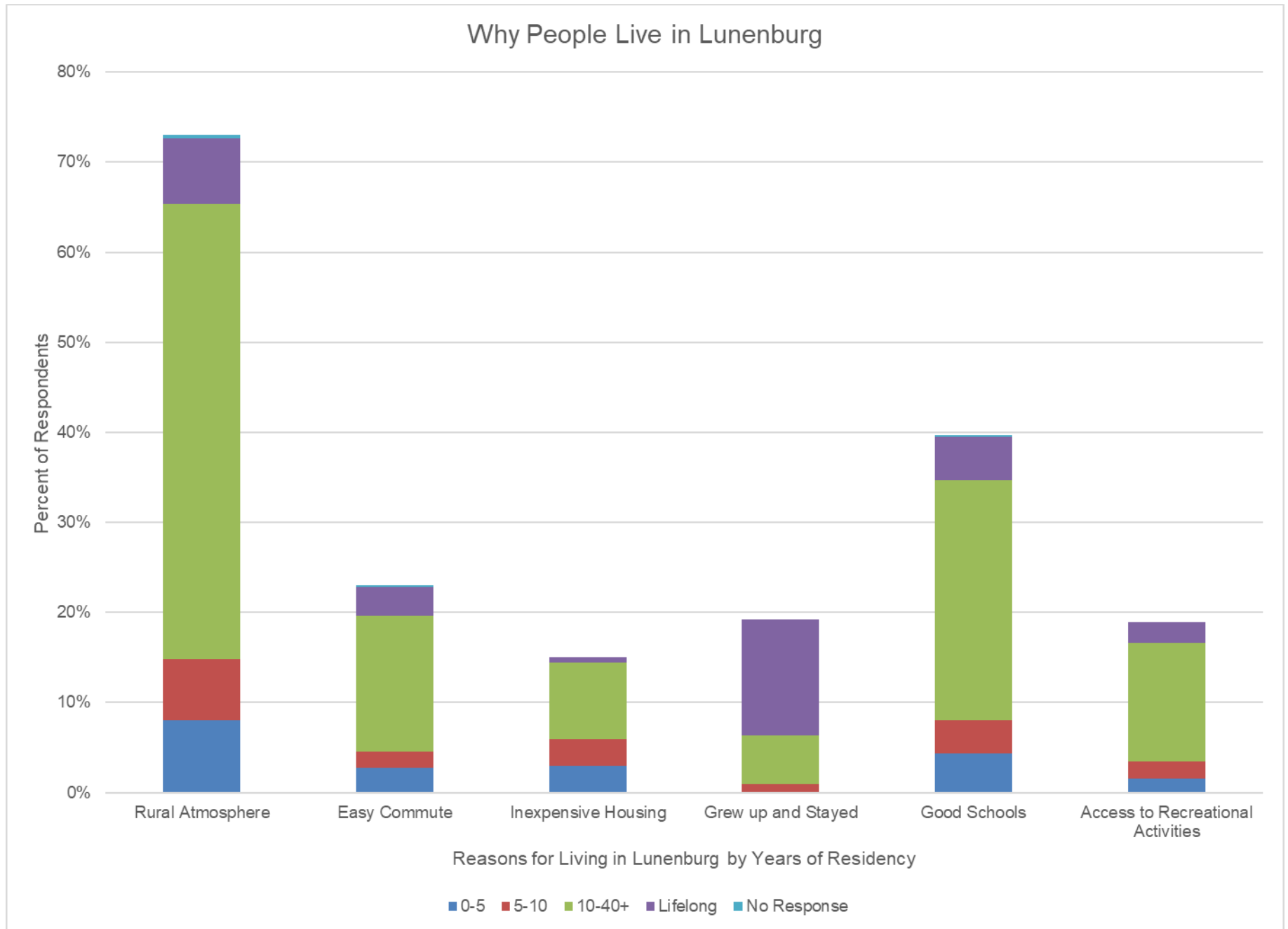
	<p>WE NEED DOCKS!!</p> <ul style="list-style-type: none"> • YOGA AND HEALTH /FITNESS, GOLF LEAGUE, MUST WOMENS OVER 40 BASKETBALL, COMMUNITY BASKETBALL/FOOTBALL/FIELD HOCKEY EVENTS SIMILAR TO WHAT DEB ABARE USE TO RUN. • NEED MORE SIDEWALKS - THAT CONNECT WITH EACH OTHER - SO THAT YOU CAN ACTUALLY WALK PLACES WITHOUT BEING IN THE ROAD. • MORE GREEN SPACE, DOG PARK, IMPROVED TRACKS AT MARSHALL • NONE. MORE CONSERVATION LAND. • I BELIEVE THE TRAILS SHOULD BE OPEN TO ALL. INCLUDED ATV'S SNOWMOBILES, HORSE, HIKING, BIKING. ODD DAYS FOR MOTORIZED EVEN DAYS FOR HORSES. ITS ONLY FAIR! • BETTER SIDEWALKS, AND MAINTENANCE OF WHAT WE HAVE. THE SIDEWALKS ARE NEVER COMPLETELY PLOWED TO PROVIDE ACCESS FOR PEDESTRIANS TO WALK TO TOWN ALONG MASS AVENUE. • SECTION 3 QUESTIONS ARE BEING ANSWERED IN THE CONTEXT OF DURING MY 30 YEARS HERE, AS OPPOSED TO CURRENTLY. CHILDREN WERE A BIG REASON FOR MY BEING HERE, NOW THEY ARE GROWN UP. • MORE WALKS IN CONSERVATION AREAS, WITH EDUCATIONAL PROGRAMING TO TEACH ABOUT IMPORTANCE OF PROTECTING THEM. • WE WOULD LIKE TO SEE MORE SIDEWALKS IN LUNENBURG FOR SAFETY WHEN WALKING. WE TRY A LOOP AROUND TOWN WE WALK PAST TOWN HALL, THEN LEFT ON NORTHFIELD ST. IT IS VERY DANGEROUS WITH NO SIDEWALK ON NORTHFIELD AND STREETS ALONG 2A TO RILEY ROAD WHERE WE LIVE. • WE WISH TEHRE WAS MORE FOR SENIORS IN TOWN. WE BELONG TO THE TOWNSEND SENIOR CENTER - THEY OFFER MORE FOR SENIORS. WE NEED FAR MORE PICNIC AREAS IN LUNENBURG AND MAYBE A WALKING GROUP WITH A WALKING TRAIL. • IN ALL PRACTICAL HONESTY AND FISCAL RESPONSIBILITY THE TOWN NEEDS TO FOCUS ON THE HISTORICAL BASIS OF THE TOWN - SCHOOLS, ADMIN, SECURITY AND ROADS. WE HAVE OPEN, TICK-INFESTED GREEN SPACE AND PLENTY OF COMMON, BASIC RECREATIONAL FACILITIES. PLEASE GET BACK TO BASICS AND REDUCE THE TAX BILLINGS. ERIC. J. NIEHAUS • TOURS OF EXISTING NATURES TRAILS MORE FREQUENTLY. TOURS OF CONSERVATION AREAS MORE FREQUENTLY, TOURS OF EXISTING HISTORIC BUILDINGS AND SITES MORE FREQUENTLY, WALKING PATH LIKE COOLIDGE PARK IN FITCHBURG. • CURRENT PROGRAMS FINE. AS AN AVID WALKER IN TOWN I WOULD LIKE TO SEE THE SPEED LIMIT REDUCED TO 25MPG AROUND TOWN EXCEPT FOR 2A AND 13. THANK YOU. • S.T.E.M.
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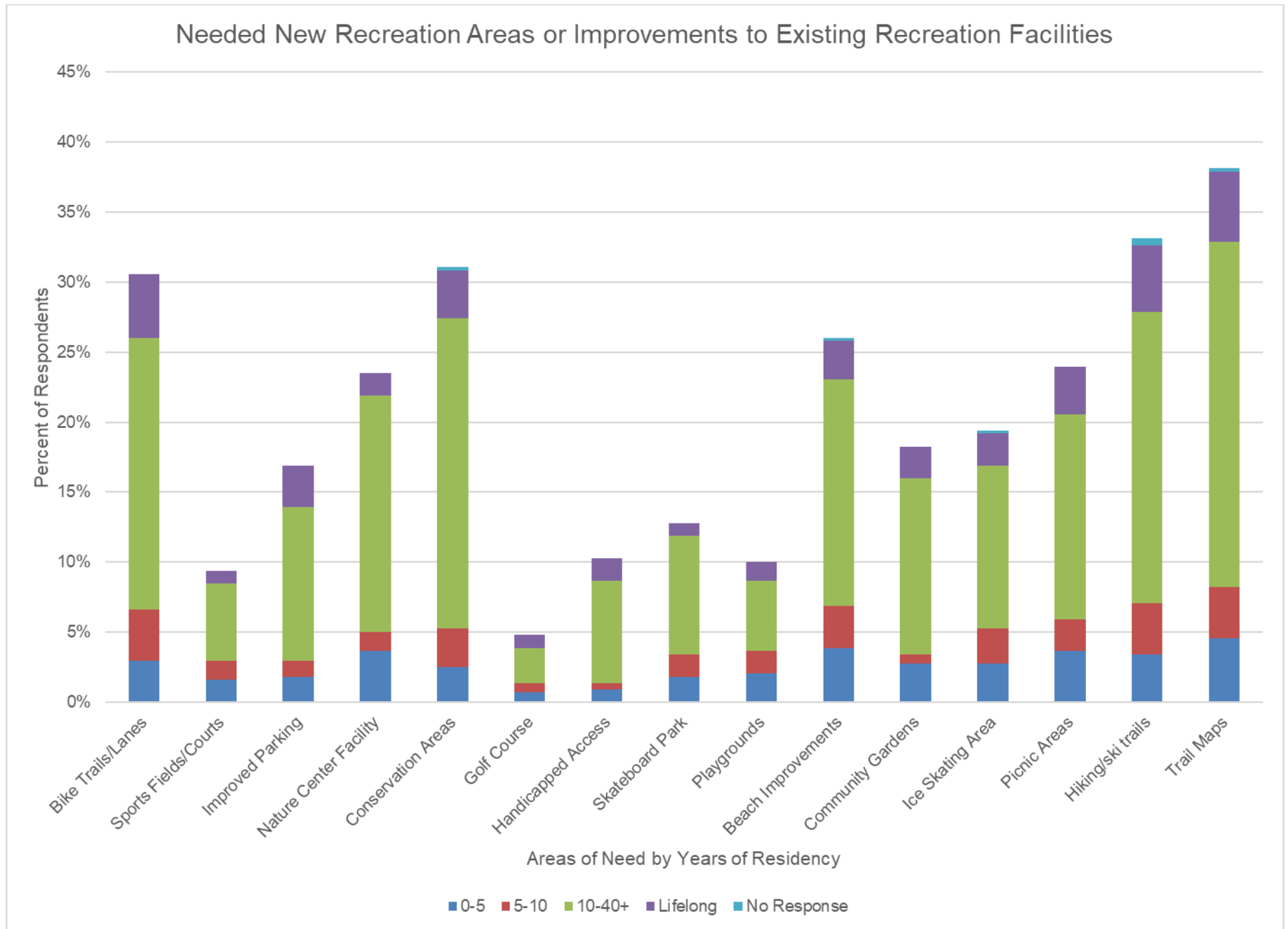
	<ul style="list-style-type: none"> • HORSEBACK RIDING • WAY FOR ELDERS TO WORK FOR TOWN IN EXCHANGE FOR LOWER PROPERTY TAXES. THANK YOU. • PLEASE STOP SPENDING MONEY - TAXES ARE TOO HIGH NOW • WELL MAPPED HIKING AND BIKING TRAILS - MAINTAINED • FOURTH OF JULY CELEBRATION • ALLOW ACCESS TO FIOS TV IN THE ARA OF TOWN WIRED FOR FIOS. I AM ALLOWED TO USE SATELLITE OR COMCAST. THERE IS NO LEGAL REASON TO PREVENT ME FROM USING FIOS ALREADY IN MY HOME. • - BIKE LANES -XC SKIING - MORE SIGNAGE ON TRAILS / MAPS • COMMUNITY GARDENING - PUBLIC PRIVATE PARTNERSHIPS, OFFER EXISTING TRAIL MAPS, CREATE BIKE TRAILS - PUBLIC PRIVATE PARTNERSHIP, CONSIDER SKATEBOARD PARK PUBLIC / PRIVATE PARTNERSHIP • WE DO NOT NEED ANY MORE. CELL PHONES HAVE LIMITED RECREATIONAL ACTIVITY TO NEARLY NOTHING. THE TOWN ALREADY BUYS WAY TOO MUCH PROPERTY. HOW MUCH TAX REVENUE IS THE TOWN PAYING FOR ALL THAT LAND? • FOCUS ON MAINTAINING PASSIVE RECREATIONAL OPPORTUNITIES RATHER THAN TOWN "PROGRAMS" THAT OFTEN SUBSIDIZE RECREATIONAL ACTIVITIES OF SMALL MINORITIES OF RESIDENTS. **TYPED RESPONSE INCLUDED** TO THE LUNENBURG OPEN SPACE COMMITTEE: YOUR OPENNESS TO RESIDENTS' OPINIONS ON OPEN SPACE AND RECREATION ARE VERY WELCOME. THE TEMPTATION, THOUGH, IS TO COMPILE A LENGTHY, FISCALLY UNWORKABLE WISH LIST. IT IS IMPORTANT THAT THE COMMITTEE SHOULD CONSIDER WHETHER ANY NEW PROGRAM WOULD SERVE THE GREATER PUBLIC INTEREST OR - LIKE THE GOLF COURSE AND SKATEBOARDING ITEMS LISTED IN THE SURVEY - ONLY A FRACTION OF THE POPULATION. LUNENBURG RESIDENTS ARE FORTUNATE TO HAVE A VARIETY OF OPTIONS FOR RECREATION, AND THE TOWN DOES MAKE AN EFFORT TO KEEP EXISTING PUBLIC ASSETS VIABLE. STILL, HEIGHTENED MAINTENANCE - REPAIRING DAMAGED SIGNAGE AND WALKWAYS, CLEARING SNOW FROM PARKING AREAS, AND THE LIKE - SHOULD HAVE PRIORITY OVER CREATING NEW PROGRAMS. IF THE COMMITTEE FOCUSES ITS REPORT ON MAINTAINING AND IMPROVING THE ASSETS RESIDENTS ALREADY ENJOY RATHER THAN LAUNCHING INITIATIVES SERVING A SMALL FRACTION OF THE POPULATION, IT WOULD DO THE TOWN A GREAT SERVICE. • ATV CLUB, AND OR APPROVED TRAILS OR AREAS FOR ATV USE. WATER SPORTS CLUB ON LAKE SHIRLEY FOR ADULTS TO WATERSKI OR SOMETHING. JUST AN IDEA. • LOVE ADULT EDUCATION CLASSES AT HIGH SCHOOL • OPEN PUBLIC LANDS TO HUNTING • WE DO UTILIZE RECREATIONAL AREAS BUT NOT IN OUR TOWN. FOR
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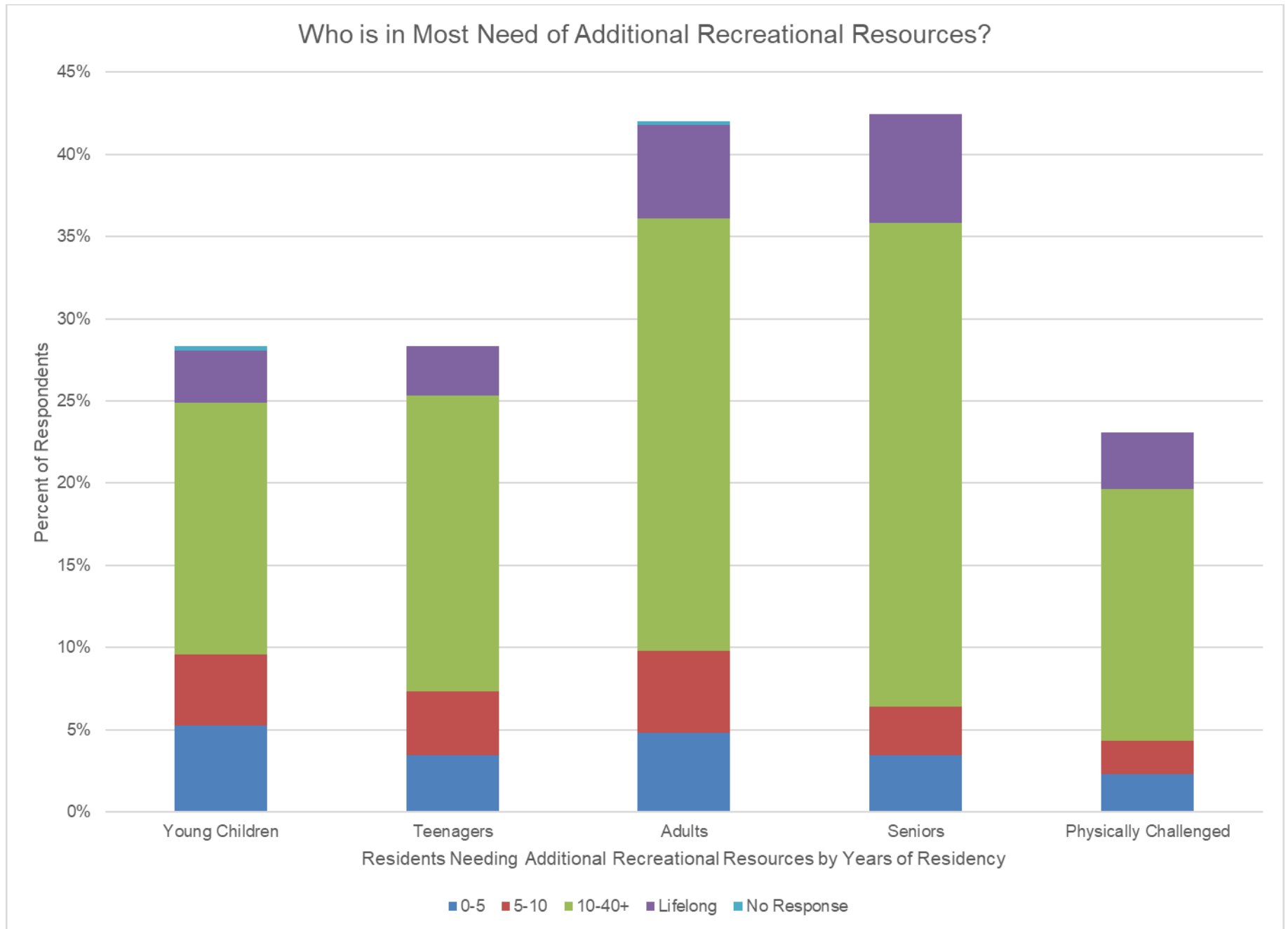
	<p>EXAMPLE, CASTLE IN THE TREES IN LITTLETON IS A MUCH NICER PLAYGROUND. WE USE THE SHIRLEY ROD AND GUN CLUB AS IT IS ALSO MUCH NICER. WE TRIED THE TOWN BEACH WHEN WE FIRST MOVED HERE BUT WERE NOT IMPRESSED. PARKING IS AN ISSUE. THE BEACH HOUSE IS RUN DOWN AND OFFERS NO CONCESSIONS. THE BEACH ITSELF IS SMALL AND ON A HILL. VERY POOR LAYOUT. WE REFUSE TO GO BACK. WE UTILIZE SHIRLEYS BENJAMIN POOL FOR SWIMMING AND LESSONS. WE TRIED THE FARMERS MARKET AND FOUND IT TO BE TOO SMALL, NOT ENOUGH SELECTION AND AGAIN PARKING WAS AN ISSUE. WE GO TO DICKS IN LUNENBURG OR UTILIZE OTHER TOWNS FARMERS MARKET SUCH AS GROTON. IF OUR TOWN HAD CONCERTS, NICE FARMERS MARKETS, A PARADE AND FIREWORKS ETC AT THE GAZEBO OR OTHER LOCATION WE WOULD GO BUT NONE OF THIS IS OFFERED!! WE ARE VERY DISAPPOINTED WITH THE OTWN AND HOW LIMITED THE SELECTIONS ARE. VERY DISAPPOINTED WITH THE SCHOOLS AS WELL. WE ARE A YOUNG FAMILY WITH GOOD INCOME AND PLAN TO MOVE AS SOON AS WE CAN. ALSO SHOULD POINT OUT THAT TAXES ARE VERY HIGH.</p> <ul style="list-style-type: none"> • PLEASE DON'T BUILD ANY ADDITIONAL FACILITIES THAT THE TOWN DOES NOT NEED. OUR TAXES HERE ARE GETTING CLOSE OR HIGHER THAN TOWNS LIKE ACTON, WESTFORD ETC. THAT HAVE TOP SCHOOL SYSTEMS AND AMENITIES. LUNENBURG HAS NEITHER AND THE TOWN IS MAKING IT HARD FOR OLDER PEOPLE TODAY AS WELL AS PEOPLE LIKE US TO BE ABLE TO SELL OUR HOUSE. HOW ABOUT MAINTAINING TREES ON ROADSIDE AND ROADWAYS! WE PAY THE HIGHEST OF TAXES AND WE RARELY GET OUR STREET MAINTAINED. • NONE IN ADDITION TO WHICH WE HAVE. • SKI TRAILS FOR CROSS COUNTRY SKIING. BOCCE TOURNAMENT. MORE OUTDOOR BAND CONCERTS. • I CAN'T IMAGINE WHY I STAY HERE! • COMMUNITY THEATER • WE NEED LESS BUILDING/CONSTRUCTION. OUR TOWN IS RAPIDLY DISAPPEARING AND BEING REPLACED WITH HIGH DENSITY AND SINGLE-FAMILY HOMES. INFRASTRUCTURE CAN'T HANDLE. TAXES ARE VERY HIGH. PLEASE PROTECT WHAT WE HAVE LEFT. • I'VE REALLY ENJOYED THE ADULT SPORTING ACTIVITIES OFFERED; BASKETBALL, SOFTBALL, PICKLE-BALL, WEIGHT TRAINING ETC. • COMMUNITY MULTI USE SPACE. FOR RESIDENTS TO USE FOR EVENTS/PARTIES/NATURE GATHERINGS • TO ASK THE TOWN ASSIST CURRENT YOUTH ORGANIZATION WITH A REDUCTION OR ELIMINATION OF FEES CHARGED WHEN USING TOWN FACILITIES. • NONE. I'D LIKE A BREAK ON MY TAXES. LUNENBURG NEEDS TO HELP SENIORS MORE AND GET SOME NEW BUSINESS IN TOWN TO DO SO. OTHER TOWNS AND STATES STOP RAISING OUR TAXES AT A CERTAIN
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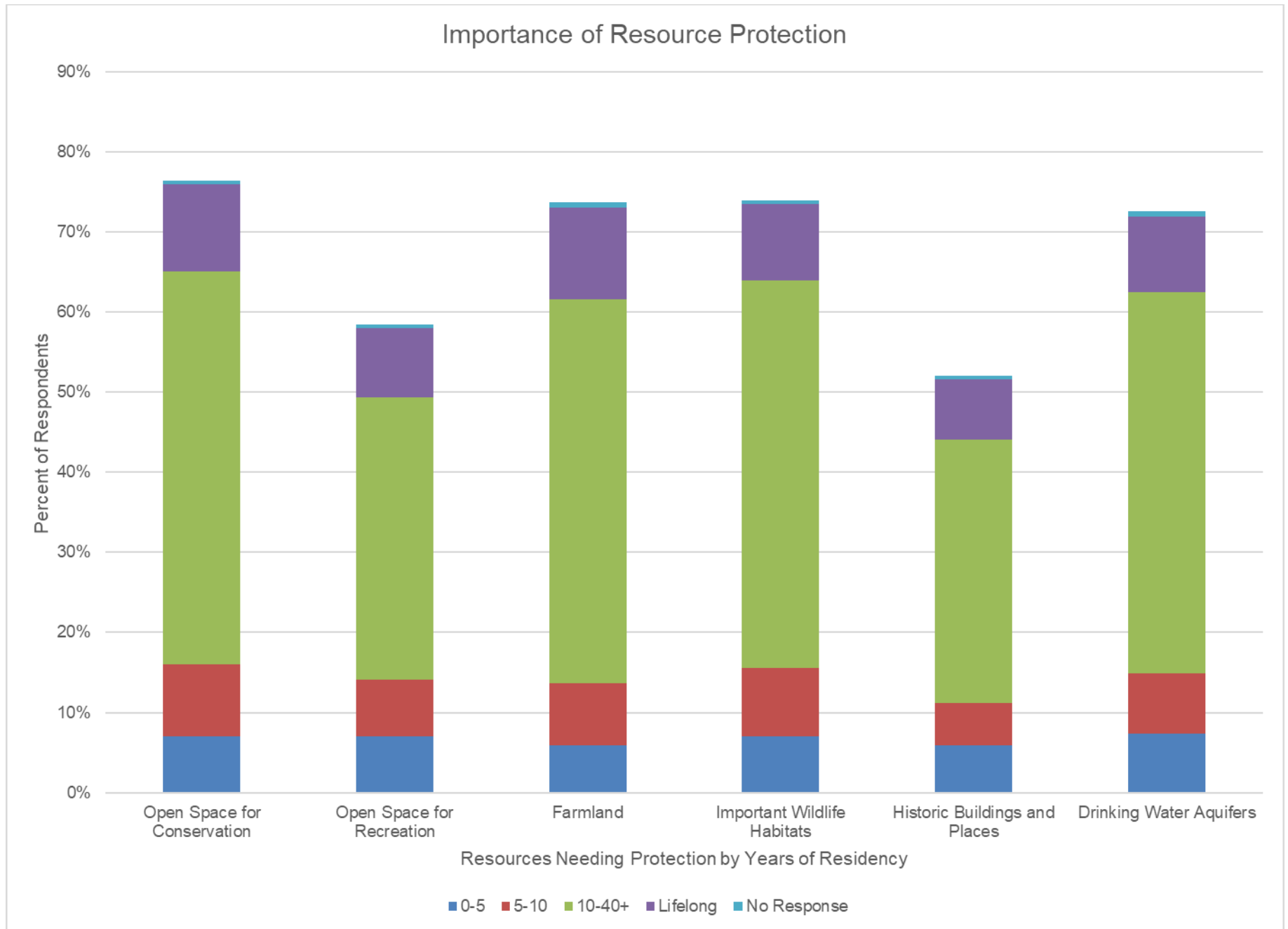
	<p>AGE. WHY NOT LUNENBURG? I'M 80 YEARS OLD AND WILL NOT AFFORD MY HOUSE MUCH LONGER.</p> <ul style="list-style-type: none"> • NO FURTHER RESTRICTIONS ON RENEWABLE ENERGY • MORE ACTIVITIES FOR GIRLS AT THE MIDDLE SCHOOL LEVEL. FIELD HOCKEY, LACROSSE. • TENNIS COURTS, MORE MARKED WALKING/HIKING TRAILS, MORE CONNECTIONS BETWEEN TEENS AND SENIORS. • NOTHING IN PARTICULAR • ANYTHING FREE • WE NEED VERIZON FIOS IN LUNENBURG • WINTER FESTIVAL WITH ICE SKATING, SNOWMOBILING, DOG SLD RIDES, ICE SCULPTURES, CROSS COUNTRY SKIING, SNOWMAN CONTEST. FLEA MARKET (TOWN WIDE) AT SCHOOL. CHARGE FOR SPACES. • 1) NEW ITEMS SHOULD BENEFIT THE MAJORITY OF THE POPULATION IN REGARD TO RECREATIONAL ACTIVITIES NOT A MINORITY. THE SKATEBOARD PARK, ALTHOUGH INTERESTING, WILL ONLY BENEFIT A SMALL %. 2) ENOUGH CATERING TO THE SCHOOL AGE POPULATION - WE PAY FOR THEIR EDUCATION, WE SHOULD NOT HAVE TO PAY FOR ANY PART OF THEIR "DAYCARE" (IE TEEN CENTER EXPERIENCE). IF ELEMENTARY PARENTS CAN PAY \$4+ AN HOUR FOR EXTENDED DAY, TEEN PARENTS SHOULD AT LEAST COVER THE COST OF THE BLDG THE TEEN CENTER IS LOCATED (WHICH COSTS THE TOWN 10K A YEAR). I AM A PARENT OF 3 TEENS, I DO NOT EXPECT THE TAXPAYERS TO PICK UP THE TAB TO KEEP THEM WATCHED AFTER SCHOOL. 3) FIELD SPACE - WE NEED MULTI SPORT FIELDS. NOT 7 FIELDS DEDICATED TO BASEBALL. 4) TOWN BEACH HAS AN UNUSED PRIME SPOT FOR EITHER ANOTHER PLAYGROUND OR A PICNIC AREA. 5) BETTER ACCESS TO LAKE SHIRLEY - THE KAYAK/CANOE "LAUNCH" AREA IS A JOKE. 6) MORE SIMPLE ACTIVITIES - WALKING TRAILS, ICE SKATING, WALKING TOURS, COMMUNITY GROUPS FOR WALKING, RUNNING, HIKING. • NEED FOR PICNIC AREA FOR PUBLIC USE. FACING MARSHALL POND ON HIGHLAND STREET IS LAND THAT I BELIEVE BELONGS TO THE TOWN. CLEARING, CLEANING AND ADDING PICNIC TABLES WOULD PROVIDE A SPOT FOR PICNICKING, BOATING AND FISHING. LAND IS ON RIGHT SIDE OF POND. • WE WOULD LIKE TO SEE A BIT MORE COMMERCIAL SHOPS, SUCH AS COFFEE SHOPS/BARS/BOUTIQUE SHOPS. IMPROVEMENTS TO THE TOWN BEACH (PLAYGROUND, BETTER BEACH AREA TO SIT) • MORE SNOWMOBILE TRAILS • A COMMUNITY ICE SKATING EVENT AT MARSHALL PARK - A FAMILY EVENT. • I DON'T GET MY TAX BILL AT A BARGAIN PRICE. WHAT MONEY (IN RESPONSE TO) DONATE MONEY TO BUY LAND. INDOOR SWIMMING POOL FOR SENIORS.
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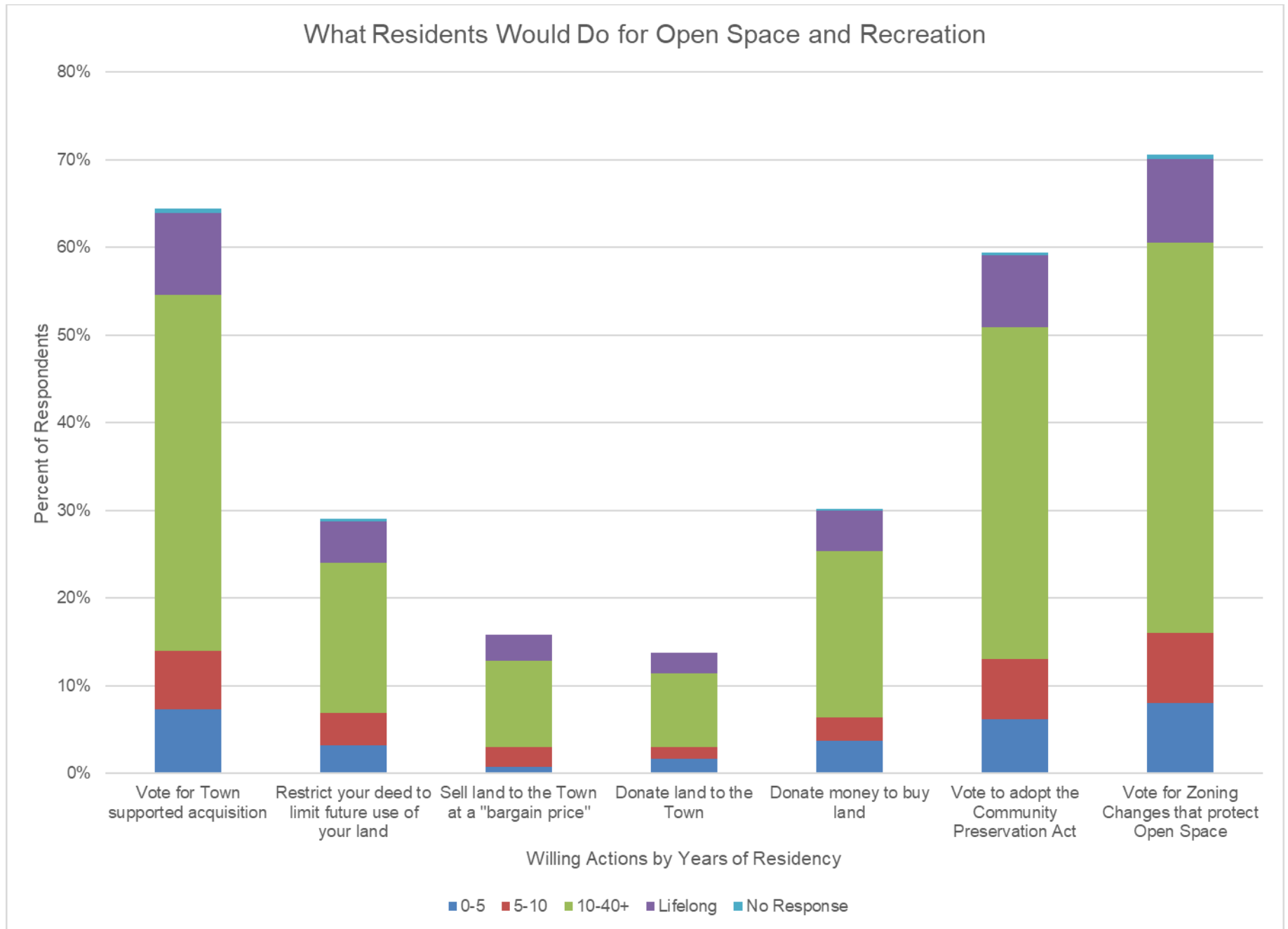
	<ul style="list-style-type: none">• SENIOR ACCESSIBLE WALKING ON NATURE TRAILS• I WOULD LIKE GUIDED CONSERVATION WALKS. IF PEOPLE WALKED AS A GROUP IT WOULD BE SAFER IN THE WOODS TO ENJOY ALL THE TRAILS IN LUNENBURG.• TRAILS FOR HORSES• I think it would be nice if we could focus some efforts on the town beach and making it at least safer for parking. It's been neglected a long time and it needs some love. Or an alternate town beach somewhere with larger space. I have been told the town owns land on Lake Shirley.• I'd also really love a safer, more accessible, larger, flatter town green. I have no idea what it would take to make that happen, to find grant money to demolish the old primary school on School Street and turn that into a green space/gathering space, but it would be fantastic if that could be a priority for the committee as well. (although I realize that's kind of a hot topic politically in town right now!)
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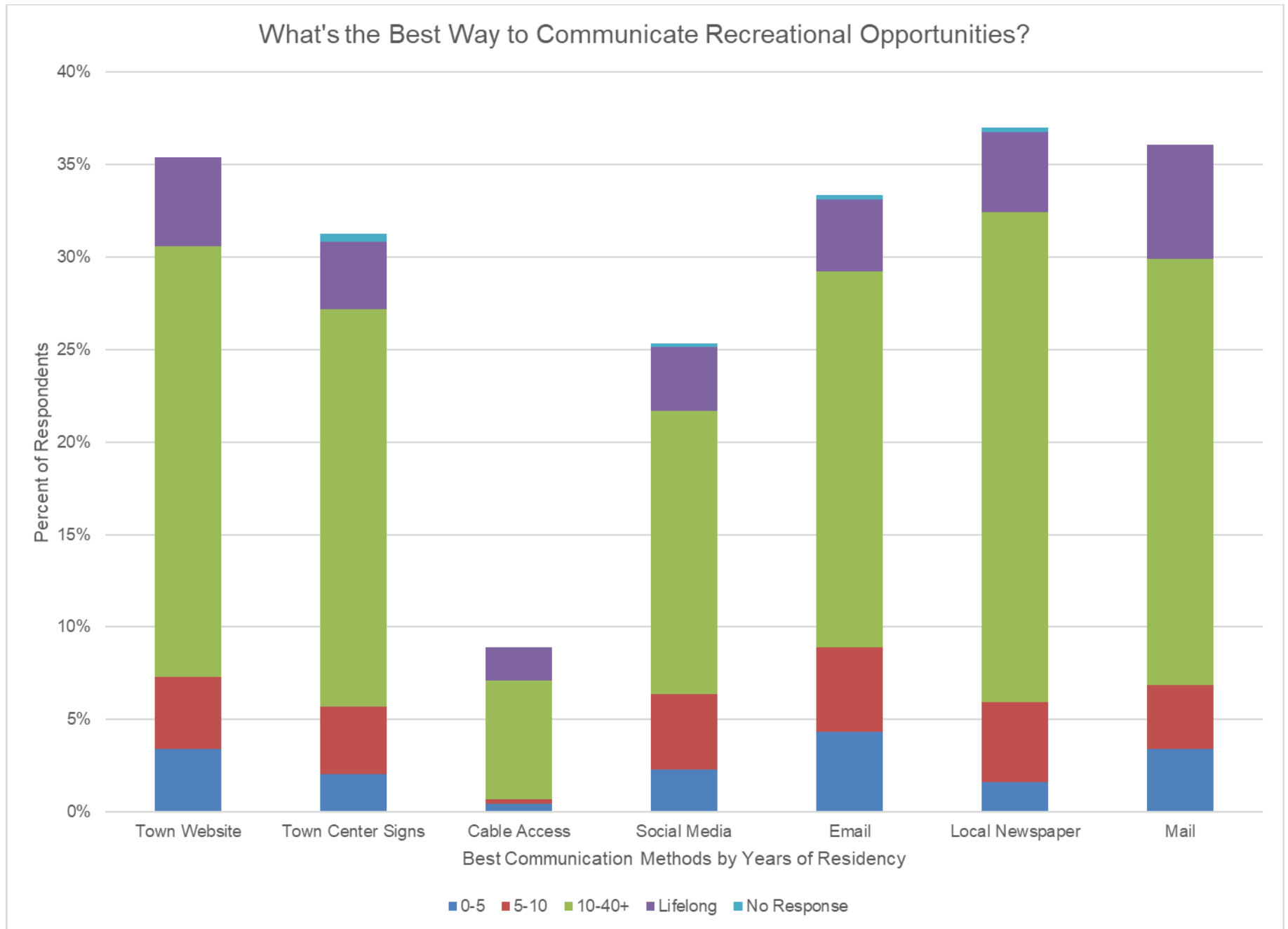


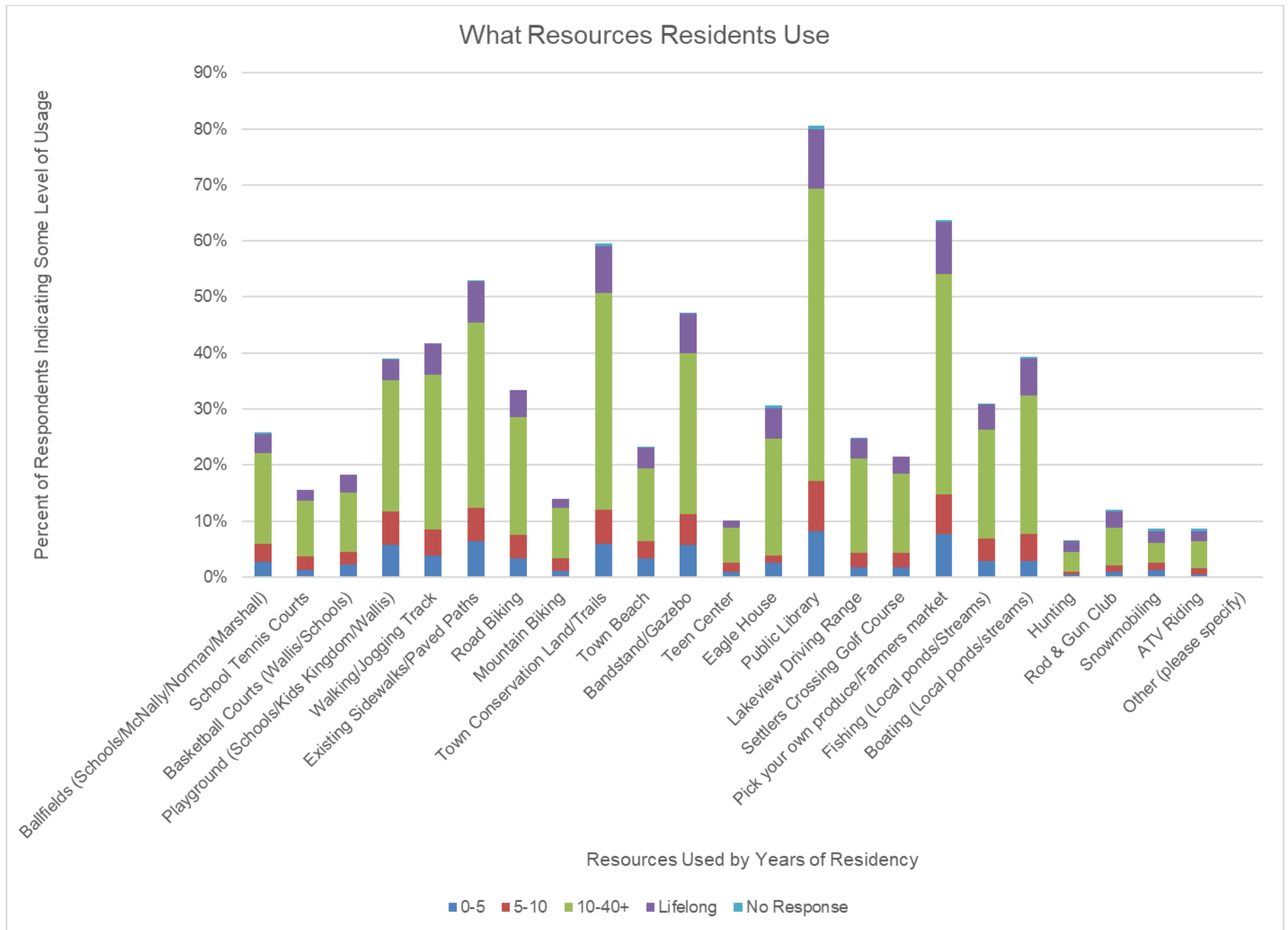


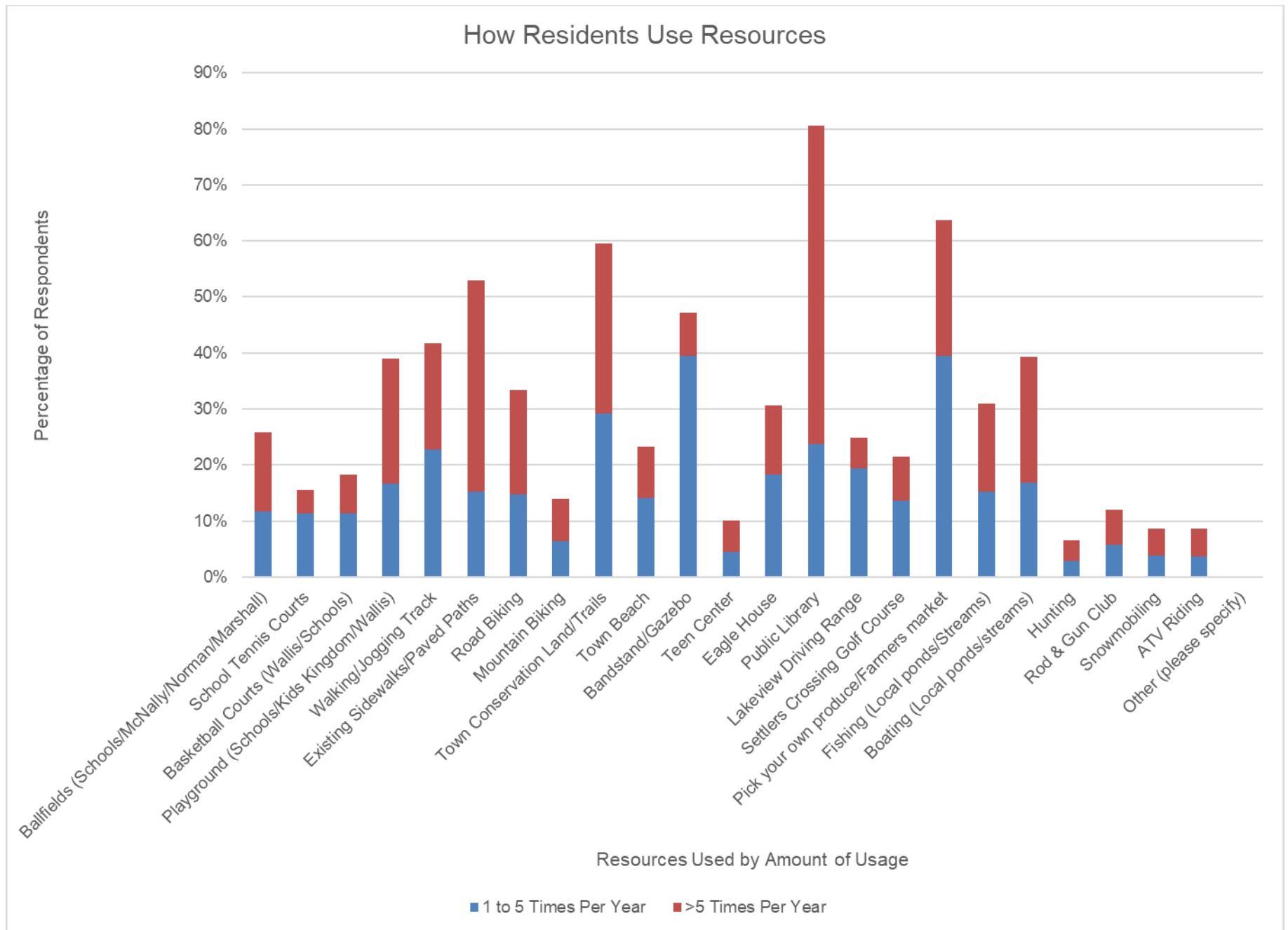












APPENDIX 6: 2017 ASSESSOR'S ANNUAL REPORT

BOARD OF ASSESSORS

Fiscal 2017 Assessments and Revenues by Major Property Class

Property Class	Levy Percent	Valuation by Class	Tax Rate	Tax Levy
Residential	90.3771%	1,120,428,704	19.98	22,386,165
Commercial	5.0501%	62,607,199	19.98	1,250,892
Industrial	1.6232%	20,123,300	19.98	402,064
Personal Property	2.9496%	36,566,467	19.98	730,598
TOTALS	100.0000	1,239,725,670	19.98	24,769,719

Valuation and Tax History

Fiscal Year	Tax Rate	Total Valuation	Accounts	Tax Levy	Change (%)
2017	19.98	1,239,725,670	5,071	24,769,718.90	5.2944
2016	19.61	1,199,604,323	5,008	23,524,240.77	11.9993
2015	18.32	1,146,501,536	5,062	21,003,908.13	3.5383
2014	17.99	1,127,633,052	5,092	20,285,118.60	3.6765
2013	17.30	1,131,029,744	5,054	19,565,814.57	3.7154
2012	16.83	1,120,966,561	5,351	18,865,867.23	4.7707
2011	16.16	1,114,282,889	5,185	18,006,811.48	3.3253

Fiscal Year 2017 Abstract of Assessments

Property Class Code/Description	Accts	Class Valuation	Avg. Value
101 Residential Single Family	3,486	931,301,300	267,155
102 Residential Condominiums	431	91,998,100	213,453
012 - 043 Mixed Use Properties	35	26,157,661	747,361
104 Residential Two Family	88	22,894,300	260,163
105 Residential Three Family	7	1,694,000	242,000
Miscellaneous Residential	37	11,725,000	316,892
111 - 125 Apartments	9	12,212,200	1,356,911
130 - 132, 106 Vacant Land	500	29,509,300	59,019
300 - 393 Commercial	134	53,862,900	401,962
400 - 442 Industrial	30	20,063,300	668,777
501 - 508 Personal Property	223	36,566,467	163,975
600 - 821 Chapter 61, 61A, 61B	91	1,741,142	19,133
Exempt 900's	186	62,363,500	
TOTALS	5,257	1,302,089,170	

Assessor's Account for Exemptions and Abatements

Description	FY2017	FY2016	FY2015	Prior Years	Totals
Assessor's Overlay	140,934.60	140,212.29	207,330.39		
Overlay Deficits	-0-	-0-	-0-		
Charges to 6/30/2017	113,956.77	118,903.55	133,262.09		
Released to Surplus	-0-	-0-	-0-		
Total Balance	26,977.83	21,308.74	74,069.30	26,760.88	144,168.56

New Growth Revenue

Fiscal Year	Added Valuation	Tax Rate	New Revenues	Change (%)
2017	24,883,011	19.61	487,955	35.22
2016	19,697,681	18.32	360,856	37.48
2015	14,590,507	17.99	262,484	-11.79
2014	17,200,564	17.30	297,571	-7.55
2013	19,124,255	16.83	321,862	-28.17
2012	27,729,619	16.16	448,111	137.43
2011	13,291,045	14.20	188,732	44.98
2010	9,982,315	13.04	130,170	-5.78

Lunenburg Board of Assessors

Louis J. Franco, Chairman	Richard H. Letarte, Member	Rena Swezey., Member
Louise Paquette, Admin. Assessor	Harald Scheid, Regional Assessor	Rebecca A. Boucher, Regional Assessor

APPENDIX 7: LAND INVENTORY

Assessor Parcel ID	Acres	Open Space Owner	Open Space Manager	Open Space Type	Property Name	Level of Protection	CR/APR	CR/APR Holder	Zoning	Grants	Current Use	Public Access	Condition	Recreation Potential
162/052.0-0037-0000.0	22.4	Town of Lunenburg	Cemetery Commission	Town-Cemetery	North Cemetery	Limited			RA	n/a	Cemetery	Yes	Good	Walking, nature observation.
162/052.0-0034-0000.0	1.0	Town of Lunenburg	Cemetery Commission	Town-Cemetery	North Cemetery	Limited			RA	n/a	Cemetery facilities	Yes	Good	n/a
162/051.0-0026-0000.0	23.1	Town of Lunenburg	Cemetery Commission	Town-Cemetery	North Cemetery	Limited			RA	n/a	Cemetery. Open space/Conservation (swamp)	Yes	Good	n/a
162/090.0-0007-0000.0	6.0	Town of Lunenburg	Cemetery Commission	Town-Cemetery	South Cemetery	Limited			RB	n/a	Cemetery	Yes	Good	Walking, nature observation.
52.5 Town-Cemetery Total														
162/133.0-0001-0000.0	64.1	Town of Lunenburg	Conservation Commission	Town-ConsComm	Harris Conservation Area	Permanent			RB	State Self Help-31	Open space/conservation. Trails	Yes	Good	Passive outdoor recreation
162/038.0-0039-0000.0	3.6	Town of Lunenburg	Conservation Commission	Town-ConsComm	Brown (Northfield)	Permanent			O	State Self Help-32?	Open space/conservation	Yes	Good	Passive outdoor recreation
162/081.0-0009-0000.0	17.4	Town of Lunenburg	Conservation Commission	Town-ConsComm	Clark's Hill	Permanent			RB	State Self Help-26	Open space/conservation. Trails	Yes	Good	Passive outdoor recreation
162/063.0-0007-0000.0	313.1	Town of Lunenburg	Conservation Commission	Town-ConsComm	Cowdrey Nature Preserve	Permanent			RA	State Self Help-1, -18, -20, -24, -25	Open space/conservation	Yes	Good	Passive outdoor recreation
162/085.0-0001-0000.0	9.0	Town of Lunenburg	Conservation Commission	Town-ConsComm	Fairbanks Land	Permanent			O	n/a	Open space/conservation	Yes	Good	Passive outdoor recreation
162/078.0-0037-0000.0	0.5	Town of Lunenburg	Conservation Commission	Town-ConsComm	General Builders	Permanent			RA	n/a	Open space/conservation	Yes	Good	Passive outdoor recreation
162/078.0-0040-0000.0	0.9	Town of Lunenburg	Conservation Commission	Town-ConsComm	General Builders	Permanent			RA	n/a	Open space/conservation	Yes	Good	Passive outdoor recreation
162/073.0-0015-0000.0	34.2	Town of Lunenburg	Conservation Commission	Town-ConsComm	Hawes' Land	Permanent	CR	North County Land Trust	RA	n/a	Open space/conservation. Agriculture.	Yes	Good	Passive outdoor recreation
162/073.0-0016-0000.0	12.5	Town of Lunenburg	Conservation Commission	Town-ConsComm	Hawes' Land	Permanent	CR	North County Land Trust	RA	n/a	Open space/conservation. Agriculture.	Yes	Good	Passive outdoor recreation
162/078.0-0004-0000.0	14.4	Town of Lunenburg	Conservation Commission	Town-ConsComm	Hawes' Land	Permanent	CR	North County Land Trust	RA	n/a	Open space/conservation. Agriculture.	Yes	Good	Passive outdoor recreation
162/086.0-0006-0000.0	6.6	Town of Lunenburg	Conservation Commission	Town-ConsComm	Hayward Property	Permanent			O	n/a	Open space/conservation	Yes	Good	Passive outdoor recreation
162/038.0-0009-0000.0	6.1	Town of Lunenburg	Conservation Commission	Town-ConsComm	Hirsch Property	Permanent			RA	n/a	Open space/conservation. Trails. Access to Rayno.	Yes	Good	Passive outdoor recreation
162/045.0-0001-0000.0	65.7	Town of Lunenburg	Conservation Commission	Town-ConsComm	Hunting Hills	Permanent			O	State Self Help-19	Open space/conservation	Yes	Good	Passive outdoor recreation
162/045.0-0002-0000.0	47.3	Town of Lunenburg	Conservation Commission	Town-ConsComm	Hunting Hills	Permanent	CR	MA DFG	O	State Self Help-34	Open space/conservation. Trails. Hunting.	Yes	Good	Passive outdoor recreation
162/046.0-0015-0000.0	6.7	Town of Lunenburg	Conservation Commission	Town-ConsComm	Hunting Hills	Permanent	CR	MA DFG	O	State Self Help-34	Open space/conservation. Trails. Hunting.	Yes	Good	Passive outdoor recreation
162/108.0-0041-0000.0	1.3	Town of Lunenburg	Conservation Commission	Town-ConsComm	Kuiju Land	Permanent			RB	n/a	Open space/conservation	Yes	Good	Passive outdoor recreation
162/013.0-0002-0000.0	280.4	Town of Lunenburg	Conservation Commission	Town-ConsComm	Large Town Forest	Permanent			O	State Self Help-5, -7, -8, -9, -13, -21	Open space/conservation. Trails	Yes	Good	Passive outdoor recreation
162/088.0-0031-0000.0	8.1	Town of Lunenburg	Conservation Commission	Town-ConsComm	Oliver Lot	Permanent			RA	n/a	Needs investigation	Yes	Good	Passive outdoor recreation
162/086.0-0005-0000.0	4.8	Town of Lunenburg	Conservation Commission	Town-ConsComm	Percifull Property	Permanent			O	n/a	Open space/conservation	Yes	Good	Passive outdoor recreation
162/095.0-0015-0000.0	67.8	Town of Lunenburg	Conservation Commission	Town-ConsComm	Laurel Bank	Permanent			RA	State Self Help-33	Open space/conservation. Trails. Agriculture.	Yes	Good	Passive outdoor recreation
162/068.0-0010-0000.0	24.1	Town of Lunenburg	Conservation Commission	Town-ConsComm	Proctor Park	Permanent			O	State Self Help-30	Open space/conservation. Trails	Yes	Good	Passive outdoor recreation
162/053.0-0001-0000.0	57.8	Town of Lunenburg	Conservation Commission	Town-ConsComm	Rayno Land	Permanent			RA	State Self Help-27	Open space/conservation. Trails	Yes	Good	Passive outdoor recreation
162/107.0-0021-0000.0	67.5	Town of Lunenburg	Conservation Commission	Town-ConsComm	Robb's Hill	Permanent			O	State Self Help-23	Open space/conservation. Trails	Yes	Good	Passive outdoor recreation
162/123.0-0008-0000.0	61.8	Town of Lunenburg	Conservation Commission	Town-ConsComm	Robb's Hill	Permanent			O	n/a	Open space/conservation. Trails	Yes	Good	Passive outdoor recreation
162/097.0-0028-0000.0	2.0	Town of Lunenburg	Conservation Commission	Town-ConsComm	Rodrigues Property	Permanent			RA	n/a	Open space/conservation	Yes	Good	Passive outdoor recreation
162/028.0-0009-0000.0	43.0	Town of Lunenburg	Conservation Commission	Town-ConsComm	Small Town Forest	Permanent			RA	State Self Help-5	Open space/conservation	Yes	Good	Passive outdoor recreation
162/044.0-0001-0000.0	252.5	Town of Lunenburg	Conservation Commission	Town-ConsComm	Small Town Forest	Permanent			O	State Self Help-2, -3, -4, -6, -17, -28	Open space/conservation	Yes	Good	Passive outdoor recreation
162/003.0-0002-0000.0	36.9	Town of Lunenburg	Conservation Commission	Town-ConsComm	NW Town Forest	Permanent			O	n/a	Open space/conservation.	Yes	Good	Passive outdoor recreation
162/004.0-0001-0000.0	165.9	Town of Lunenburg	Conservation Commission	Town-ConsComm	NW Town Forest	Permanent			O	State Self Help-10, -11, -12, -16	Open space/conservation.	Yes	Good	Passive outdoor recreation
162/008.0-0010-0000.0	38.8	Town of Lunenburg	Conservation Commission	Town-ConsComm	NW Town Forest	Permanent			O	n/a	Open space/conservation.	Yes	Good	Passive outdoor recreation
162/016.0-0011-0000.0	15.3	Town of Lunenburg	Conservation Commission	Town-ConsComm	NW Town Forest	Permanent			O	n/a	Open space/conservation.	Yes	Good	Passive outdoor recreation
162/098.0-0025-0000.0	0.7	Town of Lunenburg	Conservation Commission	Town-ConsComm	Whalom Waterfront	Permanent			C	n/a	Paved waterfront. Benches. Pier.	Yes	Good	Passive outdoor recreation
162/089.0-0010-0000.0	11.4	Town of Lunenburg	Conservation Commission	Town-ConsComm	White Rabbit Swamp	Permanent			RB	n/a	Open space/conservation	Yes	Good	Passive outdoor recreation
162/021.0-0017-0001.0	168.3	Town of Lunenburg	Conservation Commission	Town-ConsComm	William H. & Sandra B. Lane Property at L	Permanent			O	State LAND Grant #36	Open space/conservation. Trails.	Yes	Good	Passive outdoor recreation
162/100.0-0007-0000.0	8.9	Town of Lunenburg	Conservation Commission	Town-ConsComm	Hopkirk Property	Permanent			RB	n/a	Open space/conservation. Adjoins Woodruff.	Yes	Good	Passive outdoor recreation
162/134.0-0043-0000.0	4.1	Town of Lunenburg	Parks Commission	Town-ConsComm	Fitzgerald Field at Ben Normand Park	Permanent			RB	State Self Help-22	Baseball/softball	Yes	Good	Baseball/softball
1,923.6 Town-ConsComm Total														
162/033.0-0019-0000.0	6.7	Town of Lunenburg	Department of Public Works	Town-DPW	DPW Complex	Limited			RA	n/a	DPW Complex	Limited	Good	n/a
162/109.0-0018-0000.0	0.4	Town of Lunenburg	Department of Public Works	Town-DPW	Heikkila Property	Limited			RB	n/a	Roadside turnout. "Highway purposes"	Limited	Good	n/a
162/071.0-0051-0000.0	0.5	Town of Lunenburg	Department of Public Works	Town-DPW	Old DPW Facility	Limited			RA	n/a	Parks Commission storage facility	Limited	Fair	n/a
162/080.0-0044-0000.0	0.2	Town of Lunenburg	Department of Public Works	Town-DPW	Pump Station	Limited			RB	n/a	DPW facilities	Limited	Good	n/a
162/115.0-0016-0000.0	42.0	Town of Lunenburg	Department of Public Works	Town-DPW	Young Street Dump	Limited			C	n/a	Former dump. Gravel pit. Trails.	Limited	Good	Passive outdoor recreation
49.7 Town-DPW Total														
162/060.0-0068-0000.0	1.8	Town of Lunenburg	Board of Selectmen	Town-GenMun	Eagle House/Connor Laurens PG	Limited			RA	n/a	Senior center. Playground. Bocce	Yes	Good	Senior center, Playground, Bocce.
162/111.0-0020-0000.0	0.9	Town of Lunenburg	Board of Selectmen	Town-GenMun	Kilburn & Goodrich Tract	Limited			RB	n/a	Open space/conservation.	Yes	Good	Passive outdoor recreation
162/135.0-0019-0000.0	1.0	Town of Lunenburg	Board of Selectmen	Town-GenMun	Lake Shirley (Dam)	Limited			O	n/a	Dam	Limited	Good	n/a
162/136.0-0006-0000.0	0.3	Town of Lunenburg	Board of Selectmen	Town-GenMun	Lake Shirley (Parmenter Street)	Limited			RA	n/a	Open space/conservation. Lake access.	Yes	Good	Passive outdoor recreation
162/119.0-0008-0000.0	2.4	Town of Lunenburg	Board of Selectmen	Town-GenMun	Massapoag Swamp	Limited			RB	n/a	Open space/conservation	Limited	Good	Passive outdoor recreation
162/071.0-0076-0000.0	2.4	Town of Lunenburg	Board of Selectmen	Town-GenMun	Old Primary School	Limited			RA	n/a	Old primary school.	Limited	Poor	n/a
162/094.0-0026-0000.0	41.0	Town of Lunenburg	Board of Selectmen	Town-GenMun	Pleasant Street (Twin City)	Limited			RA	n/a	Agriculture	Yes	Good	Passive outdoor recreation
162/071.0-0074-0000.0	1.1	Town of Lunenburg	Board of Selectmen	Town-GenMun	Ritter Building	Limited			RA	n/a	Municipal offices	Yes	Good	Outdoor space for Farmer's Market
162/072.0-0003-0000.0	0.5	Town of Lunenburg	Board of Selectmen	Town-GenMun	Sunnyhill Road Tract	Limited			RA	n/a	Open space/conservation	Yes	Good	Passive outdoor recreation
162/015.0-0002-0000.0	0.7	Town of Lunenburg	Board of Selectmen	Town-GenMun	Tax Title	Limited			O	n/a	Vacant	n/a	Unknown	Needs assessment
162/024.0-0143-0000.0	0.3	Town of Lunenburg	Board of Selectmen	Town-GenMun	Tax Title	Limited			RA	n/a	Vacant	n/a	Unknown	Needs assessment
162/029.0-0067-0000.0	0.3	Town of Lunenburg	Board of Selectmen	Town-GenMun	Tax Title	Limited			RA	n/a	Vacant	n/a	Unknown	Needs assessment
162/029.0-0092-0000.0	0.3	Town of Lunenburg	Board of Selectmen	Town-GenMun	Tax Title	Limited			RA	n/a	Vacant	n/a	Unknown	Needs assessment
162/052.0-0015-0000.0	3.7	Town of Lunenburg	Board of Selectmen	Town-GenMun	Tax Title	Limited			RA	n/a	Vacant	n/a	Unknown	Needs assessment
162/061.0-0028-0000.0	0.6	Town of Lunenburg	Board of Selectmen	Town-GenMun	Tax Title	Limited			C	n/a	Vacant	n/a	Unknown	Needs assessment
162/061.0-0039-0000.0	3.6	Town of Lunenburg	Board of Selectmen	Town-GenMun	Tax Title	Limited			RA	n/a	Vacant	n/a	Unknown	Needs assessment
162/078.0-0013-0000.0	3.5	Town of Lunenburg	Board of Selectmen	Town-GenMun	Tax Title	Limited			RA	n/a	Vacant	n/a	Unknown	Needs assessment
162/078.0-0039-0000.0	0.5	Town of Lunenburg	Board of Selectmen	Town-GenMun	Tax Title	Limited			RA	n/a	Vacant	n/a	Unknown	Needs assessment
162/080.0-0034-0000.0	0.4	Town of Lunenburg	Board of Selectmen	Town-GenMun	Tax Title	Limited			RA	n/a	Vacant	n/a	Unknown	Needs assessment
162/098.0-0128-0000.0	0.2	Town of Lunenburg	Board of Selectmen	Town-GenMun	Tax Title	Limited			RA	n/a	Vacant	n/a	Unknown	Needs assessment
162/115.0-0037-0000.0	0.4	Town of Lunenburg	Board of Selectmen	Town-GenMun	Tax Title	Limited			RA	n/a	Vacant	n/a	Unknown	Needs assessment
162/122.0-0007-0000.0	0.1	Town of Lunenburg	Board of Selectmen	Town-GenMun	Tax Title	Limited			RA	n/a	Vacant	n/a	Unknown	Needs assessment
162/137.0-0006-0000.0	0.3	Town of Lunenburg	Board of Selectmen	Town-GenMun	Tax Title	Limited			RB	n/a	Vacant	n/a	Unknown	Needs assessment
162/071.0-0038-0000.0	0.5	Town of Lunenburg	Board of Selectmen	Town-GenMun	Town Common	Limited			RA	n/a	Common. Gazebo.	Yes	Good	Outdoor space for gatherings

Assessor Parcel ID	Acres	Open Space Owner	Open Space Manager	Open Space Type	Property Name	Level of Protection	CR/APR	CR/APR Holder	Zoning	Grants	Current Use	Public Access	Condition	Recreation Potential
162/060.0-0005-0000.0	0.1	Town of Lunenburg	Board of Selectmen	Town-GenMun	Town Hall	Limited			C n/a		Town offices	Yes	Good	Large room for events.
162/094.0-0008-0000.0	66.6	Town of Lunenburg	Board of Selectmen	Town-GenMun	West Street Property	Limited			RA n/a		Open space/conservation	Yes	Good	Passive outdoor recreation
162/080.0-0021-0000.0	111.4	Town of Lunenburg	Board of Selectmen	Town-GenMun	Woodruff Property	Limited			RA n/a		Agriculture	Yes	Good	Passive outdoor recreation
162/015.0-0009-0000.0	0.3	Town of Lunenburg	Board of Selectmen	Town-GenMun		Limited			O n/a		Vacant	n/a	Unknown	Needs assessment
162/071.0-0052-0000.0	0.3	Town of Lunenburg	Board of Selectmen	Town-GenMun		Limited			RA n/a		Vacant	n/a	Unknown	Needs assessment
162/078.0-0064-0000.0	0.4	Town of Lunenburg	Board of Selectmen	Town-GenMun		Limited			RA n/a		Vacant	n/a	Unknown	Needs assessment
162/098.0-0004-0000.0	0.2	Town of Lunenburg	Board of Selectmen	Town-GenMun		Limited			C n/a		Vacant	n/a	Unknown	Needs assessment
162/098.0-0008-0000.0	0.4	Town of Lunenburg	Board of Selectmen	Town-GenMun		Limited			C n/a		Vacant	n/a	Unknown	Needs assessment
162/112.0-0040-0000.0	0.3	Town of Lunenburg	Board of Selectmen	Town-GenMun		Limited			RA n/a		Vacant	n/a	Unknown	Needs assessment
162/118.0-0013-0000.0	0.1	Town of Lunenburg	Board of Selectmen	Town-GenMun		Limited			RB n/a		Vacant	n/a	Unknown	Needs assessment
162/134.0-0016-0000.0	0.0	Town of Lunenburg	Board of Selectmen	Town-GenMun		Limited			RA n/a		Vacant	n/a	Unknown	Needs assessment
162/134.0-0018-0000.0	0.3	Town of Lunenburg	Board of Selectmen	Town-GenMun		Limited			RA n/a		Vacant	n/a	Unknown	Needs assessment
162/134.0-0024-0000.0	0.5	Town of Lunenburg	Board of Selectmen	Town-GenMun		Limited			RA n/a		Vacant	n/a	Unknown	Needs assessment
162/137.0-0012-0000.0	3.3	Town of Lunenburg	Board of Selectmen	Town-GenMun		Limited			RA n/a		Vacant	n/a	Unknown	Needs assessment
162/138.0-0002-0000.0	3.6	Town of Lunenburg	Board of Selectmen	Town-GenMun		Limited			RB n/a		Vacant	n/a	Unknown	Needs assessment
162/050.0-0010-0000.0	6.1	Town of Lunenburg	Board of Selectmen	Town-GenMun	Barney's Dairy School Lot	Limited			RA n/a		Open space	Yes	Good	Passive outdoor recreation
162/060.0-0069-0000.0	0.8	Town of Lunenburg	Boys & Girls Club of Lunenburg	Town-GenMun	Boys & Girls Club	Limited			RA n/a		Community center. Basketball.	Fee	Good	Community center, half-court basketball.
162/043.0-0025-0000.0	6.0	Town of Lunenburg	Conservation Commission	Town-GenMun	Small Town Forest	Limited			O n/a		Open space	Yes	Good	Passive outdoor recreation
162/004.0-0002-0000.0	3.2	Town of Lunenburg	Conservation Commission	Town-GenMun	NW Town Forest	Limited			O n/a		Open space/conservation.	Yes	Good	Passive outdoor recreation
162/089.0-0008-0000.0	29.3	Town of Lunenburg	Conservation Commission	Town-GenMun	White Rabbit Swamp	Limited			RB n/a		Open space/conservation	Yes	Good	Passive outdoor recreation
162/059.0-0026-0000.0	4.7	Town of Lunenburg	Police/Fire Dept.	Town-GenMun	Public Safety Complex	Limited			C n/a		Public Safety Complex	Limited	Good	n/a
162/060.0-0054-0000.0	1.8	Town of Lunenburg	Public Library	Town-GenMun	Public Library	Limited			RA n/a		Public library. Gardens.	Yes	Good	Library, gardens and outdoor space. Public rooms for events.
306.6				Town-GenMun Total										
162/113.0-0026-0000.0	2.4	Town of Lunenburg	Parks Commission	Town-Parks	Brian McNally Field	Limited			RA n/a		Baseball	Yes	Good	Baseball
162/060.0-0018-0000.0	27.8	Town of Lunenburg	Parks Commission	Town-Parks	Marshall Park	Limited			RA n/a		Baseball/softball. Basketball. Playground. Trails. Pond	Yes	Good	Baseball/softball. Basketball. Playground. Trails. Pond
162/098.0-0022-0000.0	0.2	Town of Lunenburg	Parks Commission	Town-Parks	Town Beach	Limited			RA n/a		Beach. Rec Center.	Fee	Good	Beach. Rec Center.
162/060.0-0051-0000.0	0.3	Town of Lunenburg	Parks Commission	Town-Parks	Veteran's Memorial Park	Limited			RA n/a		Memorial park	Yes	Good	Walking.
162/098.0-0074-0000.0	2.1	Town of Lunenburg	Parks Commission	Town-Parks	Wallis Park	Limited			RA n/a		Basketball courts. Playground.	Yes	Good	Basketball courts. Playground.
32.8				Town-Parks Total										
162/062.0-0015-0000.0	16.3	Town of Lunenburg	School District	Town-School	Lunenburg Primary	Limited			RA n/a		Soccer fields. Playground. Gymnasium. Library.	Yes	Good	Soccer fields. Playground. Gymnasium. Library.
162/060.0-0055-0000.0	51.9	Town of Lunenburg	School District	Town-School	Schools-Main Campus	Limited			RA n/a		Gymnasiums. Playing fields. Tennis. Basketball. Track	Yes	Good	Gymnasiums. Playing fields. Tennis. Basketball. Track. Library
68.2				Town-School Total										
2,433.5				Grand Total										
							CR/APR:		Zoning District					
							CR = Conservation Restriction		RA = Residence A					
							APR = Agricultural Preservation Restriction		RB = Residence B					
									O = Outlying					
									C = Commercial					

Assessor Parcel ID	Acres	Open Space Owner	Open Space Manager	Open Space Type	Property Name	Level of Protection	Chapter 61	CR/APR	CR/APR Holder	Zoning	OSDesc
162/001.0-0001-0000.0	36.0	MA DCR	MA DCR	State Conservation Land	Willard Brook State Forest	Protected				O	Open space/conservation
162/001.0-0002-0000.0	90.7	MA DCR	MA DCR	State Conservation Land	Willard Brook State Forest	Protected				O	Open space/conservation
162/065.0-0030-0000.0	2.2	MA DFG	MA DFG	State Conservation Land	Mulpus Brook WMA	Protected				C	Open space/conservation. Hunting.
128.9 State Conservation Land Total											
162/071.0-0077-0000.0	0.5	Lunenburg Historical Society	Lunenburg Historical Society	Private Recreation	Lunenburg Historical Society	Limited				RA	Historical museum and archives
162/109.0-0019-0000.0	13.8	Lunenburg Sportsman's Club	Lunenburg Sportsman's Club	Private Recreation	Lunenburg Sportsman's Club					RB	Ranges. Target practice.
162/141.0-0001-0000.0	20.8	N. Leominster Rod & Gun Club	N. Leominster Rod & Gun Club	Private Recreation	N. Leominster Rod & Gun Club	Limited	61B			RB	Range. Target practice
162/141.0-0002-0000.0	13.4	N. Leominster Rod & Gun Club	N. Leominster Rod & Gun Club	Private Recreation	N. Leominster Rod & Gun Club	Limited	61B			RB	Range. Target practice
162/141.0-0003-0000.0	72.7	N. Leominster Rod & Gun Club	N. Leominster Rod & Gun Club	Private Recreation	N. Leominster Rod & Gun Club	Limited				RB	Range. Target practice
162/023.0-0024-0000.0	46.1	Private Landowner	Private Landowner	Private Recreation	Hickory Hills Landowners, Inc.	Limited	61B			O	Open space/conservation. Trails
162/037.0-0010-0000.0	29.1	Private Landowner	Private Landowner	Private Recreation	Settlers Crossing Golf Course	Limited	61B			R	9-hole golf course
162/037.0-0013-0000.0	209.7	Private Landowner	Private Landowner	Private Recreation	Settlers Crossing Golf Course	Limited	61B			R	9-hole golf course
162/037.0-0014-0000.0	2.6	Private Landowner	Private Landowner	Private Recreation	Settlers Crossing Golf Course	Limited				RA	9-hole golf course
162/040.0-0019-0000.0	8.8	Private Landowner	Private Landowner	Private Recreation	Northfield Pool					RA	Pool. Basketball. Tennis. Playground.
162/062.0-0005-0000.0	0.9	Private Landowner	Private Landowner	Private Recreation	Drawbridge Puppet Theatre					RC	Puppet theatre
162/078.0-0069-0000.0	25.3	Private Landowner	Private Landowner	Private Recreation	Twin City Baptist					RA	Gymnasium. Playing fields
162/093.0-0034-0000.0	8.6	Private Landowner	Private Landowner	Private Recreation	Lakeview Driving Range					RA	Golf driving range. Batting cages. Mini-golf
162/098.0-0024-0000.0	2.2	Private Landowner	Private Landowner	Private Recreation	Emerald Place Beach					C	Homeowners Assoc. Beach
162/134.0-0004-0000.0	9.3	Private Landowner	Private Landowner	Private Recreation	Shady Point Campground	Limited	61B			C	Campground. Boat launch.
464.0 Private Recreation Total											
162/057.0-0033-0000.0	1.0	Lunenburg Water District	Lunenburg Water District	LWD	Chase Road Tower	Limited				RA	Public water supply
162/073.0-0004-0000.0	7.1	Lunenburg Water District	Lunenburg Water District	LWD	Szocik Property	Limited				LB	Public water supply administration
162/079.0-0019-0000.0	0.7	Lunenburg Water District	Lunenburg Water District	LWD	Sunnyhill Water Tower	Limited				RB	Public water supply
162/110.0-0003-0000.0	131.7	Lunenburg Water District	Lunenburg Water District	LWD	LWD Primary Wellfield	Limited				RB	Public water supply wellfield.
162/113.0-0022-0000.0	0.9	Lunenburg Water District	Lunenburg Water District	LWD	LWD Offices	Limited				RA	Public water supply administration
162/144.0-0001-0000.0	17.5	Lunenburg Water District	Lunenburg Water District	LWD	Keating Well	Limited				OI	Public water supply
158.9 LWD Total											
162/149.0-0002-0000.0	31.4	Lancaster Land Trust	Lancaster Land Trust	Land Trust	Turner Pond Conservation Area	Protected				OI	Open space/conservation
162/039.0-0039-0000.0	21.5	North County Land Trust	North County Land Trust	Land Trust	Peabody Conservation Area	Protected		CR	Town of Lunenburg		Trails
52.8 Land Trust Total											
162/064.0-0003-0000.0	20.5	Private Landowner	Private Landowner	CR	Brockelman CR	Protected	61B	CR	The Trustees of Reservations	O	
162/065.0-0021-0000.0	18.1	Private Landowner	Private Landowner	CR	Brockelman CR	Protected	61B	CR	The Trustees of Reservations	O	
162/106.0-0018-0000.0	28.1	Private Landowner	Private Landowner	CR	Robbs Hill	Protected	61	CR	Town of Shirley Cons Comm	O	Open space/conservation. Trails
66.7 CR Total											
162/014.0-0014-0000.0	39.3	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			O	
162/020.0-0019-0000.0	13.3	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			O	
162/021.0-0011-0000.0	100.0	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			O	
162/021.0-0017-0000.0	34.2	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			O	
162/032.0-0013-0000.0	5.5	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			O	
162/035.0-0017-0000.0	9.4	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			O	
162/039.0-0022-0000.0	8.0	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			RA	
162/040.0-0016-0000.0	37.1	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			RA	
162/047.0-0014-0000.0	13.7	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			O	
162/058.0-0046-0000.0	9.6	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			RA	
162/059.0-0032-0000.0	23.1	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			LB	
162/061.0-0031-0000.0	18.0	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			RA	
162/061.0-0033-0000.0	12.4	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			RA	
162/065.0-0014-0000.0	6.7	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			O	
162/066.0-0002-0000.0	22.7	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			O	
162/074.0-0041-0000.0	2.8	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			C	
162/074.0-0045-0000.0	3.9	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			C	
162/086.0-0003-0000.0	0.7	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			O	
162/087.0-0026-0000.0	12.3	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			O	
162/092.0-0035-0000.0	30.0	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			RB	
162/099.0-0001-0000.0	17.4	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			RB	
162/102.0-0006-0000.0	5.6	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			RB	
162/104.0-0020-0000.0	33.6	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			O	
162/114.0-0065-0000.0	20.9	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			RA	
162/119.0-0004-0000.0	91.9	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			RB	
162/120.0-0006-0000.0	8.3	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			RB	
162/120.0-0019-0000.0	5.8	Private Landowner	Private Landowner	Chapter 61B		Limited	61B			RB	
586.5 Chapter 61B Total											
162/016.0-0001-0000.0	66.5	Private Landowner	Private Landowner	Chapter 61A		Limited	61A			O	
162/033.0-0006-0000.0	19.9	Private Landowner	Private Landowner	Chapter 61A		Limited	61A			RA	

APPENDIX 8: MAPS

The following maps were produced to support the open space and recreation planning effort. Data used in this analysis was the latest available from the Massachusetts Bureau of Geographic Information (MassGIS) and other public resource agencies. These maps are for planning purposes only; these maps should not be used for parcel-specific regulatory review and should never substitute site-specific assessments by qualified professionals.

The maps included are described below, along with special notations about data displayed as may be required or necessary.

A8.1. Map of Lunenburg, 1830

This is the map of Lunenburg surveyed by Cyrus Kilburn in 1830. Map reproduction courtesy of the Norman B. Leventhal Map & Education Center at the Boston Public Library.

A8.2. Map of Lunenburg, 1870

From Atlas of Worcester County, Massachusetts, F.W. Beers & Co., 1870.

A8.3. Agriculturally Significant Soils

This Soil Survey Geographic (SSURGO) data base was produced by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies for the Soil Survey of Worcester County (Northeast Unit), Massachusetts. Enlargement of these maps to scales greater than that at which they were originally mapped can cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soil that could have been shown at a larger scale. The depicted soil boundaries and interpretations derived from them do not eliminate the need of onsite sampling, testing, and detailed study of specific sites for intensive uses. Thus, this map and its interpretations are intended for planning purposes only. Digital data files are periodically updated. Files are dated, and users are responsible for obtaining the latest version of the data.

A8.4. Drinking Water Resources

Wellhead Protection Areas (Zone II, IWPA) are important for protecting the recharge area around public water supply (PWS) groundwater sources.

As stated in 310 CMR 22.02, a **Zone II** is: "That area of an aquifer which contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated (180 days of pumping at safe yield, with no recharge from precipitation). It is bounded by the groundwater divides which result from pumping the well and by the contact of the aquifer with less permeable materials such as till or bedrock. In some cases, streams or lakes may act as recharge boundaries. In all cases, Zone IIs shall extend up gradient to its point of intersection

with prevailing hydrogeologic boundaries (a groundwater flow divide, a contact with till or bedrock, or a recharge boundary)."

In the absence of an approved Zone II, DEP has adopted the **Interim Wellhead Protection Area (IWPA)** as the primary, protected recharge area for PWS groundwater sources. The minimum IWPA radius is 400 feet, the maximum (default) radius reached at 100,000 GPD (70 GPM) is 2,640 feet (1/2 mile).

Non-Potential Drinking Water Source Areas (NPDWSA) are regulatory in nature layer, representing one of many considerations used in determining the standards to which ground water must be cleaned in the event of a release of oil or hazardous material.

A8.5. Environmental Hazards

The Massachusetts Department of Environmental Protection (MassDEP) maintains a series of data pertaining to environmental hazards.

The **Solid Waste Diversion and Disposal** datalayer tracks the locations of land disposal of solid waste.

The **Ground Water Discharge Permits** datalayer (formerly known as Groundwater Discharge Points) is a statewide point dataset containing approximate locations of permitted discharges to groundwater.

Underground Storage Tanks datalayer is a statewide point dataset containing the locations of facilities having one or more underground storage tanks.

Tier Classified Oil and/or Hazardous Material Sites (MGL c. 21E) is a statewide point dataset containing the approximate location of oil and/or hazardous material disposal sites that have been (1) reported and (2) Tier Classified under M.G.L. Chapter 21E and the Massachusetts Contingency Plan (MCP).

Activity and Use Limitations (AUL) is a statewide point dataset containing the approximate location of oil or hazardous material release or disposal sites where an Activity and Use Limitation has been filed.

A8.6. Environmental Justice

Environmental Justice neighborhoods are the focus of the state's Executive Office of Energy and Environmental Affairs' (EEA) Environmental Justice (EJ) Policy, which establishes EJ as an integral consideration in all EEA programs, to the extent applicable and allowable by law. Polygons in the 2010 Environmental Justice (EJ) Populations layer represent areas across the state with high minority, non-English speaking, and/or low-income populations. Data in this layer were compiled for Census 2010 block groups from the 2010 census redistricting tables and from the American Community Survey (ACS) 2006-2010 5 year estimates tables.

A8.7. FEMA Flood Zones

These data represent a subset of the data available on the paper Flood Insurance Rate Maps (FIRM) as provided by the Federal Emergency Management Agency (FEMA). The Q3 flood data were developed to support floodplain management and planning activities but do not replace the official paper FIRMs. These data are not suitable for engineering applications or site work nor can the data be used to determine absolute delineation of flood boundaries. Instead the data should be used to portray zones of uncertainty and possible risks associated with flooding.

A8.8. Geologic Features

This data layer is part of a comprehensive study by the U.S. Geological Survey to produce a statewide digital map of the surficial geology at a 1:24,000-scale. This compilation of surficial geologic materials defines the areas of exposed bedrock, and the boundaries between glacial till, glacial stratified deposits, and overlying early-postglacial and postglacial deposits.

Till and Bedrock - areas of Thin Till, Thick Till, End Moraine Deposits, Bedrock Outcrops, and Areas of Abundant Outcrop and Shallow Bedrock. Thin till and bedrock outcrops polygons are mutually exclusive; thick till polygons overlie areas of thin till, and abundant outcrop/shallow bedrock polygons overlie areas of thin till and bedrock outcrops.

Stratified Deposits - areas of glacial stratified deposits, categorized as Coarse, Glaciolacustrine Fine, and Glaciomarine Fine.

Postglacial - areas of Swamp Deposits, Floodplain Alluvium, Beach and Dune Deposits, and Artificial Fill. Swamp polygons may overlie alluvium polygons; artificial fill polygons may overlie areas of swamp or alluvium.

A8.9. Historic Resources

The Massachusetts Historical Commission (MHC) Historic Inventory datalayers displays historic resources included in the Massachusetts Cultural Resource Information System (MACRIS) maintained by the MHC. The act of checking this MACRIS Maps datalayer, MHC's on-line MACRIS database, or any other electronic data or record, does not substitute for compliance with applicable local, state, or federal laws and regulations.

The **Inventory Points** layer contains the locations of buildings, burial grounds, structures, and objects (e.g. statues, monuments, walls). The points layer is symbolized to indicate the most common historic designation types: 1) National Register of Historic Places, 2) local historic district, 3) both National Register and local historic district, 4) Preservation Restriction, and 5) inventoried but not designated with one of the previous designations.

The **Inventory Areas** polygon layer includes areas and districts symbolized in MACRIS in a similar manner to Inventory Points.

Please note that new and updated information is added to MHC files daily, and that there may be considerable lag time before this information is reflected in MACRIS or in MACRIS Maps.

A.8.10. Land Inventory

Produced using FY'2017 MassGIS' standardized "Level 3" assessors' parcel mapping data set contains property (land lot) boundaries and database information from Lunenburg's Assessor.

This data was cross-referenced against MassGIS's Protected and Recreational OpenSpace datalayer that contains the boundaries of conservation lands and outdoor recreational facilities in Massachusetts.

The Open Space Committee also sought the input of each pertinent municipal board and department to assure the data depicted here is as accurate as possible.

A.8.11. MRPC Formal Trail Inventory

The Montachusett Regional Planning Commission completed an inventory of trails on publicly accessible lands, located by GPS, for towns throughout its region in 2018.

A.8.12. Sewer Service Area

Approved sewer service areas as of May 5, 2018.

A.8.13. Significant Wildlife Habitats

The Massachusetts Natural Heritage & Endangered Species Program (NHESP) and The Nature Conservancy's Massachusetts Program developed BioMap2 in 2010 as a conservation plan to protect the state's biodiversity. BioMap2 is designed to guide strategic biodiversity conservation in Massachusetts over the next decade by focusing land protection and stewardship on the areas that are most critical for ensuring the long-term persistence of rare and other native species and their habitats, exemplary natural communities, and a diversity of ecosystems.

BioMap2 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.

BioMap2 Critical Natural Landscape was created to identify and prioritize 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.

The **Priority Habitats of Rare Species** datalayer contains polygons representing the geographic extent of Habitat of state-listed rare species in Massachusetts based on observations

documented within the last 25 years in the database of the NHESP. Priority Habitat polygons are the filing trigger for project proponents, municipalities, and all others for determining whether or not a proposed project or activity must be reviewed by the NHESP for compliance with the Massachusetts Endangered Species Act and its implementing regulations. Areas delineated as Priority Habitats can include wetlands, uplands, and marine habitats. The Priority Habitats presented here are part of the 14th Edition of the Massachusetts Natural Heritage Atlas, and are effective beginning August 1, 2017.

The **Estimated Habitats of Rare Wildlife** datalayer contains polygons that are a subset of the Priority Habitats of Rare Species and are for use with the Wetlands Protection Act regulations (310 CMR 10.00). They are based on occurrences of rare wetland wildlife observed within the last 25 years and documented in the NHESP database. They do not include those areas delineated as Priority Habitat for rare plants or for rare wildlife with strictly upland habitat requirements. The Estimated Habitats presented here are part of the 14th Edition of the Massachusetts Natural Heritage Atlas and are effective beginning August 1, 2017.

Vernal pools are temporary pools of water that provide habitat for distinctive plants and animals. This layer shows the locations of certified vernal pools. This contains points for all vernal pools that have been **certified** by the NHESP, and areas of **potential** vernal pools as identified by NHESP using aerial photographic interpretation. Potential vernal pools identified in this survey do not receive protection under the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00), or under any other state or federal wetlands protection laws.

The **Areas of Critical Environmental Concern (ACEC)** datalayers provide digital polygon and line boundaries for areas that have been designated ACECs by the Secretary of Energy and Environmental Affairs (EEA). ACECs are places in Massachusetts that receive special recognition because of the quality, uniqueness and significance of their natural and cultural resources. These areas are identified and nominated at the community level and are reviewed and designated by the state's EEA Secretary. ACEC designation creates a framework for local and regional stewardship of these critical resource areas and ecosystems. ACEC designation also requires stricter environmental review of certain kinds of proposed development under state jurisdiction within the ACEC boundaries. The ACEC Program is administered by the Department of Conservation and Recreation (DCR) on behalf of the Secretary of Environmental Affairs.

The Massachusetts Division of Fisheries and Wildlife has mapped **Coldwater Fisheries Resources (CFRs)**. CFRs are important habitat for a number of coldwater species, including trout. Coldwater species are typically more sensitive than other species to alterations to stream flow, water quality and temperature within their aquatic habitat. Identification of CFRs is based on fish samples collected annually by staff biologists and technicians. New streams are sampled and evaluated yearly.

A8.14. Unique & Scenic Resources

The **Scenic Landscapes** datalayer may be used as a state-wide overview of scenic areas as identified in the Massachusetts Landscape Inventory Project, 1982.

Scenic Roads are those that have been designated under Massachusetts General Laws Chapter 40, Section 15C by Town Meeting vote.

A8.15. Water Resources

MassGIS has produced a statewide digital datalayer of the approximately 2,300 **watershed sub-basins** as defined and used by the USGS Water Resources Division and the Mass Water Resources Commission. These sub-basins were aggregated together to make the 28 major basins that comprise all of Massachusetts. Lunenburg's sub-basins were aggregated by brook/river each is affiliated

The MassDEP **Hydrography** layer is an enhanced version of the older U.S. Geological survey 1:25,000 Hydrography datalayer. It represents hydrographic (water-related) features, including surface water (lakes, ponds, and reservoirs), rivers, and streams

MassDEP **Wetlands** layers provide a medium-scale representation of the wetland areas of the state by wetland type. The wetlands boundaries shown on this map have been determined by photographic interpretation. They do not represent, and should not be used as, wetlands delineations under the Massachusetts Wetlands Protection Act (M.G.L. c. 131 §40) and its regulations.

A8.16. Zoning

Current as of July 1, 2017.

A8.17. Action Plan Map

A8.18. Complete Streets Plan Prioritization Program Maps

LUNENBURG

Scale 1 1/2 inches to the mile

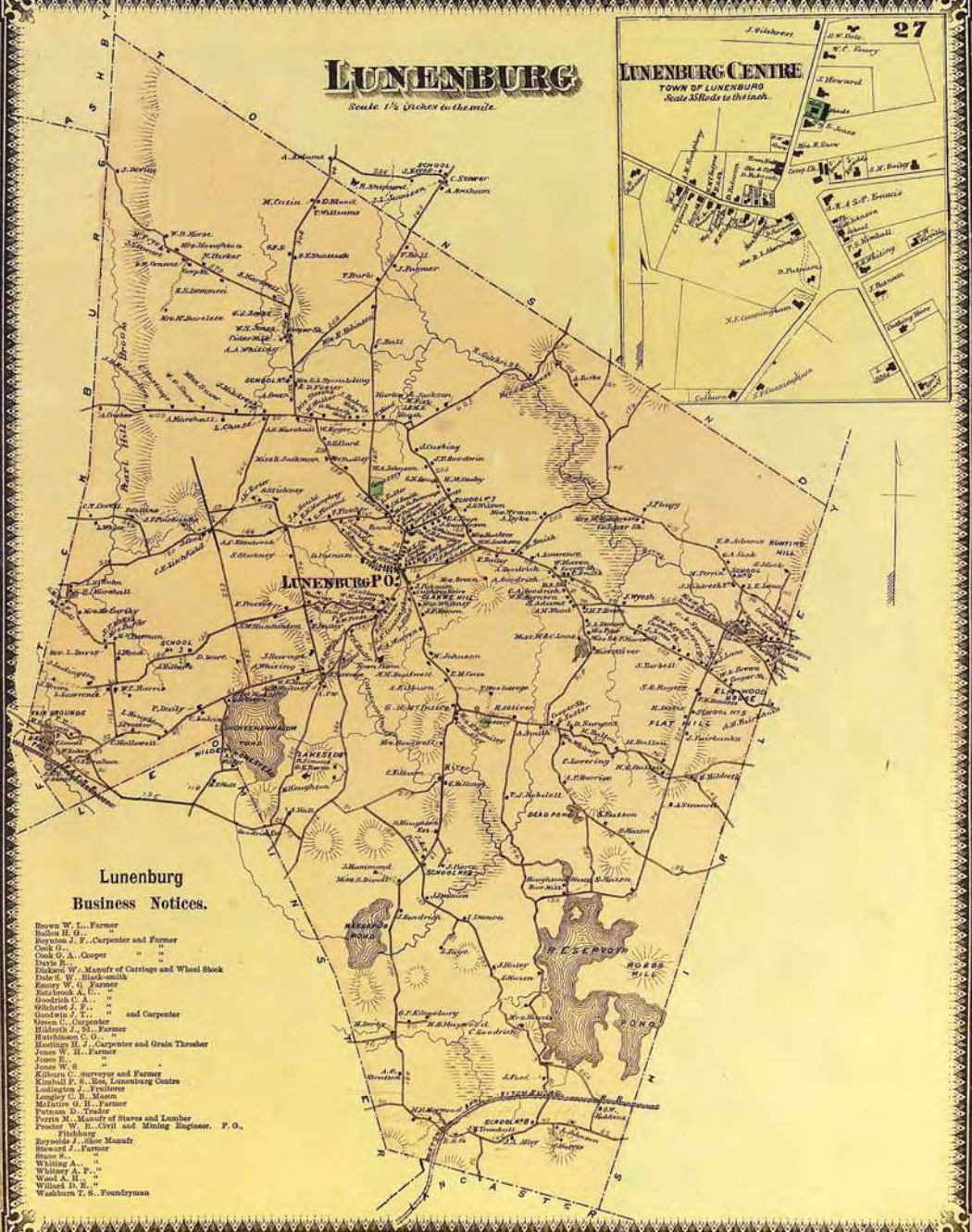
LUNENBURG CENTRE

TOWN OF LUNENBURG
Scale 3/16 inch to the inch

27

Lunenburg Business Notices.

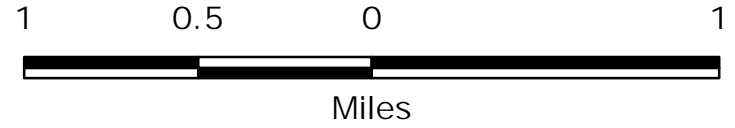
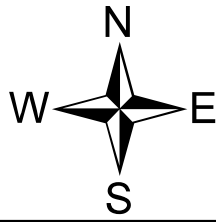
Brown W. L., Farmer
Bates H. G.,
Beynon J. V., Carpenter and Farmer
Cook G., " "
Davis E., " "
Dale S. W., Manufacturer of Carriage and Wheel Stock
Eason W. V., Farmer
Edwards A. G., " "
Goodrich J. F., " "
Gibson J. T., " and Carpenter
Harris C., Carpenter
Hudson E. J., Farmer
Hatchinson C. G., " "
Hoskins E. J., Carpenter and Grain Thresher
Jones W. H., Farmer
Jones W. S., " "
Kilgus C., Surveyor and Farmer
Kimball P. S., Rev. Lunenburg Centre
Ladlow J., Physician
Langley C. B., Mason
Mallory G. H., Farmer
Putnam D., Trader
Perrin M., Manufacturer of Stoves and Lumber
Proctor W. R., Civil and Mining Engineer, F.O.,
Fitchburg
Reynolds J., Shoe Manufacturer
Rowland J., Farmer
Steele S., " "
Whitney A. P., " "
Whitney J. P., " "
Wood A. H., " "
Willard D. E., " "
Wideman T. S., Foundryman





Lunenburg Open Space and Recreation Plan

Agriculturally Significant Soils 2018 Update



Ashby

Fitchburg

Townsend

Shirley

Leominster

Lancaster

Legend



Lunenburg Town Boundary



Lunenburg Parcels

Agriculturally Significant Soils



Prime Farmland



Statewide Importance

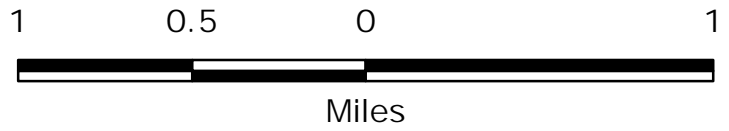
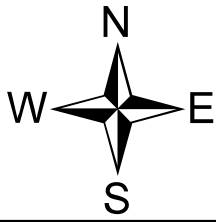


Unique Importance



Lunenburg Open Space and Recreation Plan

Drinking Water Resources *2018 Update*



Ashby

Fitchburg

Townsend

Leominster

Shirley

Lancaster

Legend

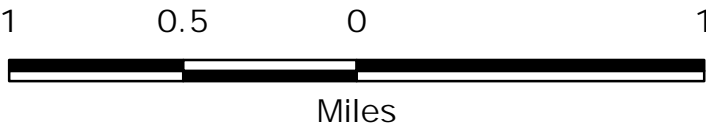
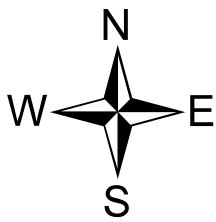
- | | |
|---------------------------------------|-----------------------------|
| Lunenburg Town Boundary | Public Water Supplies |
| Lunenburg Parcels | Community Ground Water |
| Perennial Stream | Community Surface Water |
| Intermittent Stream | Surface Distribution Site |
| Lakes, Ponds, and Reservoirs | Non-Transient Non-Community |
| Aquifers | Transient Non-Community |
| High Yield | Proposed Well |
| Medium Yield | DEP Approved Zone IIs |
| Non Potential Drinking Water Aquifers | Interim Wellhead Prot. Area |
| High Yield | |
| Medium Yield | |

USGS The National Map: National Boundaries Dataset, National Elevation Dataset, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; U.S. Census Bureau - TIGER/Line; HERE Road Data. Data Refreshed July, 2017.



Lunenburg Open Space and Recreation Plan

Environmental Hazards
2018 Update



Ashby

Fitchburg

Townsend

Shirley

Lancaster

Leominster

Legend

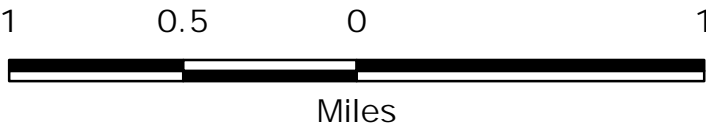
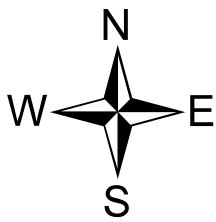
- Lunenburg Town Boundary
- Lunenburg Parcels
- Solid Waste Facilities
- Groundwater Discharge Points
 - Car Wash
 - Laundromat
 - Sanitary Discharge
 - Other
- All Underground Storage Tanks

- Tier Classified Sites
- Tier 1A
 - Tier 1B
 - Tier 1C
 - Tier 1D
 - Tier II
 - AUL Sites



Lunenburg Open Space and Recreation Plan

*Environmental Justice
2018 Update*



Ashby

Fitchburg

Townsend

Shirley

Lancaster

Legend



Lunenburg Town Boundary



Lunenburg Parcels

Environmental Justice 2010 Populations

EJ Criteria, by Block Group



Minority



Income



English isolation



Minority and Income



Minority and English isolation



Income and English isolation

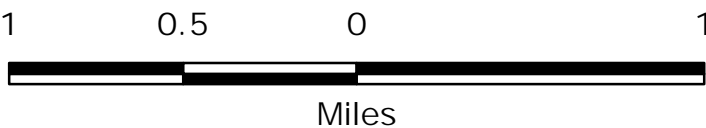
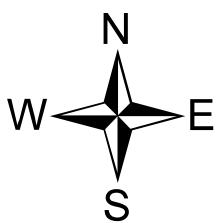


Minority, Income and English isolation



Lunenburg Open Space and Recreation Plan

*FEMA Flood Zones
2018 Update*



Ashby

Fitchburg

Townsend

Shirley

Leominster

Lancaster

Legend

- Lunenburg Town Boundary
- Lunenburg Parcels
- FEMA Q3 Flood Zones
 - A*
 - AE**
 - X500***

Notes:

National Flood Hazard Layer data is not currently available for Lunenburg. These data represent a subset of the data available on the paper Flood Insurance Rate Maps (FIRM) as provided by the Federal Emergency Management Agency.

** Zone A: An area inundated by 100-year flooding, for which no base flood elevations (BFE's) have been determined.*

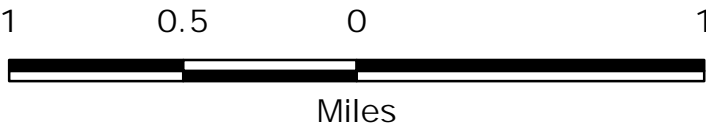
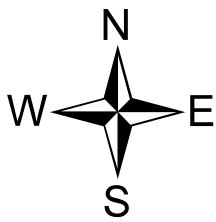
*** Zone AE: An area inundated by 100-year flooding, for which BFE's have been determined.*

**** Zone X500: An area inundated by 500-year flooding; an area inundated by 100-year flooding with average depths of less than 1 foot or with drainage areas less than 1 square mile; or an area protected by levees from 100-year flooding.*



Lunenburg Open Space and Recreation Plan

*Geologic Features
2018 Update*



Ashby

Fitchburg

Townsend

Lunenburg

Leominster

Shirley

Lancaster

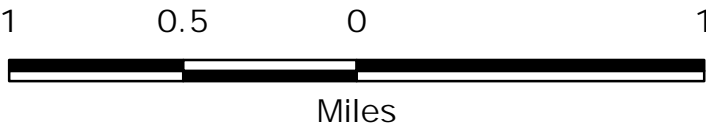
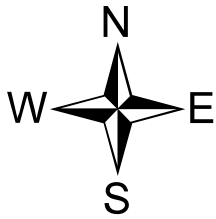
Legend

- Lunenburg Town Boundary
- Lunenburg Parcels
- Perennial Stream
- Intermittent Stream
- Lakes, Ponds, and Reservoirs
- Bedrock Outcrop
- Abundant Outcrop and Shallow Bedrock
- Coarse Glacial Stratified Deposits
- Thick Till
- Postglacial Deposits
 - Swamp and Marsh Deposits
 - Alluvium
 - Artificial Fill



Lunenburg Open Space and Recreation Plan

*Historic Resources
2018 Update*



Ashby

Fitchburg

Townsend

Shirley

Lancaster

Leominster

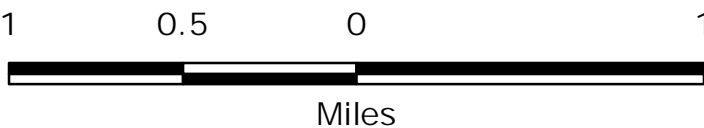
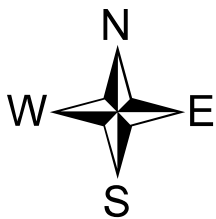
Legend

- Lunenburg Town Boundary
- Lunenburg Parcels
- MHC Historic Inventory Points (8/18)
 - Nat'l Register of Historic Places
 - Preservation Restriction
 - Local Historic District
 - NRHP and LHD
 - Inventoried Property
- MHC Historic Inventory Areas (8/18)
 - Nat'l Register of Historic Places
 - Preservation Restriction
 - Local Historic District
 - NRHP and LHD
 - Inventoried Area



Lunenburg Open Space and Recreation Plan

Land Inventory Overview Map



Ashby

Fitchburg



















Townsend

Shirley

Leominster

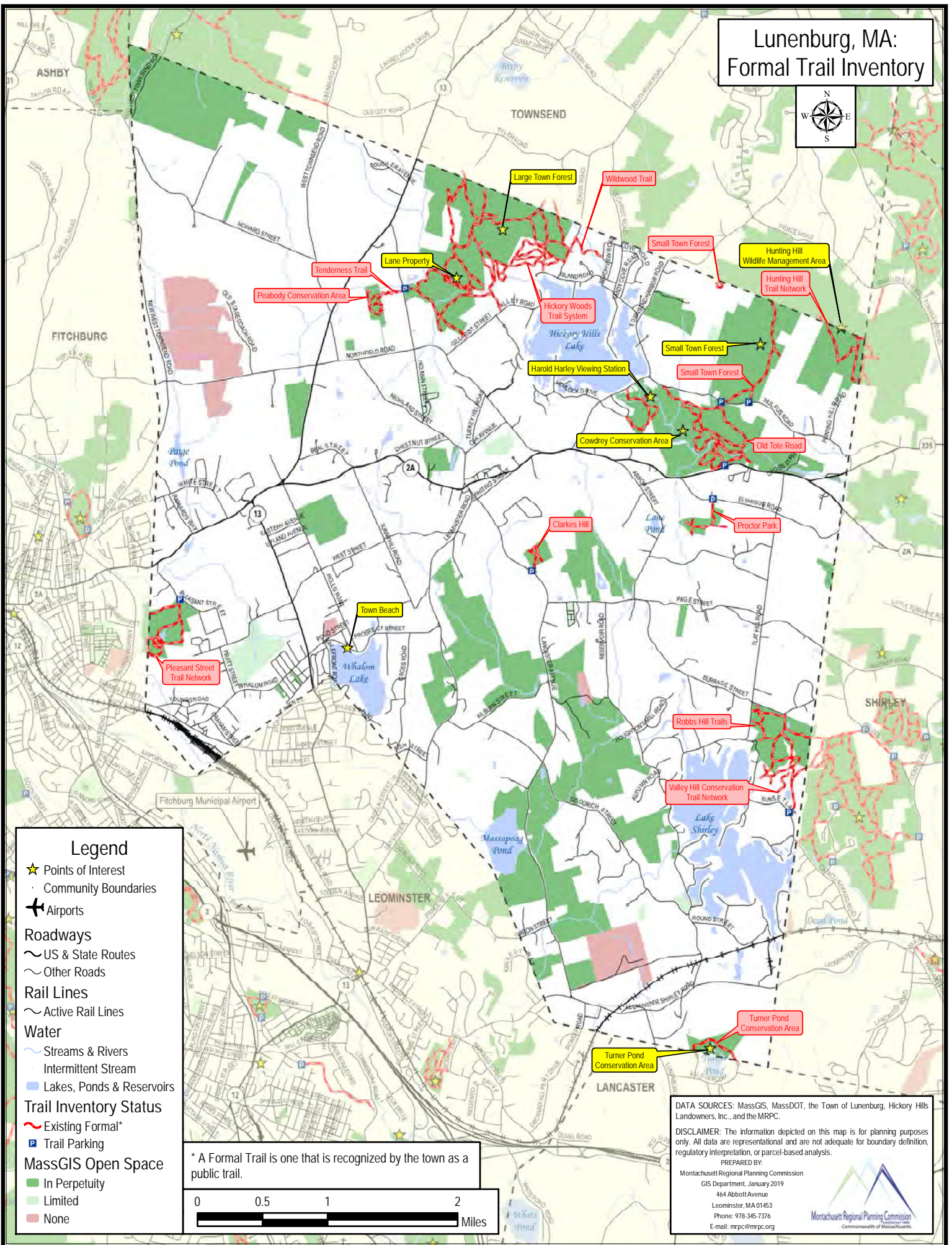
Lancaster

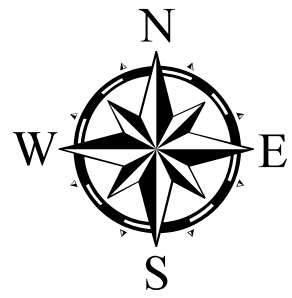
Legend

- | | |
|---|---|
|  Lunenburg Town Boundary | Land Inventory |
|  Lunenburg CRs/APRs |  State Conservation Land |
|  APR |  Town - Cons Comm |
|  CR |  Town-Parks |
| Chapter 61 Parcels |  Town-School |
|  61 - Forestry |  Town-DPW |
|  61A - Agriculture |  Town-Gen Mun |
|  61B - Open Space |  Town-Cemetery |
| |  Water District |
| |  Private Recreation |
| |  Land Trust |
| |  Lunenburg Parcels |

USGS The National Map; National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed October 2018.

Lunenburg, MA: Formal Trail Inventory



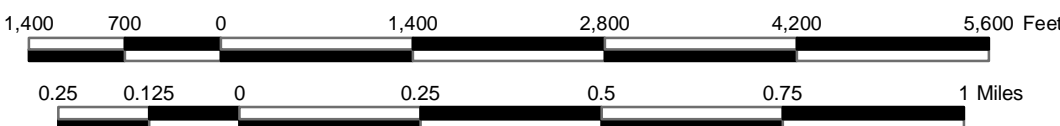


SEWER SERVICE AREA
as of 5/5/18

LUNENBURG

MASSACHUSETTS

SCALE: 1" = 1400'



FITCHBURG

SHIRLEY

LEOMINSTER

LANCASTER

LEGEND

- | | |
|-------------------------------------|-----------------------------|
| — PROPERTY LINE | — ROAD |
| — COMMON OWNERSHIP | — PRIVATE ROAD |
| - - - IN CONTENTION | - - - RIGHT OF WAY |
| - - - UTILITY EASEMENT | - - - TOWN LINE |
| — WATER | — WETLAND |
| SEWER SERVICE AREA | SEWER SERVICE AREA BOUNDARY |
| PARCELS ADDED MAY 2018 TOWN MEETING | |

NOTES

THIS MAP IS BASED ON THE TOWN OF LUNENBURG, MA PROPERTY MAPS PREPARED IN 2005 BY CAI TECHNOLOGIES IT IS INTENDED FOR REFERENCE AND PLANNING PURPOSES ONLY.

PROPERTY LINES CURRENT TO JULY 1, 2018

SOURCE DATA: SEWER SERVICE AREA DATA PROVIDED BY TOWN OF LUNENBURG, MA. PROPOSED SERVICE AREAS DIGITIZED BY CAI TECHNOLOGIES, IN NOVEMBER, 2009.

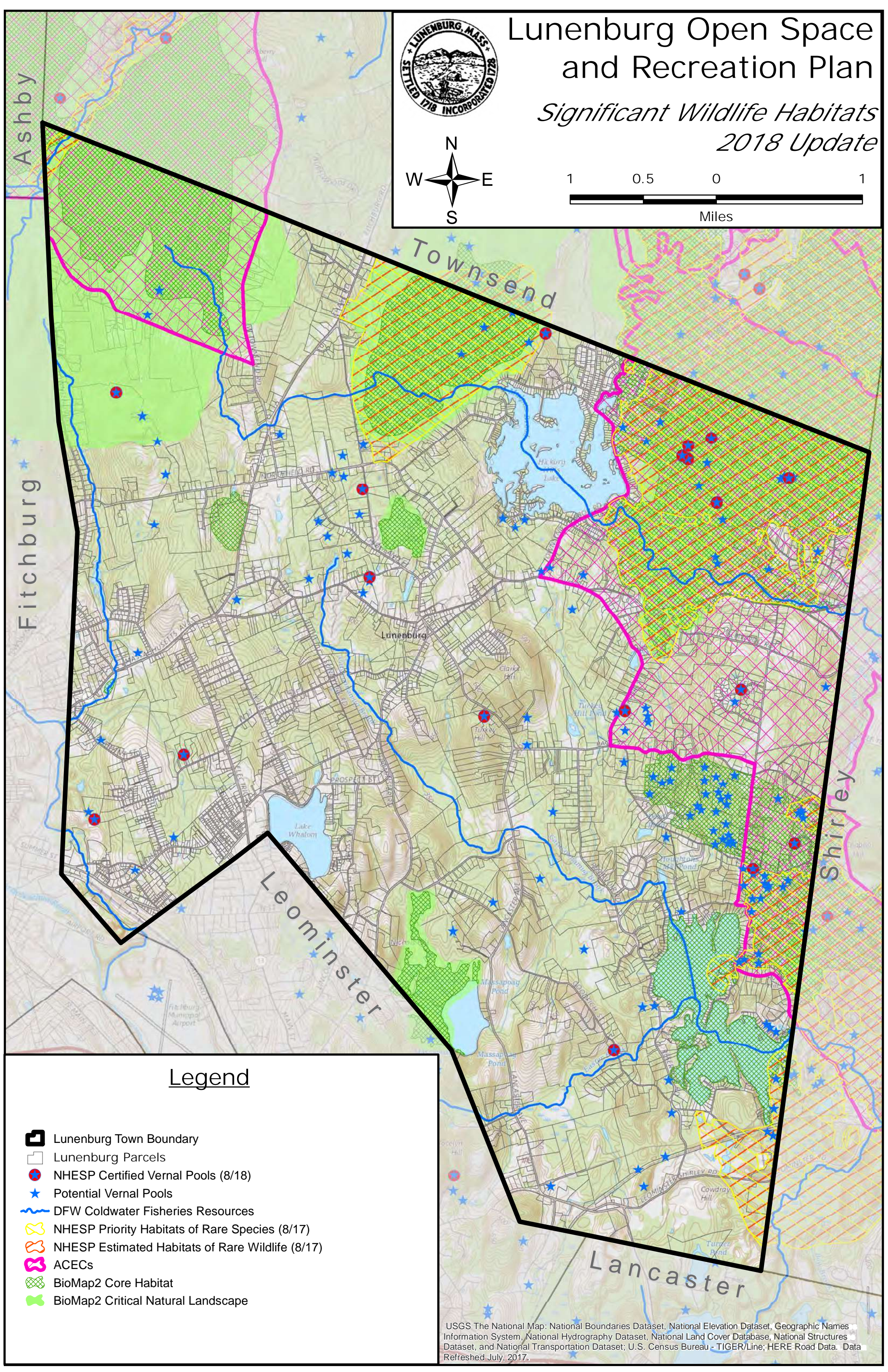
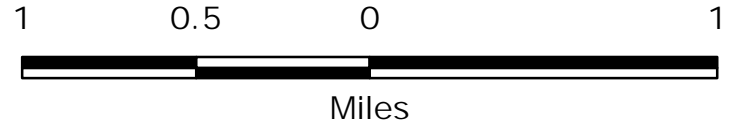
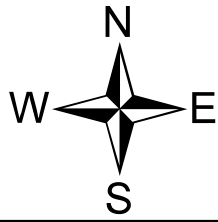


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Lunenburg Open Space and Recreation Plan

Significant Wildlife Habitats *2018 Update*



Legend

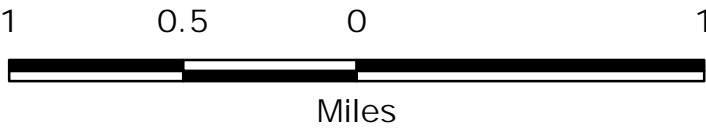
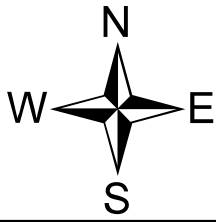
- Lunenburg Town Boundary
- Lunenburg Parcels
- NHESP Certified Vernal Pools (8/18)
- Potential Vernal Pools
- DFW Coldwater Fisheries Resources
- NHESP Priority Habitats of Rare Species (8/17)
- NHESP Estimated Habitats of Rare Wildlife (8/17)
- ACECs
- BioMap2 Core Habitat
- BioMap2 Critical Natural Landscape

USGS The National Map: National Boundaries Dataset, National Elevation Dataset, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; U.S. Census Bureau - TIGER/Line; HERE Road Data. Data Refreshed July, 2017.



Lunenburg Open Space and Recreation Plan

Unique & Scenic Resources



Ashby

Fitchburg

Townsend

Shirley

Lancaster

Large blocks of conservation land.

Northfield Road

Historic town center.

Mulpus Brook wetland views from Rt. 2A at Cowdry Nature Center.

Leominster Road

Lancaster Avenue

Flat Hill Road

Pastoral vistas along Lancaster Ave. & Leominster Rd.

Water views across various lakes and ponds.

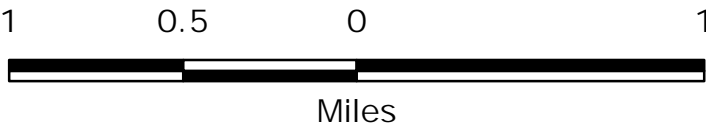
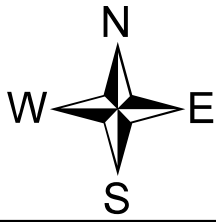
Legend

- Lunenburg Town Boundary
- Lunenburg Parcels
- Scenic Road (MGL Ch. 40 Sec. 15C)
- Scenic Landscape Inventory (MA DCR 1982)
 - Distinctive
 - Noteworthy
 - Distinctive/Noteworthy



Lunenburg Open Space and Recreation Plan

*Water Resources
2018 Update*



Ashby
Fitchburg

Townsend

Leominster

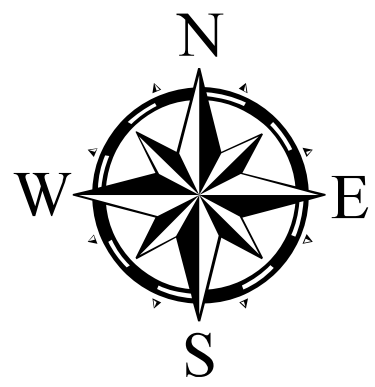
Shirley

Lancaster

Legend

- | | |
|------------------------------|----------------------|
| Lunenburg Town Boundary | Watershed Sub-basins |
| Lunenburg Parcels | Catacunamaug Brook |
| Perennial Stream | Falulah/Baker Brook |
| Intermittent Stream | Mulpus Brook |
| Lakes, Ponds, and Reservoirs | North Nashua River |
| Wetland Types | Squannacook River |
| Bog | |
| Deep Marsh | |
| Shallow Marsh Meadow or Fen | |
| Shrub Swamp | |
| Wooded Swamp - Coniferous | |
| Wooded Swamp - Deciduous | |
| Wooded Swamp - Mixed Trees | |

USGS The National Map: National Boundaries Dataset, National Elevation Dataset, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; U.S. Census Bureau - TIGER/Line; HERE Road Data. Data Refreshed July, 2017.

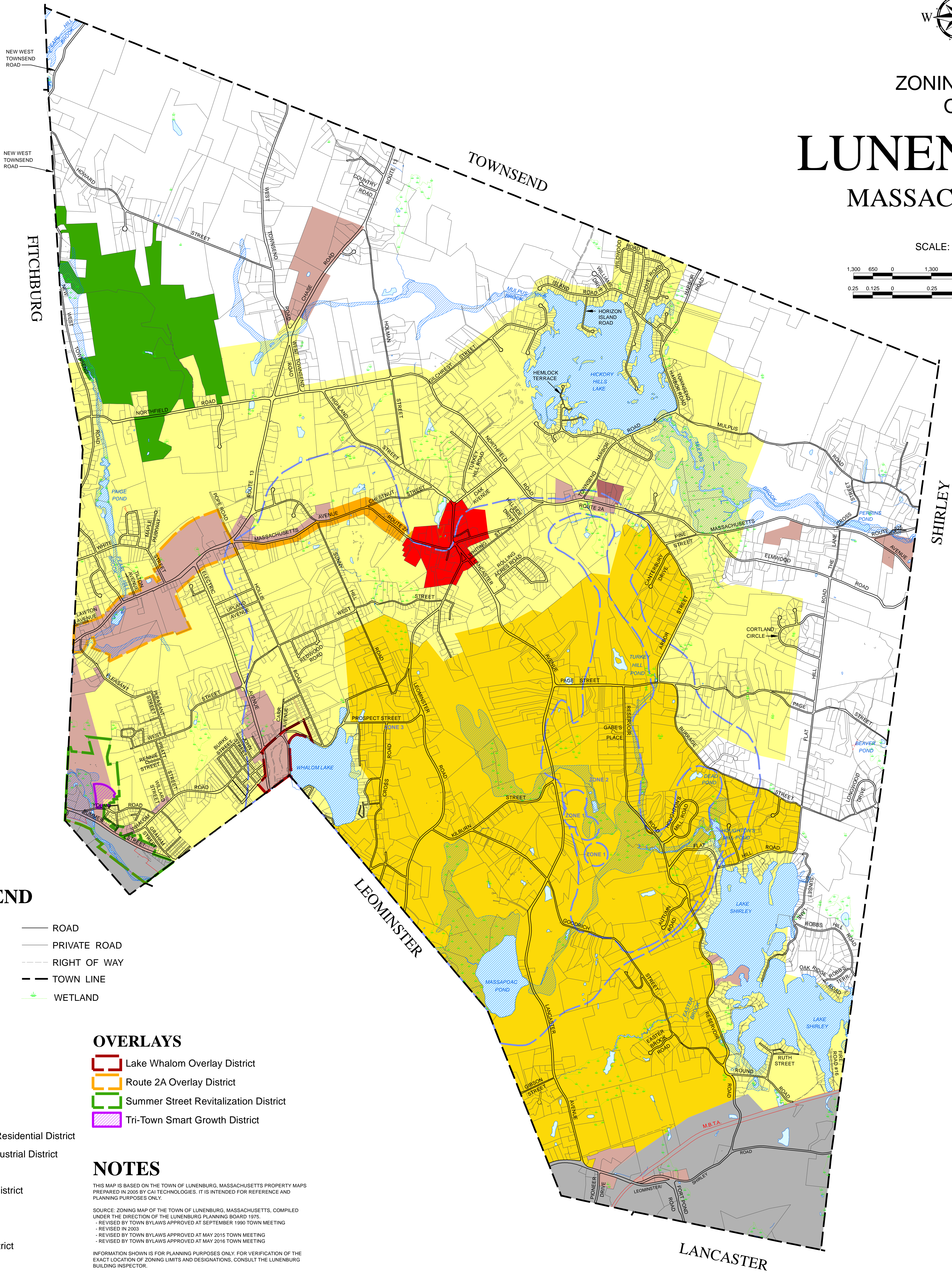
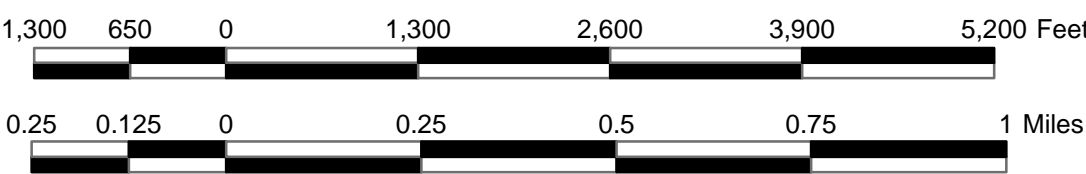


ZONING MAP
OF

LUNENBURG

MASSACHUSETTS

SCALE: 1" = 1300'



LEGEND

- | | |
|----------------------|------------------|
| — PROPERTY LINE | — ROAD |
| — COMMON OWNERSHIP | — PRIVATE ROAD |
| --- IN CONTENTION | --- RIGHT OF WAY |
| --- UTILITY EASEMENT | --- TOWN LINE |
| — WATER | — WETLAND |

ZONING

- Aquifer Boundaries
- Flood Plain District
- RA - Residence A District
- RB - Residence B District
- LB/R - Limited Business/Residential District
- OP/I - Office Park and Industrial District
- C - Commercial District
- RC - Retail Commercial District
- R - Recreation District
- O - Outlying District
- VCD - Village Center District

OVERLAYS

- Lake Whalom Overlay District
- Route 2A Overlay District
- Summer Street Revitalization District
- Tri-Town Smart Growth District

NOTES

THIS MAP IS BASED ON THE TOWN OF LUNENBURG, MASSACHUSETTS PROPERTY MAPS PREPARED IN 2005 BY CAI TECHNOLOGIES. IT IS INTENDED FOR REFERENCE AND PLANNING PURPOSES ONLY.

SOURCE: ZONING MAP OF THE TOWN OF LUNENBURG, MASSACHUSETTS, COMPILED UNDER THE DIRECTION OF THE LUNENBURG PLANNING BOARD 1975.
- REVISD BY TOWN BYLAWS APPROVED AT SEPTEMBER 1990 TOWN MEETING
- REVISD IN 2005
- REVISD BY TOWN BYLAWS APPROVED AT MAY 2015 TOWN MEETING
- REVISD BY TOWN BYLAWS APPROVED AT MAY 2016 TOWN MEETING

INFORMATION SHOWN IS FOR PLANNING PURPOSES ONLY. FOR VERIFICATION OF THE EXACT LOCATION OF ZONING LIMITS AND DESIGNATIONS, CONSULT THE LUNENBURG BUILDING INSPECTOR.

PROPERTY LINES CURRENT TO JULY 1, 2017

PRODUCED BY

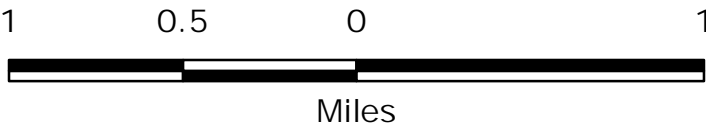
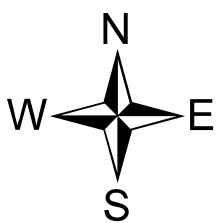


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Lunenburg Open Space and Recreation Plan

Action Plan Map



Ashby

Fitchburg

Townsend

Shirley

Leominster

Lancaster

Legend

- Lunenburg Town Boundary
- Acquisition Priority Areas
- Water, Scenic, and Agr.
- Important Habitats
- Lunenburg CRs/APRs
- APR
- CR
- Chapter 61 Parcels
- 61 - Forestry
- 61A - Agriculture
- 61B - Open Space
- Land Inventory
- State Conservation Land
- Town - Cons Comm
- Town-Parks
- Town-School
- Town-DPW
- Town-Gen Mun
- Town-Cemetery
- Water District
- Private Recreation
- Land Trust
- Lunenburg Parcels

USGS The National Map; National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed October 2018.

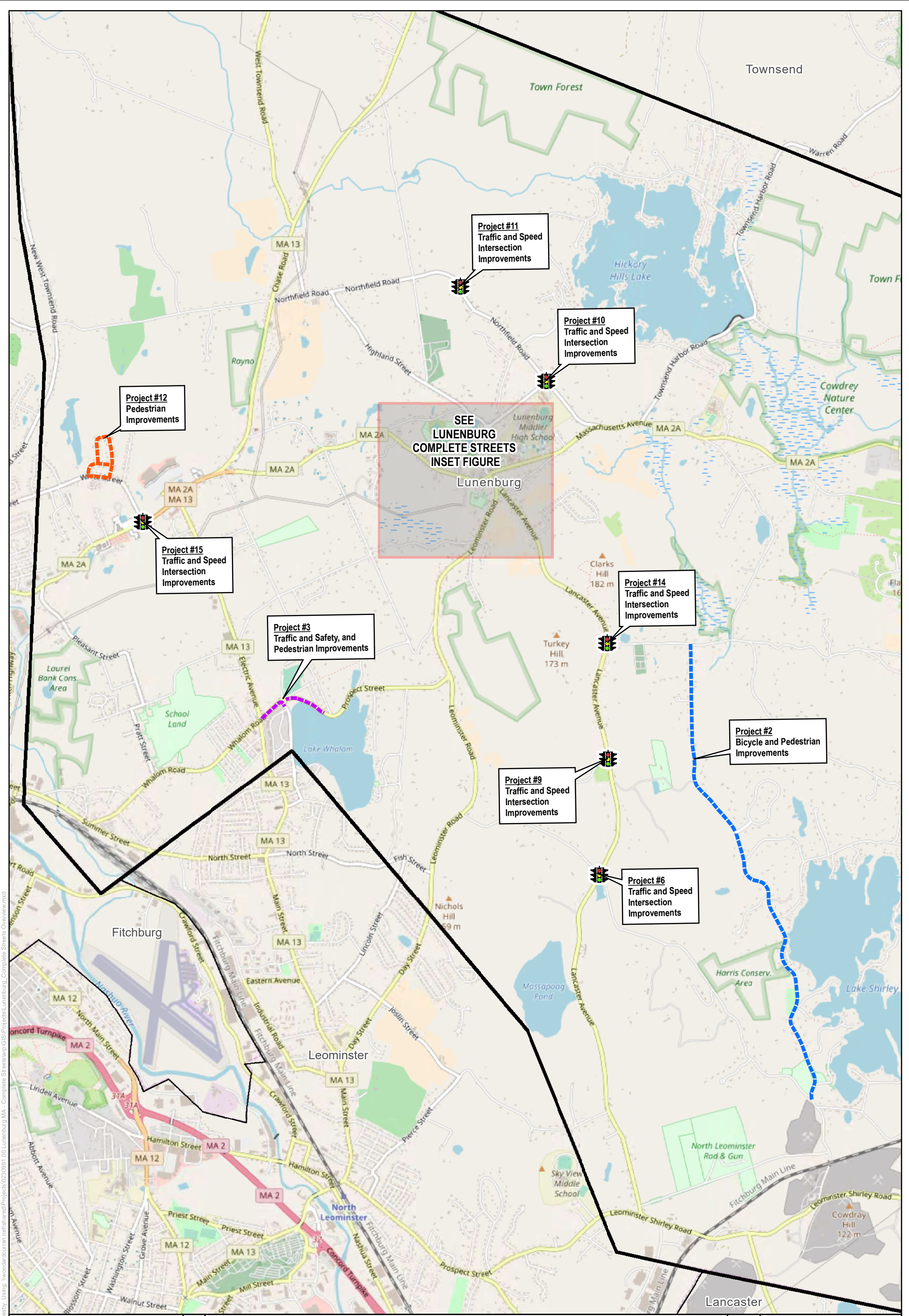




Figure Exported: 6/6/2018, By: esreeby, Using: woodwardcurran.net\shared\Projects\0230991.00 Lunenburg MA - Complete Streets\wp\GIS\Projects\Lunenburg - Complete Streets Overview.mxd

Complete Streets Prioritization Program


Lunenburg, MA




Lunenburg Boundary




Bicycle and Pedestrian Improvements




Pedestrian Improvements



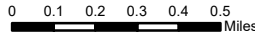
Traffic and Safety, and Pedestrian Improvements



Traffic and Speed Intersection Improvements



N



0 0.1 0.2 0.3 0.4 0.5 Miles

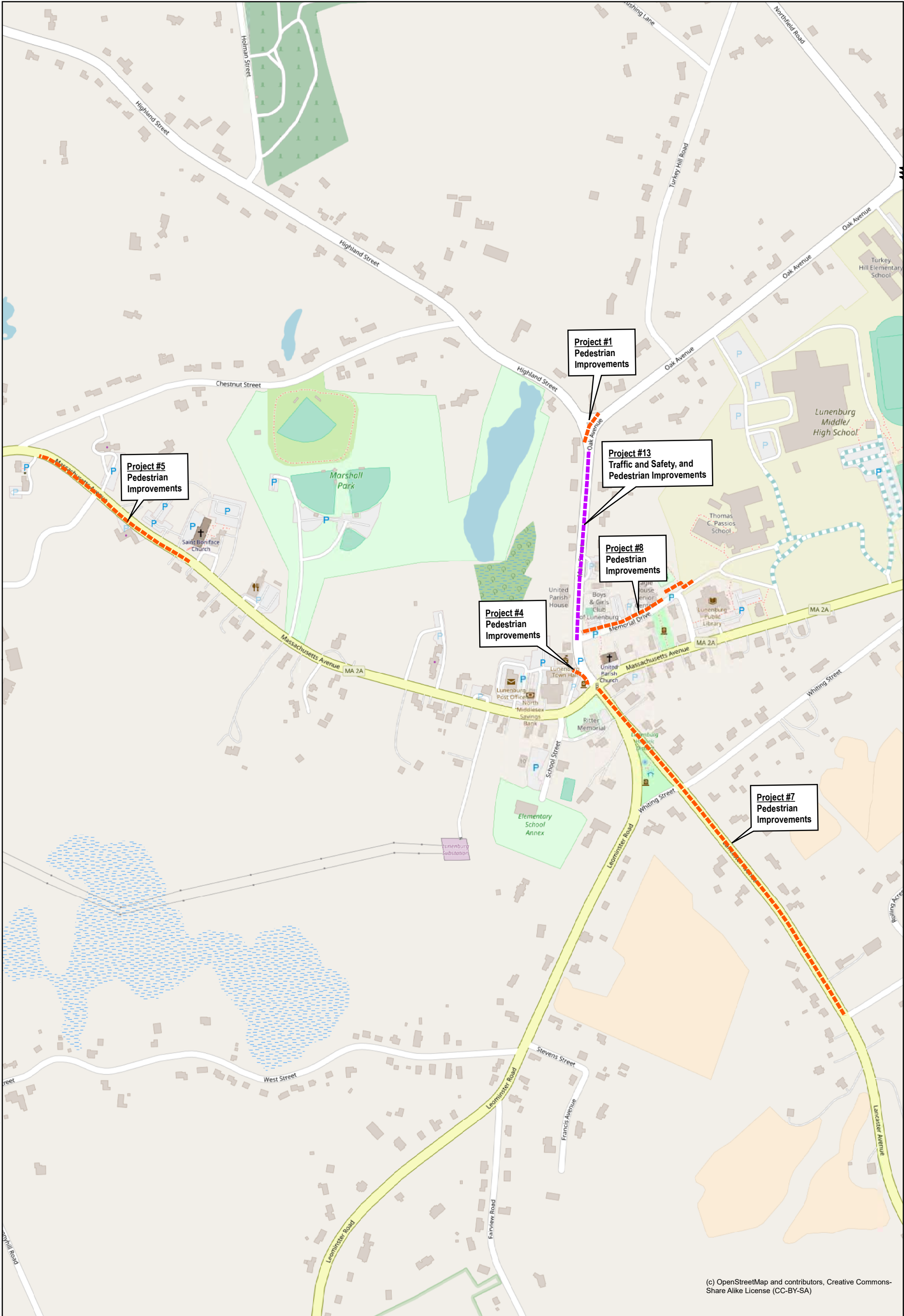


WOODARD
& CURRAN

Project #: 0230991.00
Map Created: June 2018

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Figure Exported: 6/6/2018, By: esreeby Using: \\woodardcurran.net\shared\Projects\0230991.00 Lunenburg MA - Complete Streets\wp\GIS\Projects\Lunenburg - Complete Streets - Inset.mxd



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<div><div>Complete Streets Prioritization Program</div><div>INSET Lunenburg, MA</div></div>	<div>Legend</div> <div><div><div></div><div>Pedestrian Improvements</div></div><div><div></div><div>Traffic and Safety, and Pedestrian Improvements</div></div></div>	<div><div>N</div><div>0 100 200 300 400 500 Feet</div></div>	<div><div></div><div>Project #: 0230991.00 Map Created: June 2018</div></div>
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APPENDIX 9: CHAPTER 61, 61A, 61B FIRST REFUSAL PROCEDURE

TOWN OF LUNENBURG

MGL CHAPTER 61, 61A, 61B FIRST REFUSAL PROCEDURE

- I. PURPOSE: To serve as a guide outlining general steps to be followed when landowners in the Town of Lunenburg intend to transfer, convert, or sell their Chapter 51, 61A, or 61B land.
- II. PROCEDURE:
 1. NOTIFICATION REQUIREMENTS (per MGL C61, Sec. 8, C61A, Sec. 14, or C61B, Sec. 9):
 - a. The landowner provides a Notice of Intent, by certified mail, to each of the following: the Board of Selectmen, Board of Assessors, Planning Board, Conservation Commission, and State Forester (c/o Commissioner of DCR) to sell or convert classified land.
 - i. The notification shall include:
 1. Cover letter notifying Board of Selectmen of intent to transfer, sell or convert the land, specifying proposed use of the land (in the event the transfer, sale or conversion is exempt provide details as to why it is exempt from Town's First Refusal Option);
 2. Contact information for landowner, including name, address and telephone number;
 3. If Intent to sell, copy of the purchase and sales agreement specifying purchase price and all terms and conditions of proposed sale, and any additional agreements;
 4. Survey of land (or map if survey is unavailable); and
 5. Location and acreage of land, shown on a map drawn at the same scale as the assessors' map.
 2. TOWN COUNSEL REVIEW
 - a. The Board of Selectmen's Office will immediately forward a copy of the Notice to Town Counsel for review. Town Counsel will notify the Board of Selectmen, within 15 working days, as to whether:
 - i. The Notice is sufficient;
 - ii. If sufficient whether the Town has a First Refusal Option; or
 - iii. The Town does not have a First Refusal Option. In the event the Town does not have a First Refusal Right the Town Counsel will prepare an appropriate Waiver Form.
 3. INSUFFICIENT NOTICE
 - a. In the event the Notice does not contain all of the material and information, as required, the Town shall, within 30 days after receipt, notify the landowner, in writing, that the Notice is insufficient and does not comply. The landowner must resubmit the Notice with all required information and material to restart the process.
 4. ONE HUNDRED AND TWENTY DAY PERIOD FOR TOWN TO EXERCISE RIGHT OF FIRST REFUSAL

- a. The day after sufficient notification is mailed to all appropriate parties, as shown by the certified mail receipt, begins the 120-day period for the town to consider whether to exercise its first refusal option or assign this right to a conservation organization. Note: If the notification from the landowner is insufficient and the Town has given notice of such insufficiency, within 30 days, the landowner must then resubmit his/her notification, re-starting the 120-day period.

5. TOWN ACTION:

- a. The Board of Selectmen's Office will coordinate the following activities:
 - i. Confirms that Town Counsel has been provided a copy of Notice and has responded;
 - ii. Confirms that the following Boards have received the required Notification: Conservation Commission, Planning Board and Board of Assessors. Advises said Boards to provide Board of Selectmen with any input not later than 30 days from the mailing of the Notification.
 - iii. Notifies such other Town Boards and Commissions, as have requested notification, that said Notice has been received and provide a copy. Advises said Boards to provide Board of Selectmen with any input not later than 30 days from the mailing of the Notification.
 - iv. Notifies at least one nonprofit conservation organization (i.e. North County Land Trust) that said Notice has been received and provide a copy. Advises said organization(s) to provide Board of Selectmen with any input not later than 30 days from the mailing of the Notification.
 - v. Notifies the foregoing Boards and organizations, referenced in paragraphs ii., iii., and iv. above, in the event the Town has notified the Landowner that the Notice is insufficient.
 - vi. Board of Selectmen - Schedules and organizes a meeting to discuss the First Refusal Option opportunity within two weeks from the end of the 30 day time period from the date of mailing of the Notification, unless an earlier meeting date is possible. At the meeting the Board of Selectmen will review all input received.
 - vii. In the event the response from a town board or committee is not received by the 25th day, the Board of Selectmen's Office will contact the town entity. It will be assumed that any entity not submitting a response by the 30 day deadline provided by the Board of Selectmen's Office does not wish to make any recommendation that the Town exercise or not exercise its First Refusal Option.
 - viii. Board of Selectmen's Office, within 10 days of the meeting described in the paragraph vi, prepares and distributes to all parties a document that summarizes the results of the meeting and the recommendations of the various committees, and indicates whether or not there seems to be interest in exercising the Town's First Refusal Option, or assigning it to an appropriate organization. A copy of all written committee, organization, and individual recommendations should be attached to this document.
 - ix. Board of Selectmen vote whether to pursue the Town exercising its First Refusal Option. In the event that there is a majority vote of the Board of Selectmen to pursue the Town exercising its First Refusal Option, the Board of Selectmen shall schedule a public hearing (giving public notice in accordance with the Open Meeting Law) regarding the Town exercising its First Refusal Option. (Note - the town cannot exercise its First Refusal Option without a public hearing.) It is

advisable that the public hearing take place by the halfway point in the 120-day period, or earlier if possible, in order that issues such as associated contracts and identification of funding may be resolved before the 120 days expire.

- x. Board of Selectmen votes, after the Public Hearing (within the 120-day time frame), to do one of the following:
 - 1. Exercise the First Refusal Option;
 - 2. Assign the First Refusal Option to a qualified nonprofit conservation organization or agency;
 - 3. Decline to exercise the First Refusal Option.

6. REQUIREMENTS FOR EACH OPTION:

- a. If option (a) is chosen: The Board of Selectmen must execute and record with the Northern Worcester County Registry of Deeds a *Notice of Exercise*, containing the name of the owner of record and a description of the premises adequate for identification, and send notice to the landowner by *certified mail*, accompanied by a proposed purchase and sale agreement to be consummated within 90 days, or such extended time as may be agreed upon by the parties.
- b. If option (b) is chosen: The Board of Selectmen must execute and record a *Notice of Assignment*, stating the name and address of the organization or agency which is expected to exercise the option and the terms and conditions of the assignment. If the land trust or agency elects to exercise the option, it must send notice to the landowner by certified mail, and record its Notice of Exercise, containing the name of the owner of record and a description of the premises adequate for identification, plus propose a purchase and sale agreement to be consummated within 90 days, or such extended time as may be agreed upon by the parties.
- c. If option (c) is chosen: The Board of Selectmen should sign and deliver a *Notice of Non-Exercise*, containing: the name of the owner of record; a description of the premises adequate for identification; and a brief description of the terms contained in the original Notice, to the landowner, sending it by certified mail to the landowner's address as set forth in the Notice of Intent.

Note: If neither the Notice of Exercise nor the Notice of Assignment is recorded within the 120-day period, or the Town gives Notice of Non-Exercise the Town's option expires and the landowner is free to sell, but only upon the original terms spelled out in the purchase and sale agreement that accompanied his/her original Notice of Intent.

ADOPTED BY THE BOARD OF SELECTMEN ON AUGUST 21, 2018

APPENDIX 10: LETTERS OF SUPPORT

A10.1. Board of Selectmen

A10.2. Conservation Commission

A10.3. Parks Commission

A10.4. Land Use Director

A10.5. Finance Committee

A10.6. Public Schools Facilities Director

A10.7. Storm Water Task Force

A10.8. Lunenburg Water District

A10.9. Montachusett Regional Planning Commission

A10.10. North County Land Trust

A10.11. Nashua River Watershed Association

A10.12. Massachusetts Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program

**TOWN OF LUNENBURG
BOARD OF SELECTMEN**

Jamie Toale, Chairman
Damon McQuaid, Vice Chairman
Phyllis Luck, Clerk
Katey Adams, Member



17 Main Street
P. O. Box 135
Lunenburg, MA 01462
Phone 978-582-4144
Fax 978-582-4175

December 18, 2018

Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs
Division of Conservation Services
100 Cambridge Street- Suite 900
Boston, MA 02114

To Whom It May Concern;

Please accept this letter of support for the Open Space and Recreation Plan for Lunenburg, 2019-2026. The Board met on December 18, 2018, reviewed the plan and voted to support it.

The Open Space Plan is an important document for Lunenburg's quality of life. The plan is vital to maintain Lunenburg's rural character, support Lunenburg's agricultural sustainability, conserve important wildlife habitats and drinking water resources as well as enhancing and promoting existing open space and recreational assets of the Town.

Sincerely,

Lunenburg Board of Selectmen

Town of Lunenburg Conservation Commission

Richard Bursch, Chair
Todd Dwyer, Vice-Chair
Bob Pease
Catie Childs
Carl Luck
Jack Rabbitt
Kenneth Jones



Tel: (978) 582-4146
960 Massachusetts Ave.
Lunenburg, MA 01462

Matthew S. Marro,
Conservation Administrator

12.31.18

Mr. Brandon Kibbe
Open Space Advisory Committee
960 Mass Ave
Lunenburg, MA 01462

Dear Mr. Kibbe,

The Lunenburg Conservation Commission is in receipt of the draft Open Space and Recreation Plan update. The Conservation Commission would like to take this opportunity to personally thank you for spearheading these efforts and tirelessly coordinating the committee activities.

The Conservation Commission would like to thank each and every member of the committee. It was refreshing to see the varied and enthusiastic input from all into this plan. The variety of experiences and knowledge of the membership make this a top notch plan. The Commission is very happy to endorse this draft plan.

Thank You,

Matthew S. Marro
Conservation Administrator

Cc: File
Conservation Commission

Town of Lunenburg Park Commission

Tel: (978) 582-4160
Dennis Mannone, Chair
Karin Menard, Clerk
Susanna Jewell



520 Chase Road
Lunenburg, MA 01462

January 9, 2019

Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs
Division of Conservation Services
100 Cambridge St - Suite 900
Boston, MA 02114

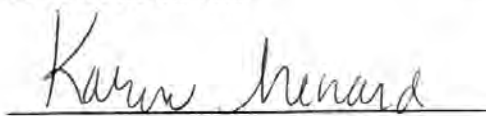
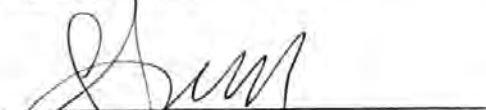
To Whom It May Concern:

It is with great pleasure that the Lunenburg Park Commission write this letter of support for the Open Space and Recreational Plan 2019-2026. The Park Commission met on January 9, 2019 and voted unanimously to express our support.

The Park Commission finds that the Plan is thorough and carefully considers Lunenburg's open space and recreation needs over the next 7 years. The Board is appreciative of the time and effort that the Ad Hoc Open Space Committee spent in developing this important guide for the future of Lunenburg's open space and recreation assets. This document will serve the community well in the years to come.

Sincerely,

Lunenburg Park Commission


Dennis Mannone
Karin Menard
Susanna Jewell

TOWN OF LUNENBURG
Office of the Planning Board

Matthew Allison, Chair
David Prokowiew, Vice-Chair
Kenneth Chenis, Clerk
Tanner Cole, Member
Paula Bertram, Member



Tel: (978) 582-4147 ext 5
Fax: (978) 582-4353
960 Massachusetts Avenue
Lunenburg, MA 01462

Adam R. Burney
Land Use Director

Marjorie J. Boggio
Administrative Assistant

13 December 2018

Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs
Division of Conservation Services
100 Cambridge St. Suite 900
Boston, MA 02114

To Whom It May Concern:

This letter is to express the Lunenburg Planning Board's support for the Town's Open Space and Recreation Plan 2019-2026. The Planning Board reviewed and discussed the Plan at its 10 December 2018 meeting.

The thoughtful, inclusive, wide reaching process the Open Space Committee implemented to develop the plan will serve Lunenburg well. The final Open Space and Recreation Plan is a crucial part of ensuring that the natural, cultural and recreation resources of the community are preserved and maintained in a sustainable manner and continue to contribute to the rural character of Lunenburg.

The Planning Board respectfully requests that you approve the Lunenburg Open Space & Recreation Plan 2019-2026 as submitted. Thank you for your time and attention in this matter.

Regards,

Adam R. Burney, MPA
Land Use Director

Town of Lunenburg

Finance Committee:

Terri Burchfield, Chairman
John Henshaw, Vice-Chairman
Hanna Anderson, Secretary
George Martin
Jay Simeone
Marc Luescher
Michelle Walton



17 Main Street, P.O. Box 135
Lunenburg, MA 01462-0135
978.582.4139
FAX 978.582.4148

Commonwealth of Massachusetts
Executive Office of Energy and
Environmental Affairs
100 Cambridge Street-9th Floor
Boston, MA 02114

To Whom it May Concern;

We, the members of the Lunenburg Finance Committee, are pleased to submit this letter of support for the OPEN SPACE AND RECREATION PLAN being submitted for the period of 2019 to 2026 on behalf of the Town of Lunenburg, Massachusetts. At a meeting on December 13th, 2018, the Committee voted unanimously to express our support.

We believe this plan represents a comprehensive base of knowledge of Town assets, a great record of progress since the last plan, and provides a reasonable and responsible way forward for the Town to make the best and most efficient uses of the natural resources available to us. The work taken to assure that the goals reflect input from members of the community provides confidence that the plan will garner the support needed to see it through. As we look back at the accomplishments from the previous plan, and look to continue and build on that progress, we find this document provides the identification of "clear needs and pragmatic solutions for delivering better resources and recreational opportunities to the residents of Lunenburg" promised.

The plan captures the conservation needs as well as the recreation and other open space needs in a way that will help us focus financial resources as the Town addresses the goals and objectives herein. We encourage you to approve the plan as presented.

Thank you,

Terri Burchfield
Finance Committee Chair

bkibbe@lunenburgonline.com

From: John Londa <jlonda@lunenburgonline.com>
Sent: Tuesday, December 18, 2018 5:27 PM
To: bkibbe@lunenburgonline.com
Subject: RE: Lunenburg Open Space and Recreation Plan Review

Brandon, Thank for the chance to review. We reviewed the sections pertaining to Lunenburg Public Schools and endorse the draft.

John Londa
Director of Facilities
Lunenburg Public Schools
1025 Massachusetts Ave.
(978) 230-2351

The contents of this e-mail and any attachments are the property of the Town of Lunenburg including the Lunenburg School District and subject to the Public Records Law, M.G.L. c. 66, § 10 . When writing or responding, please remember that the Secretary of State's Office has determined that email is a public record and not confidential. To conform to federal mandates, the Town of Lunenburg and Lunenburg Public School District archives all electronic messages and Internet activity for a minimum of 7 years.

From: bkibbe@lunenburgonline.com [mailto:bkibbe@lunenburgonline.com]
Sent: Friday, November 30, 2018 11:16 AM
To: jlonda@lunenburgonline.com
Subject: Lunenburg Open Space and Recreation Plan Review

Hi John:

The Open Space Committee is respectfully requesting your review of our draft update to the town's Open Space and Recreation Plan. Please see the attached letter, which includes a link to the plan. If you have any questions, please don't hesitate to contact me.

Best regards,
Brandon Kibbe

<https://www.lunenburgma.gov/boards-commissions-committees/planning-board/open-space-committee>

Town of Lunenburg
Stormwater Task Force
Phyllis Luck, Chair
Matthew Allison, Member
Jack Rabbitt, Member
P O Box 135
Lunenburg, MA 01462

January 11, 2019

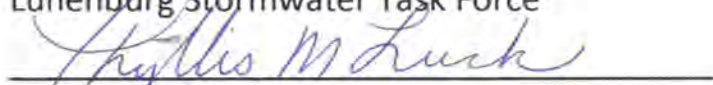
Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs
Division of Conservation Services
100 Cambridge St., Suite 900
Boston, MA 02114

To Whom It May Concern;

The Lunenburg Stormwater Task Force is pleased to submit this letter of support for the Open Space and Recreation Plan for Lunenburg, 2019-2026. The Task Force met on January 10, reviewed the plan, and voted to support it.

The Stormwater Task Force shares the goals articulated within the Open Space Plan, which seek the enhancement and promotion of Lunenburg's open space and recreation assets, preservation of the Town's most critical natural resources, the expansion of access to conservation and recreation resources, and desire for diversified funding sources. This plan is essential to the preservation of Lunenburg's rural character, the sustainability of its agriculture, the conservation of wildlife habitats and drinking water resources, as well as the enhancement and promotion of existing open space and the recreational assets of the Town.

Sincerely,
Lunenburg Stormwater Task Force



Phyllis Luck



Matthew Allison



Jack Rabbitt

bkibbe@lunenburgonline.com

From: fmcnamara lunenburgwater.net <fmcnamara@lunenburgwater.net>
Sent: Monday, December 3, 2018 8:38 AM
To: bkibbe@lunenburgonline.com
Subject: RE: Lunenburg Open Space and Recreation Plan Review

I reviewed the Plan. It looks very well done. I have no changes I would recommend.

Fran

From: bkibbe@lunenburgonline.com <bkibbe@lunenburgonline.com>
Sent: Friday, November 30, 2018 11:17 AM
To: fmcnamara lunenburgwater.net <fmcnamara@lunenburgwater.net>
Subject: Lunenburg Open Space and Recreation Plan Review

Hi Fran:

The Open Space Committee is respectfully requesting your review of our draft update to the town's Open Space and Recreation Plan. Please see the attached letter, which includes a link to the plan. If you have any questions, please don't hesitate to contact me.

Best regards,
Brandon Kibbe

<https://www.lunenburgma.gov/boards-commissions-committees/planning-board/open-space-committee>



December 17, 2018

Lunenburg Open Space Committee
Attn. Brandon Kibbe, Chairman
960 Massachusetts Avenue
Lunenburg, MA 01462

Dear Mr. Kibbe:

The Montachusett Regional Planning Commission (MRPC) staff completed a review of Lunenburg's Open Space and Recreation Plan (OS&RP). Staff used the Open Space Guidebook published by the Executive Office of Energy and Environmental Affairs (EEOEA), Division of Conservation Services (DCS) "Open Space and Recreation Plan Requirements" to determine if the local planning document contained the required sections and met requirements. Lunenburg's plan is thorough and consists of all required sections. We would like to take this opportunity to congratulate all local residents and officials for putting this important document together.

Sincerely,



John Hume
Planning and Development Director

brandonkibbe@comcast.net

From: Anna Wilkins <awilkins@northcountylandtrust.org>
Sent: Monday, January 21, 2019 1:25 PM
To: brandonkibbe@comcast.net
Cc: Jassy Bratko
Subject: 2019-2019 Lunenburg Open Space Plan- Letter of Support

Dear Mr. Kibbe,

On behalf of the North County Land Trust, I want to offer my congratulations to you and the Lunenburg Open Space Committee on a well thought out, realistic, and forward-looking Open Space and Recreation Plan. The Plan adequately provides the planning and action framework for the town to follow as they seek to address the town's needs for conservation and recreation land, agricultural land, corridors and parks, and greenways in the coming years.

We were especially pleased to see the discussion of potentially considering the Community Preservation Act as we have seen the positive effect it has had on the ability of many communities to protect the assets that make their towns unique. In addition, the recognition of Lunenburg's agriculture importance caught our attention. We feel our imperiled agricultural land is very important to protect for our region's long-term sustainability. Lunenburg's prime agricultural soils and existing farms are a significant asset.

North County Land Trust is eager to work cooperatively with the Town as it seeks to implement the Plan's recommendations in the coming months and years. We appreciate the Town's efforts and applaud the work of the Open Space Committee members efforts completing the 2019-2029 Open Space and Recreation Plan.

Sincerely,

Anna Wilkins

Executive Director

North County Land Trust
325 Lindell Avenue
Leominster, MA 01453
www.northcountylandtrust.org
Office: (978) 466-3900
Cell: (978) 821-0574



*Committed to Conservation in North Central Mass.
Celebrating 25 years and counting....*



Protecting our water, our land, our communities

January 28, 2019

Brandon Kibbe
Lunenburg Open Space and Recreation Plan Committee
960 Massachusetts Avenue
Lunenburg, MA 01462

Dear Mr. Kibbe:

The Nashua River Watershed Association (NRWA) is pleased to endorse and support Lunenburg's Open Space and Recreation Plan (OSRP) that has been recently prepared by members of the Lunenburg Open Space and Recreation Plan Committee.

As appropriate parcels are protected from development, and as public trails, facilities and other recreational opportunities are simultaneously enhanced and made accessible to the general public, both environmental quality and quality of life will improve. We look forward to continued collaboration with the town to provide active and passive recreation use of conserved land available to residents of Lunenburg and others. This finely-written and well-researched plan indicates that the committee responsible for its completion was most serious in its efforts. We commend and support its acceptance. If you have any questions or desire further information please contact me at AIF@NashuaRiverWatershed.org.

Sincerely,

A handwritten signature in black ink, appearing to read "A Futterman", with a horizontal line extending to the right.

Al Futterman
NRWA Land Programs Director



DIVISION OF FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581
p: (508) 389-6300 | f: (508) 389-7890
MASS.GOV/MASSWILDLIFE

Jack Buckley, Director

October 25, 2018

Robert Pease
Lunenburg Conservation Committee
960 Massachusetts Avenue
Lunenburg, MA 01462

RE: Lunenburg Open Space and Recreation Plan

Dear Mr. Pease:

Thank you for contacting the Massachusetts Natural Heritage and Endangered Species Program (NHESP) regarding the Open Space and Recreation Plan for the Town of Lunenburg. Enclosed is information on species listed under the Massachusetts Endangered Species Act (MESA), as well as on Priority Natural Communities, Certified and Potential Vernal Pools, Coldwater Fishery Resource streams and rivers, and other aspects of biodiversity documented in our database for the Town of Lunenburg. The Town is encouraged to include this letter and associated materials in the Open Space and Recreation Plan.

MESA-listed Species

According to the NHESP database, the Town of Lunenburg currently has habitat for the following rare species listed under MESA:

- Blanding's Turtle (*Emydoidea blandingii*, Threatened)
- Bald Eagle (*Haliaeetus leucocephalus*, Threatened)
- Eastern Whip-poor-will (*Caprimulgus vociferus*, Special Concern)
- Wood Turtle (*Glyptemys insculpta*, Special Concern)

Fact sheets on this species may be downloaded from our website at <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/species-information-and-conservation/mesa-list/list-of-rare-species-in-massachusetts.html>. The Town is encouraged to include these fact sheets in its Plan.

Priority Natural Communities

There are no Priority Natural Communities documented to NHESP from Lunenburg.

Vernal Pools

As of this date, there are 18 Certified and 134 Potential Vernal Pools documented from Lunenburg. Most of the Potential Vernal Pools are likely able to be certified; the Town is encouraged to certify vernal pools on its own properties and to require developers to certify pools on any property requiring permits from the Town.

Coldwater Fishery Resources

There are four Coldwater Fisheries Resource streams in Lunenburg:

- Catacoonamug Brook
- Easter Brook
- Mulpus Brook
- Pearl Hill Brook

BioMap2

Eleven areas within Lunenburg are *BioMap2* Core Habitat. They include three Aquatic Cores, four Forest Cores, two Vernal Pool Cores, four Wetland Cores, and areas for five Species of Conservation Concern.

Adjacent to and overlapping some of these Core Habitats in Lunenburg are six areas of *BioMap2* Critical Natural Landscape, including two Aquatic Buffers, three Landscape Blocks, and six Wetland Buffers. For an explanation of *BioMap2* and the Core Habitats within Lunenburg, please see the attached *BioMap2* Report.

Discussion

In a town like Lunenburg, it can be hard to decide which areas are the highest priorities for conservation actions. The Town should consider carefully these suggestions for inclusion in its Open Space and Recreation Plan:

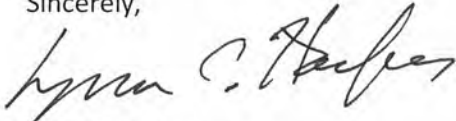
- Land Protection: The Town and its conservation partners should consider concentrating on adding on to already protected lands, as well as conserving wetlands:
 - In the northeast corner of Lunenburg, the Town already protects several large properties. The undeveloped parcels could be targets for additional land protection by the Town and its conservation partners, as this area is important habitat for the Threatened Blanding's Turtle.
 - In the northwest corner of the Town, there is a large block of *BioMap2* Landscape Block, which includes Willard Brook State Forest and Town conservation land. Protecting more land here would help conserve a large area for a wide array of biodiversity.
- Habitat Management: The Town should assess its conservation areas for the presence of invasive species. If invasives are present in substantial numbers or areas, consider removing them. (Note that MassWildlife currently offers grants to fund such activities).
- Regulation: The Town should support and encourage its Conservation Commission to enforce the provisions of the Massachusetts Wetlands Act. While there is no local board or official charged with enforcing the provisions of the Massachusetts Endangered Species Act, the Town could consider having the Conservation Commission and the Building Inspector notify

development applicants of the presence/absence of Priority Habitat of Rare Species on the applicant's property.

- Education and Outreach: Developing community support for conservation of biodiversity is essential for successful efforts at land protection, habitat management, and regulation. Offering field trips on Town conservation areas, writing articles on conservation for local websites and newspapers, and encouraging local students to conduct biological surveys and observations on conservation areas are a few of the low-cost ways to build support that will pay off in the future.

The Town of Lunenburg is to be commended for undertaking production of an Open Space and Recreation Plan. Please do not hesitate to call me at 508-389-6351 if you have any further questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Lynn C. Harper". The signature is fluid and cursive, with the first name "Lynn" being more prominent.

Lynn C. Harper

Habitat Protection Specialist

Massachusetts Natural Heritage & Endangered Species Program

APPENDIX 11: BioMAP2 LUNENBURG REPORT

BioMap2

CONSERVING THE BIODIVERSITY OF
MASSACHUSETTS IN A CHANGING WORLD

Lunenburg

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.





Table of Contents

Introduction

What is *BioMap2* – Purpose and applications

One plan, two components

Understanding Core Habitat and its components

Understanding Critical Natural Landscape and its components

Understanding Core Habitat and Critical Natural Landscape Summaries

Sources of Additional Information

Lunenburg 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.

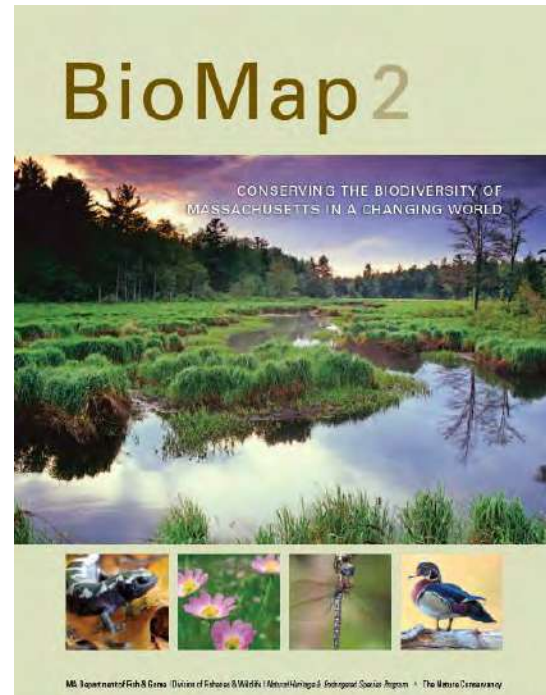
BioMap2 combines NHESP's 30 years of rigorously documented rare species and natural community data with spatial data identifying wildlife species and habitats that were the focus of the Division of Fisheries and Wildlife's 2005 State Wildlife Action Plan (SWAP). *BioMap2* also integrates The Nature Conservancy's 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, 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 sites or have very few remaining acres in the state.
- Imperiled communities typically have 6-20 sites or few remaining acres in the state.
- Vulnerable communities typically have 21-100 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/nhesp.

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/nhesp. 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.



**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

For more information on rare species and natural communities, please see our fact sheets online at www.mass.gov/nhesp.



Town Overview

Lunenburg lies within the Southern New England Coastal Plains and Hills Ecoregion, an area comprised of plains with a few low hills. Forests are mainly central hardwoods with some transition hardwoods and some elm-ash-red maple and red and white pine. Many major rivers drain this area.



Lunenburg at a Glance

- Total Area: 17,758 acres (27.7 square miles)
- Human Population in 2010: 10,086
- Open space protected in perpetuity: 2,888 acres, or 16.3% percent of total area*
- BioMap2 Core Habitat: 3,599 acres
- BioMap2 Core Habitat Protected: 1,409 acres or 39.2%
- BioMap2 Critical Natural Landscape: 3,620 acres
- BioMap2 Critical Natural Landscape Protected: 1,212 acres or 33.5%.

BioMap2 Components

Core Habitat

- 4 Forest Cores
- 4 Wetland Cores
- 3 Aquatic Cores
- 2 Vernal Pool Cores
- 4 Species of Conservation Concern Cores**
 - 2 birds, 1 reptile, 2 amphibians

Critical Natural Landscape

- 3 Landscape Blocks
- 5 Wetland Core Buffers
- 3 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.

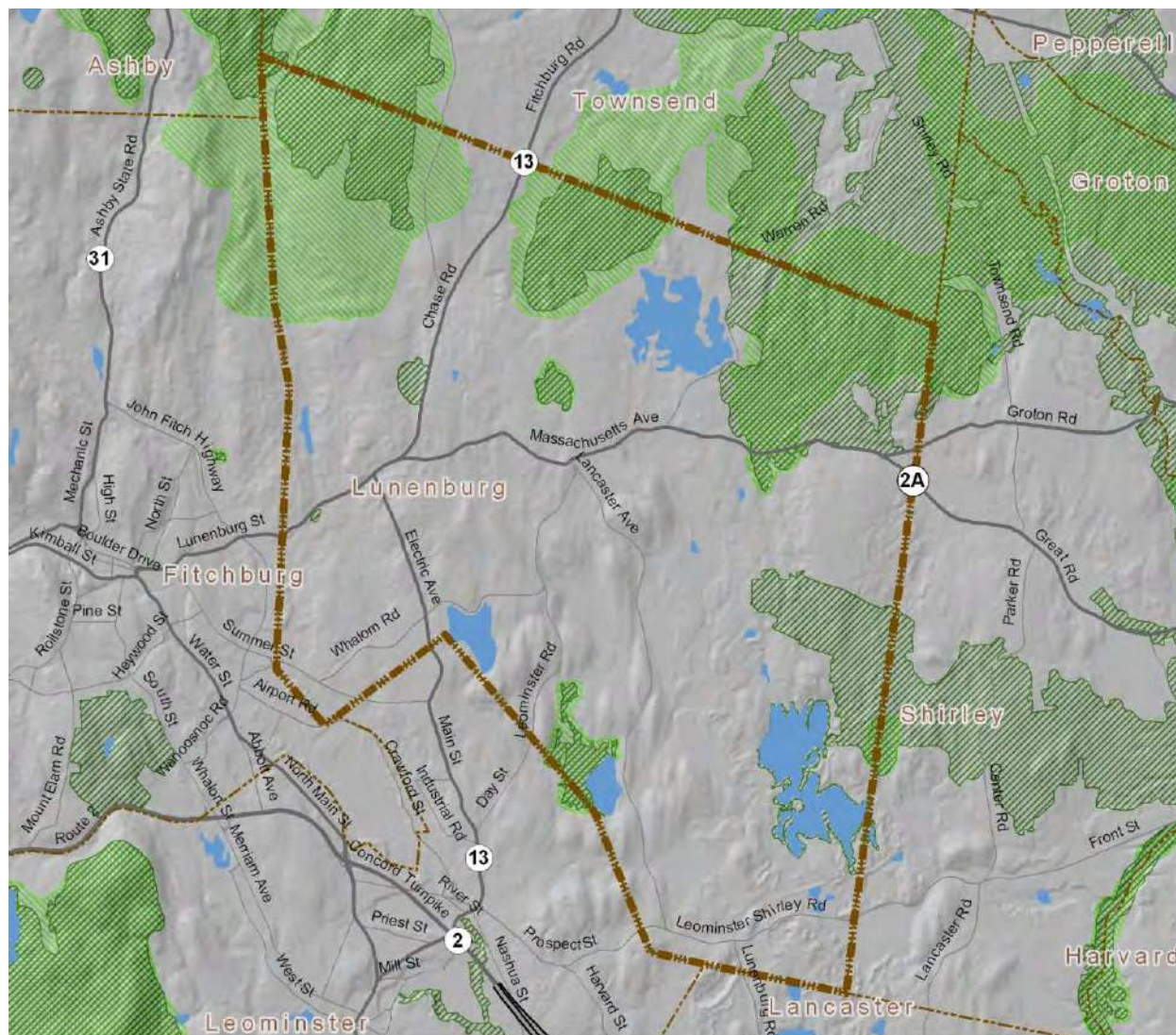




BioMap2

Conserving the Biodiversity of Massachusetts in a Changing World

BioMap2 Core Habitat and Critical Natural Landscape in Lunenburg

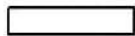


BioMap2 Core Habitat



BioMap2 Critical Natural Landscape

1 Mile



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

Amphibians

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

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

Reptiles

[Blanding's Turtle](#), (*Emydoidea blandingii*), T

Birds

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

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

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.

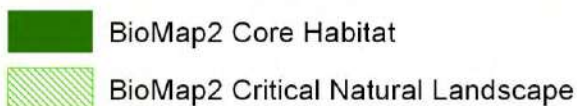
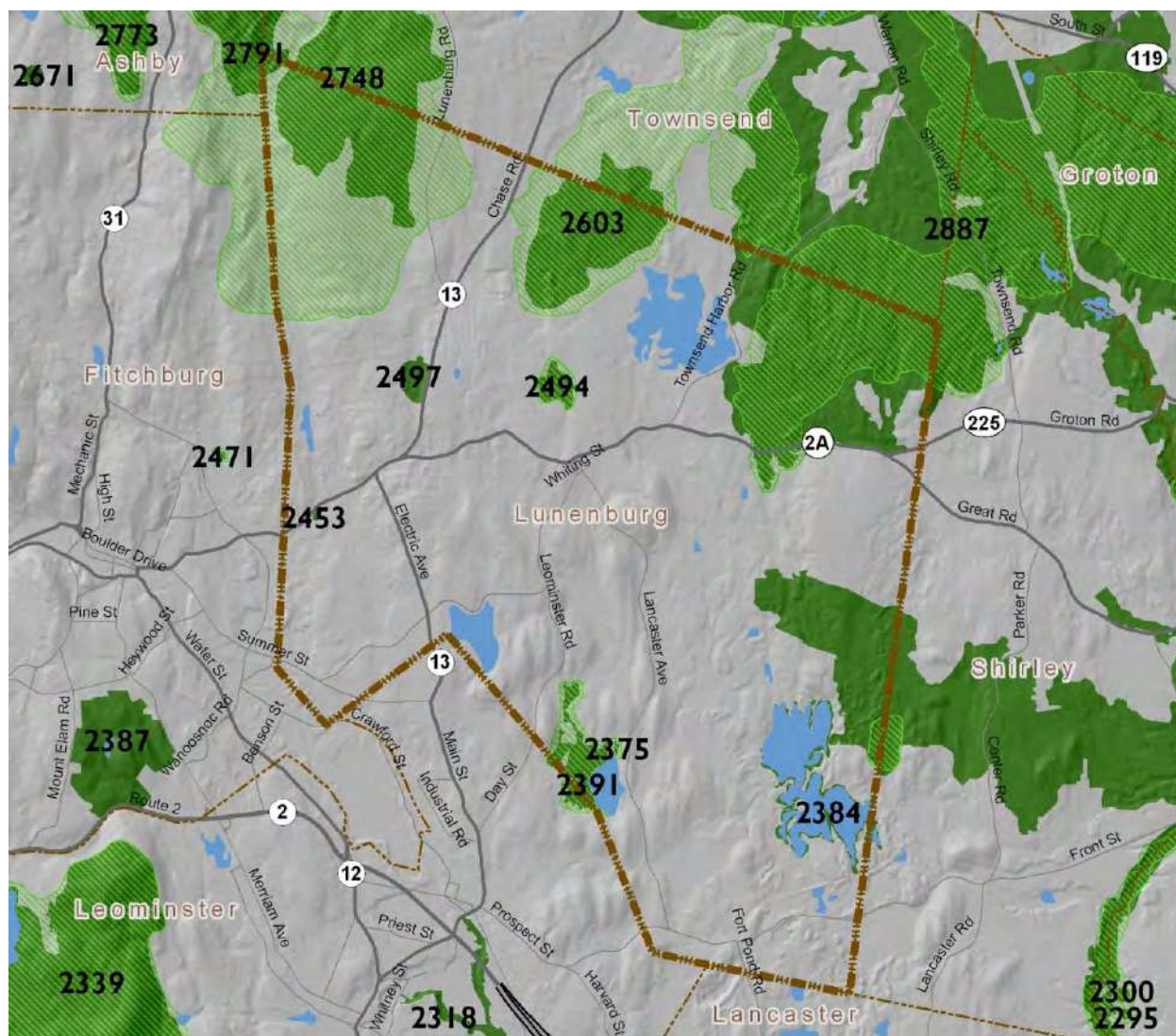
S3 = Vulnerable communities, typically have 21-100 sites or limited acreage across the state.





BioMap2 Core Habitat in Lunenburg

Core IDs correspond with the following element lists and summaries.



1 Mile





Elements of BioMap2 Cores

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

Core 2351

Wetland Core

Core 2375

Wetland Core

Core 2384

Species of Conservation Concern

Bald Eagle

Haliaeetus leucocephalus

T

Core 2391

Wetland Core

Core 2453

Aquatic Core

Core 2494

Aquatic Core

Species of Conservation Concern

American Bittern

Botaurus lentiginosus

E

Core 2497

Species of Conservation Concern

Four-toed Salamander

Hemidactylium scutatum

Non-listed SWAP

Core 2603

Forest Core

Core 2748

Forest Core

Wetland Core

Core 2791

Forest Core

Core 2887

Forest Core

Aquatic Core

Wetland Core

Vernal Pool Core

Priority & Exemplary Natural Communities

Acidic Graminoid Fen

S3

Alluvial Red Maple Swamp

S3





Circumneutral Talus Forest/Woodland		S3
High-terrace Floodplain Forest		S2
Low-energy Riverbank		
Pitch Pine - Scrub Oak Community		S2
Riverside Seep		S2
Small-river Floodplain Forest		S2
Species of Conservation Concern		
Cat-tail Sedge	<i>Carex typhina</i>	T
Climbing Fern	<i>Lygodium palmatum</i>	SC
Houghton's Flatsedge	<i>Cyperus houghtonii</i>	E
Low Bindweed	<i>Calystegia spithamea</i>	E
New England Blazing Star	<i>Liatris scariosa</i> var. <i>novae-angliae</i>	SC
Ovate Spike-sedge	<i>Eleocharis ovata</i>	E
Philadelphia Panic-grass	<i>Panicum philadelphicum</i> ssp. <i>philadelphicum</i>	SC
Small Bur-reed	<i>Sparganium natans</i>	E
Wild Senna	<i>Senna hebecarpa</i>	E
Brook Floater (Swollen Wedgemussel)	<i>Alasmodonta varicosa</i>	E
Creeping	<i>Strophitus undulatus</i>	SC
Triangle Floater	<i>Alasmodonta undulata</i>	Non-listed SWAP
Intricate Fairy Shrimp	<i>Eubrachipus intricatus</i>	SC
Pine Barrens Speranza	<i>Speranza exonerata</i>	SC
Pine Barrens Zanclognatha	<i>Zanclognatha martha</i>	T
Pink Sallow	<i>Psectraglaea carnosa</i>	SC
Twilight Moth	<i>Lycia rachelae</i>	E
Twelve-spotted Tiger Beetle	<i>Cicindela duodecimguttata</i>	SC
New England Bluet	<i>Enallagma laterale</i>	Non-listed SWAP
Arrow Clubtail	<i>Stylurus spiniceps</i>	Non-listed SWAP
Brook Snaketail	<i>Ophiogomphus aspersus</i>	SC
Kennedy's Emerald	<i>Somatochlora kennedyi</i>	E
Spatterdock Darner	<i>Rhionaeschna mutata</i>	SC
Spine-crowned Clubtail	<i>Gomphus abbreviatus</i>	SC
Umber Shadowdragon	<i>Neurocordulia obsoleta</i>	SC
Zebra Clubtail	<i>Stylurus scudderi</i>	Non-listed SWAP
Blue-spotted Salamander	<i>Ambystoma laterale</i>	SC
Four-toed Salamander	<i>Hemidactylium scutatum</i>	Non-listed SWAP
Marbled Salamander	<i>Ambystoma opacum</i>	T
Northern Leopard Frog	<i>Rana pipiens</i>	Non-listed SWAP
Spring Salamander	<i>Gyrinophilus porphyriticus</i>	Non-listed SWAP
Blanding's Turtle	<i>Emydoidea blandingii</i>	T
Eastern Hognose Snake	<i>Heterodon platirhinos</i>	Non-listed SWAP
Eastern Ribbon Snake	<i>Thamnophis sauritus</i>	Non-listed SWAP
Northern Black Racer	<i>Coluber constrictor</i>	Non-listed SWAP
Smooth Green Snake	<i>Ophedrys vernalis</i>	Non-listed SWAP
Spotted Turtle	<i>Clemmys guttata</i>	Non-listed SWAP



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Wood Turtle	<i>Glyptemys insculpta</i>	SC
Bridle Shiner	<i>Notropis bifrenatus</i>	SC
American Bittern	<i>Botaurus lentiginosus</i>	E
Eastern Whip-poor-will	<i>Caprimulgus vociferus</i>	SC
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	T
Least Bittern	<i>Ixobrychus exilis</i>	E
Sora	<i>Porzana carolina</i>	Non-listed SWAP
Upland Sandpiper	<i>Bartramia longicauda</i>	E
Vesper Sparrow	<i>Pooecetes gramineus</i>	T
Water Shrew	<i>Sorex palustris</i>	SC





Core Habitat Summaries

Core 2351

A <1-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.

Core 2375

A 3-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.

Core 2384

A 412-acre Core Habitat featuring a Species of Conservation Concern.

Bald Eagles nest in tall trees along large lakes and rivers. The bulk of their diet consists of fish. Large lakes and rivers also support important winter congregations of Bald Eagles.

Core 2391

A 120-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 120-acre Wetland Core is among the largest 20% of Wetland Cores statewide and in this ecoregion.

Core 2453

A 3-acre Core Habitat featuring Aquatic Core.

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.

Core 2494

A 48-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.

American Bitterns are heron-like birds that nest primarily in large cattail, tussock or shrub marshes and are very sensitive to disturbance.

Core 2497

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

Four-toed Salamanders live in forested habitats surrounding swamps, bogs, marshes, vernal pools, and other fish-free waters that are used as breeding sites. Most breeding sites in Massachusetts are characterized by pit-and-mound topography with significant sphagnum-moss cover. Eggs are typically laid in mounds or patches of sphagnum moss that overhang water. Upon hatching, the larvae wriggle through the moss and drop into the water, where they will develop for several weeks prior to metamorphosis.

Core 2603

A 569-acre Core Habitat featuring Forest Core.

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.

Core 2748

A 1,105-acre Core Habitat featuring Forest Core, Wetland Core.

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.

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.

Core 2791

A 1,364-acre Core Habitat featuring Forest Core.

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.

This 1,364-acre Forest Core is the ninth largest in the ecoregion and is almost completely protected through Willard Brook State Forest.





Core 2887

A 50,549-acre Core Habitat featuring Forest Core, Wetland Core, Aquatic Core, Vernal Pool Core, Priority Natural Communities, and Species of Conservation Concern.

The Nashua River and three of its tributaries in Massachusetts, the Nissitissit River, the Squannacook River, and Unkety Brook, are the watery framework for a complex landscape that supports an exceptionally high number of rare and uncommon species. Forty-one such turtles, dragonflies, freshwater mussels, salamanders, plants and other species inhabit these rivers, brooks, and vernal pools. Good populations of the globally rare Brook Floater mussel inhabit the Nissitissit River, while the equally rare Ringed Boghaunter dragonfly can be found in four boggy sites across this large Core Habitat. The wide-ranging and regionally rare Blanding's Turtle inhabits almost all of this Core; these turtles use many parts of this landscape throughout their decades-long lives, from feeding and over-wintering in deep vernal pools and buttonbush swamps to nesting in open, sunny, well-drained fields and abandoned gravel pits.

Acidic Graminoid Fens are sedge- and sphagnum-dominated acidic peatlands that experience some groundwater and/or surface water flow but no calcareous seepage. Standing water is often present throughout much of the growing season. This is a good example of a variant of Acidic Graminoid Fen dominated by Water Willow. It has good structural characteristics and no exotic invasive species.

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. This example of Alluvial Red Maple Swamp is of excellent quality and is associated with several small oxbow ponds.

Circumneutral Talus Forest communities develop on boulder strewn slopes below slightly acidic cliffs or rock outcrops. There is often a gradient of vegetation density as the slope changes, with more trees on the lower slope. This example of Circumneutral Talus Forest, though small, is in very good condition. It has excellent diversity and no exotic invasive species, but has only a small buffer to development.

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. This Core has two examples of High-Terrace Floodplain Forest which are moderate sized, but fairly disturbed with exotic invasive species present.

Low-Energy Riverbanks are open herbaceous communities occurring on sandy or silty mineral soils of river and streambanks that do not experience severe flooding or ice scour. This example of Low-Energy Riverbank is in good condition, with few exotics, and is part of a larger complex of riverine and wetland ecosystems.

Pitch Pine/Scrub Oak Communities are globally rare, fire-dependent, shrub-dominated communities, with scattered trees and occasional openings. They provide habitat for many rare species, and develop on dry, poor, usually sandy, soils. This example of Pitch pine-Scrub Oak community is in good condition, with intact natural processes like fire, and good species and habitat diversity.

Riverside Seeps are a mixed herbaceous community that occurs at the base of steep riverbanks where groundwater seeps out of the bottom of the upland slope. This enrichment leads to high species diversity.





This example of Riverside Seep is relatively undisturbed and of high quality, and consists of several Black Ash-dominated seepy areas occurring along a slope above floodplain forest.

Small-River Floodplain Forests are silver maple/green ash forests occurring on alluvial soils of small rivers and streams. They occur on small tributaries of the Connecticut and Nashua Rivers and along some small rivers of eastern Massachusetts. This small example of Small-River Floodplain Forest is in good condition.

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.

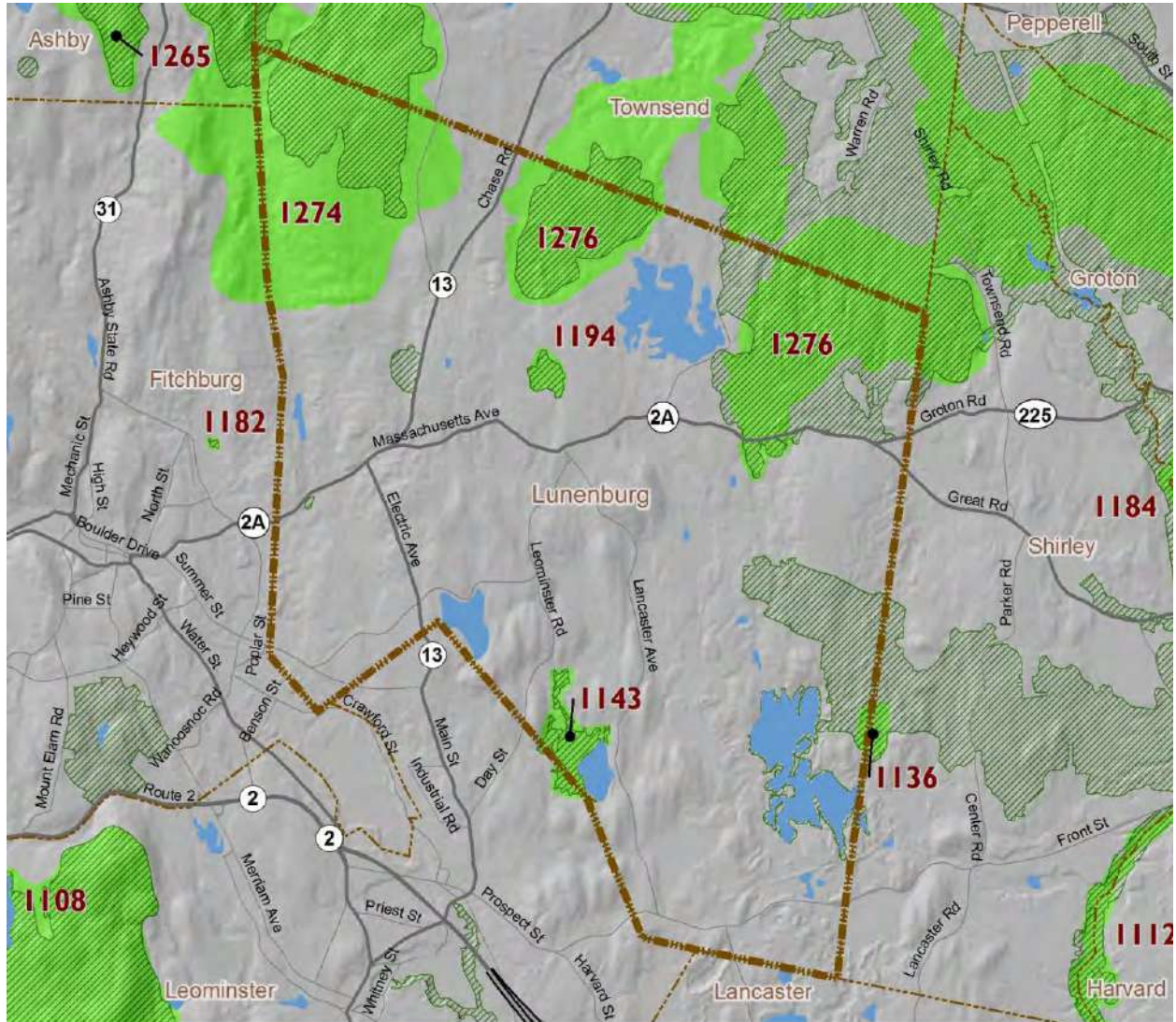
Vernal pools are small, seasonal wetlands that provide important wildlife habitat, especially for amphibians and invertebrate animals that use them to breed. *BioMap2* identifies the top 5 percent most interconnected clusters of Potential Vernal Pools in the state.





BioMap2 Critical Natural Landscape in Lunenburg

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



BioMap2 Core Habitat



BioMap2 Critical Natural Landscape

1 Mile



Natural Heritage
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Species Program

Massachusetts Division of Fisheries and Wildlife

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Elements of BioMap2 Critical Natural Landscapes

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

CNL 1114

Wetland Core Buffer

CNL 1136

Wetland Core Buffer

CNL 1143

Wetland Core Buffer

CNL 1194

Aquatic Core Buffer

CNL 1274

Landscape Block
Wetland Core Buffer

CNL 1276

Aquatic Core Buffer
Landscape Block
Wetland Core Buffer





Critical Natural Landscape Summaries

CNL 1114

A <1-acre Critical Natural Landscape featuring 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 1136

A 71-acre Critical Natural Landscape featuring 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 1143

A 214-acre Critical Natural Landscape featuring 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 1194

A 63-acre Critical Natural Landscape featuring Aquatic 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 1274

A 4,708-acre Critical Natural Landscape featuring 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.

This mostly forested 4,708-acre Landscape Block is the eleventh largest of 62 Blocks in the ecoregion.

CNL 1276

A 6,761-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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Help Save Endangered Wildlife!

Please contribute on your Massachusetts income tax form or directly to the



Natural Heritage &
Endangered Species Fund

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