Town of Wilmington Open Space and Recreation Plan









JULY 2021

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ACRONYMS

ADA Americans with Disabilities Act

AMSL above mean sea level

AVIS Andover Village Improvement Society

BFE Base Flood Elevation

CMR Code of Massachusetts Regulations

CVP certified vernal pool

CWRMP Comprehensive Water Resources Management Plan

DCR Massachusetts Department of Conservation and Recreation
DEP Massachusetts Department of Environmental Protection

DPW Wilmington Department of Public Works

EPA United States Environmental Protection Agency
EEA Executive Office of Energy and Environmental Affairs

FEMA Federal Emergency Management Agency

GIS Geographic Information Systems
GWPD Groundwater Protection District
IRWA Ipswich River Watershed Association
LAND Local Acquisitions for Natural Diversity
MAPC Metropolitan Area Planning Council

MBTA Massachusetts Bay Transportation Authority

MCP Massachusetts Contingency Plan

MEPA Massachusetts Environmental Protection Agency

MFHA Moderate Flood Hazard Area

MGD million gallons per day

M.G.L. Massachusetts General Laws

MS4 Municipal Small Separate Sewer System
 MVP Municipal Vulnerability Preparedness
 MWRA Massachusetts Water Resources Authority
 NCRS USDA Natural Resources Conservation Service

NDMA N-Nitrosodimethylamine

NHESP Natural Heritage and Endangered Species Program

NRHP National Register of Historic Places

NSPC North Suburban Planning Council (a subgroup of MAPC)

OSRP Open Space and Recreation Plan

PARC Parkland Acquisitions and Renovations for Communities

PVP potential vernal pool

RAO Response Action Outcome (related to cleanup of contaminated sites)

SFHA Special Flood Hazard Areas

SWAP Source Water Assessment Program
USDA United States Department of Agriculture

USGS United States Geological Survey

WPA Massachusetts Wetlands Protection Act

Section 1: Plan Summary

The central themes running through the Wilmington Open Space and Recreation Plan are to provide active open space and recreation opportunities together with natural land conservation that preserve the character of the Town and enhance the lives of its citizens.

Vision Statement: The Town of Wilmington is a suburban community in a natural setting with woodlands and wetlands scattered around Town, creating a spacious, small town character and quality of life. The Town will continue to preserve and acquire open space to maintain Wilmington's small town character. Wilmington should be a place where there is a variety of open space that provides active and passive recreational opportunities to all age groups and interests.

To achieve that vision, the goals outlined in this plan build on community input from surveys and meetings. A five-year action plan outlines specific tasks associated with each goal. The goals are:

- Provide opportunities for open space appreciation and environmentally friendly walking and biking trails.
- Balance resources to meet open space demands and provide a variety of open space amenities for a full range of users and interests.
- Protect the Town's natural resources and open space areas that support water protection, flood management, and essential wildlife habitat and ecosystems.

Since the last Open Space and Recreation Plan, a number of projects that further the Town's goals have been undertaken:

- Yentile Farm Recreational Facility, which is ADA accessible, was constructed;
- A new dog park was constructed at Town Park;
- The Land Stewardship Handbook was updated;
- The Town created an ADA policy for benches and picnic tables;
- A new accessible playground was constructed within a residential subdivision;
- At Silver Lake, the pier lip was constructed and hard surfaces connected;
- A handicap accessible ramp was installed at the Rotary Park ball field;
- A pickle ball court was added at Robert Palmer Park;
- Improvements were made to the bocce court at the Senior Center, including solar lights, landscaping changes, and wood replacement;
- Trail improvements were constructed by Eagle Scouts at Town Forest, including a new bridge over a wetland and a new trail connection replacing an overgrown section of trail;
- Trail improvements were constructed by Eagle Scouts at Cormier Park and along the Middlesex Canal:
- Trails were mapped at Hathaway Acres, Blanchard Road, and Town Forest;
- The Town's Stormwater Management Bylaw and Regulations were updated to reflect the latest changes in the EPA's municipal separate storm sewer systems (MS4) requirements;

- All approved residential subdivisions have utilized the Conservation Subdivision Design Bylaw so land is set aside for open space in exchange for reduced lot sizes and setback requirements;
- The subdivisions recently constructed or under construction have resulted in additional Conservation Land and trail systems;
- The amount of land overseen by the Conservation Commission has increased;
- The Town was awarded a grant for Municipal Vulnerability Preparedness (MVP) Plan and update to the Hazard Mitigation Plan.

Section 2: Introduction

Statement of Purpose

This updated plan continues the work of the Town's Open Space Committee, Recreation Commission, Department of Public Works, and Planning & Conservation Department to guide open space protection and recreation area management. It builds off previous open space planning efforts and lays out a work plan for the next five years.

The plan helps to ensure that the Town remains eligible for state funding for open space preservation and park improvement projects including Parkland Acquisitions and Renovations for Communities (PARC), Local Acquisitions for Natural Diversity (LAND), and the federal Land and Water Conservation Fund which are administered by the Massachusetts Executive Office of Energy and Environmental Affairs (EEA).

Planning Process and Public Participation

The purpose of this new Open Space and Recreation Plan (OSRP) is to update the Town's existing Plan, to evaluate current conditions, and to plan for the future. In addition to become eligible for state grants, a Town's OSRP must be updated at five-year intervals and be approved by the State Division of Conservation Services.

The Town of Wilmington began the process of updating its last approved Open Space and Recreation Plan in 2019. An Open Space Committee was appointed, and Committee members include:

- 1. James Campbell
- 2. Karen Campbell (Recreation Director)
- 3. Megan Fiorello
- 4. Jason Hounsell
- 5. Jamie Magaldi (DPW Operations Manager, Tree Warden)
- 6. Michael McInnis
- 7. Suzanne Sullivan

The Committee was assisted by staff: Valerie Gingrich (Director of Planning & Conservation) and Sierra Pelletier (Assistant Planner).

To develop a community vision and goals and solicit input on issues and opportunities for resource protection and the provision of open space and recreation, the Open Space Committee and staff developed an outreach plan that included:

- A series of Open Space Committee working meetings open to the public were held to help determine community goals, objectives, and strategies;
- Two community-wide online surveys (also available in hard copy at several locations) marketed
 through local papers, the local cable channel WCTV, email distribution lists, and social media: one in
 2019 to gauge residents' initial interests and opinions, and a second survey in 2020 to get community
 feedback on draft goals and objectives; and
- A final meeting to present the draft vision and recommendations and solicit input for recommended changes, additions, and deletions.

The Open Space Committee also solicited public input by posting the draft Plan online for public review.

Acknowledgements

The Commission on Disabilities provided an accessibility assessment and assisted with identifying action items for public trails and recreation facilities.

Staff from the Department of Planning and Conservation, Sierra Pelletier, former Staff Planner, Ryan Hale, former Conservation Agent, and Valerie Gingrich, Director, updated and drafted text for the 2021 Plan in conjunction with the Open Space Committee.

Section 3: Community Setting

Regional Context

Wilmington is a mixed residential, commercial, and industrial suburban community located in Middlesex County, 16 miles north/northwest of Boston and 11 miles southeast of Lowell. It is bordered by Andover, Billerica, Burlington, North Reading, Reading, Tewksbury, and Woburn. Wilmington is a part of the North Suburban Planning Council (NSPC) sub-region of the Metropolitan Area Planning Council (MAPC). NSPC meets regularly to discuss and work cooperatively on sub-regional issues and opportunities, such as transportation and open space. MetroFuture, MAPC's regional development plan for the Boston Metropolitan Area, includes goals and objectives related to smart growth, preservation of natural landscapes, economic development, and general health through 2030. MetroCommon, the latest regional plan, is underway and will provide a long-range plan through 2050.

Interstate 93 (I-93) has four exits within Wilmington, and Interstates 495 and 95 (I-495 and I-95) as well as Route 3 are within minutes of Town. The Haverhill and Lowell MBTA commuter rail lines both make stops in Wilmington. Routes 62, 38, and 129 run through Town and attract pass-through traffic from industrial and commercial centers in Woburn and Burlington. Employees throughout the region are drawn to employment opportunities in Wilmington, particularly in industrial districts along I-93. As of 2015, about 18,400 people come from other communities to work in Wilmington in addition to over 1,300 Town residents who work in Town, while Town residents working in other communities only totals about 11,000 – demonstrating it is a regional jobs hub¹.

Wilmington historically developed as a farming community. The post-World War II demand for housing and completion of I-93 and I-495 in the 1960s spurred growth, and a strong economy in the mid-1980s and 90s accelerated growth. Today, as land and housing prices have increased inside Route 128, businesses and homebuyers have come to Wilmington in search of more affordable property. The suburban setting, good public schools, and low crime rate have undoubtedly played a role in this migration. Proximity to Boston – with its major technology, financial services, medical, and educational institutions – and proximity to transportation modes allowing easy access to Boston and to points throughout New England, have also added to the significant growth pressures. As land availability has decreased and value increased, open space has been significantly reduced and there is less land available to satisfy the demands and needs of more people.

The Ipswich River has its headwaters in Wilmington, and most of the Town is located within the Ipswich River watershed (see **Figure 1**), with portions of the western and northwestern section of Town in the Shawsheen River watershed and a small section in the southeast corner in the Boston Harbor watershed (part of the Mystic River watershed). The Town is rich in water resources, including the wetlands that cover 19% of the Town's total area. Groundwater aquifers underlying Wilmington supply the majority of the Town's drinking water, as well as that of neighboring and downstream communities (see Map 1). Industrial pollution and nonpoint source pollution from roadways are potential threats to regional water supplies. Regional concerns about groundwater quality and quantity have increased as development has encroached on environmentally sensitive lands. The Ipswich River demonstrates the impact of this development: several times during the past three decades, up to half of the river went dry, resulting in fish kills and other environmental damage. In 2001 the Massachusetts Water Resources Commission classified the Ipswich River as "highly stressed." American Rivers listed it as one of the 20 Most Endangered

5

¹ UMass Donahue Institute. 2019. <u>Wilmington Route 38-Main Street Corridor Market Study</u> (U.S. Census Bureau, On the Map Application, Longitudinal Employer-Household Dynamics LEHD data 2015).

Rivers in the United States in 1997 and increased its threat level to the third most endangered river in 2003 due to flow conditions.² In 2021, the Ipswich River was again listed as one of the top 10 most endangered rivers in the U.S.

Figure 1: Ipswich River Watershed³

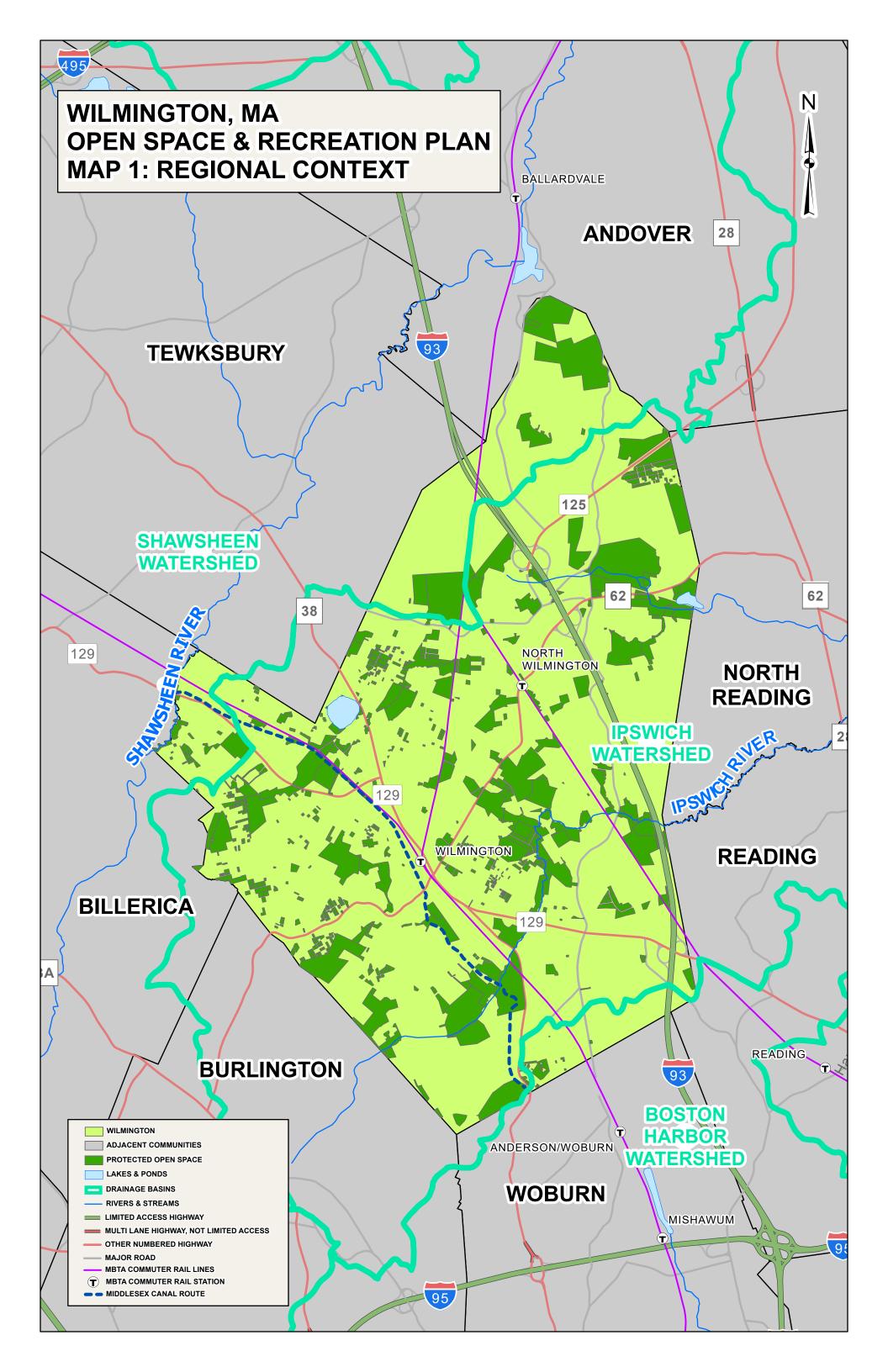


The Conservation Commission's efforts to protect a corridor along the Ipswich River and its tributaries complement similar efforts in neighboring communities. Reading and North Reading have protected land along the Ipswich River up to the Wilmington border. Burlington has protected areas bordering Wilmington at Mill Brook, Saw Mill Brook, and Lubbers Brook, and holds a conservation restriction near its reservoir on land in Wilmington. In light of the impact that water consumption has on the Ipswich River, efforts have been undertaken to educate the community on the importance of using water judiciously.

Regional open space resources include the 156-acre Town Forest, which could be linked to the Foster's Pond open space in Andover and Yentile Farm Recreational Facility, which contains a large multi-aged playground and artificial turf soccer/multi-use field. The sandy beaches of Silver Lake draw residents from neighboring communities. Finally, the historic Middlesex Canal runs through Wilmington and attracts visitors to see the remnants of the first traction canal built in North America.

² Ipswich River Watershed Association. CUAHSI HIS. Retrieved from http://hiscentral.cuahsi.org/pub_network.aspx?n=247

³ Mass.gov. Ipswich Targeted Watershed Project – Overview. Retrieved from https://www.mass.gov/service-details/ipswich-targeted-watershed-project-overview



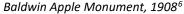
History of the Community

Wilmington was incorporated in 1730 because residents were tired of the long, winding journeys to public worship services in Reading or Woburn.⁴ Because it was formed from outlying areas of surrounding communities, Wilmington did not develop around the traditional New England town common. Water resources, agriculture, and transportation played major roles in Wilmington's history.

Wilmington is known for having many water resources. Silver Lake, originally named Sandy Pond, was the source of water for one of Wilmington's earliest sawmills, Thompson-Harnden Mill (1720). The mill was supplied with waters diverted from the lake through a manmade ditch and from Lubbers Brook. From 1870 to the early 1920s as many as 17 commercial ice houses operated along the shores of Silver Lake, supplying homes and businesses as far away as Boston with ice throughout the year. From the early 1960s to 2003, Maple Meadow Swamp served as a significant source of the Town's water supply, until discontinued due to contamination of the aquifer.

Additionally, agriculture was significant in the Town's history. Early settlement occurred on the higher, drier areas, with the wetter lands used for farming, as well as piggeries, dairy production, and lumber. Early settlers growing hops gave 18th century Wilmington the nickname "Hoptown." Unfortunately, this success inspired such a "regional hop-fever" among other New England farmers that prices plummeted. A replacement crop was found in the cranberries that thrived in Wilmington's ubiquitous wetlands and bogs. Cranberries were a key contributor to the Town's economy throughout the 19th century, and they continued to be grown throughout the early 20th. The Baldwin (or Woodpecker) Apple was discovered in Wilmington in the 18th century by a worker building the Middlesex Canal. It was cultivated extensively throughout the county, primarily for cider, and was considered "a veritable boon to the science of pomology and without peer as a winter fruit." A monument was built in 1895 commemorating where the apple was discovered.







Middlesex Canal Lubbers Brook Aqueduct (year unknown)⁷

The success of hops and cranberries in the 18th century inspired local officials and merchants such as Colonel Loammi Baldwin, the first Sheriff of Middlesex County (and person after whom the Baldwin Apple

⁴Eames, Lemuel C. Wilmington. In Drake, Samuel (Ed). 1874. <u>History of Middlesex County</u>. Boston: J.R. Osgood and Co.

⁵ Gould, Levi S. 1905. Ancient Middlesex. Somerville, MA: Somerville Journal Print.

⁶ Nielson, Larz. 2011 Dec. 23. Wilmington: The Home of the Baldwin Apple. Middlesex East.

⁷ Library of Congress

was named), to construct a canal between Chelmsford and Boston⁸. Construction on the Middlesex Canal, the first traction canal in North America, began in 1794 and it was an important transportation route for the next 50 years. During this time Wilmington exported hops, cranberries, and lumber. The Middlesex Canal declined as the more efficient railways expanded to serve the towns of Middlesex County. In 1835 the Boston & Lowell Line came through Wilmington, and was soon followed by the Boston & Maine and the Salem & Lowell Lines.⁹



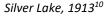


Silver Lake Railroad Station, 1917¹⁰

B&M Depot, 197810

With relatively quick access from the urban centers of Lowell and Boston, Wilmington's Silver Lake became a summer resort attraction. Summertime populations doubled or even tripled around the lake as urban residents escaped the confines of the city. In addition to the summer residents, Silver Lake hosted a day camp for city kids and a Salvation Army Bible Camp. The Depression of the 1930s turned many of those summer residences into permanent homes, and Wilmington began its transformation into a suburban community.







Silver Lake, 1914¹⁰

As Wilmington began significant growth in the 1950s, public infrastructure both aided and responded to the Town's development. The Town's first sewer was installed in 1957 along Woburn Street. New school buildings began construction in the 1950s, and the Planning Board initiated Subdivision Control Law in 1957. The completion of Route 128 in the 1950s and I-93 in the 1960s, as well as two rail lines to Boston,

⁸ Gould, Levi S. 1905. Ancient Middlesex. Somerville, MA: Somerville Journal Print.

⁹ Eames, Lemuel C. Wilmington. In Drake, Samuel (Ed). 1874. <u>History of Middlesex County</u>. Boston, MA: J.R. Osgood and Co.

¹⁰ Wilmington Memorial Library, Ernie Botte's Postcard Collection

¹¹ O'Reilly, Gerry (Ed). 1996. Wilmington: A Retrospective. Wilmington, MA: Wilmington Historical Commission.

serviced and encouraged residential and industrial development in Wilmington. Single-family residences drastically increased, and the Town had a suburban industrial character by the 1970s. 12

The Town designated the land surrounding the highway as industrial and zoned the land to prepare for then-future development (1960 – 1980). Large businesses took advantage of the Town's transportation connection and available land, such as the two largest employers historically, Textron (then known as AVCO) opening in 1957/58 and Analog Devices, Inc. (ADI) opening in 1971. ADI went on to make Wilmington their company headquarters in 2018.





Lowell Street at Woburn Street (Perry's Corner), 1913¹³

Rte 38 (Main Street) at Church Street, 1964¹³

As early as the 1950s, Wilmington officials were trying to balance the immediate needs and long-term objectives for the people to maintain Wilmington as a desirable community in which to live and to work. The Wilmington General Plan Report was published in July 1957 as a precursor for the Wilmington Master Plan which was developed in 1960. In 2001 a new Town Master Plan was developed to direct growth of residential, commercial, and industrial development, and identify areas that should be rezoned to include a mixed use district. The 2004 Housing Plan and the 2000 and 2015 Open Space and Recreation Plans also addressed balancing a growing population with the need for open space.

Population Characteristics

GROWTH TRENDS

Railroad and highway development caused Wilmington's population to quadruple between 1930 and 1990. The most intensive period of growth occurred in the 1950s and 1960s, but leveled off during the 1980s, and spurted again in the late 1990s. The 1990 population of 17,654 increased to 21,363 in 2000, for a growth rate of 21% for the decade. In 2010 the population was 22,325, demonstrating a decrease in the 10-year growth rate to 4.5%. As of 2018 the population was estimated to be 23,907, a 7.1% increase since 2010.¹⁴

Though the University of Massachusetts Donahue Institute 2020 projection estimated 23,751 residents, the actual population surpassed that by 2018. Future projections do not indicate high growth rates for

¹² Eliot, Charles W. 1970. Comprehensive General Plan: Report for Wilmington Planning Board.

¹³ Wilmington Memorial Library, Durkee Collection

¹⁴ U.S. Census Bureau, Population Estimates Program (PEP), Updated annually. Population and Housing Unit Estimates, 2018

Wilmington (24,605 estimated for 2035 ¹⁵), but they do signal important shifts in demographics and age groups having implications for open space and recreation planning.

DENSITY

Population density influences demand for public outdoor parks and recreation spaces. In high density areas, properties may lack private yard space. Typically, these areas would benefit from small parks or playgrounds. In residential areas with lower density, the need for small parks is less significant. In 2018, Wilmington had a population density of 1,390 people per square mile, a 5.7% increase from 1,315 people per square mile in 2010. ¹⁶ **Table 1** compares population density of surrounding communities. Wilmington is among the less dense municipalities in its immediate area.

Table 1: Population Density¹⁷

Community	People per Square Mile
Andover	1,170
North Reading	1,181
Wilmington	1,390
Tewksbury	1,492
Billerica	1,659
Burlington	2,415
Reading	2,559
Woburn	3,131

Zoning, which will be discussed in more detail later in this section, encourages single-family development on relatively large lots. Recent zoning changes have created small mixed use districts in denser, commercial areas. They allow for multi-family housing, which may increase population density in the future, but also has the potential to reduce sprawling single-family development on larger, undeveloped parcels. The Town also allows for accessory apartments by-right, which may account for some of the density increase in recent years.

AGE

Age of residents can affect the demand for specific types of outdoor recreation. While residents of all ages differ in their recreational needs based on individual interests, there are some assumptions that can be made about the demand for facilities based on demographics. Families with young children tend to need neighborhood playgrounds. Youth, teenagers, and active adults need playfields for team sports, walking, running, and court sports. Elderly residents generally seek pleasant places to walk, sit outdoors, view wildlife, and gather with friends. A higher prevalence of retirees and empty-nesters may create a demand for a variety of adult recreation programs.

Table 2 shows the age distribution of the Town's population. Projections show a shift toward an older population, as seen in **Figure 2**, which will continue to grow in the coming years as more of the Baby Boomer generation reaches retirement and ages. Approximately 15.5% of the population was age 65 and older as of 2017, the same percent as the state overall, though Wilmington's median age is 42.3, slightly

¹⁵ UMass Donahue Institute Population Estimates Program.

¹⁶ U.S. Census Bureau, 2010 Decennial Census

¹⁷ U.S. Census Bureau, Population Estimates Program (PEP), Updated annually. Population and Housing Unit Estimates. 2018

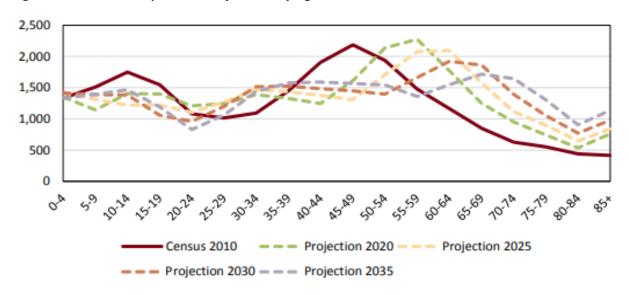
higher than the state median age of 39.4. Wilmington's over-65 population percentage is expected to nearly double to 27% in 2035. In the 2019 OSRP survey, many residents chose improvement of existing trails, creation of new trails, and addition of sitting/picnic areas as priorities, which may have a link to an aging population.

Despite an increase in the general population, Wilmington has been experiencing a decline in the school age population. During the 2019-2020 school year, 3,166 students were enrolled in Wilmington Public Schools¹⁹, with annual counts showing a steady decrease since the 2006-2007 enrolled student population of 3.844.²⁰

Table 2: Percent of Population by Age in 2017¹⁸

Age	US	Massachusetts	Wilmington
17 and Under	22.9%	20.4%	22.1%
18-24	9.7%	10.3%	8.0%
25-39	20.1%	19.9%	17.6%
40-64	32.4%	33.9%	36.8%
65+	14.9%	15.5%	15.5%

Figure 2: 2020-2035 Population Projections by Age²¹



HOUSEHOLD AND FAMILY CHARACTERISTICS

Household and family composition can influence community preferences for open space and recreation. **Table 3Error! Reference source not found.** provides a snapshot of household composition. As the number of children and number of families with children decrease, demand may decrease for playgrounds, sports fields, and recreation programs. The increase in the population over age 65 may lead to an increased need

¹⁸ U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates, 2017.

¹⁹ Massachusetts Department of Elementary and Secondary Education. School and District Profiles. Wilmington (03420000), 2007-2020.

²⁰ Wilmington School Department.

²¹ UMass Donahue Institute. 2019. Wilmington Route 38-Main Street Corridor Market Study.

for picnic areas, walking trails, and places to gather outdoors. The increase in people living alone may lead to a desire for more adult recreational programs as people seek out social interactions.

Table 3: Household Composition, 2000-2017²²

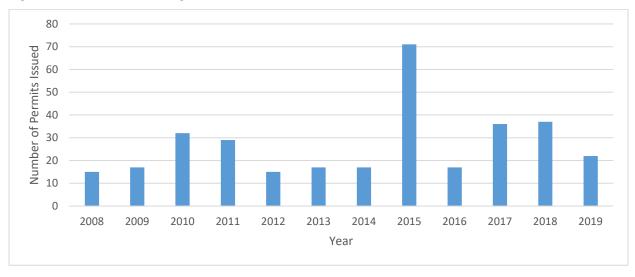
Household Type	2000	2010	2017	Change
Households with individuals under 18 years	3,127	3,080	2,805	-322
Households with individuals 65 years and over	1,519	1,948	2,283	764
Persons living alone	985	1,183	1,279	294
Total Households	7,027	7,532	7,947	920

HOUSING

Type and location of housing may influence the demand for access and availability of recreation areas and programs. Housing needs can occasionally conflict with open space and recreation needs. However, the housing and open space goals may not be mutually exclusive and advocacy for both may be beneficial. For example, Wilmington's Conservation Design Subdivision (CSD) developments allow for smaller lots and require preserved open space and trails. There is a push toward multi-family and denser single-family development. As this type of development increases — dwelling units with smaller or no yards or shared community spaces — residents may seek out public parks and recreation areas more frequently. Most residential neighborhoods in Wilmington are within one-half mile of an open space trail or a playground, and subdivisions that were approved in recent years were CSD developments and have neighborhood trail access.

The number of residential building permits issued in the Town in recent years is illustrated in Figure 3. This data includes accessory apartments and excludes new houses that were built to replace a razed house on the same lot.

Figure 3: Residential Building Permits 2008 to 2019



²² U.S. Census Bureau. 2000 Decennial Census; 2010 Decennial Census; 2013-2017 American Community Survey (ACS) 5-Year Estimates.

INCOME

Median household and median family incomes in Wilmington are above county and state median income levels. The largest income bracket, roughly 25% of households, is \$100,000-\$149,999. The percent of people whose income is below poverty level is substantially lower than county and state levels at only 2.9%, ²³ but has increased compared to 2011 (1.8%). ²⁴ The per capita income in Wilmington in 2011 was \$32,972, ranked 112th in the state. ²⁵ In 2017 the per capita income was \$46,239, ²³²³ an increase by over \$10,000 after adjusting for inflation.

Table 4: Household and Family Income and Poverty in 2017²³

	Median Household Income	Median Family Income	% of People whose Income is below Poverty Level
Wilmington	\$118,549	\$126,447	2.9%
Middlesex County	\$92,878	\$117,048	8.2%
Massachusetts	\$74,167	\$94,110	11.1%

EMPLOYMENT

Employment in Wilmington mostly centers on industrial zones along I-93 (see Map 3, showing location of commercial/industrial development along I-93). While manufacturing is the largest employment industry, the Town has a variety of commercial uses, including wholesale trade, construction, health care and social services, retail, food service, and public administration. ²⁶ As of 2019, the Town's largest employers include Analog Devices, Inc. (ADI; the largest employer in Wilmington), AMETEK Aerospace & Defense, Charles River Laboratories, Osram Sylvania, and Town of Wilmington (municipal, public safety, and school departments). ²⁷

Employers and local businesses can be important potential partners in supporting the Town's recreation facilities and programs, particularly through volunteer efforts. Companies in the Ballardvale Street area often participate in clean-up activities in Town Forest. Employees of ADI will be volunteering to help the Ipswich River Watershed Association improve the canoe landing on the Ipswich River at Woburn Street.

PEOPLE WITH DISABILITIES

About 10.8% of Wilmington's population has a disability.²³ There are significant differences in rates of disability based on age, which is shown in **Table 5**. As the population aged 65 and older is expected to increase in the coming years, the need for accessible recreation areas may also increase.

Recreation Department programs are accessible to the disabled, and the School Department has made many capital improvements in the last two decades to improve accessibility. Handicap accessible playgrounds have replaced older playgrounds at Shawsheen, North Intermediate, Wildwood, and Woburn Street Schools. The new high school completed construction in 2015 and has handicap accessible courts and play areas. In addition, in 2004 the Town of Wilmington and the Public Access Board (PAB) of the Commonwealth cooperated in the construction of a handicap accessible sport fishing pier at Silver Lake.

²³ U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates, 2017.

²⁴ U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates, 2011.

²⁵ Massachusetts Municipal Association. 2012/2013 Directory.

²⁶ UMass Donahue Institute. 2019. <u>Wilmington Route 38-Main Street Corridor Market Study.</u> (Massachusetts Executive Office of Labor and Workforce Development, ES-202)

²⁷ Labor Market Information (LMI), Largest 100 Employers in Wilmington. 2020. Infogroup, Omaha, NE. Retrieved from https://lmi.dua.eol.mass.gov/lmi/LargestEmployersArea/LEAResult?A=05&GA=000496

The Yentile Farm Recreational Facility that opened in 2017 is also handicap accessible and features accessible swings and play equipment. Capital improvements to provide handicap accessibility continue as municipal facilities are upgraded, modernized, and remodeled, and as new facilities are constructed. An inventory of open space and recreation areas' accessibility is provided in Appendix I.

Table 5: Disability Rate by Age Group²³

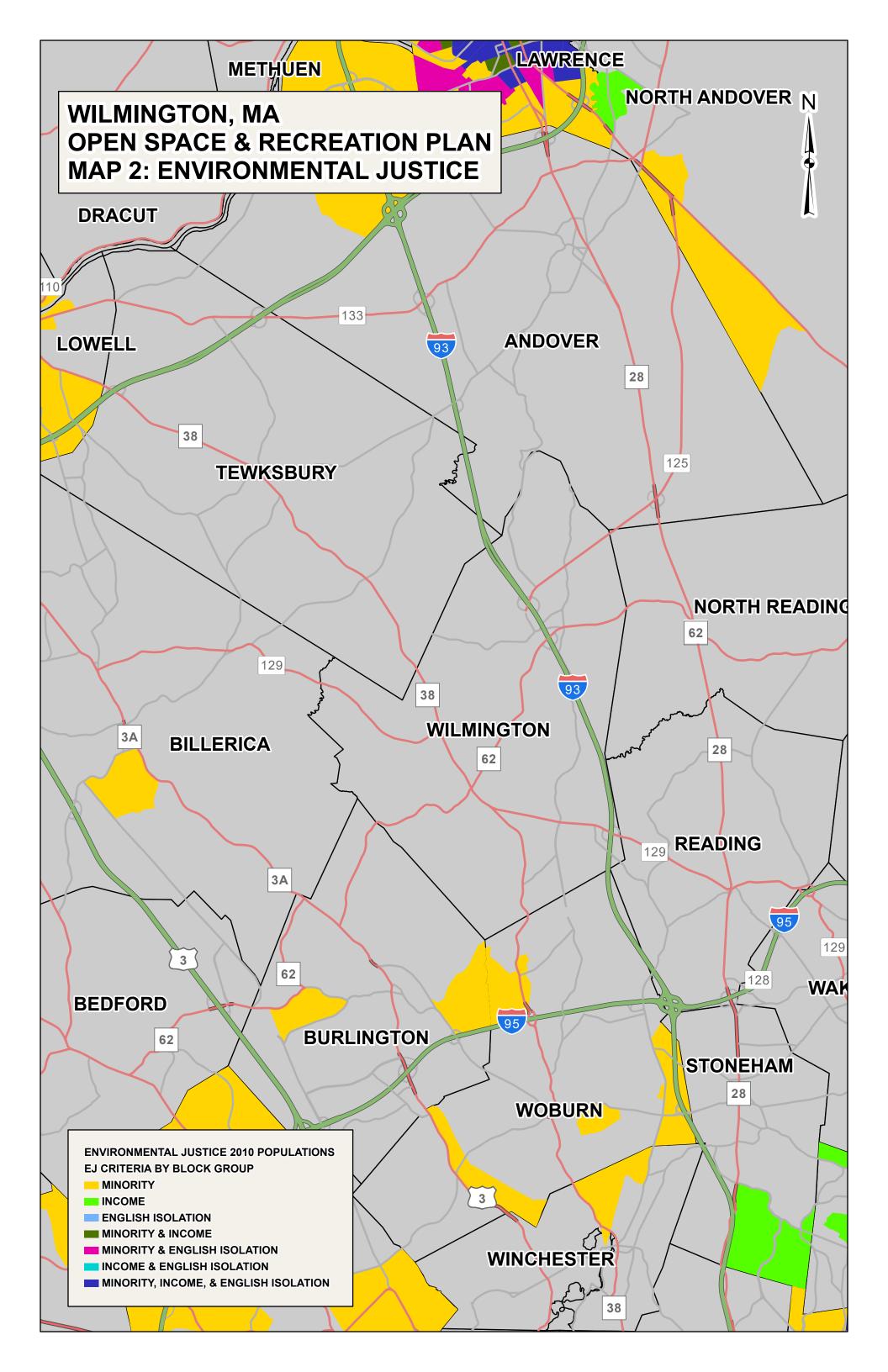
Age Group	Under 5	5 to 17	18 to 34	35 to 64	65 to 74	Over 75
Percent of Age Group with a Disability	0.8	5.4	5.6	8.6	18.3	53.5

ENVIRONMENTAL JUSTICE AND EQUITY

The Massachusetts Executive Office of Energy and Environmental Affairs (EEA) Environmental Justice Policy aims to provide equal protection and meaningful participation for all Massachusetts residents with respect to environmental regulations and policies. This Policy also supports equitable access to environmental assets, which include parks, open space, and recreation areas.²⁸ The State has identified communities that contain Environmental Justice (EJ) Populations (see Map 2) — those with high percentages of minority, non-English speaking, low-income, and foreign-born populations. While Wilmington does not have any identified EJ populations, this plan considers ways to reduce any inequities in access to parks and recreation amenities, such as encouragement of open spaces within residential developments and access to playgrounds and trails for people living all over Town.

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²⁸ Full text of Environmental Justice Policy at https://www.mass.gov/files/documents/2017/11/29/2017-environmental-justice-policy_0.pdf



Growth and Development Patterns

PATTERNS AND TRENDS

Wilmington's original dispersed agricultural character has been replaced by a more developed suburban town as transportation services have expanded and improved. This has resulted in increased population and density. The Town's character includes areas of undeveloped open space, wetlands, and single-family residential development with the exception of a few multi-family developments. Many of the large developable tracts in Town have been built out as conservation subdivisions over the last few years, but some large tracts still remain. Additional development will reduce land available for active and passive recreation while increasing the demand for such amenities. Zoning and buildout area are discussed further in Long-Term Development Patterns section.

INFRASTRUCTURE

Transportation

Wilmington is very accessible by automobile and rail. There are four exits off Interstate 93, three state routes (62, 129, and 38, which connect with Route 128), and two MBTA commuter rail stations. There is major congestion along all these routes, and local traffic worsens when drivers seek alternate routes. Bus transit is limited to Route 38 through the Lowell Regional Transit Authority, and the MBTA provides *The Ride*, a paratransit service for the elderly and disabled. Biking and walking are not always feasible given the spread out pattern of development, and main roads are not always conducive to walking or biking. The Town has an ongoing sidewalk improvement program designed to allow students to walk safely to school. Improvements on several main routes in Town are slated to begin construction in the next couple years and will incorporate complete streets upgrades to encourage more and safer bicycle and pedestrian travel: improvements on Main Street (Route 38) from the intersection of Routes 38 and 62 to the Woburn city line as well as improvements for the Lowell Street (Route 129) and Woburn Street intersection. The MAPC's 2008 Regional Plan as well as their 2017 North Suburban Mobility Study call for expanding the public transit system and multimodal options in urban and suburban areas to provide more choices for people to get to and from work and home.

Water Supply System

Wilmington is largely served by municipal wells. The Town has taken steps to protect areas around municipal wells and has incorporated all DEP approved Zone II areas²⁹ in Town in the Aquifer Protection District. Locations of the Zone II are shown on Map 6.

In early 2003, the contaminant N-Nitrosodimethylamine (NDMA) was discovered in the Maple Meadow Brook Aquifer, a sub-basin of the Ipswich River Basin, where five of the Town's nine wells reside. These wells were taken off line, which reduced the Town's pumping capacity by approximately three million gallons per day. A Comprehensive Water Resources Management Plan (CWRMP) was developed and the conclusion of the study indicated that the Massachusetts Water Resource Authority (MWRA) is the best alternative to recover lost water production. A large pipeline was constructed tying the Town's water distribution system directly to one of the MWRA's main distribution points, and the Town voted to join

²⁹ 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 approved yield, with no recharge from precipitation).

the MWRA as a partial water community. This allows the Town to supplement its water supply during high demand periods.

In 2007 a Block Rate Method for billing each residential, commercial, and industrial user to reduce water consumption went into effect. Massachusetts Department of Environmental Protection (DEP) recommends this method and a water use of 65 gallons per day per person. Since then, Wilmington has achieved consumption rates below the recommended use, at approximately 50-60 gallons per day per person, according to the most recent data from MAPC DataCommon.

Sewer

Eighty-two percent of Wilmington is served by on-site septic systems, and 18% is served by the MWRA. Improperly maintained septic systems can be a potential source of ground and surface water contamination. On the other hand, out of basin water transfer via an expanded sewer system could have an impact on the amount of groundwater available in Wilmington and the Ipswich River watershed because water recharge would be reduced. The CWRMP covered this topic extensively, and the Town agreed to limit its sewer system expansion to designated areas of need.

LONG-TERM DEVELOPMENT PATTERNS

Zoning and Land Use Regulations

Zoning has existed in Wilmington since 1934, undergoing a major change in 1955. These earlier zoning maps served as a "blueprint" for growth and development. As the zoning map shows (Map 3), this concept and subsequent modifications have channeled commercial development along the main arteries in Town, with industrial districts near the I-93 interchanges, creating well-defined residential, commercial, and industrial areas. Multi-family developments tend to be closer to main routes in Town, while single-family development has been channeled off of side streets, with more being constructed each decade for subdivisions. However, large tracts of undeveloped land are becoming scarce, and the number and size of new subdivisions may decrease in the coming years.

Dimensional requirements of each zoning district are demonstrated in **Table 6**. There are exceptions to these requirements. For example, there is a frontage exception in residential districts allowing up to a 20% reduction in frontage if 5,000 square feet of area is added to the lot size. Also, there is an exception for hammerhead lots. A minimum frontage of 40 feet is allowed where hammerhead lot areas are increased by appropriate amounts.

Table 6: Wilmington Zoning Districts and Dimensions

District	Min. Area (square feet)	Min. Frontage (linear feet)	Minimum Open Space
Residence-10	10,000	100	N/A
Residence-20	20,000	125	N/A
Residence-60	60,000	200	N/A
NB (Neighborhood Business)	10,000	100	30%
GB (General Business)	20,000	125	20%
CB (Central Business)	10,000	40	0%
GI (General Industrial)	20,000	125	30%
LI/O (Light Industrial/Office)	20,000	125	30%
HI (Highway Industrial)	80,000	125	30%
NM (Neighborhood Mixed Use)	20,000	125	20%

About 90% of Wilmington's housing stock is single-family housing. However, a need for multi-family housing and mixed use developments is being addressed via the Neighborhood Mixed Use District. The district was created in 2016 and expanded in 2017. It is applicable to land located along parts of Lowell Street (Route 129) as well as Main Street (Route 38) near the Wilmington Train Station, which were previously zoned General Business. Developments of six multi-family units or greater also must have 15% of the units restricted as affordable to count toward the Town's Subsidized Housing Inventory, which helps address the need for more affordable housing. Multi-family developments are reviewed by the Planning Board for special permit.

A large majority of single-family development in Town has been through the Conservation Subdivision Design (CSD) special permit through the Planning Board. The purpose of the CSD Bylaw is to protect open space, forest, wildlife habitat, wetlands, historical resources, and community character by allowing greater flexibility and creativity in the design of residential developments, including single-family, two-family, and multi-family structures. The projects are limited to the number of new lots allowed under conventional zoning, but applicants may use 50% of the required setbacks for the zoning district and cluster the homes. CSD developments also preserve at least 35% of the land as publicly accessible open space, some of which must be upland. For these reasons, these developments create greater open space than conventional zoning and subdivisions would allow. CSD applications are reviewed by the Planning Board for special permit.

Scheduled and Proposed New Development and Redevelopment

A number of commercial and industrial properties are being developed or redeveloped, including the expansion of the Analog Devices property to become their world headquarters and the redevelopment of a 400,000 square foot warehouse at 613 Main Street. Recently approved projects that have not yet begun construction include the redevelopment of an industrial site at 100 Eames Street and four new industrial/flex buildings on Upton Drive. Recently completed projects include the redevelopment of a 40 acre site on Fordham Road for Amazon, a 60,000 square foot addition to a commercial building on Jonspin Road, and a new multi-tenant commercial building at 196 Ballardvale Street.

Several single-family Conservation Design Subdivisions are presently under construction. North Wilmington Estates will have 26 homes and protect 47.7 acres in the north of Town. Sawmill Brook Estates (Green Meadow Drive) will have 26 homes and protect 30.4 acres along Sawmill Book. Highland Estates will have 17 homes and protect 7.2 acres, mostly along Lubbers Brook at the Billerica town line. Murray Hill, which is nearing completion, has 36 homes and protects nearly 15 acres abutting Burlington open

space and the Kylie Estates CSD to the north. All of these have trail networks, and Murray Hill also has a public playground.

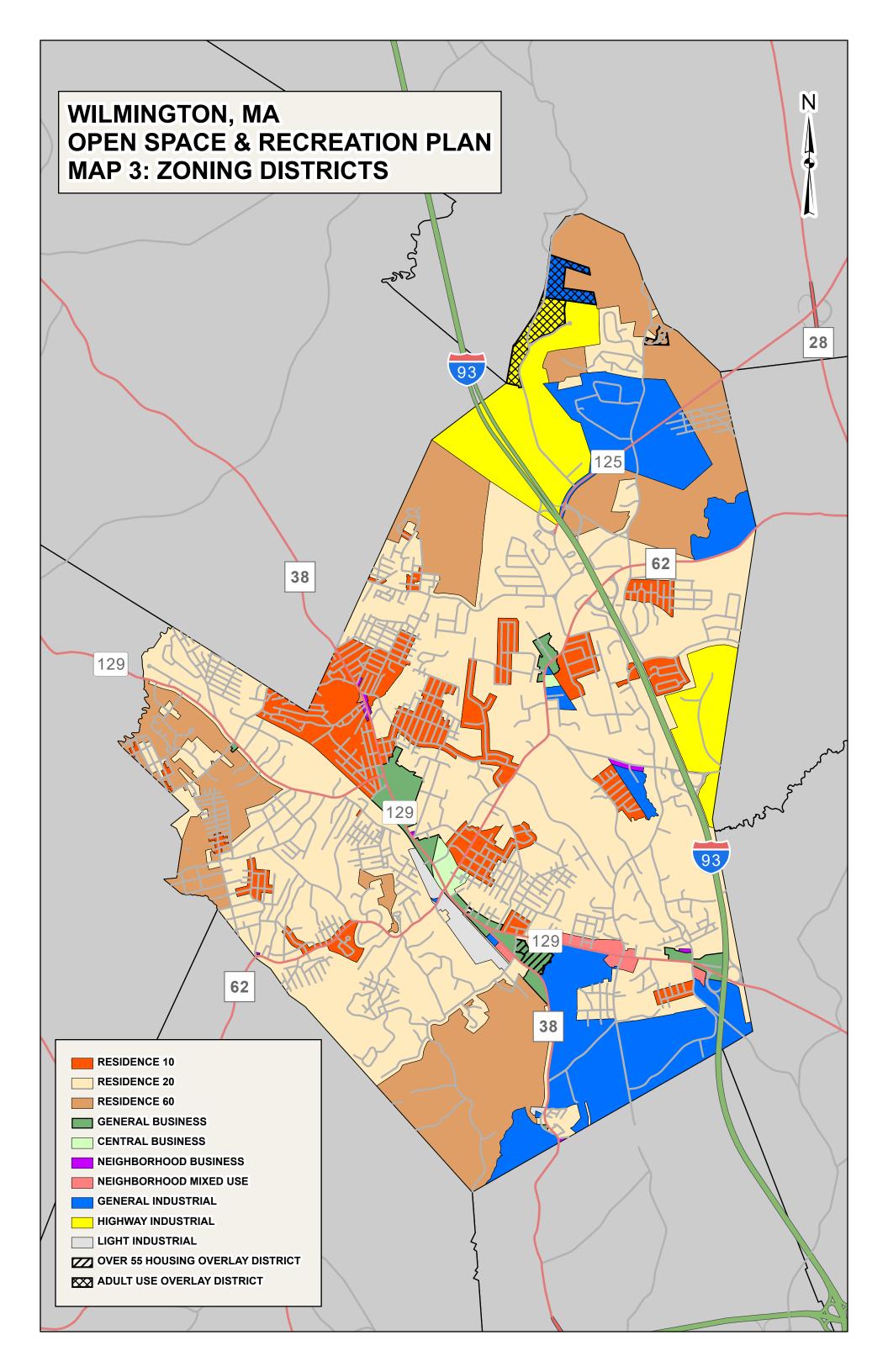
Spruce Farm is an Over 55 Development under construction off of Andover Street that will have 27 units, three of which are restricted as affordable. The development protects 2.65 acres upland from Foster's Pond. Recently approved projects also include a multi-family development at 168 Lowell Street and at 635 Main Street, and a mixed use development at 203 Lowell Street with commercial and multi-family residential buildings.

Full Buildout Under Current Zoning

Under current zoning, which does not provide for use variances, uses primarily remain separated in distinct areas. Expansion of these districts includes some limited potential on greenfield sites. There are a couple larger open tracts of land that are expected to be developed into residential subdivisions in the next 5-10 years. However, these sites are more complicated to develop with physical constraints that limit development area. It is expected that these sites will employ conservation subdivision designs to cluster homes and create publicly accessible open space, which the Town has been proactive in encouraging.

Industrially zoned areas have largely been built out, with the exception of the 28 acre site on Upton Drive that was permitted for four warehouse/flex buildings in August 2019. However, outdated and underutilized industrial sites are expected to see redevelopment over the years as the economy shifts. Wilmington's industrial areas are primarily located along I-93 and have the competitive combination of proximity to Boston and affordable rents. These areas are not likely to include housing in the future, but as the workforce looks for safe, healthy commuting and recreational opportunities, open space becomes more than just a residential amenity.

Commercial areas in Town are primarily clustered along Main Street, along Lowell Street, along Ballardvale Street, and around the North Wilmington Train Station. Mixed use zoning has been introduced to some of these areas as local traditional retail uses follow the national trend of decline. The introduction of multifamily housing to these areas will create a different pattern of residential development than the rest of Town which is roughly 90% single-family homes. New mixed use and multi-family developments are primarily infill and redevelopments, not occurring on greenfield sites. Multi-family housing will rely on public open space for passive and active recreation, given the lack of yards or shared community areas, so demand for these spaces may increase as more of this housing gets built. For instance, multi-family development in the area along Lowell Street that was rezoned from General Business to the new Neighborhood Mixed Use District can easily access the Yentile Farm Recreational Facility that was constructed off of Lowell Street on Cross Street. As other locations add housing of different types, the Town will need to be mindful of adequate open space facilities, both passive and active.



Section 4: Environmental Inventory and Analysis

Geology, Soils, and Topography

BEDROCK GEOLOGY

Wilmington is located in the Avalon Belt geologic province. This area was formed by millions of years of tectonic and volcanic action, and later glaciers during the last ice age (see Surficial Geology and Soils below). Two terranes are present in Wilmington: the Avalon Terrane and the Nashoba Terrane, which are separated by the Bloody Bluff Fault in southern Wilmington. The fault, named for a Revolutionary War Battle in Lexington, generally extends in a southwest/northeast orientation from Sawmill Brook at the Burlington town line to just south of the Ipswich River at the Reading town line. The Nashoba Terrane is to the northwest of the fault and the Avalon Terrane is to the southeast. ³⁰

Metasedimentary, metavolcanic, and intrusive rocks are present in both terranes.³¹ In Wilmington, metasedimentary and metavolcanic rocks include schist, quartzite, amphibolite, and gneiss, with variations of each between the terranes. Intrusive rocks include granite, diorite, diabase, tonalite, and gabbro.^{30, 31}

Areas of abundant bedrock outcrops and shallow bedrock within 10 feet of the surface are mapped in several areas of Wilmington. The largest concentration is at the higher elevation areas along the border with Burlington and part of northern Wilmington. Other smaller areas are mapped along the Woburn town line, south of where Woburn Street crosses I-93, near Treasure Hill Road, and a small isolated area north of Aldrich Road at the Billerica town line. Numerous other smaller individual bedrock outcrops are present throughout Wilmington. Bedrock was briefly quarried off of Taft Road in the 1880s, where Presidential Drive is currently located. A piece of this bedrock was used to make the monument to World War I veteran Harold R. Rogers Alended to the front of the Olde Burying Ground property at 240 Middlesex Avenue.

SURFICIAL GEOLOGY AND SOILS

Over 12,000 years ago, Wilmington was covered by mile-high glaciers that pushed their way south, scraping the bedrock and ground surface, carrying rocks and soil from the north. As it began to melt approximately 10,000 to 12,000 years ago, the meltwater and sediment deposits further sculpted the landscape. Surficial geology depths up to 50 feet are abundant in south Wilmington and depths up to 100 feet are more abundant in north Wilmington.

Glacial till was deposited by the glaciers as they melted. The majority of Wilmington is underlain by glacial outwash or stratified drift. Postglacial deposits include wind deposited (eolian) particles; organic deposits in swamps, bogs, and marshes; and alluvial deposits in floodplains. Eolian deposits are generally found in upland areas and were quickly deposited after the glaciers melted. Organic and alluvial floodplain deposits are typically found in low-lying areas.

There are notable eskers, drumlins, erratics, and kettle ponds in Town. Eskers include one approximately 1,100-foot long located 300 feet west of the end of Blanchard Road that is accessible via well maintained

³⁰ Hatch, Norman L., Jr., Ed. 1991. <u>The Bedrock Geology of Massachusetts (U.S. Geological Survey Professional Paper 1366-E-J).</u> Washington, D.C.: United States Government Printing Office.

³¹ Castle, Robert O., et al. 2005. Bedrock Geologic Map of the Wilmington Quadrangle, Massachusetts.

³² 1889 Town Meeting Elected Dead Man. 1982 Oct 13. Town Crier.

³³ Rogers Monument Will Not Be Moved. 1977 Nov 23. Town Crier.

trails, and one at the end of Douglas Avenue. One of the best examples of a drumlin in Wilmington is Buck's Hill from the Wildwood School southeast to Woburn Street between Wildwood Street and Wing Road.³⁴ Kelly Hill in the center of Town is another example, formed over 10,000 years ago.³⁵ Erratic boulders are present throughout many areas of Town, but are especially prominent in Town Forest where they are readily visible and accessible from maintained trails. A significant kettle pond is Silver Lake, which formed around 15,000 years ago.³⁶



Trail on top of the esker at Cormier Park off of Blanchard Road



Bucks Hill drumlin topography



Glacial erratic boulder in Town Forest



Silver Lake, a kettle pond

Of the drumlins, eskers, and other coarse-material glacial formations, some have been excavated for gravel or exploited as disposal sites. The basaltic and other ledge in the ridges on the southwest, east, and north edges of Town have imparted relatively good permeability to the soils that have developed from them, but these soils are shallow and broken by rocky outcrops in most areas. Much of the well-drained soils overlay deep sand deposits. Borings at Koch Membrane on Main Street near the Town Park

³⁴ They Could Not See the Forest for the Trees. 1951 Nov 9. Wilmington Crusader.

³⁵ No Easy Answers in Official Map Hearing. 1987 Aug 12. Town Crier.

³⁶ Geosyntec Consultants. <u>The Silver Lake Stormwater Improvement Project</u> (brochure).

have indicated a sand depth of 36 feet, and borings elsewhere in Town have indicated sand deposits to much greater depths.

Peat deposits occur along most of the Town's streams. The gravel pits north of Salem Street on Martins Brook were the site of the most extensive peat deposits in the Town, prior to their excavation. In most of the wetlands located away from the streams, heavy soils and muck are found to a depth of one to two feet, generally, with exceptionally deep muck in kettleholes and other depressions. Hardpan usually underlies the upper wetland layers.

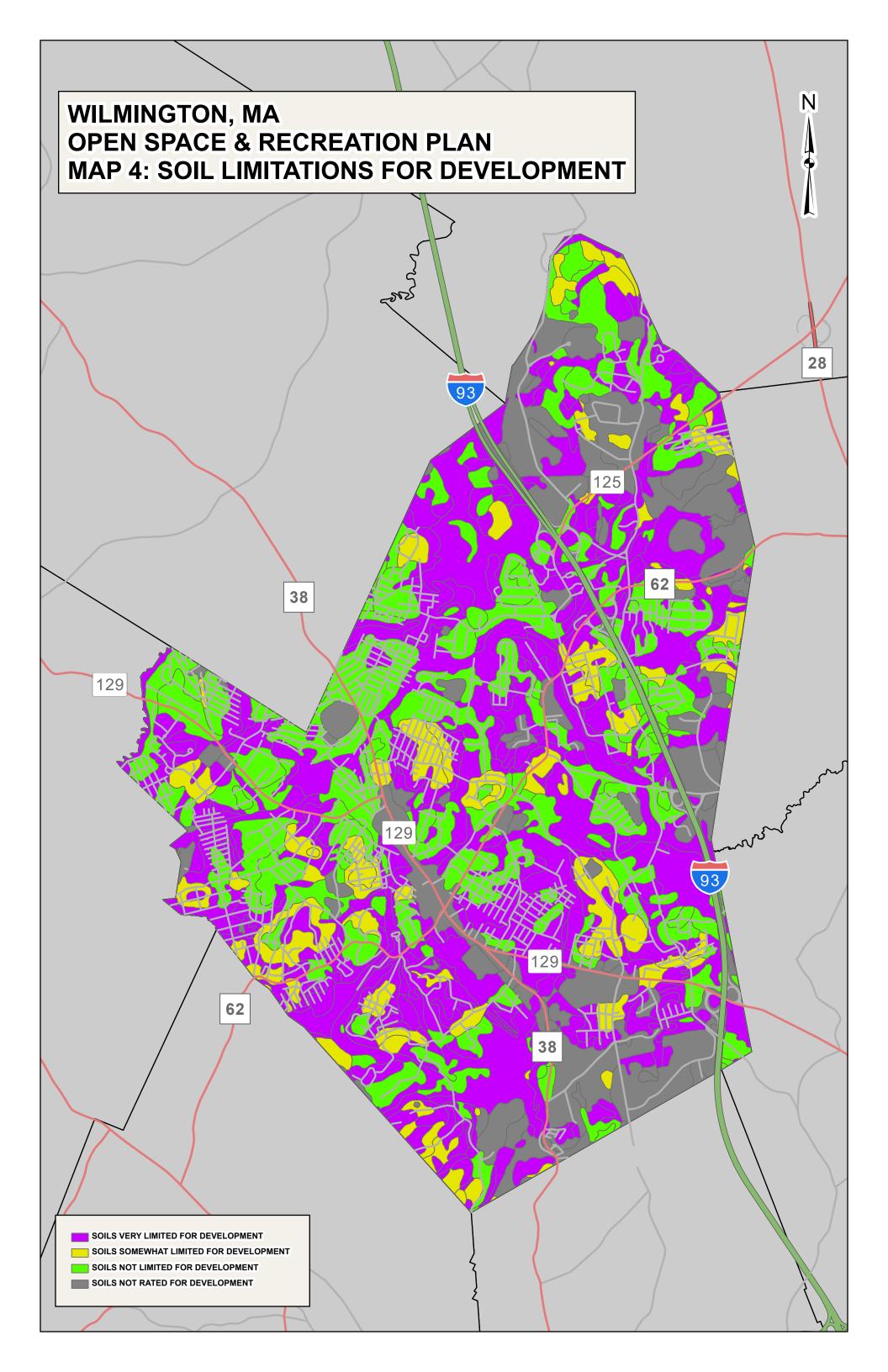
Wilmington's historical agricultural success producing apples and hops did not come easily. No Class I agricultural capability soil exists in Wilmington, and the better agricultural soils of the Town generally have one or more limitations for agricultural uses.

The NCRS identifies various specific soil types in Wilmington. The most dominant soil types in Wilmington include loamy sand (primarily Deerfield, Hinckley, and Windsor series), muck (primarily Freetown series), and urban land. Loamy sand generally represents wooded areas with pine, birch, maple, and oak, or areas that have been developed, and they are spread throughout various parts of Town. Muck areas are deep, poorly drained, and mainly flat. They are distributed throughout Town with many around waterways such as Lubbers Brook and Sawmill Brook. They are mostly forested, with oak, cedar, elm, and other species. Some were once cranberry bogs. Urban land is generally more heavily developed and most prevalent in the industrial areas in the southeast and northern parts of Town as well as the Business and Light Industrial Districts along Main Street (Route 38). The NCRS rates each soil type according to its limitations for several kinds of development. Slight limitations indicate that the soil is generally favorable for development; moderate limitations indicate that the soil is unfavorable, but special planning and design can overcome the shortfalls; and a severe limitation indicates that major increases in construction costs, design, or maintenance are needed to develop the area. It is essential to understand that these limitations reflect the state and cost of technology, and do not constitute a guarantee of future protection. Development limitations of Wilmington's soils are shown in Map 4 at the end of this Section.

Based on Wilmington's geology and historical development patterns, remaining open space comprises primarily wetland areas associated with streams. In areas susceptible to flooding, installation and maintenance of appropriate infrastructure may be difficult, and water or frost damage to trails or playing fields may result. Soil limitations also have implications for trail planning and more active recreation needs such as ball fields. Thin soils may not support the growth of adequate groundcover, and summertime watering of playing fields puts additional strain on the Town's water supply.

TOPOGRAPHY

Wilmington's total area is 17.1 square miles, or approximately 11,000 acres. Its topography is characterized by rounded hills and relatively broad lowlands. Elevations generally range between 80 and 120 feet above mean sea level (amsl), with higher terrain and steeper slopes to the north overlooking Foster's Pond near the Andover town line, and to the southwest along the border with Burlington. The highest point is 256 feet amsl at the site of the water tower in the Town Forest. The lowest elevations are 70 feet amsl where the Ipswich River flows into Reading and North Reading just east of Route I-93, and 71 feet amsl near the confluence of Maple Meadow Brook, Mill Brook, and Sawmill Brook between Main Street and Chestnut Street in southern Wilmington.



Landscape Character

The high percentage of wet soils creates a landscape dominated by wetlands. Wilmington's streams, ponds, swamps, bogs, and other permanently or perennially wet lands are generally of moderate area (25-75 acres) and interspersed among higher formations. Several large open swamp areas occur, such as the remnants of the old Cedars of Lebanon and Ladder Pole Swamps. The wetlands in the northwest of Town cover approximately 250 acres. Many smaller wetlands scattered throughout Town provide visual relief from commercial and residential development and serve as natural buffers for privacy, wildlife habitat, and – if left intact – working drainage systems to prevent flooding.

Wilmington's landscape has changed greatly from its early days as a rural farming community and vacation destination at Silver Lake. Following I-93 being completed in the 1960s, industrial development near highway exits boomed, and the Town's greater accessibility led to a boom in residential development, creating a more suburban character. Many remaining greenspaces have recently been developed with Conservation Design Subdivisions, but they also protect several acres of open space within them and provide trail systems.

Views of woods, wetlands, and remnants of the Middlesex Canal, including aqueducts like the Maple Meadow Brook Aqueduct, are part of the unique character of the Town.



Walking path within the Middlesex Canal bed



View of a wetland in Town Park

Water Resources

WATERSHEDS

While most of Wilmington lies in the Ipswich River watershed (81%), portions of the western and northwestern section of Town are in the Shawsheen River watershed (10.5%), and a small section in the southeast corner of Town is in the Boston Harbor watershed (8.5%) (see Map 6).

The Ipswich River Watershed Association, founded in 1977, works to protect the watershed. They engage in advocacy for protecting ecosystems and water conservation through examining policies, permits, and

regulatory decisions, and promoting the Net Zero Water Use Policy. They also collect data and monitor to assess the river's health, such as monitoring water quality (RiverWatch Program), macroinvertebrates, instream flow, invasive aquatic plans (Weed Watchers Network), and herring counts. This data informs their restoration projects. The Association also provides outreach education to communities.³⁷ In 2003 Wilmington collaborated with the Ipswich River Watershed Association and the towns of Burlington, Reading, and North Reading to provide guidance on protecting open space and stormwater management, resulting in a Regional Water Conservation Plan and Water Wise Community Handbook.³⁸

As required, the state participates in the Source Water Assessment Program (SWAP) under the federal Safe Drinking Water Act (SDWA) Amendments of 1996. This program involves identifying water supply protection areas, land uses in those areas that may threaten water quality, and contamination susceptibility of public water sources.³⁹ The program maps these areas as well. The 2001 SWAP Report for Wilmington Water Department – the most recent publication – lists land uses in the protection areas (Zones I and II), DEP permitted facilities within the Wilmington Water Supply Protection Area, and underground storage tanks. It also lists the threat levels of various uses within Zones I and II, if they were managed improperly. Industrial uses are ranked as higher threats, residential uses are moderate threats, and commercial and agricultural uses are a mix of primarily high and moderate threats. The report recommends Best Management Practices (BMPs) that, when in place, may reduce the threat level.

Wilmington undertook a number of initiatives to protect its watersheds and associated groundwater following approval of the 2002 Open Space and Recreation Plan (OSRP). These include an Illicit Discharge Bylaw, passed in 2007; a Stormwater Management Bylaw, passed in 2009; a catch basin stenciling program; redesign of the Town's website in 2010 providing greater information concerning environmental issues and regulations for residents; and membership in the MWRA allowing Wilmington to supplement its water supply during the summer months, thereby reducing the strain on the Town's aquifers. Wilmington has been making further steps since the 2015 OSRP. For example, in 2019 the Town began updating its Stormwater Management Bylaw to comply with the updated requirements of the Municipal Small Separate Sewer System (MS4) Permit, which is issued by both the U.S. EPA and Massachusetts DEP. In 2020 the Town formally adopted the revised Bylaw.

The Town holds hazardous waste collection days, uses an integrated pest management protocol for its playing fields and school yards, and operates a yard waste composting facility in an effort to lessen inappropriate dumping in wetland areas. Under Wilmington's Zoning Bylaw both the Ground Water Protection District (GWPD) and Flood Plain District restrict development and excessive impervious area without compensating recharge within those districts.

SURFACE WATER

Waterways

The total length of the major streams in Wilmington is approximately 21 miles. The principal waterways in Wilmington are the Ipswich River and its tributaries. Mill Brook, Lubbers Brook, Sawmill Brook, Maple Meadow Brook, Patches Pond Brook, and Cold Spring Brook flow from near the Burlington town line to central and north-central Wilmington, converge, and continue eastward to where Maple Meadow Brook and Lubbers Brook meet to form the Ipswich River just west of Jenks Bridge at Woburn Street. Martins

³⁷ Ipswich River Watershed Association website. Retrieved from www.ipswichriver.org.

³⁸ Metropolitan Area Planning Council. 2014 Jan. <u>North Suburban Planning Council Subregional Priority Mapping Project</u>

³⁹ Massachusetts Source Water Assessment Program Strategy. 1999 Feb; revised 1999 Aug.

Brook flows from Martins Pond in North Reading through northeast Wilmington and then back into North Reading where it converges with the Ipswich River further downstream. The Revay (Revah) Brook drains areas in Wilmington east of Woburn Street and south of the Ipswich River.

The Shawsheen River is also a significant waterway that forms the border between northeast Billerica and western Wilmington, with several tributaries in western and northern Wilmington. Only a few small tributaries to the Aberjona River start in southeast Wilmington. As such, this section primarily describes the Ipswich River and its significant tributaries as well as the Shawsheen River.

<u>Ipswich River (16.5 Square Mile Watershed)</u>

Historic maps and descriptions identify Mill Brook or Maple Meadow Brook as the Ipswich River through Wilmington. The start of the Ipswich River based on current maps is at the confluence of Lubbers Brook and Maple Meadow Brook just west of Route 62 (Woburn Street) at Jenks Bridge. Therefore, Mill Brook and Maple Meadow Brook are discussed separately below. From their confluence the Ipswich River meanders east for approximately 2,500 feet (channel length) to I-93 through a large shallow emergent marsh, shrub swamp, and deciduous forested wetland complex. Most of this wetland complex is Town Conservation Land or other Town-owned land. It then flows approximately 175 feet under a bridge that crosses I-93 and then for another approximately 250 feet before leaving Wilmington and entering Hundred Acre Meadow where it forms the border between North Reading and Reading Town Forest. Tributaries within Town are discussed below.

There are fishing opportunities in various parts of the Ipswich River. The river has also been used for canoeing and kayaking. There are current efforts by Ipswich River Watershed Association to install a kiosk to reestablish canoe and kayak access at Jenk's Landing where the river cross under Woburn Street.

Mill Brook was also historically known as Settle Meadow Brook and has a watershed of 2.4 square miles. It has its source in Burlington near Wilmington Road and flows generally through the southeast of the Town. It flows from its source northeasterly through wetlands on Conservation Land known as Wilmington Gardens Wildlife Preserve. There are three un-named tributaries in this area; two to the north and one to the south. Just beyond Burlington Avenue, a small tributary draining wetlands to the south and southwest joins the main channel which then flows almost due north through Conservation Land and a narrow linear corridor fringed by wetlands. It is joined by an un-named tributary near the end of Grand Street which flows east then northeast. It has two un-named tributaries of its own; one that starts at Presidential Drive and flows east, and one that starts near the West Intermediate School and flows southeast. From the confluence with the main tributary, Mill Brook flows northeasterly under Canal Street and along the northern extent of a large commercial and industrial property. It then crosses the Gillis Aqueduct of the Middlesex Canal and then flows under the railroad and Main Street through a culvert beneath the Wilmington House of Pizza parking lot, south of Clark Street.

From Main Street it meanders northeast to a junction with another un-named tributary in a swamp just west of Middlesex Avenue where the Snow Gristmill was operating about 1705. This tributary starts at the railroad tracks behind St. Thomas Church and flows south through wetlands to a point where Mill Brook turns sharply to the southeast. From there it continues east/southeast and through a swamp to Adams Street. Beyond Adams Street it continues east through a large wetland complex on the High School property and through Conservation Land to Maple Meadow Brook southwest of Wildwood Street.

Maple Meadow Brook (8.5 square mile watershed) generally flows in a northerly direction from its confluence with Sawmill and Mill Brooks just south of the Middlesex Canal Aqueduct. From the aqueduct it continues north under the MBTA Railroad, then Main Street and Lowell Street before taking a sharp turn east after it flows under Wildwood Street. It continues to flow north and northeast, under the MBTA

Railroad and through swamps and a small pond. Patches Pond Brook joins the stream, then it turns east at "Ladder Pole Swamp", flows through more wetlands, and joins Lubbers Brook to form the Ipswich River.

Sawmill Brook (2.7 square mile watershed) is the Mill Brook referred to above in Larz Nielson's "Informal History" and probably identified by Johnson in 1651 as the source of the Ipswich River. From the site of Clapp's Mill in Burlington, it flows through a forested gorge more typical of Western Massachusetts before passing through the Green Meadow Conservation Subdivision to the "Maple Meadow Swamp" (or Boggy End) and the well field east of Chestnut Street. From the early 1960s to 2003 Maple Meadow Swamp served as a significant source of the Town's water supply. The municipal well in the northern portion of the Town Park was discontinued at the same time as the wells in Maple Meadow Swamp due to contamination of the aquifer.

Another small brook rises west of Chestnut Street and flows southeast across Chestnut Street near the Baldwin Apple Monument, past the Skating Club Pond, and into the well field where it is joined by Maple Meadow, Sawmill, and Cold Spring Brooks before the ruins of the Middlesex Canal Aqueduct at the Town Park. Below Main Street, Maple Meadow Brook drains a swamp and flows through another swamp and small pond before crossing Lowell Street. Swamps continue on both sides of the stream northerly to Wildwood Street and the confluence with the Ipswich River entering from the west. North of Parker Street, an un-named brook also joins the stream – described above as Patches Pond Brook. From just upstream of Wildwood Street, the river turns east at the south end of "Ladder Pole Swamp," flows along the north side of the Wildwood School property and through more wetlands east of Federal Street where it joins Lubbers Brook. From there it flows under I-93 and on to form the border between Reading and North Reading.

Cold Spring Brook (0.3 square mile watershed) applies to a small stream, which rises in a swamp in Burlington and flows parallel with the electric transmission lines to cross Chestnut Street before turning north to join Sawmill Brook.

Patches Pond Brook (0.9 square mile watershed) is the unofficial name for a tributary of Maple Meadow brook, which rises in Patches Pond between the Middlesex Canal and Chestnut Street, south of Burlington Avenue. The brook drains the large swamp area immediately west of the railroad (Lowell Branch). The brook crosses Main Street and flows northeasterly through another considerable wetland, where it is joined by another smaller stream that drains Rotary Pond and is culverted under the Post Office and Church Street. It then turns east through the swamps along the Ipswich River and Maple Meadow Brook to join the latter just above Wildwood Street.

Lubbers Brook (5.9 square mile watershed) was also historically known as Sinking Meadow Brook. It starts in southwest Wilmington and flows west/southwest through residential areas to a point where the Billerica, Burlington, and Wilmington town lines converge. It then serves as the boundary between Wilmington and Billerica for just under half a mile northwest of the three-town bound before turning into Billerica. Just south of Cook Street in Billerica (Aldrich Road in Wilmington), Lubbers Brook turns northeasterly and re-enters Wilmington in a large open water and wetland complex northwest of the Aldrich Road well field. It then flows east through a series of three former holding ponds that fed the former cranberry bog, then through wetlands with small areas of open water before flowing through the Middlesex Canal Sinking Meadow Aqueduct and swamp at the Shawsheen Avenue well field. From there it continues northeasterly, where a minor tributary comes in from the south and the vicinity of the Richmond Street Bridge.

East of Glen Road, Lubbers Brook flows northerly, just west of the Town Hall and through a cranberry bog and pond of some 20 acres, and so into a very large area of wetlands stretching east and west south of Salem Street. A tributary joins the main brook before Lubbers Brook crosses the Wildcat railroad branch

into the "Cedars of Lebanon Swamp." It then flows southeasterly to its confluence with Maple Meadow Brook at Jenks Bridge on Woburn Street. Tributaries entering the section between Middlesex Avenue and Concord Street include one from the swamp east of North Street, and a larger stream from the west, which drains a large swamp between Lawrence Street and Middlesex Avenue and a smaller wetland east of Middlesex Avenue and north of Concord Street.

Martins Brook (11 square mile watershed) and its tributaries drain into the Ipswich River in the eastern portion of Town, roughly between Route 125 and Concord Street. Its drainage basin is in the northern part of Town. Martins Brook enters Wilmington from Martins Pond in North Reading, and flows westerly to the Electric Transmission Line, then southerly through the gravel pits and "Nod Pond" (or Martins Brook Pond), which is in fact a bog surrounding the gravel-excavated drumlin described above with an irregular pond surface of approximately five acres situated at its southern end. Martins Brook then turns east and flows through a pond and gravel diggings to the North Reading town line. The north side of the Brook to Salem Street is a Town well field, and properties on the south side are included in the Hathaway Acres open space.

Gowing Brook (0.5 square mile watershed) joins Martins Brook, some 800 feet west of the Town line. It rises in the wetlands of the Fordham Road Industrial Park and flows north to the eastern edge of the Barrows well field – part of a larger wetland north of Park Street and east of Woburn Street – where it is joined by a stream (Barrows Brook) from west of I-93. The combined streams flow northeasterly from their confluence, again through more wetlands to Martins Brook.

Revay (Revah) Brook (1.8 square mile watershed) drains areas in southeastern Wilmington, east of Woburn Street and south of the Ipswich River. The main brook rises in Reading and flows northwesterly through swamps at the Meadow Brook Club to the Ipswich River. One tributary in Wilmington rises in a pond west of the railroad tracks and another in the two swamps north and south of the gas pipeline in the Alderwood Estates. A third is referred to above as flowing from the swamp south of Suncrest Avenue. On both sides of I-93 and both north and south of the Lowell Street Interchange, there are wetlands, the drainage of which was interrupted by the construction of the highway.

Shawsheen River (37 Square Mile Watershed)

Shawsheen River is considered a tributary of the Merrimack River, which runs along the top of "the Thumb" (northwest of Hopkins Street), forming part of the Billerica-Wilmington town line. Portions of "the Thumb" drain to the Shawsheen River, as does the wetland north of Salem Street and west of the Boston & Maine Railroad, and the high ground north of Route 125. This northernmost part of Wilmington is divided by a watershed line just west of Woburn Street which delivers waters on the western side to a stream that flows past the bound stone at the point where Wilmington, Andover, and Tewksbury meet, along the Tewksbury line and across the abandoned Salem and Lowell Railroad before turning westerly to the Shawsheen River. Waters from the east side of the divide flow into Fosters Pond.

Like the Ipswich, there are fishing opportunities in the Shawsheen River. The State stocks the river with trout. "Fisherman's Access" off the end of Grace Drive was the first parcel of land donated to the Conservation Commission shortly after it was established in 1964. The parcel abuts land owned by the Billerica Historical Commission, the remnants of the Middlesex Canal Aqueduct, and the USGS streamflow gauging facility. The site is seasonally popular with canoeists and kayakers as an informal "put-in", as well as with anglers. A path affords views of the old canal works and a variety of riparian and wetland vegetation for the casual hiker.

Lakes and Ponds

There are several ponds in Town including Silver Lake, a "Great Pond" with a manmade outlet to Lubbers Brook. Other ponds include some on a tributary to Revay (Revah) Brook and on Maple Meadow Brook; the Skating Club Pond; Martins Brook Pond or Nod Pond, which is more of a marsh; The Black Lagoon off of Cold Spring Brook, where a trail in the Hathaway Acres residential development borders both; Patches Pond on the Canal; Gifford's Pond near Ring Avenue in Corum Meadows; one at the end of Kenwood Avenue in Alderwood Estates; and other small ponds in the gravel excavated areas on both sides of Salem Street. There are also former cranberry bogs north and south of Shawsheen Avenue and north of the Town Hall. In addition, there is a pond in Rotary Park, and in the northernmost section of Town a part of Foster's Pond, a shallow lake of 135 acres that is almost entirely in Andover.

Silver Lake

Silver Lake, at an elevation of 96 feet, is the largest natural pond in Wilmington. It has a surface area of 28.5 acres, and a shoreline of 4,000 feet. The lake is spring-fed and its watershed drains an area of 132 acres mostly west of the lake in both Wilmington and Tewksbury. The lake's average depth is 10 feet, with its deepest point at 30 feet.⁴⁰

As previously discussed, Silver Lake was a popular vacation attraction for decades and now is surrounded with permanent residences. Today the lake is mainly used for swimming, fishing, boating, and ice-skating. Town Beach is on the southwest shore and has a small playground. The Recreation Department operates the beach and bathhouse during summer months and hires seasonal lifeguards and water safety instructors. The department also has several canoes available for rental on a daily basis. A small beach, nicknamed "Baby Beach," is located along Grove Avenue. It has no parking or lifeguard and is used primarily by nearby residents.

Fishing is popular, with contests sponsored by the Recreation Department and various local non-profit groups. The state Division of Fisheries and Wildlife and Environmental Police stock the lake with several species of trout. Yellow perch, chain pickerel, and sunfish are common, but the lake's lack of natural tree cover and fairly stagnant water make it a moderate fishery at best. A handicap accessible fishing pier was constructed in 2004 on the southwestern shore of the lake, not far from the main swimming beach.

In 1998 the Town closed the beaches for swimming on several occasions due to high fecal coliform counts. A water quality and biological assessment found that water quality overall had improved since a similar analysis done in 1987, but that stormwater inputs and a growing population of waterfowl were sources of increased algal growth. A program to conduct water quality sampling on a continuing basis throughout the swimming season was developed. The Town received grant funds to install low-impact stormwater management improvements at the lake and along nearby roads in 2005-2006. These improvements resulted in improved water quality in the lake. The Town undertook an invasive aquatic plant control program in 2009 to control a severe infestation of Eurasian watermilfoil. Curlyleaf pondweed was discovered in 2010.

Rotary Park Pond

The pond at Rotary Park in the center of Town has a mostly wooded trail, which continues out into the rest of Rotary Park, and benches for resting and enjoying the scenery. The Park has a playground, ballfield, and picnic tables, and includes a pleasant view of the pond, where people occasionally fish.

⁴⁰ Geosyntec Consultants. <u>The Silver Lake Stormwater Improvement Project</u> (brochure).

Patches Pond

Patches Pond is situated near the Middlesex Canal, between the railroad and Chestnut Street. It was part of the water-works system of the Middlesex Canal and was used for mooring boats.

Gifford's Pond

Gifford's Pond is a manmade pond that was created in the 1970s during construction of the Corum Meadows subdivision and is surrounded by residences. There is a short path off of the end of Pilcher Drive providing access. It is under the care and custody of the Conservation Commission for recreation and conservation purposes.

Nod Pond (Martins Brook Pond)

Nod Pond (or Martins Brook Pond) is in fact a bog surrounding a gravel-excavated drumlin with an irregular pond surface of approximately five acres situated at its southern end. Historically, it was the site of the Nod Mill, which operated from about 1695 until 1890, when a large fire throughout the area burned it down. Its dam was rebuilt in the 1930s, and the Town dammed the former Nod Mill site to flood the bog and recharge Town wells, which sometimes also floods a nearby road in North Reading. ⁴¹ Today the pond is located on the Department of Public Works' property.

Outstanding Resource Waters (ORW)

The Massachusetts Surface Water Quality Standards regulations require that the Massachusetts DEP is responsible for protecting quality of water resources and public health. This includes the protection of Outstanding Resource Waters (ORW), which include water supplies and their tributaries, wetlands, and other waters. A very small portion of the Mill Pond Reservoir Intake Point ORW of the Ipswich River Basin is located within Wilmington between Chestnut Street and Hillside Way, and the rest of the ORW is located within Burlington. This ORW connects to the Horn Pond ORW of the Boston Harbor Basin which extends into much of Woburn and parts of Lexington and Winchester.

AQUIFERS AND AQUIFER RECHARGE AREAS

Groundwater

Wilmington once drew its entire municipal water supply from groundwater wells located within the Ipswich River watershed (See Map 6). Because other communities downstream on the Ipswich River also depend on the river as a major source of domestic and industrial water, Wilmington's groundwater constitutes a regional resource. The Ipswich River is considered one of the most stressed river basins in Massachusetts and was listed as the third most endangered river in the country by American Rivers in 2003. American Rivers again listed the Ipswich River on the top 10 most endangered rivers in 2021. Its ability to continue to supply the region's growing communities has been the subject of numerous studies.

Town Meeting in 1991 approved Groundwater Protection Districts (GWPD), otherwise known as Zone II. Certain commercial activities and the use, storage, and disposal of certain hazardous materials within these overlay districts are subject to more intensive regulation. A limited amount of impervious area is allowed on lots in the GWPD, and special permits and additional stormwater recharge are required in order to exceed that amount. The districts were later amended to protect recharge areas for wells in neighboring communities.

In view of the many users that demand water from Wilmington's fixed groundwater supply, protection

⁴¹ Nielson, Larz F. 2018 Nov 23. History: Nod Mill Built on Martin's Brook about 1695. Wilmington Town Crier.

and conservation needs to be a priority. This Open Space and Recreational Plan (OSRP) aims to preserve and protect the groundwater by acquiring and preserving open space. Cooperation with surrounding communities is essential to ensure adequate drinking water quality and quantity.

Water Supply

The Town's water supply comes from groundwater, pumped from four wells within Town. Additional water is available for purchase through the MWRA. How the Town manages its water resources is an important element of the OSRP, as evidenced by the goal to protect the Town's natural resources and open space areas that support water protection and flood management. The Town's development pressures and patterns along with financial commitment will have a significant effect on whether these goals are achievable.

Wilmington implements a Comprehensive Water Resource Management Plan (CWRMP). The CWRMP received final approval from the Executive Office of Environmental Affairs (EEA) in June of 2006. The CWRMP addresses the Town's water supply, stormwater management, and wastewater needs for a planning period from 2006 to 2025. While stormwater and wastewater were once viewed as something to dispose of as soon as possible, the scientific community now recognizes the deleterious effect this can have on streams, wetlands, and water supplies. Sewer lines can "dewater" aquifers by transporting more water outside of its basin than is recharged from precipitation and septic systems. Impervious surfaces and old stormwater systems send runoff away quickly, exacerbating the problem by curtailing or eliminating crucial groundwater recharge to wetlands and waterways. Areas of older, existing stormwater systems have the potential to increase peak flows of rivers, worsening flooding of downstream receptors. The CWRMP attempts to reverse these practices and change past mindset by placing a much higher value on stormwater and wastewater as water resources.

The CWRMP was initiated by EEA in response to the stressed conditions of the Ipswich River. The stress is caused by water withdrawals, loss of recharge from increased impervious surfaces, and dewatering from sewers lines. The river and its surrounding wetland and upland resources can no longer support the full, current, and future demands of the Town. The Ipswich is considered by the State as one of the most stressed river basins in Massachusetts. The CWRMP's goals are to address these issues while at the same time striking a balance between growth demands and protection and restoration of the Ipswich River, its headwater tributaries, and Wilmington's drinking resources. In order to achieve these goals, in 2009 the Town secured an alternative supplemental water supply with the MWRA.

In addition to the stresses on the Ipswich River and its headwater tributaries, the Town has also lost production of the Maple Meadow Brook aquifer (five wells) due to contamination emanating from the former Olin Chemical site at 51 Eames Street. The CWRMP also addresses this additional burden on the municipal water supply. Since the Town has had to discontinue use of the Maple Meadow Brook Aquifer indefinitely, those wells cannot be considered a reliable long-term supply. The Town replaced the lost capacity by obtaining a permanent full-time MWRA connection primarily for use during the summer months. Attempts are made to maximize MWRA water during times of low rainfall within the Ipswich River Basin.

Due to the loss of the Maple Meadow Brook Aquifer, it becomes a paramount goal to protect Wilmington's remaining water resources and allow the Town to continue using its local resources.

FLOOD HAZARD AREAS

The Federal Emergency Management Agency (FEMA) defines and maps Special Flood Hazard Areas (SFHA), Moderate Flood Hazard Areas (MFHAs), and other flood hazard areas in Wilmington. This

information is used to determine the probability of an area flooding based on topography, the upgradient watershed, and Base Flood Elevation (BFE), among other factors.

The Federal Emergency Management Agency (FEMA) defines and maps Special Flood Hazard Areas (SFHA) and other flood hazard areas in Wilmington. This information is used to determine the probability of an area flooding based on topography and the upgradient watershed, among other factors. SFHAs are defined by the Base Flood Elevation (BFE), which is the elevation below which there is a 1% chance of being inundated in any given year (sometimes called the 100-year floodplain).

SFHAs in Wilmington include Zone A (no BFE), Zone AE (BFE established), and the regulatory floodway of waterways. These are generally associated with significant waterways and waterbodies, as well as adjacent areas below the BFE. These include the Shawsheen River, Ipswich River, Maple Meadow Brook, Lubbers Brook, Mill Brook, Sawmill Brook, Martins Brook, Revay (Revah) Brook, Gowing Brook, Silver Lake, and Nod Pond.

Moderate Flood Hazard Areas (MFHAs), labeled Zone B or Zone X (shaded), are areas between the BFE and the elevation at which there is a 0.2% chance of being inundated in any given year. This is sometimes called the 500-year floodplain. These areas typically extend along and adjacent to smaller streams, and in the upper reaches of the more significant streams.

Both SFHAs and MFHAs also sometimes extend into upland areas that may only receive water during flood events. Both the local Zoning Bylaws and state Wetlands Protection Act regulate land alteration and development in and near flood zones. FEMA is tasked with reviewing flood maps every five years to determine if they need updates. FEMA updated the Flood Insurance Rate Maps (FIRM) maps in 2010 and 2011. Map 6 shows areas subject to flooding in Wilmington.

WETLANDS

The wetlands of Wilmington are a dominant topographical and landscape feature. Currently covering 19% of the Town's total land area, Wilmington's swamps, bogs, and other permanent or perennial wetlands are a dominant natural feature. They are generally of moderate area (25-75 acres) and interspersed between higher formations. The wetlands in the northwest of Town cover approximately 250 acres.

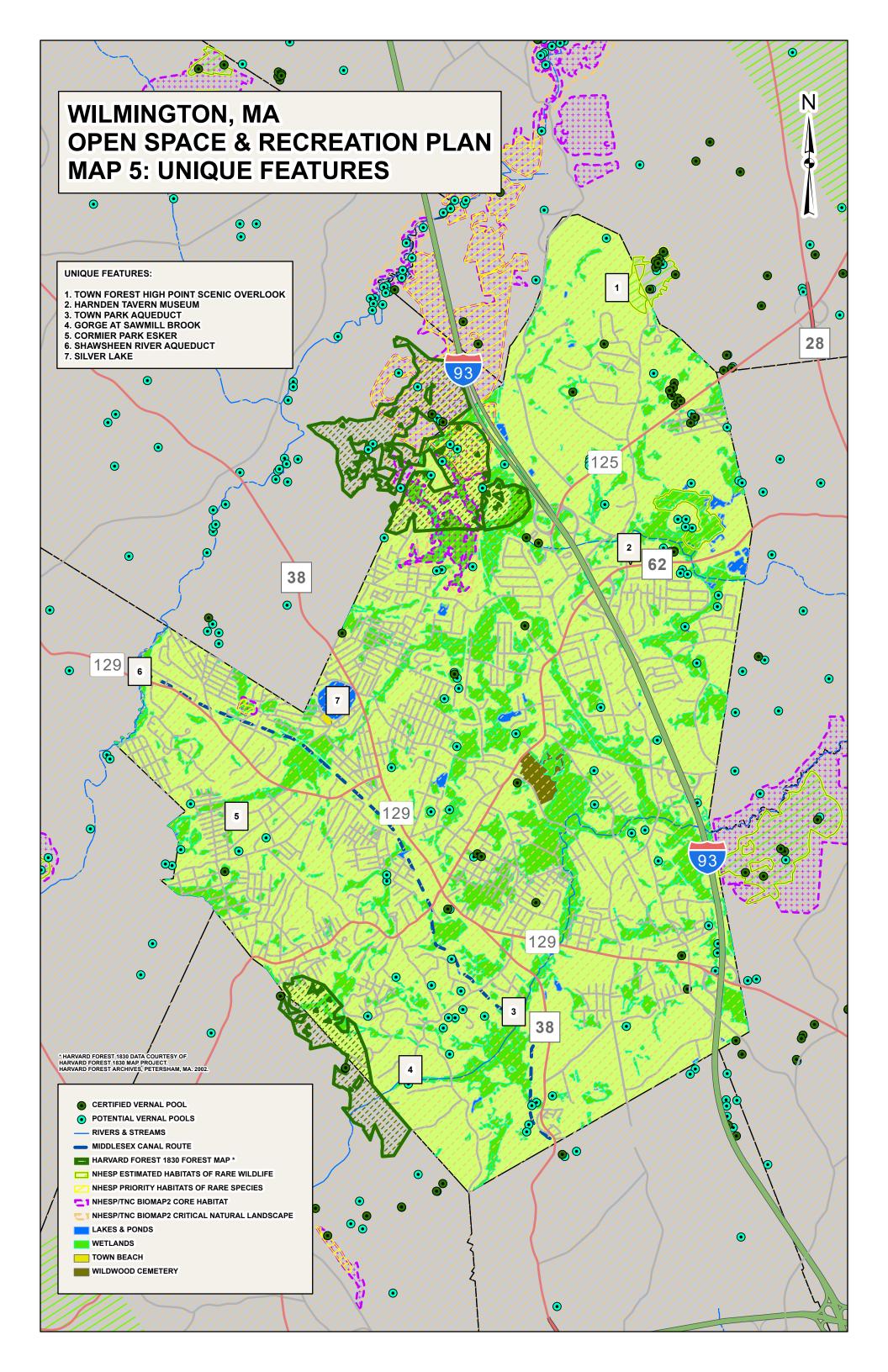
Atlantic White Cedar Swamps (AWCS; Chamaecyparis thyoides) are characterized by having greater than 25% canopy cover of Atlantic White Cedar, and are listed as Imperiled (Rank S2) by the NHESP. These are Imperiled because of rarity (typically 6-20 occurrences), very restricted range, few remaining acres, or miles of stream or other factors making it very vulnerable to extirpation from the state.

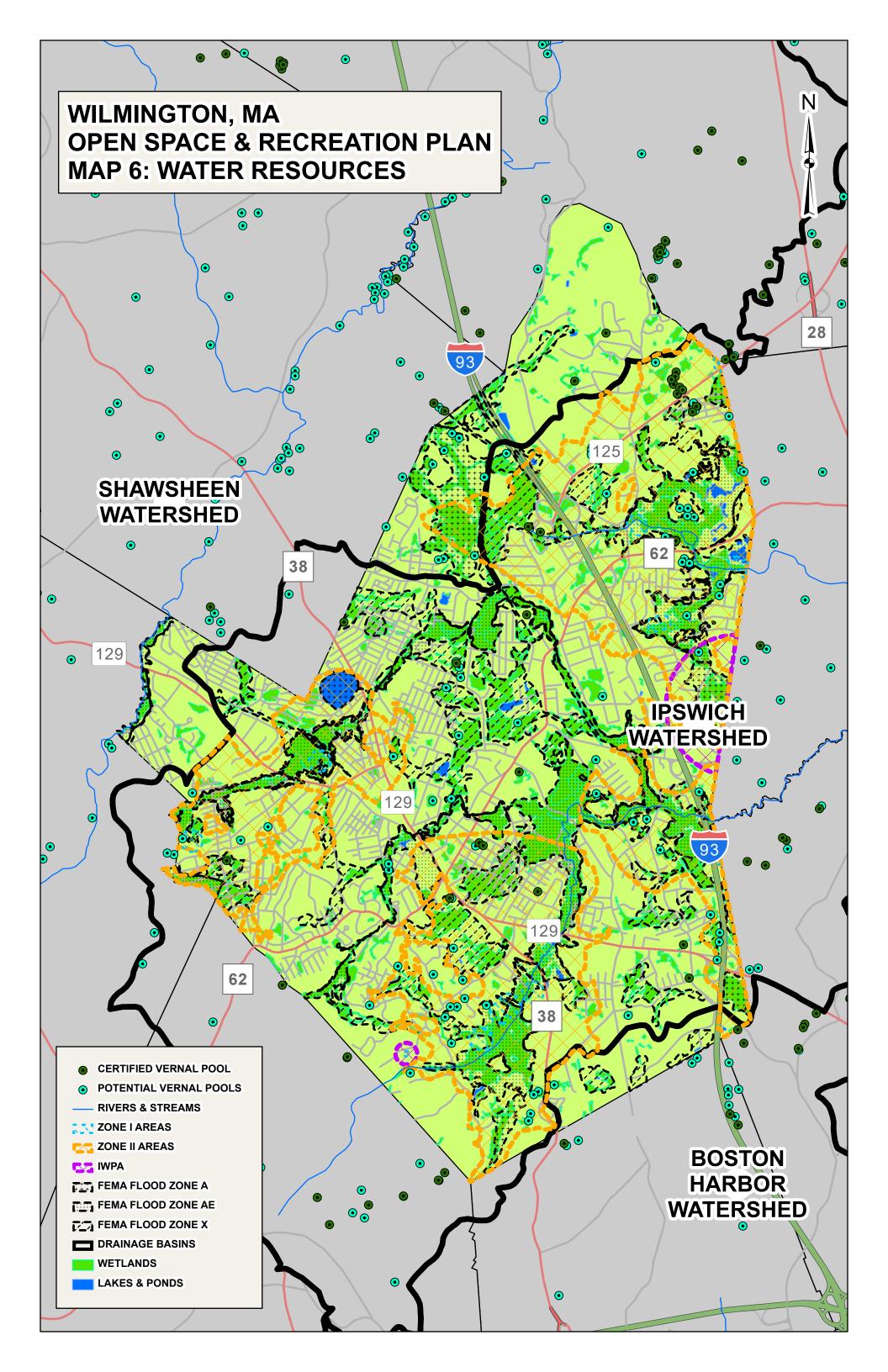
One of the largest mapped Atlantic White Cedar Swamps on the north shore of Massachusetts is present in and near Maple Meadows/Central Park Conservation Land between Federal Street and Wildwood Street. "Ladder Pole Swamp" is the name given by the early settlers to these wetlands (because they used the maples from that area for their ladder-poles). This swamp includes Town properties in Wildwood Cemetery, north of Wildwood School, and in the bend of Maple Meadow Brook towards which the wetlands drain. The Cedars of Lebanon Swamp was historically located between what is now Salem Street and Route 62, northeast of Silver Lake, but much of this area has since been developed and small pockets of swampy areas remain. AWCS are also mapped along Martins Brook east of Andover Street, between Shady Lane Drive and Lubbers Brook, and in the vicinity of Marjorie Road and Morningside Drive. Most of the AWCS in Wilmington are Alluvial AWCS as they are within or near the floodplain of Mill Brook, Maple Meadow Brook, Lubbers Brook, or Martins Brook.

Acidic Peatlands consist of bogs, fens, and Atlantic White Cedar Swamps (AWCS). Bog and fen complexes exist southeast of Mill Brook between the Burlington and Wilmington town line and Marion Street ("Boggy

End"), immediately northeast of Wilmington High School, between the MBTA commuter rail line and Arlene Avenue, on Water Department Land northwest of Route 125, near Lake Street northeast of the MBTA commuter rail line, between Tacoma Drive and Broad Street, and east of Andover Street southwest of the DPW facility. Most of the wetlands are contiguous to streams or linked to them and are thus constituents of the floodplain. Because of the high organic and vegetative character of these wetlands, there is a high degree of surface water retention during storm runoff — a built-in flood protection mechanism. Air photographs taken by the US Geological Survey three days before the crest of the March 1968 flood indicate that inundation along the Ipswich River had occurred almost entirely within the same areas identifiable as wetlands during non-flood periods. Wetlands are also valuable for water filtration and wildlife habitat.

These drainage systems, brooks, and ponds, with their attendant wetlands and floodplains, have a special significance in relation to water supply for Wilmington and neighboring communities. Due to the increased development throughout the greater Boston region, however, these areas are under constant pressure from encroachment and fragmentation, which disrupts their natural functions and diminishes their effectiveness in protecting our surface and groundwater resources. Wetlands particularly need to maintain their natural water regime, including normal fluctuations and connections with the uplands and other wetlands. Water quantity and quality are ongoing issues for wetlands, as are controlling invasive non-native species.





Vegetation

The variety of vegetation that exists throughout the Town ensures a balanced ecology in the natural environment. This is of benefit not only to the birds, mammals, and other animal life, which depend on the health of the environment, but for humans as well, who enjoy the benefits a healthy environment affords.

GENERAL INVENTORY

Although much of Wilmington is developed, natural vegetation continues to provide important ecological and aesthetic functions including habitat for a variety of wildlife and contributing to the scenic character of the Town. Mature woodlands add to the value of residential neighborhoods and help filter out airborne constituents of auto and industrial exhaust. As much as 3,400 acres, or almost one-third of the Town are still forested with a mixture of conifers and hardwoods.

Aside from their ecological value, the wooded and marsh landscapes of Wilmington have definite aesthetic value for residential and business neighborhoods and provide privacy. Where woodlands have been preserved in residential neighborhoods, this value is well apparent. The aesthetic value is also clear in protected wetland areas and around trails.







Wooded Trail

FOREST LAND

According to the *Ecology of Eastern Forests*, Wilmington lies in a region dominated by the northern hardwood forest with species more typical of the oak-hickory and northern pine-oak associations also represented. American beech, northern red oak, sugar maple, Norway maple, scarlet oak, white oak, striped maple, ash, larch, eastern hop hornbeam, shagbark hickory, sycamore, and white, yellow, and gray birch are among the hardwoods that grow in Town. Red maple abounds on the marsh edges and along the Town's brooks. Remnants of the "Cedars of Lebanon" that grew across northern sections of Town from Middlesex Avenue north past Salem Street still remain, as does a fine stand of swamp white cedar located to the southeast of Wildwood Cemetery. Other evergreens include large stands of white pine, red cedar, Norway spruce, and eastern hemlock. A large variety of "specimen trees" adorn streets and

yards as they do in many other New England communities, but the stately chestnuts and American Elms that graced streets and yards in prior years have all but disappeared, victims of Dutch Elm disease and the more recent chestnut blight. The Princeton Elm – more resistant to Dutch Elm disease – is encouraged as an alternative to the American Elm in new development or redevelopment.

WILDFLOWERS

Many wildflowers proliferate in the woods and wetlands of Wilmington. Jack-in-the-pulpit, ginseng, whorled loosestrife, Canadian Mayflower, teaberry, meadow rue, yarrow, wild mint, early meadow rue, wild sarsaparilla, pokeweed, jewelweed, false Solomon's seal, speedwell, smooth Solomon's seal, Indian pipe, pink lady's-slipper, partridge berry, spotted wintergreen, pipsissewa, St. John's wort, starflower, trillium, bunchberry, rue anemone, wood anemone, swamp dewberry, bluets, and wild geranium are just a few.

PUBLIC SHADE TREES

Wilmington regulates public shade trees under M.G.L. c. 87, requiring permission from the Tree Warden to remove any public shade tree. A Tree Warden, Jamie Magaldi, was appointed in November 2013. He is the DPW Operations Manager and a Certified Arborist. He investigates complaints filed by residents and evaluates trees at the request of other Town departments. The DPW has a planting program and replaces damaged public shade trees at residents' request. The Planning Board requires new residential subdivisions to be planted with shade trees. The Planning Board also requires landscaping through site plan review that includes shade trees along roadways for various commercial (re)developments, and interior landscaping with shade trees or other similar type of landscaping for parking lots for 40 vehicles or more.

TREE PLANTING INITIATIVES

The Massachusetts Tree Warden and Foresters Association's Arbor Day Seedling Program, which is being promoted by the Public Library and DPW, provides a pack of seedlings and instructions on how to plant them to the general public who are interested. The Town is also looking into joining the National Arbor Day Foundation's "Tree City USA" program, which encourages proper planting and care of trees to beautify parks, neighborhoods, streets, and other public spaces.

AGRICULTURAL LAND

Wilmington was once populated with a number of farms. Currently there are two farms under the Chapter 61A tax program: Foley Farm, a 5.6 acre parcel in the eastern part of Town with a small self-serve produce stand; and Krochmal Farm, a commercial piggery that straddles Wilmington and Tewksbury. Sciarappa Farm, a 62.5 acre parcel that abuts the Town of Andover, is not currently under the Chapter 61 program and has been inactive in recent years. Potential future redevelopment of the property (as something other than a farm) has been a topic of discussion in recent years. The Town has also had recent discussions about purchasing the property for open space.

WETLAND VEGETATION

Wilmington's wetlands are host to a great diversity of vegetation. Winterberry, sweet pepper bush, speckled alder, silky and red osier dogwood, swamp azalea, spicebush, tussock sedge, soft rush, reed canary grass, arrow arum, water arum, blue flag, yellow flag, high-bush blueberry, barberry, greenbrier, skunk cabbage, arrow wood, buttonbush, sensitive, ostrich, royal, and a variety of other ferns are among

the many plants that thrive in these wet environments. Purple loosestrife and phragmites – two non-native invasive species – have, unfortunately, taken root in many wetland areas.

The marshes – treeless forms of wetlands – possess attractive characteristics of their own. Tall grasses, sedges, and other low plants are part of the low carpets that border meandering stream sections and areas of poor drainage. Where roads or settled areas are adjacent to marshes, a potential exists for framing marsh views in suitable ways with selected tree plantings at the edges. Some roads that traverse marshes are lined with invasive plants that could be replanted with indigenous plants and trees. The tallest pussy willow of record was identified in Wilmington in 1969 at a height of 35 feet, on Andover Street near Brown's Crossing.

SPECIAL CONCERN, THREATENED, AND ENDANGERED SPECIES

According to the U.S. Fish and Wildlife Service, there are no federally-listed threatened or endangered plant species under the Endangered Species Act in Wilmington. According to the NHESP the following state-listed vascular plant species were last observed in Wilmington:

Species	Common Name	Status	Last Observed
Scirpus longii	Long's Bulrush	Threatened	2001
Arceuthobium pusillum	Eastern Dwarf Mistletoe	Special Concern	1903
Calamagrostis pickeringii	Pickering's Reedgrass	Endangered	1899
Asclepias pupurascens	Purple Milkweed	Endangered	1886
Utricularia resupinata	Resupinate Bladderwort	Threatened	1869

These species and their habitats are protected because they are either at risk, or may become at risk, of extinction in Massachusetts. However, only Long's Bulrush has been documented in recent years. The peatlands that Long's Bulrush grows in require low nutrient, cold waters to be maintained. Since the NHESP lists many additional plants in neighboring communities, a more thorough inventory in Wilmington is needed to establish whether additional endangered and threatened species actually grow locally.

Fisheries and Wildlife

GENERAL INVENTORY

In addition to the balanced ecology provided by vegetation, the variety of wildlife species provide benefits for flora and fauna as well as for humans, from the control of insect pests by birds and fish, to the control of rodent populations by natural predators. The rich variety of wetland and upland habitats in Wilmington support many wildlife species that have disappeared from other communities in the Boston region. Some species that were displaced by development in the past are reappearing while others are in danger of losing their local breeding grounds as today's development encroaches on their habitats. Deer, raccoon, beaver, mink, otter, muskrat, opossum, and red fox can be found within the Town, in addition to the ubiquitous chipmunk and gray and red squirrels. Sightings of coyotes, fishers ("fisher cats") and bobcat are becoming more frequent. Among the reptiles and amphibians, milk and garter snakes are found in all parts of Town, and water snakes, newts, salamanders, and several turtle species can be located in the stream environments.

Among the most common nesting birds are wood duck, goldfinch, phoebe, robins, juncos, blue jays, grackles, mockingbirds, catbirds, Carolina and house wrens, cedar waxwing, red-winged black birds,

rough-winged swallows, cardinals, northern orioles, great blue herons, crows, chickadees, tufted titmice, white and red breasted nuthatches, brown creepers, hairy and downy woodpeckers, along with yellow shafted flickers, tree swallows, red eye vireos, warbling vireos, Virginia rail, willow flycatchers, great crested flycatchers, eastern kingbirds, rufous-sided towhees, common yellow throat, yellow warbler, , mallard ducks, the introduced non-migratory Canada goose, belted kingfisher, red-tailed hawks, broadwing hawks, Coopers hawk, bald eagles, osprey, barred owls, and great-horned owls. The mix of upland and wetland topography provides an inviting stopover for migrant warblers, waterfowl, and various songbirds. Scarlet tanagers, although not abundant, have been spotted many times during nesting season in several locations along with indigo buntings, green herons, night herons, and solitary sandpipers. Black duck, geese, and other waterfowl favor many streams and pond areas. Wild turkeys are also making a comeback.

Fishing potential of the Shawsheen and Ipswich Rivers is good, although fishing in Wilmington's smaller streams has declined over time due to seasonally low levels of dissolved oxygen and/or low flows. In some sections of the Ipswich, in particular, river species have begun to give way to species more typical of ponds and still water fisheries. The State stocks both Silver Lake and the Shawsheen River with trout. Hornpout, pickerel, bass, perch, and sunfish are present in Silver Lake, and local children enjoy fishing in many of the smaller ponds throughout Town.

VERNAL POOLS

Vernal pools are isolated wildlife habitats used by amphibians and invertebrates to breed. Vernal pools, temporary woodland ponds, typically fill with rain water and groundwater in the fall or early winter and remain ponded through the spring and into summer. Vernal pools typically dry out by the middle or end of summer each year, or at least every few years. Drying of the pool is an important feature, since it prevents fish from establishing permanent populations, helping to ensure better survival of the vernal pool species by eliminating fish predators. Because vernal pools are isolated by nature, typically not "connected" to water bodies, they are not protected under the Wetlands Protection Act. In order to protect these isolated wetlands, a pool must be certified with the NHESP, a Massachusetts Division of Fisheries & Wildlife. Certification provides a vernal pool, and up to 100 feet beyond its boundary in some cases, certain protection under several state and federal laws. Originally defined and protected under the Massachusetts Wetlands Protection Act regulations, Certified Vernal Pools now also receive protection under Title 5 of the Massachusetts Environmental Code, Section 401 of the Federal Clean Water Act, the Massachusetts Surface Water Quality Standards which relate to Section 401, and the Massachusetts Forest Cutting Practices Act. The Massachusetts DEP is responsible for the implementation of these regulations (except for the Forest Cutting Practices Act, administered by the Department of Environmental Management), and has designated specific staff as vernal pool liaisons. Once certified, the pools are then recorded, inventoried, and added to the Massachusetts GIS/Database.

The NHESP's available data shows that Wilmington currently has 27 Certified Vernal Pools (CVP), and dozens of Potential Vernal Pools (PVP) need to be confirmed. Certifying the PVPs would provide more protection to these wetlands and the species that use them. There are several clusters of CVPs/PVPs, which provide extra habitat value for the species that use them since each pool is somewhat different and provides alternate habitats in different years and seasons. Clusters of vernal pools are good targets for conservation protection, especially when on or near existing conservation land or part of likely Primary Forest (described later). Any such lands already protected are good sites for biodiversity and good cores for larger properties.

Spotted turtles, spotted and blue spotted salamanders, wood frogs, and other amphibians use these pools for reproduction. The crustacean, Fairy shrimp, is an obligate species, meaning it cannot live or reproduce anywhere else.

CORRIDORS FOR WILDLIFE MIGRATION

Wildlife corridors are areas of contiguous tracts of land that provide habitat suitable to accommodate wildlife migration patterns. Major wildlife corridors in Wilmington occur in some of the larger woodland areas and along the wetland/stream complexes continuing into adjacent Towns.

One woodland area includes the Town Forest and Camp Forty Acres bordering Andover continuing to wetland areas of Foster's Pond then to the Sciarappa Farm and on to Water Department land to Benevento Companies' gravel pits, Martins Pond and Brook abutting North Reading, and on to three of Wilmington's well fields out to Fordham Road closer to the Reading town line. Barriers along this corridor include Rte. 125, some of the quarry and processing operations at Benevento Companies, Martins Brook, Salem Street, the culvert under Salem Street at Martins Brook, and Park Street.

A second corridor includes land between Tewksbury and I-93. Barriers in this area include the two railroad lines, I-93, and larger streams.

A third corridor includes a stream from the Boutwell Street area to wetlands in Billerica and Burlington to Lubbers Brook to Shawsheen Avenue and the railroad line on to Main Street past Town Hall to two railroads, then along the second railroad to Concord Street and Woburn Street to I-93 into Reading and North Reading. Barriers along this corridor include Boutwell Street, Aldrich Road/Cook Street, Shawsheen Avenue, railroads, Main Street, Middlesex Avenue, Concord Street, Woburn Street, and I-93.

A final corridor runs along the boundaries with Burlington and Woburn and continues in three fingers that eventually join with Lubbers Brook. One finger follows the Ipswich River, one follows Sawmill Brook, and the last comes from Burlington's Mill Pond Reservoir joining into Maple Meadow Brook. There is a smaller corridor between Sawmill Brook and Marion Street and another between Maple Meadow Brook and Floradale Avenue. Barriers again include railroad, main roads, and larger streams.

For a Town as developed as Wilmington, the tracts of forest and abundance of wetland/stream complexes are a significant asset and provide significant wildlife migration corridors. Barriers are problematic to these corridors and efforts to provide safe wildlife passage under transportation corridors are important.

RARE, THREATENED AND ENDANGERED SPECIES

NHESP has mapped a few Estimated Habitats of Rare Wildlife and Priority Habitats of Rare Species in northern Wilmington, and one of the latter in "the Thumb." BioMap2 shows that Wilmington has 182 acres of Core Habitat and 215 acres of Critical Natural Landscape as of the 2012 publication. According to the NHESP, the following State-listed wildlife species were last observed in Wilmington:

Species	Common Name	Status	Last Observed
INVERTEBRATES			
Callophrys irus	Frosted Elfin	Special Concern	2014
Apodrepanulatrix liberaria	New Jersey Tea Inchworm	Endangered	2008
Euchlaena madusaria	Scrub Euchlaena	Special Concern	2008
Acronicta albarufa	Barrens Daggermoth	Threatened	1910

VERTEBRATES

Ambystoma laterale pop.1	Blue-spotted salamander	Special Concern	2017
Rallus elegans	King Rail	Threatened	2010
Terrapene carolina	Eastern Box Turtle	Special Concern	2016
Notropis bifrenatus	Bridle Shiner	Special Concern	1928

As with the plants listed above, not all have been documented recently. The Blue-spotted Salamander, Eastern Box Turtle, King Rail, New Jersey Tea Inchworm, Scrub Euchlaena, and Frosted Elfin have been documented in the last two decades. Eastern Box Turtles use wetlands on hot summer days, but are primarily species of upland forests. They nest in open, often sandy areas. As with many turtle species, Box Turtles use vernal pools as part of their habitat. The Blue-spotted Salamander lives in moist deciduous and coniferous forests with sandy soils, and unlike many other salamander species, during warmer months they are found above ground, though they avoid direct sunlight. To continue to have good populations of the recently delisted (2006) Spotted Turtle in Massachusetts, protecting areas with good populations, such as wetland forests, is important. Residential development may pose a significant threat to these areas. Again, since the NHESP lists many additional birds, reptiles, insects, and fish for Wilmington's abutting communities, a more thorough inventory in Wilmington is needed to establish whether other endangered and threatened species also occur locally.

Scenic Resources and Unique Environments

SCENIC LANDSCAPES

Wilmington's scenic character is a product of natural conditions and the built environment. Several notable areas provide scenic views. Corridors along the streams, marshes, and swamps of Wilmington provide excellent views of wildlife, vegetation, and the Town's many streams. The hills of the Town Forest provide sweeping views of the region. Several of the Town's original narrow, winding roads still retain their colonial charm with views of antique homes, stonewalls, and former farms. Although sections have been widened to deal with current traffic requirements, these roads include Chestnut Street, Church Street, Middlesex Avenue, and Wildwood Street.

PRIMARY FORESTS AND BIOMAP CORE AREAS

Wilmington is one of the towns with maps showing areas forested in the 1830s and in 1999, areas of possible Primary Forest, untilled woodlots, and wooded pastures. Map 5 shows two of these areas: one is in the northwest part of Town just southwest of I-93 and the other along the line with Burlington where both towns have some conservation land. Such lands have greater biodiversity than areas that have been tilled. These are not Old Growth – they have been harvested and pastured – but the ground may not have been tilled. Although a great deal will have gone on in those areas in the time between maps, some areas that were forested in both times were never tilled. Surveys of the soil structure in the individual sites are necessary to determine whether those sites are primary forest. The importance of primary forest is that such sites retain more native biodiversity than sites that have been tilled: soil fauna and flora, microorganisms, and plants that reproduce primarily vegetatively contribute to the higher biodiversity. In addition, a variety of species of wildflowers are more common in untilled forests than previously tilled lands. The areas of 1830s forest on private land would be good targets for conservation acquisition to maintain the biodiversity of the Town and region. Passage of the Conservation Subdivision Design Bylaw allowed for the protection of two areas of untilled woodlots in North Wilmington as part of the open space provided in the McGrane Woods and North Wilmington Estates Subdivisions, as well as two areas in southeastern Wilmington: along Lubbers Brook in the Highland Estates Subdivision, and near Burlington

town conservation land in the Murray Hill Estates, Green Meadow, and Kylie Estates (Mill Road) Subdivisions.

In Wilmington, there are several BioMap areas – the most important areas to protect to maintain the biodiversity of the Town, region, and state. Map 5 shows the BioMap core areas (between Lake Street and Ohio Street) as mapped by NHESP to identify the areas of most importance for biodiversity: they are based on known locations of rare species and uncommon natural communities, and incorporate the habitats needed by rare species to maintain the local populations. Map 5 shows Priority and Estimated Habitats (off Lake Street and west of I-93), which in contrast to BioMap areas, are regulatory. The habitat maps are updated regularly, while the BioMap report is static (issued 2001, 2010, and 2012), so the latter misses some of the most recently identified rare species areas. Priority Habitats are drawn for all rare species. Estimated Habitats are a complete subset of Priority Habitats that focus on habitat of rare wetlands wildlife.

Large unfragmented conservation land provides the best opportunities to maintain populations of species and limit further species loss from the Town. Land protection that ties in with open space in other municipalities, and other protected open space, public or private, is one way to provide important large areas of biodiversity protection. The Town already has some conservation land near the BioMap core areas — continuing to protect land within the core area will enhance the habitat value of existing conservation and park land. The large BioMap Core and Priority Habitat in the eastern part of Town (PH1067 and C499) cover land mostly in adjoining Towns, but there is some conservation land in Wilmington that supports the habitat. Management and monitoring of conservation lands is as important as is acquisition and protection. It is also important in many areas to control invasive non-native species that alter the habitat and occupy space that native species would otherwise use. NHESP recommends monitoring conservation land and removing non-native species before they become a problem and impact native species. It must be recognized that removing non-native species may require permits and should be done as an on-going program or it may cause more problems than it solves.

WETLANDS

As previously discussed, Wilmington's wetlands are a dominant landscape feature. While there are many scattered throughout Town, the Cedars of Lebanon and Ladder Pole Swamps are particularly unique and visible. The Ladder Pole Swamp is one of the largest mapped Atlantic White Cedar Swamps on the north shore of Massachusetts, located in and near Maple Meadows/Central Park Conservation Land between Federal Street and Wildwood Street. Wetlands particularly need to maintain their natural water regime, including normal fluctuations and connections with the uplands and other wetlands. Water quantity and quality are ongoing issues for wetlands. As with forested conservation land, it is important to acquire and protect wetlands as well as monitor invasive species.

MAJOR CHARACTERISTIC GEOLOGIC FEATURES

Wilmington has a gentle landscape of rounded hills, broad lowlands, and abundant wetlands. Higher elevations and steeper slopes lie in the north area of Town near the Andover town line, and to the southwest along the border with Burlington. Silver Lake is likely the Town's most recognizable geologic feature, a natural pond of 28 acres. This Great Pond is both an iconic landscape in Town as well as a popular recreational asset.

CULTURAL, ARCHEOLOGICAL, AND HISTORIC AREAS

Wilmington has five houses, five historic districts, and the Middlesex Canal listed on the National Register of Historic Places (NRHP), and several other homes and areas are eligible for listing. Houses listed include the Wilmington Town Museum at the Col. Joshua Harnden Tavern (c. 1770), the West Schoolhouse (1895),

the Boutell-Hathorn House, the Butters-Avery House (also known as William Butters II House), the Ephraim Buck House, and the West Schoolhouse. Districts listed which encompass many historic buildings, monuments, and cemeteries are the Centre Village Historic District, Church Street Historic District, High Street Historic District, Gowing-Sheldon Historic District, and Buck's Corner Historic District. Nearly 100 homeowners participated in the Historical Commission's "Plaque Program," demonstrating Wilmington's architectural evolvement.

As described in an earlier section, the Baldwin apple was first cultivated in Wilmington, and in 1895 the Baldwin Apple Monument was built commemorating where the apple was discovered. It is located on the corner of Chestnut Street and Emery Lane, next to the William Butters II Homestead.

Commemorative monuments honoring veterans killed in action are located around Town:

Monument on Town Common (All Wars)
Vietnam Veterans Memorial - Public Library
Robert W. Parent Memorial - Old Town Hall
Rogers Park - Middlesex Ave. and Glen Road
Ronald Eaton Square - Glen Road and Main St.
John J. Fullerton Jr. Memorial - Grove Ave. Beach
PFC John F. Landry Jr. - Silver Lake on Main St.
Richard Welch Memorial - Main St. and Bridge Lane
Nee Park - Burlington Ave. and Chestnut St.
Butterworth Square - Federal St. and Concord St.

Old Soldiers Lot - Wildwood Cemetery
Simpson Lot - Wildwood Cemetery
Police Station Monument
Memorial Shrine - St. Thomas
John A. Rich Memorial - Lowell St.
Lubbers Brook - Main St.
Regan Park - Salem St.
Drew Square - Woburn St. and West St.
Berrigan Park - Lower Main St. and Cook Ave.

UNIQUE ENVIRONMENTS

While there are no Areas of Critical Environmental Concern (ACEC) in Wilmington, the Town's extensive water resources, including wetlands, rivers and streams, and Silver Lake, are highly valued.

Wilmington is home to a narrow gorge through which Sawmill Brook flows, to several former cranberry bogs along Lubbers Brook that provide scenic vistas from the roads. The Town's highest point in the Town Forest provides scenic views toward Boston and other towns.

Environmental Challenges

HAZARDOUS WASTE AND BROWNFIELD SITES

As with many communities in Massachusetts, Wilmington is faced with a number of environmental problems related to past land use practices, which have resulted in hazardous waste and brownfield sites. These contaminated sites along with former landfills present environmental constraints to where open space and open space links can be provided.

Currently 267 releases of oil or other hazardous materials, some dating back to 1986, are listed on the Massachusetts Contingency Plan's (MCP) Site List for Wilmington. About 61% of these sites achieved RAO status, meaning substantial hazards were eliminated; however, 3% of these have activity and use limitations and 4% need periodic evaluation. While many of the incidents have been relatively minor and their files at the DEP are considered to be in compliance or closed, several extensive releases of hazardous materials are affecting drinking water supplies. For example, chemicals from the General Electric site in Wilmington are responsible for contaminating North Reading's Stickney Well in the 1980s, and, along with

releases of volatile organic compounds from several other businesses on Concord Street, threaten Reading's 100-acre wellfield directly across the Ipswich River.

Olin Chemical Corporation, a Tier 1A site (the most severe category under the MCP), was under direct supervision of DEP. It became a federal Superfund site in 2006, and Olin will be working under EPA direction to clean up the site on Eames Street, where former owners of the property disposed of a host of chemicals. In 2019 the site was added to the U.S. EPA Administrator's Emphasis List for intense and immediate action.

LANDFILLS

Prior to joining the Northeast Solid Waste Consortium (NESWC), Wilmington contracted with the Spinazola family to dispose of residential solid waste on property located on Route 38 (Main Street) in South Wilmington. The Spinazola's dump, now called the Maple Meadow Landfill, operated from 1955 to 1975, when it was ordered closed and capped. The site was never capped, however, and some dumping continued, along with illegal wetlands filling, into the 1990s. In 2000 the DEP and the Spinazola family negotiated an agreement to conduct a site assessment and initiate capping of the old dump. Investigations to determine the extent of dumping into wetlands and on adjacent properties remain stalled due to ongoing legal proceedings, and monitoring wells to determine the extent of contamination in the groundwater migrating toward the Chestnut Street and Butters Row wells have been installed.

A former private landfill along the Tewksbury border north of Salem Street has been under investigation by the DEP and the EPA. Officials have determined that several properties in North Wilmington adjacent to Tewksbury's Rocco's Dump contained high levels of contaminants. Rocco's Dump is now on EPA's website as Sutton Brook Disposal Area Superfund site. Cleanup operations on the Wilmington properties were conducted in the summer of 2000. Industrial controls are being put into place to prohibit use of groundwater in that area.

Unfortunately, there are also many small, private "dumps" scattered throughout Wilmington, especially in remote areas. Tires and landscaping debris are very common, and to a lesser extent, building materials, car parts, and even whole automobiles. The Town provides scheduled hours at the yard waste center in South Wilmington for leaves and small brush, but does not accept stumps or grass clippings. The composted material is available to homeowners for reuse. Operating hours were limited to a day and a half per month in summer, increasing to twice a week in late fall and May; as of 2019 this increased to two days per week during spring and summer as well as curbside collection during three weeks in the spring. The DPW accepts used motor oil along with computers and televisions, which have been banned from landfills and incinerators. With help from state regulators, the Town, especially through the Board of Health, has educated homeowners and small contracting businesses, especially landscapers, in refraining from disposal of illegal material in inappropriate areas.

SAND AND GRAVEL OPERATIONS

With the construction of I-93 in the late 1950s, several areas near the new highway were mined for sand and gravel. Due to the geologic reality that prime aquifers for water supply are composed of sand and gravel deposits, a number of these gravel pits are located within the Zone IIs of major wellfields for Wilmington, Reading, and North Reading. As of 1970 it was estimated that more than 300 acres in Wilmington had been excavated. Some of these have since been "reclaimed": In 1968-70 Wilmington received self-help funding to acquire the area south of Salem Street and west of Martins Brook and undertook a major reclamation project involving regrading and replanting the land. This now provides the Hathaway Acres neighborhood with a buffer and protects the large wetland system and Salem Street Well at the confluence of Martins and Gowing Brooks.

The most problematic area, however, is the Benevento and Heffron (now Lynch) Materials mining and soil stockpiling operations north of Salem Street which lie just upstream and immediately adjacent to the Brown's Crossing Wellfield. DEP required Heffron to remove stockpiled material from the floodplain and restore wetlands and floodplain on its land and on adjacent conservation land, which was done between 2004 and 2006. More recently they were purchased by Lynch Materials.

For many years the Beneventos have owned and operated the sand and gravel operation along Martins Brook and bounded by Andover Street, Route 125, and the North Street/Virginia Road neighborhood in North Reading. Over the years, the natural vegetation along the brook has been removed, and the stream has been culverted along a portion of its course through the property. Much of the area has been mined down to below the water table.

If some portion of the contaminated landfill and sand and gravel properties in North Wilmington and other parts of Town can be remediated to safe levels, then there is also the possibility that these properties could be put to use for active recreation purposes. A number of factors need to be considered including, but not limited to, access to the property, the type and extent of contamination of the property, the cost of remediation, and the level to which remediation can reduce potential exposure to environmental hazards. It is also possible that money generated by remediation activities, resulting from, for example, payments by landowners and responsible parties, or funding from state agencies could be used to acquire or enhance open space and recreation facilities in other areas of the Town.

EROSION AND SEDIMENTATION

Unchecked, erosion and sedimentation can contribute to on- and off-site damages including increased stormwater runoff and decreased water recharge, unstable stream banks, impaired water bodies, air and water pollution, and others. Massachusetts DEP and the federal EPA have adopted rules (Stormwater Standards) to prevent erosion, control sediment movement, and stabilize exposed soils to prevent pollutants from moving offsite or entering wetlands or waters, and to require plans that document how pollution is managed at construction and land disturbance sites.

While there are no known areas of chronic erosion or sedimentation in Wilmington, all development sites that disturb the land are required to meet State, federal, and local stormwater standards. This includes requiring erosion controls such as straw wattles or silt fence around areas of work and stockpiles during construction or other land disturbing activities.

PERIODIC FLOODING

Flooding occurs in some parts of Town, particularly in areas where houses were built in or near wetlands. Many homeowners must deal with basement flooding during wet springs or in rainy spells. Maple Meadow Brook overflows Wildwood Street when the river is already high and a major rain occurs, which has happened on various occasions in the last 25 years. Mill Brook flows under Canal Street and a parking lot along Main Street is built in its floodway, and Lubbers Brook has flooded Concord Street. There also is periodic flooding in Glen Road from very heavy rain when the groundwater is high, but the Town has been doing more thorough stream cleaning in recent years which may be the reason Glen Road has not flooded in over 10 years. Wild Avenue is another location of known recurrent flooding.

Historically, Wilmington's extensive wetland system is credited with retaining storm flows and absorbing runoff. As the Town develops and more land is rendered impervious, the natural hydrology of the area becomes more altered so that less water is recharged into the ground, thus causing higher flood water levels and more rapid runoff into brooks and streams. In addition, fragmentation of the wetlands will lessen their ability to store stormwater, resulting in higher flood peaks and lower groundwater reserves.

Wilmington Conservation Commission has required recharge for roof runoff for houses in subdivisions as well as in the buffer zone of wetlands for many years. More importantly, the Town has implemented (and continues to update) a Local Comprehensive Stormwater Management Bylaw and Regulations that promotes low impact development including practices that enhance groundwater recharge, water quality, and prescribe good housekeeping measures for new and re-development projects. The Stormwater Bylaw and Regulations have been updated in accordance with the latest Municipal Separate Storm Sewer System (MS4) General Permit issued by the EPA in 2018.

DEVELOPMENT IMPACT

Most new development has some impact on the environment, although impacts can be minimized by strict enforcement of federal, State, and local environmental regulations. Impacts occur during construction as vegetation is altered and topsoils are disrupted, allowing wind, rainfall, and snowmelt to increase erosion and sedimentation. Ongoing major impacts are an increase in impervious areas which can contribute to flooding; reduced groundwater recharge; increased stormwater runoff; pollution potential from industrial processes; and loss of open space, tree canopy, and wetlands. The Town's Groundwater Protection District Zoning Bylaw, Conservation Subdivision Design Bylaw, and Stormwater Management Bylaw were enacted in response to an awareness of these impacts and in an effort to minimize them to the extent possible.

Wilmington's continuing demand for residential development and industrial space is putting pressure on the Town's natural resources, especially water. The Town's population is estimated to be 23,907 as of 2018⁴², a significant increase since the 1990 population of 17,654. Though the rate of population increase is slowing, the population is expected to increase modestly to 24,605 by 2035⁴³. The expansion of industrial development creates another concern: snow being trucked offsite, possibly out of the watershed.

The Town has sewer districts where sewer is allowed and non-sewer districts where it is not allowed per the Town's Comprehensive Water Resources Management Plan (CWRMP). As sewer lines are added to the specified sewer districts, more wastewater is being exported from the Ipswich River watershed, thus exacerbating the river's low flows and stressed condition.

GROUND AND SURFACE WATER POLLUTION

Water pollution can generally be described in terms of nonpoint source pollution and point source pollution. Point source pollution refers to pollution that is attributable to a single identifiable, localized source such as a discharge pipe. Nonpoint source pollution comes from many diffuse sources and is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it accumulates natural and manmade pollutants that are ultimately deposited into water bodies such as wetlands, lakes, rivers, and coastal waters, or find their way into underground water sources. Pollutants can include sediment from construction or other unprotected sites; fertilizers, oils, and other toxic chemicals; and bacteria and nutrients from pet and livestock waste as well as failed septic systems.

Nonpoint source pollution is a major cause of water quality problems both in Massachusetts and nationwide. The most effective means of controlling nonpoint source pollution is through thoughtful land management and includes tools such as Low Impact Development and Smart Growth strategies and

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⁴² U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates, 2018.

⁴³ UMass Donahue Institute Population Estimates Program.

bylaws, protective zoning, and best management practices for stormwater management, construction, septic operations, and road maintenance.

The municipal water system is currently supplied primarily by groundwater wells in the headwaters of the Ipswich River, which has been designated as a stressed basin by EEA. Portions of the Town lie in both the Boston Harbor and Shawsheen River basins. A number of homeowners and businesses are supplied by private wells in these areas, which are threatened with groundwater contamination. Olin Chemical — a federal Superfund site and on the U.S. EPA Administrator's Emphasis List for intense and immediate action — has contaminated groundwater in the Maple Meadow Brook Aquifer, which is within the Ipswich River Basin. The Shawsheen River basin contamination comes from the Sutton Brook Disposal Area landfill in Tewksbury.

Impaired waters and waterways in Wilmington include the Shawsheen River (excessive bacteria and pathogens including fecal coliform), which is subject to total maximum daily load regulations. Several other waterbodies with impairments include the Ipswich River (mercury), Martins Brook (aquatic macroinvertebrate, fecal, coliform), Silver Lake (DDT, mercury), and the Aberjona River (ammonia, aquatic macroinvertebrate, arsenic, sediment bioassays).

INVASIVE SPECIES

Similarly to many communities statewide, Wilmington is home to a number of invasive plant species. These become a problem when they overgrow native species, creating a monoculture and decreasing the diversity of species present. Among the more prevalent invasives are oriental bittersweet, glossy and common buckthorn, various honeysuckles, Japanese knotweed, multiflora rose, common reed, purple loosestrife, and Norway maple. The Town has been managing European watermilfoil and curly leaf pondweed, both invasive species, in Silver Lake. Invasive insects are also a topic of recent discussion, such as the Emerald Ash Borer (EAB) beetle, Spotted Lanternfly, Gypsy Moth, and Winter Moth. A goal of Wilmington is to increase awareness of invasive species, including having volunteers such as Eagle scouts look for and report them to the Department of Agriculture in order to proactively reduce vulnerability.

FORESTRY ISSUES

Forests are important as they provide wildlife habitat and support biodiversity, help to regulate climate and assimilate pollution, protect water supply and quality, retain soil, and mitigate flooding. They also have important recreation and aesthetic value.

Periodically, there are issues in the Wilmington forests due to inappropriate uses such as parties that leave litter and fire pits, fort building, waste and trash dumping, graffiti on tree trunks, holes being dug, and earth ramps being built for off-road vehicles. For the most part these are limited problems, although off-road vehicles can damage trails and the woods. While the police help patrol the areas where off-road vehicles have been active and respond to calls, the off-road vehicle use tends to continue.

Winter moth infestations have occurred over the past few years and may continue to be a problem. Winter moths feed on many deciduous trees and shrubs found in Massachusetts, including oak, apple, elm, maple, ash, crabapple, cherry, and blueberry. Wilmington's Tree Division has experimented with a mechanical method, attaching slippery bands around tree trunks, to lessen damage from winter moth caterpillars which can crawl up the tree to eat its buds or can be blown on their silken threads to other trees. Fortunately, recent biological control work led by Dr. Joseph Elkinton of the University of Massachusetts Department of Environmental Conservation has drastically reduced Winter Moth populations in the area through the controlled release of a parasitic fly known as *Cyzenis albicans*. The Town will be continuing to monitor for invasive pest damage. For badly defoliated or otherwise affected

trees, the Town leaves open the potential of a future registered pesticide application, depending on tolerance thresholds of the particular pest.

In 2013 the abutting town of North Andover discovered the Emerald Ash Borer (EAB) beetle, an invasive insect which has killed millions of ash trees in North America in the last two decades⁴⁴. Since then, the pest has been discovered in nearby Reading, Andover, and Tewksbury. Due to the recent spread, finding EAB beetles in Wilmington appears inevitable, and the Town is developing an Emerald Ash Borer Response Plan to ensure readiness when this occurs. Ash trees are particularly prevalent in this area, so this beetle could pose a significant threat to the ecosystem and public safety in the traveled way, as impacted ash trees become unusually brittle.

Other potential pests and a fungus that could affect forested areas are listed below: 45

- Asian Longhorn Beetle (Anoplophora glabripennis)
- European Woodwasp (Sirex noctilio)
- Giant Woodwasp (Urocerus gigas)
- o Pine Shoot Beetle (Tomicus piniperda)
- Sudden Oak Death (Phytophthora ramorum)

ENVIRONMENTAL EQUITY

While Wilmington does not have identified Environmental Justice Populations, this plan considers ways to reduce any inequities in access to parks and recreation amenities. Most residential neighborhoods in Wilmington are within one-half mile of an open space trail or a playground. With encouragement to design residential subdivisions according to the Town's Conservation Subdivision Design guidelines rather than conventional subdivision design, additional trails provided in the open space resulting from this design are being created throughout the Town. The recently completed McGrane Road subdivision includes a trail available to residents in one of the few areas in Town that was over one-half mile from such a facility. North Wilmington Estates will have a pocket park in the middle of the subdivision. Other Conservation Design Subdivisions including Kylie Estates, Murray Hill, Sawmill Brook Estates (Green Meadow Drive), and Highland Estates provide trail networks within and/or surrounding the development, some of which connect to one another, and Murray Hill also includes a public playground.

⁴⁴ Messenger, Brian. 2013 Dec 10. Invasive Beetle Detected in North Andover. <u>The Eagle-Tribune</u>.

⁴⁵ More information about these pests can be found at http://massnrc.org/pests/factsheets.htm.

Section 5: Inventory of Lands of Conservation and Recreation Interest

Why Open Space Protection Is Important

Open space is an important feature in Wilmington, not only for its aesthetic and recreational values, but for the protection it provides to the Town's aquifers and wetlands; its ability to store flood waters, lessening potential damage from flooding; its ability to reduce noise and act as a windbreak and a visual screen; to provide cooling shade in hot weather; and for the habitat it provides for wildlife and a wide range of plant species.

Wilmington possesses a wide array of public and private conservation and recreation lands. Property described in this inventory falls along a continuum, from land that is protected by rigorous legal means; to land that could be developed, although not readily; to land that has no protection but is of interest for conservation or recreation purposes. The degree of protection is noted on the matrix in Appendix I.

How Open Space Is Protected

Protecting land to remain as open space may be defined as having three varying levels of protection. The most basic level of open space protection is derived from limits on the development of private property imposed by state or local laws. Wilmington remains fortunate to have many attractive privately owned parcels that are undeveloped. If wetlands are identified on these parcels, then the Wilmington Conservation Commission may limit development on these sites through state regulations known as the Wetlands Protection Act (310 CMR 10.000). Additionally, Massachusetts state requirements for septic system location and design may sometimes limit private property development (310 CMR 15.000 – Title 5). All property in Wilmington must conform to local and state regulations, but those designated as wetland areas may face further impediments to development and may even be deemed unbuildable. The only method for private lands to be permanently protected is through a deed restriction.

The next level of open space protection is through ownership by the Town of Wilmington. As of 2020, 2,092 acres of land have been acquired by the Town of Wilmington through nonpayment of taxes, donation, and through purchase for general and other municipal purposes. Land under the general control of the Town provides some level of protection. Development by the Town of parcels under its control will, in most instances, require the expenditure of Town funds and be subject to a majority vote of Town Meeting. In addition, individuals seeking to acquire Town property must petition the Town to render a decision that the property is surplus to its needs. Town Meeting participants must vote in the majority to authorize the sale of surplus property. Lands purchased for general municipal purposes or acquired through nonpayment of taxes are not protected by Article 97.

Property that is designated under Article 97 of the Articles of Amendment of the State Constitution is deemed legally protected open space and offers a high level of protection. Article 97 protects lands that have been designated for the purposes of conservation of forests, water, agricultural land, and other natural resources, and for recreation. In 1973, the Attorney General stated that for these protected lands to be converted to any other purpose, certain procedures must first be met. They are: 1.) the local conservation commission must vote that the land is surplus to its needs, 2.) the park commission must vote the same if the land in question belongs to the park commission, 3.) the matter must be voted upon at Town Meeting or by City Council and pass by a 2/3 vote, 4.) the Town must file an Environmental Notification Form with the Executive Office of Energy and Environmental Affairs' (EEA's) Massachusetts Environmental Protection Agency (MEPA) Office, and 5.) the matter must pass by a 2/3 vote of both

houses of the Massachusetts Legislature. While conversions do occur, the process is purposefully onerous in an attempt to protect these conservation and recreation lands in perpetuity.

In Wilmington, property subject to Article 97 falls under the care, custody, management, and control of the Conservation Commission, the Water Department, and the Town of Wilmington. Having been either acquired through donation, grants, eminent domain, purchase, or transfer from another municipal use for one of the specific purposes stipulated in M.G.L. c. 40, these properties are to be maintained in their natural, scenic or open condition; retained predominantly in such condition to protect the water supply or potential water supply; used for public recreational use; or preserved to maintain their historical value in perpetuity.

The status of other Town-owned properties should be clarified prior to their disposition. Since 1990 the Town has implemented a formal process for reviewing the disposition of land under M.G.L. c. 30B. Open space and recreation needs, as well as a parcel's suitability for development of affordable housing, are now routinely included in the Property Review Board's evaluation and the Town Manager's recommendation regarding surplus property.

The following sections describe some of the most prominent resource conservation areas in Wilmington. Several non-municipal properties available for use by the public for active and/or passive recreation are also listed, as are a number of private properties of historical value.

A detailed inventory of open space properties is included in Appendix I.

Private Parcels

There are many significant privately owned open spaces that serve to preserve natural resources and add to the character of Wilmington.

CHAPTER 61/61A/61B

Chapter 61, 61A, and 61B of the General Laws of Massachusetts are tax laws that allow for reduction of property taxes for landowners willing to maintain their land as managed forest, agriculture, or outdoor recreation land. If a landowner chooses to withdraw land from this classification, the owner must pay a penalty tax to the municipality based on the number of years a reduced tax has been paid on the land. When the land is put up for sale, the municipality has a right of first refusal to consider whether or not to buy the land.

Wilmington has four parcels of land classified as Chapter 61A. Three parcels totaling approximately six acres are located at Foley Farm and consist primarily of planted fields. A fourth parcel of 53.3 acres is in the northwest of Town at Krochmal Farms. The inventory of Chapter 61 lands is included in Appendix I.

CONSERVATION RESTRICTIONS / PRIVATE OPEN SPACE

No non-profit land trusts or similar conservation organizations currently own land (fee simple) in Wilmington; however, a number of parcels are subject to "Conservation Easements". These easements are valid for 30 years from the date recorded on the deed, and must be renewed by the owner of the easement at the time of their expiration if the property is to be protected into the future. Conservation restrictions granted per M.G.L. c. 184 s. 31 and 32 are considered permanent protection, and their removal requires a two-thirds vote of the state legislature. The Town of Burlington Conservation Commission, for the purpose of protecting the watershed of the Mill Pond Reservoir, holds one such restriction. Another, held by The Nature Conservancy, protects approximately six acres on Chestnut Street and Apple Tree Lane in memory of Bernard Althin Toombs and his family who lived there for many years

and cultivated rare rhododendrons. Metro at Wilmington Station has a conservation restriction on approximately six acres that includes a certified vernal pool. Spruce Farm, an Over 55 Development, has a new conservation restriction as of 2018 on 2.7 acres of land within the development. It is located off of Andover Street, on the new Hensey Way, and also has a trail that goes out to Foster's Pond Road. North Wilmington Estates conservation subdivision has held a conservation restriction since 2015. The recently permitted Highland Estates conservation subdivision will have 7 acres under conservation restriction. The inventory of parcels with conservation restrictions is included in Appendix I.

OTHER PRIVATE OPEN LANDS OF INTEREST

In the northeastern part of Town, there is a 62-acre undeveloped parcel, Sciarappa Farm, adjacent to existing open space in Andover and Wilmington. The Town has had recent discussions about purchasing the property for open space. Should this parcel be developed, public open space would be desired as part of the development plan. In the southeastern part of Town at 201 Lowell Street, part of the Textron Corporation property, there are fields that abut the Yentile Farm Recreation Facility. This property is of interest for connections between the parcels.

PRIVATE RECREATION FACILITIES

Ristuccia Ice Rink on Main Street (Assessor's Map 44 Parcel 178)

This facility houses an indoor skating rink which previously served as the Boston Bruin's practice facility. The Town has expressed interest in purchasing the rink with a Town Meeting vote in 2014 authorizing the purchase if it can be negotiated, but the new owner does not intend to sell. A committee was formed in 2019 to investigate opportunities for a Town rink, and this effort is ongoing.

Camp 40 Acres off Andover Street (Assessor's Map R2 Parcel 24)

In 1948 the Wilmington Junior Youth Group, Inc. was formed to provide opportunities to camp and enjoy outdoor life to Wilmington children in perpetuity. The mostly undeveloped land near the Andover town line was acquired and is now used by Scout troops, the Wilmington School Department, and other groups with permission. A well-established trail system offers hiking and nature observation and provides links to the Wilmington Town Forest, as well as to Bay Circuit trails in Andover. A small brook flows through the property, and a large pond and smaller vernal pool provide outdoor educational experiences. The Camp's Board of Directors constructed a house and hired a year-round caretaker.

Size: 39 acres

<u>Activities Enabled</u>: Camping, hiking, picnicking, walking/jogging, nature observation, horseback riding, special events, cross-country skiing

<u>Facilities</u>: Large pavilion, 20 tent sites, four lean-tos, one general open recreational field, rustic latrines (no running water)

<u>Accessibility</u>: The camp has an easement over private property on Woburn Street in Andover. Parking is near the caretaker's cabin and is adequate for up to 15 cars, with overflow for large events on the field

Textron Corporation field at 201 Lowell Street (Assessor's Map 48 Parcel 73A)

This industrial site is adjacent to the Yentile Farm Recreational Facility. The site contains two baseball fields and four tennis courts for use by Textron employees as well as a path built so that a future connection could be made. Maple Meadow Brook flows through a large pond and separates the manufacturing facility from the athletic fields. A path exists for future connections to be made should Textron agree to public use. The Textron property is not protected from development.

Size: 9 acres zoned for industrial use

<u>Activities Enabled</u>: baseball/softball, tennis, walking/jogging, nature observations, picnicking Accessibility: Parking for 50 cars, not handicap accessible

Public and Nonprofit Parcels

MUNICIPAL LAND

Wilmington's open space and recreation lands comprise properties managed and administered by the Conservation Commission, the Water and Sewer Commission, the Historical Commission, and the Board of Selectmen acting as Park Commissioners. The Department of Public Works Parks & Grounds Division maintains School Department playgrounds and ball fields, parks, and the Town's beaches at Silver Lake. The Recreation Commission organizes many activities and programs for residents of all ages throughout the year, and several non-profit groups including Pop Warner Football, Wilmington Youth Soccer, and Little League Baseball use Town facilities and fields for their games and practices.

Schools

Wilmington schools provide the majority of neighborhood playgrounds, athletic fields, and courts in Town.

Boutwell School 17 Boutwell Street (Assessor's Map 18 Parcel 13B)

Playground, baseball, tennis, basketball

North Intermediate School 320 Salem Street (Assessor's Map 97 Parcel 61)

Playground, baseball, basketball, soccer, tennis

Shawsheen Elementary School 298 Shawsheen Street (Assessor's Map 22 Parcel 15)

Playground, basketball, lacrosse, skate park, soccer, street hockey, tennis

West Intermediate School 22 Carter Lane (Assessor's Map 18 Parcel 13B) Softball

Whitefield School 342 Middlesex Avenue (Route 62) (Assessor's Map 79 Parcel 9) Soccer

Wildwood Early Childhood Center 182 Wildwood Street (Assessor's Map 60 Parcel 23)

Playground, basketball, tennis/pickleball

Wilmington High School 159 Church Street (Assessor's Map 63 Parcel 10) Baseball, basketball, football, field hockey, softball, tennis, track

Wilmington Middle School 25 Carter Lane (Assessor's Map 18 Parcel 13B) Baseball

Woburn Street School 227 Woburn Street (Assessor's Map 87 Parcel 1K)

Playground, basketball, lacrosse/soccer, tennis/pickleball

Town Parks

Wilmington's parks include a range of amenities and landscapes ranging from the beach at Silver Lake to walking paths, playing fields, and sitting areas at Rotary Park and Town Park. The inventory of Town parks is included in Appendix I. Town parks include the following:

Buzzell Senior Center Middlesex Avenue at School Street (Assessor's Map 66 Parcel 1)

This parcel contains an area for bocce. In 2020 an Eagle Scout, along with other scouts and scout leaders, raised money from local businesses and revitalized the bocce court. This included safety improvements such as solar lights and landscaping changes, adding new stone dust, and replacing wood.⁴⁶

Size: 0.01 Acres

<u>Activities Enabled</u>: Bocce <u>Use Level</u>: Moderate

Murray Hill Playground Murray Hill Circle (Assessor's Map 54 Parcel 110)

This playground is located within the Murray Hill conservation subdivision and connects to the surrounding trail network.

Size: 0.39 Acres

Activities Enabled: Playground

<u>Use Level</u>: High

Robert Palmer Park adjacent to Town Hall and Glen Road Berry Bog Conservation Land (Assessor's Map 54 Parcel 110)

This park has woods, picnic area, playground, playing fields, pickleball and basketball court, trails, and a building used by the Pop Warner program for snacks and bathrooms. Trails connect to the Glen Road Berry Bog Conservation Land. Parking is at the adjacent Town Hall.

Size: 8 Acres

<u>Activities Enabled</u>: Playground, picnicking, walking, nature observation, cross-country skiing, snow shoeing, pickleball, baseball, football, basketball, softball

Use Level: High

Rotary Park Church Street, Adelaide Street off Route 62 (Assessor's Map 42 Parcel 7)

This park has a ball field, picnic and sitting areas, playground, pond, a stonedust trail, lawn, woods, and wetlands. Off-street parking is available along Adelaide Street.

Size: 6.5 Acres

<u>Activities Enabled</u>: Team sports, playground, picnicking, walking, nature observation, bicycling, cross-country skiing, snow shoeing, fishing

Use Level: High

Silver Lake 5 Burnap Street, 47 & 49 Grove Avenue, 79 & 81 Main Street (Assessor's Map 34 Parcel 138, Map 45 Parcels 102, 103, 117, & 118)

Silver Lake, a Great Pond, is a 28.5 acre pond with a Town-owned beach, playground, and fishing pier. The pier is handicap accessible. Restrooms are available seasonally.

<u>Size</u>: 28.5 Acres (lake); 5.19 Acres (land adjacent to lake)

Activities Enabled: Swimming, playground, picnicking, fishing

Use Level: High

Town Common between Middlesex Avenue and Church Street (Assessor's Map 52 Parcel 38)

⁴⁶ Burns, Cassia. 2020 July 4. Woltag Revitalizes Buzzell Senior Center Bocce Court as Part of Eagle Scout Project. Wilmington Town Crier.

http://homenewshere.com/wilmington_town_crier/news/article_aaa463b2-bc83-11ea-962b-83bb4de2cdd7.html

Town Common is a formal green with benches and a gazebo, which hosts a summer music series and the annual 4th of July Celebration. The Common is the official Town gathering place, and hosts seasonal community events and is home to the Veteran's War Memorial.

Size: 2.25 Acres

Activities Enabled: Events, picnicking, walking

Use Level: High

Town Park (including Wilmington Dog Park) 823 Main Street (Assessor's Map 26 Parcel 9)

This park has wetlands, Maple Meadow Brook, woods, open grassy areas, a ball field, trails, dog park, woods, parking, paved road with gate, and remnants of the Middlesex Canal. A long section of the towpath trail leads into Town Park from the north but is disrupted by the Maple Meadow Brook Aqueduct where the Canal once crossed. Town Park is also home to the Wilmington Dog Park, opened in 2016. It has two adjacent fenced in areas, one for smaller dogs and one for larger dogs, as well as benches.

Size: 50.1 Acres

Activities Enabled: Dog park, softball, hiking, walking, nature observation, bicycling, cross-country skiing,

snow shoeing Use Level: High

Yentile Farm Recreational Facility 9 Cross Street (Assessor's Map 39 Parcel 5)

This Facility, which opened in 2017, includes an open green, playground, multi-use turf field, basketball/hockey courts, walking paths, a pavilion, a concession building, game tables, and restrooms. Seating areas are located around the park, some with game tables, as well as shade trees, landscaping, and informational signs.

Size: 20.5 Acres

Activities Enabled: Team sports, playground, picnicking, walking, nature observation, cross-country skiing,

snow shoeing Use Level: High

Conservation Commission Lands

Given Wilmington's abundance of wetlands, many of the properties held by the Conservation Commission are too wet for active recreational activities but afford natural habitat and protect the many valuable interests identified in the Wetlands Protection Act. The Commission acquires care, custody, management, and control via donation of land or through a vote of the Town Meeting to transfer Town-owned land.

In general, the Conservation Commission owns and manages two types of parcels: natural open space parcels with constructed trails ("Recreation Parcels") and natural open space parcels that serve as habitat and resource areas that do not include access or trails ("Natural Parcels"). Both types of parcels are included in an inventory in Appendix I.

The CONSERVATION COMMISSION'S RECREATIONAL PARCELS include the following:

Alderwood Acres Kenwood Avenue (Assessor's Map 59 Parcels 30 & 31, Map 72 Parcels 29A & 29R) In 1973 this site was acquired with assistance of a grant from the state Self-Help Program to provide active and passive recreation. There is a small pond and a short trail loop. The trail is somewhat overgrown and the trailhead sign is obscured by overgrowth. Limited street parking at the end of Kenwood Avenue.

Size: 23 Acres; Natural environment area

Activities Enabled: Hiking, nature observation, cross-country skiing

Use Level: Low

Beeching Avenue Extension (CSD) Beeching Avenue, Winter Street, Laite Road (Assessor's Map 70 Parcel 101B)

The trail goes through the woods past a vernal pool creating a connection between Laite Road and Winter Street. Limited street parking at the end of Laite Road.

Size: 6 Acres

Activities Enabled: Hiking, nature observation, cross-country skiing

<u>Use Level</u>: Moderate

Brookfield Estates (CSD) Ashwood Avenue (Assessor's Map R4 Parcel 116)

The trail crosses a stream and goes through the woods. It connects to nearby commercial properties. Access off of Ashwood Avenue with one parking space at the trailhead.

Size: 25.4 Acres

Activities Enabled: Hiking, nature observation, cross-country skiing

Use Level: Moderate

Canal Village (CSD) Jaques Lane (Assessor's Map 35 Parcels 22D & 22U)

A sidewalk runs along the Middlesex Canal and a trail leads through the woods, ending in a loop. Most of the path has become overgrown to the point of unusability and will need to be re-cleared. Access off Jaques Lane with three parking spaces. There are no trailhead signs.

Size: 3.5 Acres

Activities Enabled: Hiking, nature observation, cross-country skiing

Use Level: Low

Cormier Park Blanchard Road (Assessor's Map 20 Parcel 136A)

This site along Lubbers Brook and cranberry bogs has a marked trail used for hiking and jogging. The woods are dominated by stands of white pines, and red swamp maples flank the brook and are especially attractive during the fall foliage season. An esker running perpendicular to Lubbers Brook could provide views over the marsh and the earthen dams used to control flow in and out of the cranberry bogs. There is potential for historic markers describing 19th century cranberry production. There is limited parking at the cul-de-sac on Blanchard Road.

Size: 26 Acres; Important natural historic and cultural area

Activities Enabled: Hiking, nature observation, walking/jogging, cross-country skiing

Use Level: Moderate

Corum Meadows Pilcher Drive (Assessor's Map 82 Parcel 161)

There is a short trail through woods from Pilcher Drive to a man-made pond. Limited parking is at the end of Pilcher Drive. There is no trailhead sign. An additional 17-acre parcel in the development is protected as open space along Lubbers Brook but lacks a trail and is discussed in the Conservation Commission Natural Parcels Subsection.

Size: 3.9 Acres

Activities Enabled: Hiking, nature observation, walking/jogging, cross-country skiing

Use Level: Low to Moderate

Fisherman's Access (aka Shawsheen Pines) Grace Drive (Assessor's Map 36 Parcel 160)

Located on the Shawsheen River, "Fisherman's Access" was the first parcel of land donated to the Wilmington Conservation Commission shortly after it was established in 1964. The parcel abuts land owned by the Billerica Historical Commission, the remnants of the Middlesex Canal Aqueduct, and the United States Geological Society's stream flow gauging facility. The site is wet and seasonally popular with canoeists and kayakers as an informal "put-in," as well as with anglers. A path affords views of the old canal works and a variety of riparian and wetland vegetation for the casual hiker. There is limited parking at the end of Grace Drive.

Size: 2 Acres

Activities Enabled: fishing, kayaking, hiking, walking, nature observation

Use Level: Low/Moderate

Glen Road Berry Bog adjacent to Town Hall and Robert Palmer Park (Assessor's Map 54 Parcels 7A & 8A) Lubbers Brook flows freely through this former cranberry bog, which is in transition from an open bog to maple and shrub swamp. Trails are well established and are connected to the 19-acre Town Hall complex, which encompasses the 8-acre Robert Palmer Park with its playground, ball fields, and picnic area. Its current popularity for active recreation, the transitional state of the wetlands, and convenient parking at Town Hall make this a good candidate for an interpretive nature trail that is wheelchair accessible. There are no trailhead signs.

Size: 13 Acres; Natural environment area

Activities Enabled: Hiking, nature observation, walking/jogging, cross-country skiing

Use Level: High

Green Meadow (CSD) Green Meadow Drive (Assessor's Map 2 Parcel 201)

While some houses in this subdivision are still under construction, the trail is nearly complete. It connects with trails in Kylie Estates and to Burlington open space area. There are four off-street parking spaces off the Green Meadow Drive cul-de-sac.

Size: 30.4 Acres

Activities Enabled: Hiking, walking/jogging, nature observation, cross-country skiing

Use Level: High

Hathaway Acres Draper, Marie, and Evans Drives (Multiple parcels on Assessor's Maps 101 & 102)

Trails from Salem Street, Draper Drive, and Evans Drive lead back towards Martins Brook and "the Black Lagoon", once a popular ice skating pond for the neighborhood. Gowing Brook flows up from the south at the easterly extent of the conservation land to join Martins Brook. The Water Department maintains the land on the opposite side of the brooks to the North Reading town line as the Salem Street Well Field. After acquiring Hathaway Acres with Self-Help funding in 1969, the Town undertook several conservation initiatives to mitigate damage caused by sand and gravel operations, including grading and planting hundreds of trees. Additional trails, including one or more made accessible for wheelchairs, and interpretive signs would allow today's residents to take advantage of the successful reclamation of this mined-out area. A trailhead sign exists at the Evans Drive entrance. There is street parking along Evans, Marie, and Draper Drives.

Size: 22 Acres; Natural environment area

Activities Enabled: Fishing, hiking, nature observation, cross-country skiing

<u>Use Level</u>: Moderate

Heritage Pines (CSD) Lt. Buck Drive (Assessor's Map 22 Parcel 3A)

Wooded trail surrounds the development and connects to Leonard Estates and to informal paths leading to Lubbers Brook. All of the path has become overgrown to the point of unusability and will need to be re-cleared. Access off Lt. Buck Drive with two parking spaces.

Size: 4 Acres

Activities Enabled: Hiking, nature observation, cross-country skiing

Use Level: Low

Kylie Estates (CSD) Mill Road (Assessor's Map 3 Parcel 3A)

The trail links to trails at Green Meadow Subdivision and Murray Hill Subdivision off of Eleanor Drive. It also connects to town of Burlington open space areas. The Recreation Department oversees a third party vendor biking program from the trail entrance to Burlington's Sawmill Brook Conservation Area. Access is off of Mill Road. There are four off-street parking spaces at the trailhead.

Size: 17.3 Acres

Activities Enabled: Hiking, walking/jogging, nature observation, cross-country skiing, biking

<u>Use Level</u>: High

Leonard Estates (CSD) Leonard Lane (Assessor's Map 10 Parcel 1F)

The trail connects to trails at Heritage Pines (Lt. Buck Drive). Nearly all of the path has become overgrown, including both entrances, to the point of unusability and will need to be re-cleared. There are two parallel parking spaces on Leonard Lane. There are no trailhead signs.

Size: 11.6 Acres

Activities Enabled: Hiking, walking/jogging, nature observation, cross-country skiing

Use Level: Low

Marjorie Road Extension (CSD) (Assessor's Map 70 Parcel 101F)

It is a short looping trail in the woods off the end of Marjorie Road. There is potential for boardwalk connection to Beeching Avenue Extension trails. One parking space is located off the cul-de-sac of Marjorie Road, and on-street parking is available as well. There are no trailhead signs.

Size: 6.6 Acres

Activities Enabled: Hiking, walking/jogging, nature observation, cross-country skiing

<u>Use Level</u>: Moderate

McGrane Woods (CSD) McGrane Road off of McDonald Road (Assessor's Map 84 Parcel 52J)

This subdivision protects a total of 7.7 acres on four parcels. The smallest of these has a short trail. Street parking is available at the end of McGrane Road near its connection with McDonald Road. There is no trailhead sign.

Size: 1.2 Acres

Activities Enabled: Hiking, walking/jogging, nature observation, cross-country skiing

Use Level: Moderate

Murray Hill (CSD) Extension of Eleanor Drive, Murray Hill Circle, Eagleview Drive (Multiple parcels on Assessor's Map 4)

Trails connect to trails in Kylie Estates and to Burlington open space. The trails surround the development, and one also goes through the middle of the subdivision. There is also a small public playground which is ADA accessible. For trails, there are two parallel parking spaces off Eleanor Drive and various access points on Murray Hill Circle with on-street parking and trailhead signs. For the playground, there are three parallel parking spaces along Murray Hill Circle.

Size: 18 Acres

Activities Enabled: Hiking, walking/jogging, nature observation, cross-country skiing, playground

<u>Use Level</u>: High

Wilmington Town Forest Andover Street (Assessor's Map R3 Parcel 300)

Created by a Town Meeting vote in 1975, and transferred to the care, custody, management and control of the Conservation Commission in 1985, the Town Forest is the largest conservation land in Wilmington. It is also one of the few areas of upland protected for passive recreation. The hilltop is an excellent site for observing bird migrations and a variety of small mammals and birds inhabit the mixed hardwood forest. There is a water tower at the top of the hill, and an access road that can be used for walking, jogging, bicycling, and horseback riding. There were two recent Scout projects in Town Forest: 1), a footbridge across the wetland linking the Andover Street side to the Ballardvale Street side and 2), trail marking and new trail connection behind Ashwood Avenue to replace the overgrown trail. The Forest abuts Camp 40 Acres, private land owned by Wilmington Junior Camps, and used by Scouts and other groups based at Camp 40 Acres. Links to the Bay Circuit and other trails owned by the Andover Village

Improvement Society (A.V.I.S.) just across the Andover town line could be developed. Parking is off of Andover Street where new signage has been installed.

Size: 154 Acres; Natural environment area

Activities Enabled: Hiking, nature observation, bicycling, horseback riding, cross-country skiing, snow

shoeing

Use Level: Moderate

The Conservation Commission also owns and manages land that does not include formal trails and access, but provides habitat and natural resource areas that contribute to the Town's environmental resilience and character. These Natural Parcels include hilly, wooded terrain and wetlands and are not generally conducive to public access.

The CONSERVATION COMMISSION'S NATURAL PARCELS include the following key parcels:

Corum Meadows Pilcher Drive (Assessor's Map 82 Parcel 100)

Donated by JayDee Builders at the time the Biggar Avenue neighborhood was developed in 1973, this area is named after Mr. and Mrs. Fred Corum, whose farm formerly occupied the northerly side of Salem Street opposite the neighborhood. Much of the remaining protected space is floodplain and wetlands associated with Lubbers Brook. There is street parking on Biggar Avenue, Pilcher Drive, or Jacobs Street, but no trail to access the area. An additional 3.9-acre parcel at the end of Pilcher Drive has a small pond that drains to Lubbers Brook and is discussed in the Conservation Commission Recreation Parcels Subsection.

<u>Size</u>: 17 Acres; Natural environment area Activities <u>Enabled</u>: Nature observation

Use Level: Low

Maple Meadows Wildwood Street (Multiple parcels on Assessor's Maps 49, 50, 60, & 63)

At the confluence of the Ipswich River (Mill Brook) with Patch's Pond and Maple Meadow Brook, this wetland area covers nearly 100 acres and provides a "greenway" of protected open space between Lowell, Adams, and Wildwood Streets. Since the mid-1960s the Conservation Commission and Town have worked to protect the brooks in this area, transferring numerous tax-title parcels over the years. Two major donations, each of approximately 19 acres, from Larry Doo in 1980 and Anna Low in 1990, added to the 19-acre parcel along Wildwood Street acquired in 1976 with Self-Help funds, form the core of the area, which is largely inaccessible due to thick undergrowth and wetland vegetation.

Size: Approximately 100 Acres; Area is important for groundwater recharge, wildlife corridor

Activities Enabled: Nature observation

Use Level: Low

Wilmington Gardens Wildlife Preserve Marion Street (Assessor's Map 5 Parcel 5)

This large parcel was designated as a "Wildlife Preserve" by the Town Meeting in 1973. It is largely inaccessible to the public, although "paper streets" provide legal, undeveloped access. Several small Town-owned parcels abut this piece. While the open space value is predominantly for wildlife habitat and protection of the wetlands associated with the Ipswich River, which splits the property, the property includes both wetlands and ledgy uplands with smaller glacial erratic boulders and a mixed oak and pine woods. Remnants of an old stonewall mark the northerly property line. The neighboring conservation land along the River in Burlington increases the open space value of this parcel. Management and use of this parcel should be done in consultation with the Burlington Conservation Commission.

<u>Size</u>: 53 Acres; Natural environment area <u>Activities Enabled</u>: Nature observation

Use Level: Low

Water Department Resource Land

The Water Department owns several large natural parcels (an inventory of Water Department Land is included at the end of this Section). All activities within the Zone I of public wells, however, must avoid any possibility of contaminating the groundwater. Most of the actual wells are located in wetlands associated directly with the headwaters streams of the Ipswich River, which makes them unsuitable for land-based recreation such as hiking and biking. Barrows Well Field is a good example; located between Park Street and Hathaway Acres, the well field is part of an extensive wetland system which includes Gowing Brook and contributes to Martins Brook through properties protected for both conservation and water supply purposes. The inventory of Water Department lands is included in Appendix I.

PUBLIC AND PRIVATE CEMETERIES

There are two cemeteries in Wilmington, both within the Centre Village Historic District and visible along the heavily travelled Middlesex Avenue. Wildwood Cemetery is the only cemetery in Wilmington where new burials occur. It does not have enough capacity for the projected demand, and expansion opportunities are being pursued. The Olde Burying Ground does not accept new burials. An inventory of cemeteries is included in Appendix I.

STATE/FEDERAL LAND

There are no federal non-highway lands in Wilmington. There are a few parcels owned by the state: some are small pieces left when Richmond Road was built, several are adjacent to the formerly proposed West Street route, and one is near Martins Brook and the Salem Street wells. An inventory of State owned parcels is included in Appendix I.

HISTORICAL RESOURCES

Wilmington is fortunate to have an active Historical Commission and citizens interested in preserving and promoting the Town's history. Through their efforts, Wilmington boasts five Historic Districts listed in the National Register of Historic Places (NRHP) as well as five buildings and the Middlesex Canal. The Commission has published many books and maps highlighting these historic sites, as well as significant people and events that have helped shape this community from the late 1600s to present day. Identifying and protecting historic places will help preserve the character of Wilmington. Many of the historic buildings and grounds are privately owned and not open to the public.

Historic Districts

BUCK'S CORNER HISTORIC DISTRICT

Corner of Woburn and Wildwood Streets

The 10-acre Buck's Corner Historic District exists as a former agricultural node with a collection of 17th, 18th, and 19th century houses and their barns. The District is formed by the intersection of Wildwood and Woburn Streets and along the gently curving Woburn Street toward Lowell Street.

Nicknamed "The City" early in the 19th century, the District contains six principal buildings and three barns that contribute to the architectural and historic character and integrity of the area. Most of the buildings have been altered but retain their historic design integrity. The five surviving major houses were the homes of three interrelated farming families.

Five Native American sites are located within one mile of the area. Artifacts collected within this area include projectile points, cremation remains, and pottery. Environmental characteristics of the District indicate a high potential for Native presence: wetlands, Maple Meadow Brook, and swamplands.

Ephraim Buck House

216 Wildwood Street (Assessor's Map 60 Parcel 29)

Part of the Buck's Corner Historic District, this south-facing house is located on Wildwood Street near the Woburn Street corner. One of the oldest houses in Wilmington, the front half probably dates from c. 1704, the rear from c. 1745, and Federal style alterations probably occurred around 1770. This former farmhouse, in a district of former farmhouses, is a relic of Wilmington's agricultural past. The Buck family, which owned the house for well over 200 years, was among the earliest settlers of the area. In addition to being listed as part of the Buck's Corner National Register Historic District, the building is also included in the NRHP listing of the First Period Buildings of Eastern Massachusetts. The house is privately owned.

CENTRE VILLAGE HISTORIC DISTRICT

Middlesex Avenue, Church Street, Adams Street

The Wilmington Centre Village Historic District encompasses an approximately 110-acre area near the center of the Town of Wilmington. The district contains residential and institutional buildings the 18th through early 20th centuries, and a late 19th century Town Common. These include, but are not limited to, the Congregational Church, the Old Centre School House, the Hudson-Roman House, the Town's first burial ground (Olde Burying Ground), the relocated Scalekeeper's Office and Town Pound, the Hearse Barn, and the Former Town Hall, as well as residential buildings with origins spanning the 19th through the 20th century. A Walking Tour of this District is available from the Town Museum and/or library.

First Congregational Church

Middlesex Avenue (Assessor's Map 65 Parcel 2)

Upon incorporation of the Town in 1730, the First Congregational Society was formed and served as Wilmington's only religious institution until 1832. By 1809 the Town outgrew the original church building, so a new one was constructed on the same site in 1814. When that building burned in 1864, the congregation raised \$12,000 and built the current structure, a handsome example of the late Italianate/Classical Style.

Ole Centre School/Fourth of July Building

Middlesex Avenue (Assessor's Map 66 Parcel 1)

Constructed c. 1840 as the Centre School, this small clapboard building served as the Town's public library from 1889 until construction of Memorial Library in 1969. Following Wilmington's 250th Anniversary in 1980, the Town granted use of the building to the newly established Fourth of July Committee, which in recent years has hosted Wilmington's annual "Fun on the Fourth" celebrations.

Olde Burying Ground

Middlesex Avenue (Assessor's Map 65 Parcel 3)

Established in 1731, within one year of Wilmington's incorporation as a Town, this small burial plot is located next to the Congregational Church. Members of Wilmington's first families are buried here, many of whom succumbed to an epidemic, which possibly was small pox in 1738.

Hudson-Roman House

161 Church Street (Assessor's Map 63 Parcel 10)

Built in 1897 for the Hudson family, later owned by the Roman family, this Queen Anne-style house currently serves as the School Department's Administration Building. It is a large clapboard building with a hip roof, projecting gables and porches, and a circular turret. The house is one of several along Church Street built during the Victorian Era.

Relocated Scalekeeper's Office

Middlesex Avenue (Assessor's Map 65 Parcel 3)

The little white clapboard building now located in front of the Olde Burying Ground originally sat adjacent to the Animal Pound on Squire Blanchard's property on Glen Road. It is believed the office may have been built by the Squire in relation to his position as State Inspector of Hops, c. 1840, or perhaps simply as his workshop.

Relocated Town Pound

Originally Glen Road (Map 65 Parcel 1A); now the Scalekeeper's Office site (Assessor's Map 65 Parcel 3) In Wilmington's early agricultural society, wandering cows and sheep were as common as dogs on the run in more recent times. As early as 1796 a committee was formed to construct a "pound with stones" where animals could be confined until their owners came to fetch them. In 1814 Squire William Blanchard donated a lot on Glen Road for the purpose of a new pound, which was used well into the mid-1800s. Stones were added in 1930 during the excavation of Middlesex Avenue to install a water main. Until recently the Pound was located on private, residential land without any preservation easements, but in 2010 it was relocated to public land next to the First Congregational Church in front of the Olde Burying Ground. It was placed adjacent to the Scaleskeeper's Office, which had been similarly relocated in the 1990s.

Buggy House/Hearse Barn

Middlesex Avenue (Assessor's Map 65 Parcel 3)

Best known locally as the Hearse Barn, believed to have originally been used to house the Town hearse, this building was built c. 1890, and has been used by the Tree Inspector, the Moth Committee, and the Public Works Department to store equipment and supplies more or less continuously since the turn of the century.

Former Town Hall/Wilmington Arts Center

219 Middlesex Avenue (Assessor's Map 65 Parcel 16)

Originally constructed in 1842 for the Free Will Baptist Society, the second organized religious group in Wilmington, this building was sold to the Town 22 years later, following the Society's decline. From 1864 until the 1980s, the building served as the Town Hall. In 1986 it became the home of Wilmington's Arts Council, and the site of annual art shows, recitals, and other cultural events.

CHURCH STREET HISTORIC DISTRICT

Church Street

The residential Church Street Historic District, laid out along Route 62 as an extension of the Centre Village Historic District, is a gateway to the area of Town historically known as the Town center and possesses the Town's most architecturally significant cluster of late 19th and early 20th century local architectural styles: Italianate, Colonial Revival, Neo-Colonial, and simple and elaborate Queen Anne houses, as well as a Craftsman bungalow. The District became home to the growing group of non-farming, middle-class residents during the mid-19th century.

Until then, Wilmington was a small, quiet, mainly agricultural community. The Meetinghouse, Old Centre School, and successful Bond bake houses on Middlesex Avenue marked the Town center, attracting the Town's most prominent families. Church Street was laid out to connect the c. 1844 Boston and Lowell rail depot on Main Street to the Town center. Church Street stretched from the depot to the Meetinghouse and was nicknamed the "new main road", or the "straight road", into the 20th century. The arched stone abutments of the box culvert over Mill Brook may date from the period of Church Street's first construction (c. 1850).

GOWING-SHELDON HISTORIC DISTRICT

Woburn Street

The Gowing-Sheldon District is a small, once rural area located on the southeast end of Woburn Street. Two well-preserved houses and their barns are excellent examples of their local type, one built at the beginning of the 19th century (Federal style, 1809) and the other about 50 years later (Queen Anne style, 1862). They were owned by members of the Sheldon family and sit across from one another on one of Wilmington's first roads. The District displays typical local Town planning principles of young families occupying existing houses or buildings near their families' homes in a nodal pattern along an old road connecting the Town to markets elsewhere.

A moderate potential exists for locating significant ancient Native American resources in the District. Four Native American sites are located within one mile of the area. Environmental characteristics of the district indicate a high potential for Native presence: wetlands, Maple Meadow Brook, and swamplands.

HIGH STREET HISTORIC DISTRICT

High Street

The High Street Historic District represents the transformation from an agricultural to primarily residential use at about the mid-19th century. This new, more urban settlement pattern gives weight to the area's nickname "New City," with the first "City" being the node at Buck's Corner.

The District exists eastward on High Street from its intersection with Middlesex Avenue / Route 62. The 14 houses, three carriage barns and three garages span the period from 1851 through 1942, and represent Greek Revival, Italianate, Queen Anne, Colonial Revival, Craftsman, and Neo-Colonial styles. Many of the houses remain largely unaltered, with the exception of the addition of porches, window sashes and siding, and new clapboard or vinyl features.

Environmental characteristics of the area support the presence of ancient Native American sites in the District including uplands, tributary streams, wetlands, and a glacial outwash surface. Ancient sites in this area may contribute important information relating to patterns of Native settlement and subsistence in the interior Ipswich River drainage.

Other Historic Places and Features

The Wilmington Town Museum at the Col. Joshua Harnden Tavern

Salem Street at Woburn/Andover Street (Assessor's Map 102 Parcel 1)

Located at the intersection of Woburn Street and the old Salem County Road, this home of Colonel Joshua Harnden served as a Tavern from 1793 to the Colonel's death in 1807. An impressive example of Georgian style architecture, the building was about to be torn down in 1973 when it was taken by eminent domain in accordance with a Special Town Meeting vote; that same Special Town Meeting established the Wilmington Historical Commission. In 1999, Wilmington residents voted to establish the Wilmington Town Museum at the Tavern. Visitors to the Museum can see historical artifacts, the Tavern/house, and the detached Carriage House, and learn about Wilmington's past. The building is also used to house the extensive Bond Collection of Wilmington's historical papers and memorabilia. There are grounds and wooded walking trails on the property. It is managed by the Wilmington Historical Commission. The property was listed on the NRHP in 1975.

Boutell-Hathorn House

280 Woburn Street (Assessor's Map 86 Parcel 11)

This privately owned property includes a two-story 18th century house which sits between two open fields, facing south on a 5.7 acre lot, as well as two 19th century barns and other, smaller farm buildings. It is believed that the earliest portion of the house came into existence in 1754 or earlier, during the ownership

of Thomas Boutell, on property owned by his family since 1692. In 1941 the Richardson family bought the property, which then totaled 85 acres, and maintained a farm for many years. The property was divided and reduced in 1958 when part of it was taken for construction of I-93, and it was further reduced in 1971 when the family sold off the property on the other side of the highway to leave them with the 5.7 acre lot that exists today. In 2002 then-owner Winifred Richardson granted to the Town of Wilmington a preservation restriction on the house. This means that the property cannot be destroyed, altered, or broken up in any way. When Ms. Richardson passed away in 2010, the property was deeded to the preservation organization Historic New England. The property is now privately owned and Historic New England holds an additional preservation restriction on the property. In 2004 the property was listed on the NRHP.

Butters-Avery House (also known as William Butters II House)

165 Chestnut Street (Assessor's Map 15 Parcel 13)

William Butter was one of Wilmington's earliest settlers. The House is a saltbox half-house built by William Butter, II (later known as Butters) between 1620 and 1725. The building is in the NRHP listing of First Period Buildings of Eastern Massachusetts and is the second oldest house in Wilmington. This home and farm is also significant as the site of the discovery of the Baldwin apple (known at the time of its discovery as the Pecker or Butters apple) in the late 18th century, which is memorialized with a statue on the adjacent lot.

The home remained a private residence until 2006, when it was sold as part of a parcel slated for new-home development. The Wilmington Historic Commission, members of the Butters family, and Wilmington's legislative representatives organized efforts to raise money to purchase the home back from the developer for preservation purposes. In 2010, through the efforts of the Wilmington and Massachusetts Historical Commissions, the building was accepted for listing on the NRHP. In 2016 the Town issued a Request for Proposals (RFP) to sell the house with a preservation restriction held by Historic New England and a commitment to rehabilitating the home. Over the past four years, the new owner has completed rehabilitation work.

Baldwin Apple Monument

Chestnut Street (Assessor's Map 15 Parcel 13A)

Located near where the Baldwin Apple was first discovered on Butters' Farm in the 1790s, the Baldwin Apple Monument is owned by the Rumford Historical Association of North Woburn. Erected in 1895, the memorial commemorates the native apple, which was initially known as the Butters, the Woodpecker, or simply "Pecker" Apple. It was later renamed the Baldwin Apple after Col. Loammi Baldwin, the first superintendent of the Middlesex Canal, who propagated and widely dispersed the apple. The rectangular piece of land, with 121 feet along Chestnut Street, contains 13,458 square feet, or about one-third acre. This land was purchased in the late 19th century by the Rumford Historical Association from the owner of the Butters-Avery House for the purpose of erecting the monument.

Portions of the Middlesex Canal

The Middlesex Canal was constructed over a ten-year period (1793-1803) and operated for fifty years until competition from the railroad caused the Canal to go out of business in 1853. It was dug by hand with pick ax, shovels, and horse plows for a distance of 27.3 miles from the Charles River in Charlestown to the Merrimack River in Lowell. It was used to transport cargo from the busy Boston Harbor to the countryside, and to ship raw materials down to Boston. The halfway point is in the Wilmington Town Park. George Washington was in his second term as president when the project started; it is the oldest significant canal in America. The Middlesex Canal is listed on the NRHP and is a designated National Historic Engineering Landmark.

There are eight aqueducts (four of which are in Wilmington) and twenty locks (two of which are in Wilmington). The canal was constructed on seven levels on its 107-foot descent from the Billerica Mill Pond to the Charles River: Wilmington has one complete level and parts of two others.

Wilmington has two public access points to the Canal, off Butters Row and off Wedgewood Road:

Butters Row (Assessor's Map 27 Parcel 11D, Map 28 Parcel 4)

Owned by the Middlesex Canal Association, this property was donated by Julia Fielding and her father, former Selectman Stanley Webber. This very well preserved section of the Old Middlesex Canal provides passive recreation as well as historical interest. This section connects the Town Park with Patch's Pond. Sections of canal rise 27 feet above the marshland and represented a major earth moving venture when the Canal was built.

<u>Size</u>: 14.2 acres (the two parcels above; the Canal bed runs through much of Town beyond)

Activities Enabled: Cultural, historical, archeological features; nature observation, hiking

<u>Accessibility</u>: Parking in the Town Park lot, at the Butters Row Water Treatment Plant, and at a right-of way in the Apple Tree Lane cul-de-sac. Not handicap accessible.

Off Wedgewood Road (Assessor's Map 21 Parcel 9)

This one-half-acre lot was donated by Bresnahan, Callahan, and Tighe with a Town conservation access easement off Wedgewood Road. Owned by the Middlesex Canal Association, this nice section of towpath connects the Canal in the Water Department property on Shawsheen Avenue behind the West Schoolhouse to the Fred F. Cain Bridge just west of Main Street.

Size: 0.5 Acres

Activities Enabled: Hiking, nature observation, cross-country skiing

Accessibility: Parking on Wedgewood Road.

Off Towpath Drive (Assessor's Map 29 Parcel 11U)

The western portion of this lot runs along the towpath, and the eastern portion contains a large part of Patches Pond. A trail begins off of Towpath Drive and continues through much of the lot. A kiosk was recently placed at the trailhead as part of an Eagle Scout project.

Size: 15.4 Acres

Activities Enabled: Hiking, nature observation, cross-country skiing

Accessibility: Parking on Towpath Drive

South Schoolhouse

Chestnut Street (Assessor's Map 15 Parcel 4)

One of two remaining district schoolhouses, the South School is located on Chestnut Street just west of Butters Row. It is believed to have been built in 1894, with local lumber from Clapp's Mill. Today the building is home of the Wilmington Food Pantry.

West Schoolhouse

Shawsheen Avenue at Aldrich Road (Assessor's Map 33 Parcel 49)

One of Wilmington's early schoolhouses and a survivor of the district school system established in 1839, this is a well-preserved example of a rural schoolhouse of the late 1800s. The school has remained in use for various purposes, currently housing Veterans Affairs offices, and was listed on the NRHP in 1990.

In 2004, through the efforts of Wilmington's legislative representatives, the Historical Commission, and the Town's administration, \$103,000 was granted by the Commonwealth for the rehabilitation of this landmark. The Town used the funds to purchase materials and furnishings for the Schoolhouse, which now serves as office space for Wilmington's Veteran's Services Department. The renovations were done by students at the Shawsheen Technical High School, who successfully incorporated the historic features into the upgrades.

Clapp's Mill

(Assessor's Map 3 Parcel 5)

Clapp's Mill straddles Sawmill Brook at the Burlington-Wilmington border and abuts protected open space in Burlington. The dam is an excellent example of water-powered saw and gristmills settlers used for producing lumber and flour. Development has destroyed Burlington's other mills, and the Nod Pond milldam on Martins Brook in North Wilmington is the only other that has survived in Wilmington. It is registered as a Massachusetts Historical Commission's Archaeological Resources Survey Site.

The Mill was most likely used by Minuteman James Butters (1745-1838) during the early part of the 19th century; the Mill was located on family land and down the road from the Butters' farm. The Butters and Millers, the Burlington owners for over 20 years, were related by marriage. It is very possible that Loammi Baldwin (1745-1807) designed the Mill before he achieved fame for his work on the Middlesex Canal. Noah Clapp, a carpenter from Braintree, bought the Mill in 1871 and operated it for many years.

The dam itself is approximately 70 feet long, with tall, built-up stone walls on both sides, and averages about 15 feet in width at the top. Sawmill Brook traverses the milldam, by way of an underground, stone-lined sluice, which penetrates the milldam. On the machinery floor level there are several stone slabs, which have projecting iron bolts. The property is forested. A series of trails on both sides of Sawmill Brook link the property to Burlington conservation land and the remnants of Mill Road, once the main thoroughfare between the two towns.

ADA Accessibility

An assessment of Town Parks and Trails was completed by the Wilmington Commission on Disabilities with Dr. Dee Genetti, Vice Chair as the lead reviewer. The assessment is included in Appendix II. While some recreational spaces are currently suitable for handicap accessibility, other playing fields and public spaces, including many neighborhood trails, will need improvement.

In general, the Town has significant open space areas in a natural state that provide natural habitat and resource protection. Since these parcels are generally wooded and hilly or consist largely of wetlands in a natural state, public access is not easily achieved or even preferred. These parcels are included in the Conservation Commission Natural Parcels Inventory in Appendix I, but assessments of these parcels were not completed since they offer no facilities and no access.

Since the 2015 OSRP, Wilmington has completed a number of projects to increase accessibility. The Town created an ADA policy for the purchase of new benches and picnic tables, fixed the lip at the Silver Lake pier and connected hard surfaces on the property, and installed a handicap ramp at the Rotary Park ball field.

The assessment by Dr. Genetti outlines shortcomings in providing accessible spaces and facilities. From the assessment, the Open Space Committee developed a list of action items that can be achieved in the next five years:

General Goals:

- Complete a comprehensive sign plan for all trails.
- Coordinate with sports leagues to ensure that Porto Potties brought to sports fields are accessible.
- Communicate with sports leagues about assessment in regards to concession buildings so that future work can include accessibility.

Year 1: Town Common

- Restripe accessible spaces and access aisles with correct dimensions;
- Adjust the height of parking signage;
- Install one new accessible bench;
- Replace field drain grate with new grate that has openings no larger than .5 inches;
- Reconstruct sidewalk ramps and add detectable panels proximate to crosswalk.

Year 2: Silver Lake

- Restripe accessible spaces and access aisles with correct dimensions;
- Adjust the height of parking signage;
- Install two new accessible picnic tables;
- Fix the gap at the fishing pier.

Year 3: Rotary Park

- Restripe accessible spaces and access aisles with correct dimensions;
- Adjust the height of parking signage;
- Coordinate with the Rotary Club on replacing benches and tables with accessible fixtures;
- Install new edge protectors on side of bridge over stream;
- Coordinate with Little League regarding accessible ramps to dugout;
- Construct accessible ramp to access the gazebo.

Year 4: Robert Palmer Park

- Stripe accessible space with access aisle at the park entrance;
- Install one accessible picnic table;
- Check playground ramp for accessibility;
- Assess possibility of additional accessible equipment at the playground;
- Recommend an accessible trail at Robert Palmer Park as an Eagle Scout project.

Year 5: Dog Park at Town Park

- Stripe van accessible parking space;
- Adjust the height of parking signage;
- Move boulders so that a 36" or wider entrance is provided;
- Fill in 1" gap between the parking lot and path;
- Move dog park signs to be 60" high at centerline;
- Lower gate latches to 36" and confirm they can be operated with a closed fist;
- Create accessible parking space and access aisle at softball field.

Regional Open Space and Recreation Facilities and Opportunities

In addition to local recreation facilities and open spaces, there are parks, trails, and other features in or near Wilmington with regional significance. These include Harold Parker State Forest in Andover, the Middlesex Canal, the Bay Circuit Trail, and a planned network of bikeways and proposed Rails-to-Trails conversion along sections of the old Salem-Lowell line. Yentile Farm Recreational Facility, which opened in 2017, offers a regional recreation facility though located entirely within Wilmington.

There are a number of potential links from properties in Wilmington to protected open space in neighboring communities. For example, connections in North Wilmington could link the Town Forest to Harold Parker State Forest via Bay Circuit and A.V.I.S. (Andover Village Improvement Society) trails in Andover and North Reading.

Adjacent Towns:

Andover: A number of opportunities exist near the Wilmington Town Forest to connect to trails in Andover through proposed trails in adjacent subdivision open space, and through lands around Fosters Pond, some owned by the town of Andover. The Spruce Farm Over 55 Development adds a link from Andover Street to Foster's Pond Road.

Billerica: The Shawsheen River is a shared resource between Billerica and Wilmington, forming part of the town line between them.

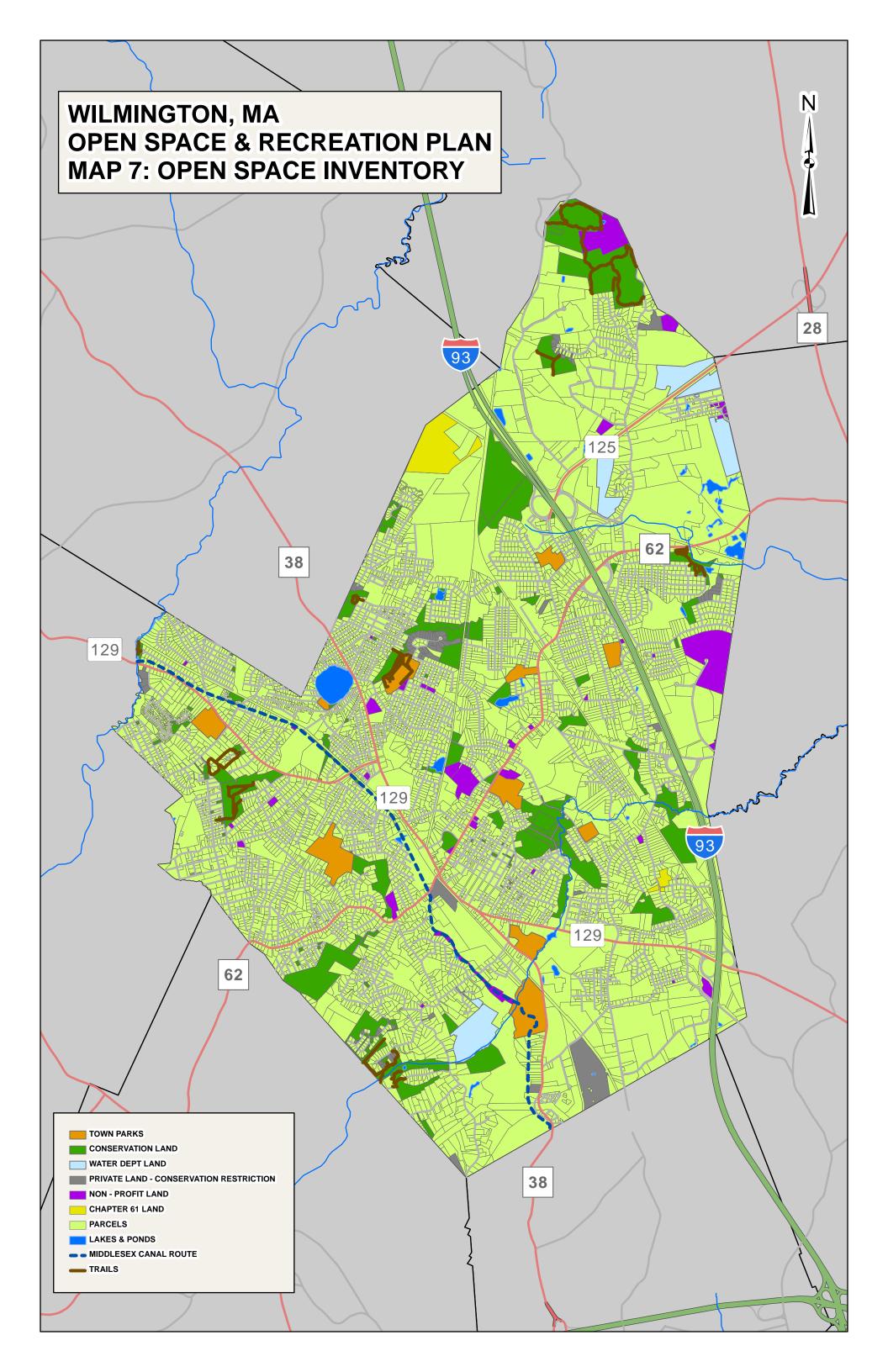
Burlington: Some of Burlington's conservation and recreation land is adjacent to or near Wilmington's conservation land along its southwest boundary. This includes lands near Burlington's reservoir, land on both sides of Mill Road (Hillside Way in Wilmington), a small piece near Wilmington Gardens Wildlife Preserve, Burlington town open space that links to Wilmington's Green Meadow and Murray Hill Subdivisions conservation land, and the Sawmill Brook Conservation Area where trails link to the Wilmington Kylie Estates Subdivision and Burlington's Fox Hill School.

North Reading: The Towns are connected via Concord, Park, and Salem (Route 62) Streets. Close to, but not adjacent to Wilmington, are the Martins and Furbish Ponds. Furbish Pond is surrounded by parcels owned by North Reading (Map 3 Parcels 44-47) and is accessible via Stickney Well Road, Park Street, and Kristyn Road in North Reading. Martins Pond and Martins Brook both have numerous open space parcels abutting both water ways, including 13.5 acres owned by the Town of Wilmington (Map 6 Parcel 2).

Reading: The towns are linked by the Ipswich River. The Ipswich River Watershed Association is currently planning to reestablish a canoe/kayak launch off of Woburn Street and install signage. The Reading Town Forest and well fields encompass 310 acres along Reading's northern perimeter, abutting the Ipswich River. The Reading Town Forest also serves as a buffer from development for most of the Town's well fields. The Ipswich River flows through this forest. Reforested areas were planted in the 1930s and now form a dense pine forest. There are several wide paths for hiking, cross-country skiing, birding, nature study, scout projects, camping, and environmental education. Recent subdivision of its east end has brought a new access point to the Reading Town Forest and a new neighborhood at its doorstep. A private golf club is located to the southwest of the Town Forest and comprises 139 acres. It is within the Interim Zone II of the well fields and abuts wetland resource areas.

Tewksbury: There are no shared resources between Tewksbury and Wilmington to date.

Woburn: There is little opportunity identified for connecting nearby open space since the towns share a border that is predominately industrial in nature.



Section 6: Community Vision

Description of Process

In August 2019, a new Open Space Committee (Committee) was formed to define and address the open space and recreation needs of the community and update the 2015 Open Space and Recreation Plan for the Town of Wilmington. The Committee membership consists of seven volunteers and includes representation from the Town's DPW, Recreation Department, Conservation Commission, and the Middlesex Canal Commission. The Department of Planning & Conservation served as staff to the Committee.

The Committee held their first meeting on October 7, 2019 to review the goals and objectives from the 2015 Plan and the progress toward those goals to date. To gather updated data, the Committee issued an online community survey on October 18, 2019. The survey link was posted on the Town's website and Twitter, and sent to local media including the Lowell Sun, Town Crier, Wilmington Apple, Wilmington Patch, and the local cable channel WCTV. Paper copies were available at the Wilmington Memorial Library, Buzzell Senior Center, and Town Hall. The survey closed on November 8, 2019 with 478 responses collected. The survey and survey results are included as Appendix 1.

The Committee met on December 2, 2019 to review the results of the survey and begin developing updated goals and objectives. At their next meeting on January 6, 2020, the Committee further refined the goals, objectives and action items to provide details for a draft Plan. Following the onset of the COVID-19 pandemic, the Open Space Committee reconvened in October to review Chapters 6-9 of the Plan, which set out the goals, objectives and action items. The Committee issued a second survey in October 2020 to provide the draft goals to the community and get feedback. Following the completion of the assessment of town parks and trails by the Commission on Disabilities, the Committee met in June 2021 to finalize the draft so that it could be posted for public comment.

All meetings were posted in accordance with Open Meeting Law and open to the public.

Vision Statement for Open Space and Recreation

Once a sparsely populated rural farming community from Civil War times up until the mid-1950s, Wilmington was transformed almost overnight into a suburban community during the post-war housing boom. Since that time industry, manufacturing, housing, and urban land use have replaced farming. The challenge facing the Town today is the need to balance and maintain current, as well as future, land uses without severing historic links to the past or the quality, integrity, and character of the Town.

Vision Statement

The Town of Wilmington is a suburban community in a natural setting with woodlands and wetlands scattered around Town, creating a spacious, small town character and quality of life. The Town will continue to preserve and acquire open space to maintain Wilmington's small town character. Wilmington should be a place where there is a variety of open space that provides active and passive recreational opportunities to all age groups and interests.

Section 7: Analysis of Needs

Summary of Resource Protection Needs

Resource protection addresses natural features (land, water, air, and climate) as well as natural communities (wildlife and vegetation) that not only define the Town's character, but are integrally linked to the health and welfare of the community as a whole.

RESOURCE MANAGEMENT

Wetlands cover approximately 19% of Wilmington's area. Streams and brooks converge to form the headwaters of the Ipswich River. Water is a dominant characteristic of Wilmington, viewed from backyards and roadways creating a scene that residents value for its openness and natural view. These areas are important both culturally, for creating and maintaining the feel of the Town, while also being important for the overall health of the community. Wilmington relies on groundwater wells for a portion of its drinking water and as the headwaters of the Ipswich River, others downstream rely on Wilmington's groundwater for a sustained flow in the Ipswich for drinking water. As such, water quality and groundwater recharge are extremely important.

Local resource protection needs regarding wetlands and waterways include the following:

- Protecting land in Wilmington's water supply recharge areas with regulation, management, and acquisition;
- Protecting land along brooks and streams to provide riverine habitat and protect water quality;
- Promoting and requiring groundwater recharge through local stormwater regulations;
- Protecting and enhancing water quality through education, promotion, and local stormwater regulations;
- Identifying potential vernal pools for protection;
- Balancing resource protection at Silver Lake with recreational uses;
- Encouraging and requiring responsible development with conservation subdivisions to create larger setbacks from water resources.

In the last five years, several larger parcels have been developed or permitted for conservation subdivisions that provide protected open space and habitat along brooks, specifically along Sawmill Brook and Lubbers Brook. The Conservation Subdivision Design (CSD) development at Green Meadow Drive along Sawmill Brook was setback further from the brook than required to provide a greenway of protected land along the waterway, while being linked to other protected parcels to form a network. The development, which consists of 26 new single-family homes resulted in over 30 acres of new public open space and a continuation of the trail network from the Murray Hill and Mill Road CSD developments, meeting Goal #3 of the previous OSRP. A goal of making sure connections are clear and seamless was discussed during the development of this Plan. Another CSD development was permitted in 2019 for 16 single-family homes off of Hopkins Street, adjacent to Lubbers Brook. Again, the development was setback further from the brook to create protected open space and habitat along the waterway. Where possible, these CSD developments and their open spaces include trails open to the public to enjoy the natural resources that have been protected. Where additional subdivisions are possible, conservation subdivisions can be strongly encouraged to create linked greenways along the waterways and provide passive recreational trails.

In addition to the vast network of wetlands and brooks, Wilmington also consists of some upland forested areas scattered across the landscape, which are typically mixed in with wetlands. These open landscapes, like water resources, give parts of Wilmington a small town feel that residents value. These upland areas are typically in proximity to wetlands or streams and are important in protecting those resources and in providing recreational opportunities in the form of trails.

Residents have also expressed a desire to maintain habitat for the wildlife that they see in their backyards every day. A popular local webpage "Wildlife of Wilmington" captures photos and videos of deer, coyotes, bobcats, foxes, and other small mammals and serves as a forum for what has been spotted in areas of Town. Large blocks of land and connected protected lands provide habitat for Wilmington's wildlife, and acquiring or preserving land for habitat is an ongoing local resource protection need in Town. A specific goal of the previous OSRP was to accept donations of land that will serve as resource protection and habitat. Since 2015, through the Conservation Commission, the Town accepted donations of land off Ballardvale Street and off Leonard Lane to meet this goal. Another larger block of land is anticipated to be donated to the Town. The land is a landlocked 66-acre parcel that abuts existing conservation land, which would create a larger habitat block in the northern part of Town adjacent to NHESP Estimated Habitat of Rare Species. The goal of acquiring additional land for resource protection and preservation of Town character through donation and other means is a goal that is carried over to this Plan.

Another goal of the previous OSRP was to transfer appropriate Town-owned parcels to the care and custody of the Conservation Commission. Four Town-owned parcels were transferred to the Conservation Commission at the 2020 Annual Town Meeting for habitat and resource protection. This goal will be carried over into this Plan to further the goal of protecting and preserving land for habitat, flood protection, and open space. A large tract of Town-owned land north of Salem Street, mapped as Core Habitat and Critical Natural Landscape on BioMap2, could be considered for transfer to the Conservation Commission for protection.

Summary of Community's Recreation Needs

RECREATION NEEDS

Recognizing the need for additional fields and facilities for youth in the 2015 OSRP, the Town installed a synthetic turf field at the High School's Alumni Stadium and a new synthetic turf multi-use field to serve soccer, football, lacrosse and field hockey players at the Yentile Farm Recreational Facility. The completion of the award winning Yentile Farm Recreational Facility met Goal #2 of the 2015 OSRP, providing field space specifically dedicated for use by Wilmington youth and teens. Playing fields are the second most used recreational spaces according to the community survey conducted in late 2019 and were rated as being in Good or Excellent condition by an overwhelming majority of users.

Another goal of the 2015 OSRP was to provide amenities for a full range of users. Today's "Seniors" are looking for active recreation, and they are looking to be active with people of all generations, not just other Seniors. In fact, Baby Boomers don't want to be referred to as "Seniors", let alone "Elderly". While Pickleball is currently the most popular sport, Seniors in Wilmington are playing bocce and tennis, golfing, bicycling and hiking. In 2018, the Town installed three dedicated Pickleball courts at the Town Hall/Robert Palmer Park. The courts are in high demand for casual use, and the Recreation Department offers reasonably priced lessons and a variety of programs for Pickleball play. Wilmington included a walking trail at Yentile Recreation and Park Facility, and additional Pickleball courts are anticipated to be included at the proposed new Senior Center for the town. Space for community gardens has been requested by Seniors and that use is also being programmed into the plans for the new Senior Center. The Town plans to market and add signage to existing walking trails which will be helpful to this group as well. Bicycle

lanes are being incorporated into roadway improvement projects to better accommodate cyclists. The Senior Center is sponsoring a walking group, and the Recreation Department offers programs for adult golf, tennis and bocce.

According to the online survey, residents highly value playgrounds. They are the most used, most well known, and the highest rated spaces with 51% Good rating and 26% Excellent. Overall, playgrounds are the second favorite type of open space with trails as the top favorite. Playgrounds in Wilmington are neighborhood-based, scattered across Town at schools, Town facilities, and parks. The enthusiasm for these neighborhood-based playgrounds reflects Goal #4 of the Massachusetts Statewide Comprehensive Outdoor Recreation Plan (SCORP) from 2017 discussed in the next subsection. Goal #4 is to support the creation and renovation of neighborhood parks. A neighborhood playground was recently installed by the developer at Murray Hill Estates on Murray Hill Circle. The small playground is intended to serve the new homes being constructed in the CSD development and surrounding area.

The construction of Yentile Farm Recreational Facility provided another large recreational facility within walking distance of several neighborhoods. Yentile was designed to be both a neighborhood park and a larger draw from across Town and beyond. The facility boasts a synthetic turf playing field, accessible walking path, multi-age playground, basketball/street hockey courts, game tables, pavilion, concession/bathroom, educational signage, and rain gardens that serve as stormwater best management The park was designed to practices. harmoniously blend recreational needs with practical maintenance capability. Accessibility was also a design component of the facility from the beginning, providing recreational opportunities underserved, Goal #1 of the 2017 SCORP. Yentile provides accessible paths, structures, swings, picnic tables, and bathrooms. There is an opportunity and need for accessible facilities in other parks and facilities in Town.



Another goal of the SCORP is to increase the availability of water-based recreation (Goal #3). The Open Space Committee specifically asked about canoe and kayak facilities in the community survey, but the overall response was that those facilities are not as much a priority as other facilities. This may be because Wilmington has the Silver Lake Beach which is very popular and well used as water-based recreation.

Following the 2015 Plan, the Town constructed a dog park at Town Park on Main Street to meet an objective of Goal #2 of the of the plan. The dog park has been a very popular amenity, but the community survey illustrated the need for promotion and education of existing amenities. A survey response commented that "it would be nice to have a dog park". Other special interests such as additional pickleball

courts, splash pads, gardening, and ice rinks were mentioned in some of the surveys. These types of uses would require additional discussion to gauge the level of community support for siting and funding.

Overall, the theme that has emerged from the community survey and discussions has been a need for increasing awareness of existing resources. Survey results illustrated that trails remain the highest priority for residents, mirroring Goal #2 of the 2017 SCORP. However, the survey also revealed that residents are not aware of the Town's existing inventory of trails and go to other towns to use their trails. Over 60% of respondents were not aware of the Town's GIS maps that illustrate the trails on the website. Town trails can be very hard to find since they do not typically have any trailhead markers. When they are found, it is



not evident where they lead, so residents may be deterred from exploring the trails when they do find them. There is an opportunity here to provide signage, education, and overall awareness of these trails and other resources. The Committee has discussed the opportunity to provide education and promotion of natural resources, history, and a longer section of trail along the towpath of the Middlesex Canal. A pedestrian trail bridge crossing the Maple Meadow Brook Aqueduct would connect Town Park off Main Street with a mile-long trail to Patch's Pond. Neighborhoods off of Butters Row and Chestnut Street would have direct trail access to Town Park and its amenities (dog park, fields, etc.).

STATE CONTEXT: STATEWIDE COMPREHENSIVE OUTDOOR RECREATION PLAN

Findings of the 2017 Massachusetts Statewide Comprehensive Outdoor Recreation Plan (SCORP) shared similarities with local findings, including an emphasis on neighborhood playground and parks, water-based recreation, and the desire for more hiking and walking trails. There appear to be opportunities to work locally toward both local and statewide goals over the next five years; specifically, by filling the gap in the Middlesex Canal Towpath trail that connects Town Park and its amenities with neighborhoods to the north. Trail grant funding could be pursued for a pedestrian bridge to span the Maple Meadow Brook Aqueduct. Additional water-based recreational opportunities can be pursued jointly with the Ipswich River Watershed Association.

The 2017 SCORP outlines the following four goals and objectives:

- 1. Access for Underserved Populations
 - Support the acquisition of land and development of new open spaces in areas that lack existing or useable open spaces, such as Environmental Justice neighborhoods
 - Develop parks and open spaces that offer amenities that go above and beyond ADA requirements for people with disabilities

- Consider the needs of underserved demographic groups senior citizens and teenagers
 in park and open space designs
- Encourage establishment of programming endowments

2. Support the Statewide Trails Initiative

- Support the acquisition of land and development of new open spaces that can provide a trail network
- o Fill in the gaps of the existing trail networks
- o Ensure that any existing or new trails are fully accessible to people with disabilities

3. Increase the Availability of Water-based Recreation

- Support the acquisition of land that will provide for water-based recreation
- Support the acquisition of land that will increase drinking water supply protection
- Develop water-based recreational facilities, including swimming areas, spray parks, boating facilities, fishing areas, etc.

4. Support the Creation and Renovation of Neighborhood Parks

- Promote the acquisition and development of neighborhood parks where none currently exist
- Develop amenities supported by neighborhood parks, such as playgrounds, off-leash dog parks, and community gardens
- Work with community development organizations to improve walking access to local parks

LOCAL CONTEXT

Wilmington offers recreational facilities throughout Town at school sites and at a number of other public facilities. Size refers to land used for active recreation exclusive of accessory uses such as parking or other uses.

Table 7: Recreational Facilities

Name & Location	Size	Use	Description	Number
Town Park	0.9	Softball		1
Main Street (Rte. 38)		Dog Park		1
Boutwell School	1.0	Baseball	Little League	1
17 Boutwell Street		Baseball	Youth T-Ball	2
		Basketball		1
		Playground		1
		Tennis		3
Middle School	3.1	Baseball	Regulation	1
25 Carter Lane				
North Intermediate School	5.7	Baseball	Little League	1
320 Salem Street		Baseball	Regulation	1
		Basketball		1
		Playground		1
		Soccer		1
		Tennis		3
Town Hall – Palmer Field	5.2	Baseball	Little League	2

	1		D 14/	
		Football	Pop Warner	1
		Basketball		1
		Playground		1
		Softball		2
		Pickleball		3
Rotary Park	0.8	Baseball	Little League	1
Adelaide Street (Off Rte. 62)		Playground		1
Shawsheen Street School	8.0	Basketball		1
298 Shawsheen Avenue		Lacrosse	Girls High School	1
		Playground		1
		Skate Park		1
		Soccer	Small Field	6
		Soccer		2
		Street Hockey		1
		Tennis		3
Silver Lake	1.7	Beach		1
	1./			
Rte. 38, Grove Ave., Burnham St.		Fishing Pier		1
		Playground		1
West Intermediate School	0.8	Softball		1
22 Carter Lane				
Whitefield School	0.9	Soccer	Small Field	1
Middlesex Avenue (Rte. 62)				
Wildwood Street School	0.7	Basketball		1
182 Wildwood Street		Playground		1
		Tennis/Pickleball		2
Wilmington High School	8.1	Baseball	Regulation	1
159 Church Street		Basketball		1
		Field Hockey		1
		Football	Main Field – Synthetic	1
		Football	Practice Field	1
		Softball		1
		Tennis		4
		Track		1
Woburn Street School	4.6	Basketball		1
227 Woburn Street		Lacrosse/Soccer		1
		Lacrosse/Soccer	Practice Field	1
		Playground	- ractice ricia	1
		Tennis/Pickleball		2
Buzzell Senior Center	0.01	Bocce		1
Yentile Farm Recreational	20.47	Basketball or		3
Facility		Street Hockey (1)	No de la Assarta del	_
9 Cross Street		Playground	Various Ages/Accessible	1
		Multi-use Field	Soccer, Football, Lacrosse	1
Murray Hill Playground	0.4	Playground		1
Murray Hill Circle	0.4	i idyground		_
Triality Tilli Circic	<u> </u>	1	1	

Table 8: Recreation Facility Totals

		Number
Baseball		10
Little League	5	
Regulation	3	
Youth T-Ball	2	
Basketball		8
Street Hockey		1
Softball		5
Beach		1
Field Hockey		1
Fishing Pier		1
Tennis		13
Tennis/Pickleball		4
Pickleball		2
Multi-use Turf (Soccer, Football, Lacro	osse)	1
Football		3
Football Field (multi-use turf)	1	
Pop Warner Football	1	
Practice Football	1	
Lacrosse		3
Boys & Girls Youth Practice	1	
Boys HS, Boys & Girls Youth	1	
Girls HS	1	
Playground		10
Skate Park	1	
Dog Park	1	
Soccer	12	
Small Field	8	
Regulation	4	
Track		1
Bocce		1
Combir	ned Total	79

Table 9: Trails and Paths

Alderwood Estates (Kenwood Ave)

Beeching Ave Ext

Blanchard Rd

Brookfield (Ashwood Ave)

Corum Meadows (Pilcher Dr)

Fisherman's Access (Grace Dr)

Glen Road Berry Bog

Green Meadow Drive

Hathaway (Draper, Evans, Marie Drives)

Heritage Pines (Lt Buck Dr) [trails gone]

Jaques Ln

Kylie Estates (Mill Rd)

Leonard Lane

Mariorie Rd

McGrane Rd

Murray Hill

Rotary Park

Robert Palmer Park (Town hall)

Town Forest

Town Park

The School Facilities Department permits school fields first for school sponsored teams and events and then for others. Other Town-owned facilities are permitted by the Recreation Department. No fees are collected for field use.

The Department of Public Works, through its Parks and Grounds Division maintains all outside recreational facilities, including lining of all fields for use by schools and sports leagues. Parks and Grounds employs seven full time, year round staff. In an effort to improve field conditions, the department works with a professional field consultant to develop and implement a systematic soil and biology based approach to sustainable management. The DPW notes that the most serious challenge to field maintenance is the lack of rest given the fields are used from March through November. The creation of additional sports fields would allow a less intensive schedule of use for individual fields and increase opportunities for field maintenance and recovery. This theory has proven accurate since the construction of the synthetic turf field at Yentile Farm Recreational Facility, which has lessened the demand of natural turf field use. Natural turf fields may be preferred going forward due to the cost and impacts of artificial turf fields.

Recreational programs in Wilmington are offered by the Recreation Department as well as youth sports organizations including Wilmington Youth Soccer Association, Wilmington Youth Lacrosse Association, Pop Warner Football, and Wilmington Little League.

Management Needs and Potential Change of Use

It is important for an Open Space and Recreation Plan to outline specific recommendations that will help the Town meet its open space and recreation goals in a strategic manner. Specifically, it is necessary for the Town to have the tools, policies, staff capacity, and financial availability at hand to implement the recommendations of the Plan.

STAFFING AND MANAGEMENT

The Department of Public Works currently maintains all Town-owned playing fields, parks, and playgrounds. Considering the number of facilities, as reflected in the community survey, the DPW does an excellent job of maintaining open spaces in good condition. However, staff time is limited and current staffing levels cannot cover trail maintenance in addition to the fields, playgrounds, parks, etc. that need

to be maintained. The acquisition of additional active open space facilities would require an evaluation of staffing levels to ensure proper maintenance.

In addition to staff in the Recreation Department, Department of Public Works, and Department of Planning & Conservation, the Town relies on volunteer efforts to advance open space initiatives and maintain existing facilities. Maintenance and stewardship of natural areas and trails is a challenge for the Town considering the other active open spaces that require regular maintenance. Historically the Town has benefited from volunteer efforts including Eagle Scout projects, annual town clean-up days, and the land stewardship program of adopting an area to maintain. Recent Eagle Scout projects have included the installation of a trailhead kiosk off Patch's Pond, a boardwalk across wetlands connecting two sections of trail at Town Forest, and trail improvements off Blanchard Road.

Community survey results showed that 35% of respondents were willing to volunteer to clear trails or adopt a trail as a land steward. Over 80% of respondents were willing to participate in a clean-up day. There could be opportunities to better use volunteer labor and efforts for improvements, maintenance, and monitoring for invasive species.

Staff time from the Department of Planning & Conservation is required to manage volunteer efforts. Currently, this function is secondary to other work requirements and receives staff time when available. Dedicated staff for open space efforts could be considered depending on the availability of funding. A summer intern program could be established for certain projects.

The Open Space Committee has discussed the establishment of a citizen led Implementation Committee to advance the goals of the Plan through the next five years.

Section 8: Goals and Objectives

This section presents open space and recreation goals and objectives for the Town of Wilmington and is based on the values and concerns expressed by community members, landowners and managers, service providers, and Town administrators and staff. The *goals* are broad statements framed to indicate a desired future condition or achievement by the Town. The *objectives* are more specific statements that outline measurable accomplishments that will help the Town achieve these goals. These together guide the development of the Action Plan, which is outlined in the following section.

GOAL 1 Provide opportunities for open space appreciation and environmentally friendly walking and biking trails.

OBJECTIVES

- 1. Increase visibility and awareness of trails.
- 2. Create trail connections that link large sections of trail.

GOAL 2 Balance resources to meet open space demands and provide a variety of open space amenities for a full range of users and interests.

OBJECTIVES

- 1. Increase awareness of the full range of existing open spaces.
- 2. Focus on high quality maintenance of existing open spaces.
- 3. Improve accessibility of existing open spaces.

GOAL 3 Protect the Town's natural resources and open space areas that support water protection, flood management, and essential wildlife habitat and ecosystems.

OBJECTIVES

- Provide education of flora and fauna.
- 2. Acquire additional open space through donation, private development, or other means.
- 3. Identify certified vernal pools and locations of potential vernal pools.

Section 9: Seven-Year Action Plan

An action plan is a compilation of recommended strategies prioritized and organized into a framework that includes a desired time frame and identifies responsible parties. In this section, recommendations are organized in a matrix that can be easily referenced, reviewed and monitored.

Action Plan Matrix

The Analysis of Needs provided a broader discussion of the general findings upon which the recommended actions are based. For each action, an anticipated schedule and a responsible party (or parties) is identified. The schedule is assigned in consideration of priority, immediacy of need, resources and funding available, and impact on the Town parks and open space lands as a whole. The schedule of actions should be evaluated regularly to respond to changing conditions and opportunities. Prioritization of action items is provided within each Objective.

Department / Board	Abbreviation
Planning & Conservation	P&C
Conservation Commission	CC
Planning Board	PB
Historical Commission	HisCom
Public Works	DPW
Board of Selectmen	BOS
Recreation Dept	Rec

OBJECTIVE 1: Increase visib	pility and awareness of trails.			
ACTIONS		TIMEFRAME	RESPONSIBLE PARTY	POTENTIAL FUNDING SOURCE
1. Draft signage plan for tra	ailheads and trails.	2022-2023	P&C, Rec, DPW	Town
Create checklist for volu	nteer groups who want to do trail projects.	2022-2023	P&C, Rec, DPW	Town
Coordinate with volunte	ers, including Eagle Scouts, on trail projects.	Ongoing	P&C, DPW	Town
4. Map all existing and nev	v trails to include on GIS webpage.	2022-2027	P&C, DPW	Town
5. Create downloadable, p	rintable maps with locations of parking.	2022-2024	P&C, DPW, Rec	Town
OBJECTIVE 2: Create trail co	onnections that link large sections of trail.			
	onnections that link large sections of trail.	TIMEFRAME	RESPONSIBLE PARTY	POTENTIAL FUNDING SOURCE
ACTIONS 1. Coordinate with Middle:	sex Canal Commission on a grant application to construct a Meadow Brook Aqueduct at Town Park.	TIMEFRAME 2023-2026		FUNDING SOURCE
1. Coordinate with Middle bridge over the Maple N	sex Canal Commission on a grant application to construct a Neadow Brook Aqueduct at Town Park. tions between Green Meadow Drive, Mill Road, Murray Hill	2023-2026	PARTY	FUNDING SOURCE
1. Coordinate with Middles bridge over the Maple N 2. Ensure that trail connect Circle, and the Town of I	sex Canal Commission on a grant application to construct a Neadow Brook Aqueduct at Town Park. tions between Green Meadow Drive, Mill Road, Murray Hill	2023-2026 2022-2023	P&C, DPW, CC P&C, DPW	EEA Trail Grants Town
1. Coordinate with Middles bridge over the Maple N 2. Ensure that trail connections Circle, and the Town of I	sex Canal Commission on a grant application to construct a Meadow Brook Aqueduct at Town Park. tions between Green Meadow Drive, Mill Road, Murray Hill Burlington are seamless.	2023-2026 2022-2023	P&C, DPW, CC P&C, DPW	EEA Trail Grants Town

commercial and mixed-use areas.

GOAL 2: Balance resources to meet open space demands and provide a variety of open space amenities for a full range of users and interests.

OBJECTIVE 1: Increase awareness of the full range of open space amenities.

ACTIONS	TIMEFRAME	RESPONSIBLE PARTY	POTENTIAL FUNDING SOURCE
Add content to Town website regarding existing open space amenities.	2022-2023	Rec	Town
2. Create new outdoor educational programming at existing open spaces.	2021-2028	Rec	Town
 Establish a regular local media/Twitter program for educating and promoting open space topics and events (tree planting, composting, invasive species, volunteer opportunities). 	2024	Rec, DPW, P&C	Town

OBJECTIVE 2: Focus on high quality maintenance of existing open spaces.

ACTIONS	TIMEFRAME	RESPONSIBLE PARTY	POTENTIAL FUNDING SOURCE
Continue tree planting efforts and pursue Tree City USA designation.	2021	DPW	Town
2. Offer more frequent, more localized neighborhood clean-up days and engage businesses to participate in promoting and sponsoring clean-up efforts.	2022	P&C, DPW	Town
3. Continue to promote the Town's Land Stewardship Program.	Ongoing	P&C, CC	Town

OBJECTIVE 3: Improve accessibility of existing open spaces (as outlined in ADA Accessibility Section).

ACTION	IS – Details outlined in ADA Accessibility Section on pages 68-69	TIMEFRAME	RESPONSIBLE	POTENTIAL
			PARTY	FUNDING SOURCE
1.	Town Common (striping, parking sign height, new bench, drain grate, sidewalk ramps)	2021	DPW	Town
2.	Silver Lake (striping, parking sign height, new table, gap at pier)	2022	DPW, Rec	Town
3.	Rotary Park (striping, parking sign height, new bench/table, gazebo ramp, bridge	2023	DPW	Town, Rotary Club
	edge)	2025	DPW, Rec	Town
4.	Robert Palmer Park (stripe accessible space, new table, playground, trail)	2026	DPW	Town
5.	Town Park/Dog Park (stripe van space, sign height, entrance, latches, parking at field)	2021	Rec	Sports Leagues
6.	Coordinate with sports leagues on buildings and providing accessible Porto potties			

GOAL 3: Protect the Town's natural resources and open space areas that support water protection, flood management, and essential wildlife habitat and ecosystems.

OBJECTIVE 1: Provide education of flora and fauna.

ACTIO	NS		TIMEFRAME	RESPONSIBLE PARTY	POTENTIAL FUNDING SOURCE
1	Coordin	ate with the Wilmington Memorial Library on environmental programming	2021-2028	P&C, Library	N/A
		unities during April for Earth Day.	2021 2020	, i de, Elbrary	1,47.
2	Create a	an invasive species monitoring program for resident volunteers.	2023-2025	Eagle Scout?	N/A
3	Identify	locations and themes for interpretive/educational signs for development in	2026	P&C, CC,	
	the nex	t OSRP (similar to signs at Yentile Farm Rec. Facility).		Volunteers	

OBJECTIVE 2: Acquire additional open space through donation, private development, or other means.

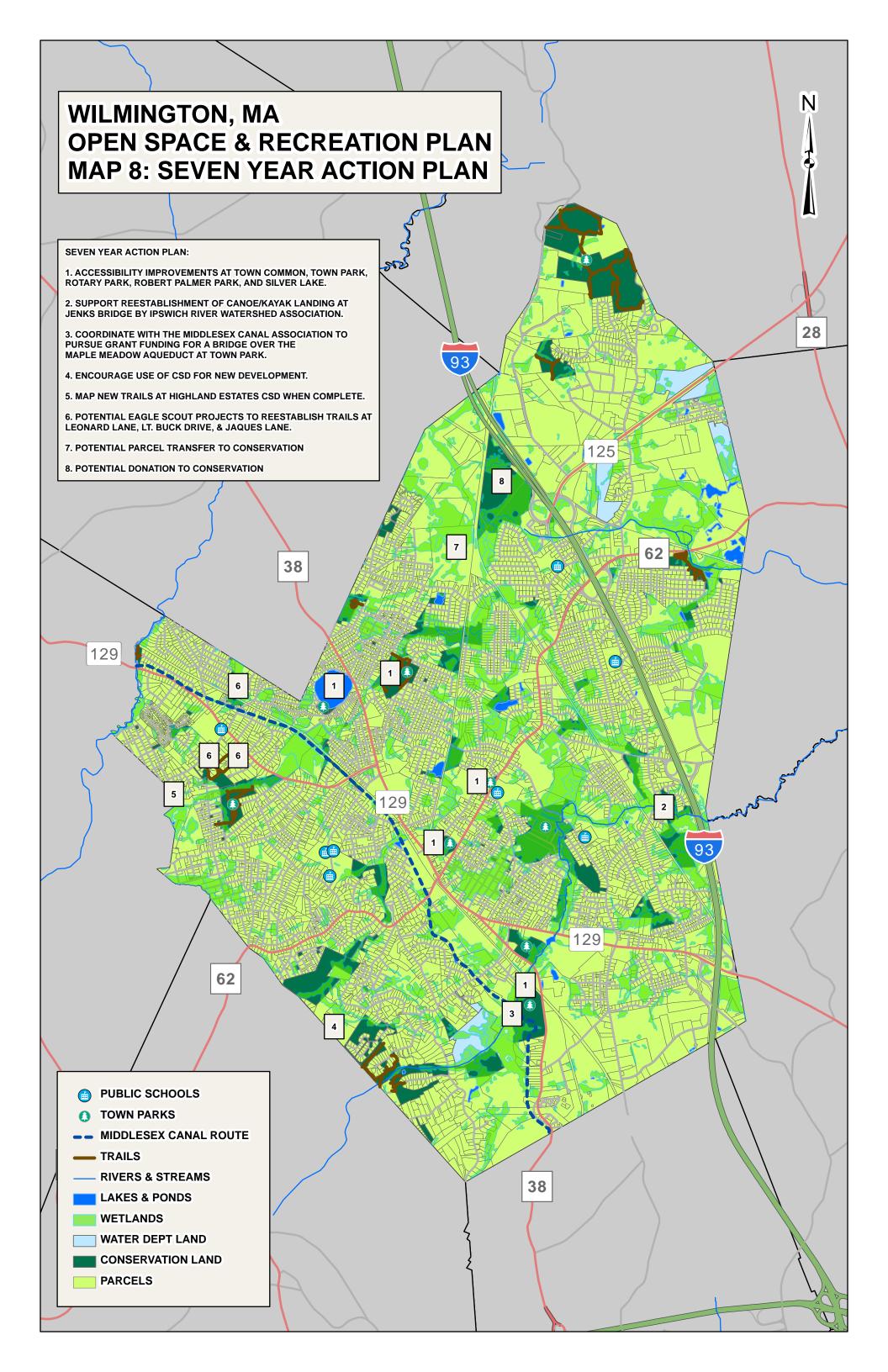
ACTION	ACTIONS		RESPONSIBLE PARTY	POTENTIAL
				FUNDING SOURCE
1.	Continue to encourage use of Conservation Subdivisions that avoid valuable natural resource areas and create open space.	On-going	P&C, PB	N/A
2.	Accept donations of land that will serve as resource protection, habitat, and preservation of Town character.	On-going	CC, BOS	N/A
3.	Transfer appropriate town-owned parcels to care and custody of Conservation Commission (Goal of 3-5 parcels annually at Town Meeting).	2022-2027	P&C, CC, BOS	N/A

OBJECTIVE 3: Identify certified vernal pools and locations of potential vernal pools.

ACTION	NS	TIMEFRAME	RESPONSIBLE PARTY	POTENTIAL FUNDING SOURCE
1.	Using GIS and existing databases, identify certified vernal pools.	2023	P&C, CC,	Town
2.	Using GIS and existing databases, identify potential vernal pools.	2024	Volunteers	Town
3.	Draft an action plan for certifying vernal pools for inclusion in next OSRP.	2025		Town

OBJECTIVE 4: Complete a Municipal Vulnerability Preparedness (MVP) Plan.

ACTIONS	TIMEFRAME	RESPONSIBLE PARTY	POTENTIAL FUNDING SOURCE
Complete MVP Plan to identify climate ready action items	2021	P&C, DPW	MVP Grant & Town



Section 10: Public Comments

Public comments were received throughout the process and specifically through the two community surveys conducted in 2019 and 2020. The draft 2021 Open Space & Recreation Plan was presented at the Board of Selectmen meeting held on June 28, 2021 and posted on the Town's website for review and comment. Two additional comment letters were received via email from residents and are included in this Section.

Review letters from Wilmington's Town Manager, Wilmington Planning Board, Wilmington Conservation Commission are provided below. The 2021 Open Space and Recreation Plan has been sent to the Metropolitan Area Planning Council for review.



Town of Wilmington

Office of the Town Manager 121 Glen Road Wilmington, MA 01887-3597

PHONE: (978) 658-3311 FAX: (978) 658-3334 TTY: (978) 694-1417

WWW.WILMINGTONMA.GOV

July 20, 2021

Ms. Melissa Cryan Division of Conservation Services MA Executive Office of Energy and Environmental Affairs 100 Cambridge Street Boston, MA 02114

Dear Ms. Cryan:

The Town of Wilmington is pleased to submit and recommend approval of the 2021 Open Space & Recreation Plan.

The updated Plan provides the Town of Wilmington with clear guidance which prioritizes our open space efforts with concise action items spread out over the next five years. A clear theme that came out of the update process is the need for visibility and awareness of all the various types of open space the Town offers. Signage and education will be important in achieving this general goal.

This Open Space and Recreation Plan is part of an ongoing effort to preserve the Town's character through preservation of natural open spaces while providing opportunities for active playing and passive recreational opportunities for all to enjoy. We look forward to achieving the goals outlined in the Plan and build on the work that has already been done in creating and preserving open space in town.

Sincerely,

Jeffrey M. Hull Town Manager 7. Thull

cc: Board of Selectmen

Kerry Colburn-Dion, Assistant Town Manager/Human Resources Director

Valerie Gingrich, Planning & Conservation Director

Michael Woods, Public Works Director

July 26, 2021

Melissa Cryan
Division of Conservation Services
MA Executive Office of Energy and Environmental Affairs
100 Cambridge Street
Boston, MA 02114

RE: Town of Wilmington Open Space & Recreation Plan 2021

Dear Ms. Cryan,

The Wilmington Conservation Commission appreciates the opportunity to comment on the Town's updated Open Space & Recreation Plan. The updated plan includes vital steps to make existing open spaces more visible and known, while continuing to include goals of creating and preserving natural open spaces for the community.

Over the past five years, the Commission has accepted donations of land for conservation purposes. Some of the land has been for passive use with trails and some has been strictly for resource protection and habitat. In 2020, the Commission successfully proposed the transfer of several town-owed parcel to the care and custody of the Conservation Commission for resource protection along the Shawsheen River.

The Commission holds an annual town-wide fall cleanup day and invites residents and volunteers to pick up trash on the trails and in natural spaces around Town. The Commission looks forward to assisting with the goal of offering more frequent neighborhood cleanup days that could include trail maintenance and bring the community together.

The 2021 Plan provides a concise vision, community goals and steps to achieve those goals. The Commission is pleased to be a part of Wilmington's efforts to maintain the Town's character by preserving, creating, and enhancing open space for all to enjoy.

Sincerely,

Donald Pearson, Chairman

Donald Pearson

Wilmington Conservation Commission

July 26, 2021

Melissa Cryan
Division of Conservation Services
MA Executive Office of Energy and Environmental Affairs
100 Cambridge Street
Boston, MA 02114

RE: Town of Wilmington Open Space & Recreation Plan 2021

Dear Ms. Cryan,

The Wilmington Planning Board appreciates the opportunity to comment on the Town's updated Open Space & Recreation Plan. The updated plan includes vital steps to make existing open spaces more visible and known, while continuing to include goals of creating and preserving natural open spaces for the community.

Over the past five years, the Board has worked with residential developers to preserve public open space for trails, wildlife habitat, and resource protection through conservation subdivision designs. The Board will continue to strongly encourage the use of these subdivisions in Town. A related goal included in the 2021 Plan is to ensure that the open space trails that have been created within conservation subdivisions have seamless connections between residential developments.

The Board also looks forward to working toward the goal of enhancing walkability and creating pockets of open space in commercial and mixed-use areas through private development.

The 2021 Plan provides a concise vision, community goals and steps to achieve those goals. The Board is pleased to be a part of Wilmington's efforts to maintain the Town's character by preserving, creating, and enhancing open space for all to enjoy.

Sincerely,

Michael Sorrentino, Chairman

Wilmington Planning Board

Michael Sorrentino

From: <u>J & J Jackson</u>
To: <u>Valerie Gingrich</u>

Subject: [EXTERNAL] Fwd: Comments on Open Space & Recreation Plan

Date: Monday, July 19, 2021 11:20:58 AM

A very nice document!

Here are some comments:

- Page 18, the sentence fragment hangs. Oh, I see, there's an improper page break to page 19 that makes it look like a lost table caption.
- Page 59, Cormier Park, An Eagle Scout project cleaned up the trailhead sign (no longer obscured by overgrowth), and trail-markers were added to indicate trail system.

Otherwise, I appreciated the report, and learned a few things from reading it!

Joe

From: <u>Helen Palmer</u>
To: <u>Valerie Gingrich</u>

Subject: [EXTERNAL] Wilmington open space feedback

Date: Tuesday, July 20, 2021 7:22:35 AM

Hello,

I am very interested in the topic and tried to read through the Open Space and Recreation Plan, which I found difficult to determine if there was a meaningful plan.

Anything to increase the hiking/walking and biking green space is welcome. I use the AVIS Andover reservations; while there is a 200 year history, so they are much advanced, our town is equally as old, with very little to show for such spaces. I totally encourage more info, development and signage of the Town Forest. And more spaces. I'm sure it's been improved from the time we tried to find a trail to explore and couldn't; but, that experience has deterred us and we go elsewhere now.

I once commuted to a job on Ballardvale by bike; have also tried to find a suitable bike able route for current job and feel too unsafe. The Ballardvale route, I was younger and adjusted hours so I could leave early and beat truck traffic and make the left onto Ballardvale at 125 without too much trauma. Currently route 129/38 is too uncomfortable and the "get arounds" I explored add too much time.... Need better/safer bike able lanes.

Better drainage on roads/ too much pooling of water resulting in splash from cars passing walkers. Side walks too close to traffic with no buffer zones to streets.

Thanks for your efforts, I look forward to seeing results.

Helen



SMART GROWTH AND REGIONAL COLLABORATION

October 28, 2021

Melissa Cryan Executive Office of Energy and Environmental Affairs 100 Cambridge St. – Suite 900 Boston, MA 02114

Dear Ms. Cryan:

The Town of Wilmington's July 2021 Open Space and Recreation Plan (OSRP) was recently submitted to the Metropolitan Area Planning Council (MAPC) for review.

The Division of Conservation Services (DCS) requires that all open space plans be reviewed by the applicable regional planning agency. This review is advisory and only DCS has the power to approve a municipal open space plan. While your office reviews open space plans for compliance with your guidelines, MAPC reviews these plans for their attention to regional issues generally and more specifically for consistency with *MetroFuture*, the regional policy plan for the Boston metropolitan area.

Consistency with MetroFuture - MetroFuture is the official regional plan for Greater Boston, adopted in 2008 in accordance with the requirements of Massachusetts General Law. The plan includes 65 goals and objectives as well as 13 detailed implementation strategies for accomplishing these goals. We encourage all communities within the MAPC region to become familiar with the plan by visiting www.mapc.org/get-involved/metrofuture-our-regional-plan. (We also note that MAPC and its member communities are now in the process of developing a new regional plan, which will look out to 2050, and is accordingly called MetroCommon 2050.)

The Town demonstrates consistency with *MetroFuture* and its role in focusing regional support for our local efforts. In particular, the OSRP highlights the Town's efforts to protect natural landscapes, conserve natural resources, and support healthy residents through implementation strategies that promote healthy living and recreation through open space preservation, expansion and maintenance. Additionally, the plan includes objectives specifically focused on accessibility and opportunities for residents of all ages and protecting water resources. It references important regional resources including the Ipswich River Watershed and open space resources including the Town Forest, Silver Lake, and the Middlesex Canal.

Community Preservation Act - Adoption of the Community Preservation Act (CPA) is a key strategy recommended by MetroFuture. We note that Wilmington has not adopted the CPA. We encourage Wilmington to consider adding an implementation action to consider adopting the CPA. Many of the Plan's recommendations would benefit from CPA as a funding source. Reforms to the CPA program were passed by the Legislature and signed by the



SMART GROWTH AND REGIONAL COLLABORATION

Governor in 2012. These reforms include broadened eligibility of recreational facilities, the option to exempt up to the first \$100,000 of commercial property value from the CPA surcharge, and the ability to use additional municipal revenue to qualify for state matching funds. In December 2019, legislation was adopted to increase the contributions to the state CPA Trust Fund which provides additional state resources to municipalities that adopt CPA. These amendments should make CPA even more attractive to the Town and may encourage residents to support the proposal. More detailed information on the CPA can be found at http://www.communitypreservation.org or by contacting MAPC's Government Affairs staff.

The Wilmington Open Space and Recreation Plan should serve the Town well as it continues its efforts to preserve open space and provide for the recreational needs of its residents.

Thank you for the opportunity to review this plan.

Sincerely,

Ralph Willmer, FAICP

loge d'une

Technical Assistance Program Manager and Principal Planner

cc: Valerie Gingrich, Director of Planning & Conservation

APPENDIX I: Open Space and Recreation Parcel Inventory

(See Section 5, see also Map 7: Open Space and Recreation Land Inventory)

Open Space and Recreation Inventory Matrix Column Headings

<u>Name</u>: names the open space or recreation area, either by common name or by name listed in GIS software

Map/Parcel: map and parcel number as shown on the Town Assessor's maps.

<u>Size</u>: acreage, square feet (sq.ft.), or other measure to give an approximation of the site's size based on data provided by GIS software

<u>Owner</u>: indicates the primary owner of the property (Town, CC = Conservation Commission, WD = Water Department, MBTA = Massachusetts Bay Transit Authority. The private owners for lands under Chapter 61, 61A, and 61B, and private conservation restrictions are not included)

<u>Management (Mgmt)</u>: indicates the managing agency of the property (Town = Board of Selectman, CC = Conservation Commission, WD = Water Department, DPW= Department of Public Works)

Current Use: describes the main use(s) for the site

Public Access: indicates if the public can access the site.

<u>ADA Access</u>: indicates if people with disabilities (in accordance with the Americans with Disabilities Act) can access the site or its amenities (Yes, No, Partial; see *Appendix XX: ADA Self Evaluation* for more details). Only listed for parcels owned by the Town

<u>Condition</u>: identifies the general site condition (Good, Fair, Poor; or in the case of Water Department lands, whether active). Only listed for parcels owned by the Town.

<u>Recreation Potential</u>: identifies potential for recreational activities. Only listed for Town Parks and Townowned conservation and recreation parcels. Conservation land is generally deemed to have limited recreation potential except passive recreation such as hiking and walking.

<u>Protected Status</u>: indicates what protection, if any, the site has from conversion to another use (Article 97, Chapter 61, Permanent = Permanent Conservation Restriction, 30-year = 30-year Conservation Restriction)

<u>Public Grant</u>: identifies if Self-Help grant (SH, now known as LAND grant) was used to acquire the parcel.

<u>Zone</u>: identifies the zoning district in which the parcel is located (for more information about zoning, see *Map 3: Zoning*)

Town Parks (Artic	le 97 Protecte	ed)										
Name / Location	Address	Map / Parcel	Size (Acres)	Owner	Mgmt	Current Use	ADA Access	Public Access	Condition	Recreation Potential	Public Grant	Zone
Town Park	823 Main St.	26 / 9	50.1	Town	DPW	ballfield, woods, trails, wetland	Partial	Yes	Fair	Interpretive Signs, Bridge	None	R20/R60
Town Beach	5 Burnap St.	34 / 138	3	Town	DPW	Beach, playground	Partial	residents free; non- residents \$10	10-000		Targeted Watershed Grant	R10
Yentile Farm Recreational Facility	9 Cross St.	39/5	20.47	Town	DPW	Ballfield, playground, picnicking, path	Yes	Yes	Good	No Additional	None	GB
Rotary Park	Church St.	42 / 7	6.51	Town	DPW	Park, pond, ballfield, path	Partial	Yes	Good/Fair	Signs, Seating	None	R10/GB
On Silver Lake	49 Grove Ave.	45 / 102	0.519	Town	DPW	Park, path	Yes	Yes	Good	No Additional	Public Access Board	R10
On Silver Lake	47 Grove Ave	45 / 103	0.413	Town	DPW	park, fishing pier, path	Yes	Yes	Good	No Additional	None	R10
Baby Beach	Grove Ave.	45 / 111	0.175	Town	DPW	Beach, no parking	No	Yes	Fair	No Additional	None	R10
On Silver Lake	79 Main St.	45 / 117	0.608	Town	DPW	Park, no parking	Partial	Yes	Fair	No Additional	None	NB/R60
On Silver Lake	81 Main St.	45 / 118	0.473	Town	DPW	Park, no parking	Partial	Yes	Fair	No Additional	None	NB/R60
Town Common	Church St.	52 / 38	2.25	Town	DPW	Park, Common	Yes	Yes	Good	No Additional	None	R20
Robert Palmer Park	Glen Road	54/110	19	Town	DPW	Ballfield, trails, playground, picnic	Partial	Yes	Good/Fair	Seating, Signs	None	R20/R60

Total 103.518

Water Department Land (no public access or recreation potential)											
Name / Location	Address	Map / Parcel	Size (Acres)	Owner	Mgmt	Current Use	Condition	Zone			
Hillside Way WST	15 Hillside Way	2 / 16A	1.60	WD	WD	water tower	Good	R-60			
Aldrich Road Well	Bousefield Street	9 / 45	6.43	WD	WD	floodplain, wet, wooded	Well Off Line	R-60			
Aldrich Road Well	Bousefield Street	9 / 46	0.19	WD	WD	floodplain, wooded	Well Off Line	R-60			
Aldrich Road Well	Bousefield Street	9 / 47	0.13	WD	WD	floodplain, wooded	Well Off Line	R-60			
Aldrich Road Well	Bousefield Street	9 / 48	0.07	WD	WD	wooded	Well Off Line	R-60			
Aldrich Road Well	Bousefield Street	9 / 49	0.07	WD	WD	wooded	Well Off Line	R-60			
Aldrich Road Well & PS	Aldrich Road Rear	9 / 54A	56.20	WD	WD	wet, floodplain, wooded	Well Off Line	R-60			
Aldrich Road Well	Revere Avenue SS	10 / 22	0.13	WD	WD	floodplain, wooded	Well Off Line	R-60			
Aldrich Road Well	Lynn Avenue	10 / 32	1.62	WD	WD	wet, floodplain	Well Off Line	R-60			
Chestnut Street Well & PS	Chestnut Street	14 / 6	53.00	WD	WD	pump station	Well Off Line	R-60			
Butters Row Well 2	Butters Row Rear	27 / 11E	7.50	WD	WD	wooded, wet, floodplain	Land	R-60			
Butters Row Well 1 & Water Treatment Plant	54 Butters Row	27 / 13	16.50	WD	WD	Water Treatment Plant	Well Off Line	R-20 / R- 60			
Water Department Land	Sachem Circle	27/14K	2.87	WD	WD	wooded	Good	R-20			
Water Department Land	Sachem Circle	27/14L	0.07	WD	WD	wooded	Good	R-20			
Nassau Avenue WST	Nassau Avenue E/S	31 / 59	3.50	WD	WD	Water tower	Good	R-20			
Shawsheen Avenue Well & PS	Shawsheen Avenue	33 / 50A	17.40	WD	WD	Public Water Supply	Good	R-20			

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Pilcher Drive Sewer PS	1A Pilcher Drive	82 / 155A	0.36	WD	WD	Sewer Pump Station	Good	R-20
Barrows Well	9-11 Sewell Road	93 / 15	26.00	WD	WD	Public Water Supply	Good	R-20
Adjacent to Salem Street Well	Cold Spring Road	101 / 1	6.29	WD	WD	Wooded	Good	R-20
Salem Street Well	Salem Street Rear	101 / 3	11.30	WD	WD	Public Water Supply	Good	R-20
Salem Street Well	RW Abandoned 2000	101 / 5	4.10	WD	WD	Public Water Supply access; some encroachment by abutter	Fair-Poor	R-20
Salem Street Well	Charlotte Road	101 / 11	3.50	WD	WD	Public Water Supply	Good	R-20
Browns Crossing Well	Salem Street	102 / 1B	13.89	WD	WD	Public Water Supply	Good	R-20
Land Across from Browns	Fork at Andover Street	103 / 10	0.66	WD	WD	Vacant	Fair-Poor	R-20
Browns Crossing Well	115 Andover Street	R1/3	105.37	WD	WD	Water Supply, DPW garage	Good	R-60
Browns Crossing Well	Andover Street	R1 / 6A	19.40	WD	WD	Public Water; wet, wooded	Good	R-60
Water Department Land	Salem Street	R1 / 25	2.00	WD	WD	encroachment by abutting business using for storage	Poor	R-20
Water Department Land	Virginia Road Off	R1 / 30A	30.00	WD	WD	Wooded, some encroachment by abutter	Fair-Poor	R-60
Browns Crossing Well	Andover Road Old	R1 / 36	13.30	WD	WD	Public Water Supply; wooded	Good	R-60
Browns Crossing Well	Route 125-NS	R1 / 36A	34.70	WD	WD	Public Water Supply; wooded	Good	R-20

Total 438.15

Public Cemeteries											
Name / Location	Address	Map / Parcel	Size (Acres)	Owner	Mgmt	Current Use	Condition	Zone			
Off Federal Street, Ladder Pole Swamp	Federal Street	62 / 46	22.00	Town	DPW	swamp	Good	R-20			
Wildwood Cemetery	233 Middlesex Avenue	64 / 1	58.00	Town	DPW	Cemetery	Good	R-20			
Off Federal Street, Ladder Pole Swamp	Federal Street	64 / 3	1.21	Town	DPW	swamp	Good	R-20			
Olde Burying Ground	240 Middlesex Avenue	65 / 3	1.25	Town	DPW	Historic cemetery	Good	R-20			

Total 82.46

Non-Profit, State, Federal* Open Space												
Name / Location	Address	Map / Parcel	Size (Acres)	Owner	Management	Protection Status	Current Use	Zone				
Brand Avenue	24 Brand Avenue	44 / 50	0.04	Commonwealth of MA	MassDOT	Unprotected	Partially wooded, some encroachment by abutter	R-10				
Richmond Street	Richmond Street	44 / 117	0.04	Commonwealth of MA	MassDOT	Unprotected	Wooded	R-10				
Richmond Street	28 Richmond Street	44 / 122	0.07	Commonwealth of MA	MassDOT	Unprotected	Wooded	R-10				
Brand Avenue	19 Brand Avenue	44 / 123	0.03	Commonwealth of MA	MassDOT	Unprotected	Wooded	R-10				
West Street	95 West Street	71 / 22	0.86	Commonwealth of MA	Commonwealth of MA	Unprotected	Wooded	R-20				
Lowell Street	297 Lowell Street	71 / 24C	0.5	Commonwealth of MA	MassDOT	Unprotected	Wooded, driveway	R-10				
Lowell Street	Lowell Street Pk	73 / 53A	3.96	Commonwealth of MA	MassDOT	Unprotected	Wooded, abuts interstate	GB				
Lowell Street	3 Lowell Street Pk	73 / 54	0.91	Commonwealth of MA	MassDOT	Unprotected	Wooded, near interstate, some encroachment by abutter	GB				
Lowell Street	5 Lowell Street	73 / 55	0.63	Commonwealth of MA	MassDOT	Unprotected	Wooded, near interstate	GB				
Lowell Street	Lowell Street Pk	73 / 55A	0.37	Commonwealth of MA	MassDOT	Unprotected	Wooded, near interstate	GB				
MBTA Wilmington Junction	1-4 MBTA Wilmington Junction	90 / 116	7	M.B.T.A	Commonwealth of MA	Unprotected	Commuter rail line	R-20/R-60/HI				
Salem Street	Salem Street-Rear	101 / 4	0.7	Commonwealth of MA	MassDOT	Unprotected	Wooded, near brook, encroachment by abutter	R-20				
Former J.T. Barry site	Salem Street-SS	R1 / 27	3.14	Commonwealth of MA	Commonwealth of MA	Unprotected	Wooded	R-20				
Abandoned R.R	Abandoned RR	R2 / 29A	0.1	M.B.T.A	Commonwealth of MA	Unprotected	Wooded	R-60				

Total 18.35

^{*} There is no Federal Open Space land in Wilmington

Conservation Commission Recreational Parcels (public access)													
Address	Мар	Parcel	Size (Acres)	Owner	Mgmt	Current Use	ADA Access	Condition	Recreation Potential	Protected Status	Public Grant	Zone	
3 Green Meadow Drive, Green Meadow CSD	002	201	30.40	СС	СС	wooded, trails	No	Good	Trails	Permanent	None	R60	
Mill Road (Burlington Town Line), Kylie Estates CSD	003	3A	17.26	сс	сс	wooded, trails, utility easements	Partial	Good	Trails	Permanent	None	R60	
Murray Hill Circle, Murray Hill CSD	004	6	14.88	СС	СС	wooded, trail, wet, upland	No	Good	Trails	Permanent	None	R20	
21 Murray Hill Circle, Murray Hill CSD	004	7J	0.67	СС	сс	wooded, trail, playground	Yes playground; not trail	Good	Trails	Permanent	None	R20	
22 Eleanor Drive, Murray Hill CSD	004	11	1.80	СС	сс	wooded, wet	No	Good	Trails	Permanent	None	R20	
34 Eleanor Drive, Murray Hill CSD	004	17	0.35	СС	СС	wooded, trail	No	Good	Trails	Permanent	None	R20	
40 Eleanor Drive, Murray Hill CSD	004	20	0.51	СС	СС	wooded	No	Good	Trails	Permanent	None	R20	
6 Murray Hill Circle, Murray Hill CSD	004	26	0.78	СС	СС	wooded	No	Good	Trails	Permanent	None	R20	
Murray Hill Circle Rear, Murray Hill CSD	004	41	0.76	СС	СС	wooded, trail	No	Good	Trails	Permanent	None	R20	
7 Leonard Lane, Leonard Estates CSD	010	1F	11.63	СС	СС	wooded, trail, stormwater basin	No	Poor	Trails	Permanent	None	R60	
Blanchard Road, Cormier Park	020	136	26.2	СС	СС	Upland, wet	No	Good	Trails	Permanent	None	R60	
1 Lt. Buck Drive, Heritage Pines CSD	022	3A	4.06	СС	СС	Upland, wet, trails	No	Poor	Trails	Permanent	None	R20	
7 Jaques Lane, Canal Village CSD	035	22D	3.14	СС	СС	wooded, marsh, trail	No	Poor	Trails	Permanent	None	R20	
2 Jaques Lane, Canal Village CSD	035	22U	0.39	СС	СС	canal remnants	No	Fair	Trails	Permanent	None	R20	
Grace Drive	036	160	2.00	Town	сс	Wooded, fishing access, river, trail,	No	Good-Fair	Water access, Trail	Permanent	None	R20	
Glen Road Berry Bog	054	7A	13.00	сс	сс	Wet, upland, trails, abuts Robert Palmer Park and Town Hall	Partial	Good	Trails, Seating	Permanent	None	R10	
Glen Road Berry Bog	054	8A	0.23	СС	СС	Wet, wooded	No	Good	Trails	Permanent	None	R10	
36 Kenwood Avenue, Alderwood Acres CSD	059	30	0.52	Town	СС	Wet, trail, turnaround	No	Good	Trails	Permanent	Self Help	R20	
40 Kenwood Avenue, Alderwood Acres CSD	059	31	0.52	Town	СС	Wet, trail, Seasonal pond	No	Good	Trails	Permanent	Self Help	R20	

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Winter Street, Beeching Avenue Ext CSD	070	101B	6.16	СС	сс	Wet, wooded, short trail	No	Good	Trails	Permanent	None	R20
22 Winter Street, Marjorie Road Ext CSD	070	101F	6.6	СС	СС	wet, wooded, short trail	No	Good	Trails	Permanent	None	R20
West Street, Alderwood Acres CSD	072	29A	20.59	Town	сс	Woods, pond, trail, boardwalk	No	Good	Trails	Permanent	Self Help	R20
43 Kenwood Avenue, Alderwood Acres CSD	072	29R	0.57	Town	сс	Wet, pond, trail	No	Good	Trails	Permanent	Self Help	R20
2 Pilcher Drive, Corum Meadows	082	161	3.90	СС	сс	Wet, pond, short trail	No	Fair	Trails	Permanent	None	R20
24 McGrane Road, McGrane Woods CSD	84	52J	1.16	СС	сс	Short trail	No	Good	Trails	Permanent	None	R60
16 Draper Drive, Hathaway Acres CSD	101	7-207	0.52	сс	сс	upland, trail	No	Good	Trails	Permanent	Self Help	R20
18 Draper Drive, Hathaway Acres CSD	101	8-208	0.52	СС	сс	upland, trail	No	Good	Trails	Permanent	Self Help	R20
20 Draper Drive, Hathaway Acres CSD	101	9-209	0.56	сс	сс	Wet, upland, trail	Partial	Good	Trails	Permanent	Self Help	R20
16 Evans Drive, Hathaway Acres CSD	101	53-253	0.78	Town	сс	Wet, wooded	No	Good	Trails	Permanent	None	R20
Evans Drive, Hathaway Acres CSD	101	54-254	0.52	сс	сс	Wet, upland, trail	No	Good	Trails, Seating	Permanent	Self Help	R20
26 Evans Drive, Hathaway Acres CSD	101	255	0.94	Town	сс	Wet, upland, dug bike jumps	No	Fair	Trails	Permanent	None	R20
Salem Street, Hathaway Acres CSD	102	4	2.25	Town	сс	upland, wet, trail, brook	No	Fair	Trails	Permanent	None	R20
Esquire Estates, Hathaway Acres CSD	102	51	12.52	СС	сс	Wetland, upland, trail	Partial	Good	Trails	Permanent	Self Help	R20
Ballardvale Street, Town Forest	105	82	2.7	Town	сс	Town Forest	Partial	Good	Trails	Permanent	None	R60
Andover Street, Town Forest	OR3	300	154.25	Town	сс	Town Forest, trail, parking	Partial	Good	Trails	Permanent	None	R60
54 Ashwood Avenue, Brookfield Estates CSD	OR4	116	25.4	Town	сс	Wet, upland, trail	Partial	Good	Trails	Permanent	None	R20

Total 369.04

Conservation Commission Natural Parcels												
Address	Мар	Parcel	Size (Acres)	Owner	Mgmt	Current Use	ADA Access	Condition	Recreation Potential	Protected Status	Public Grant	Zone
Chestnut Street Off / Burlington Line	1	7A	2.00	Town	СС	Wooded	No	Good	None	Permanent	None	R60
Chestnut Street	1	9	4.50	Town	СС	Wooded	No	Good	None	Permanent	None	R20
24R Hillside Way	2	9В	2.99	сс	СС	Wooded	No	Good	None	Permanent	None	R60
Gardens Wildlife	5	5	55.00	сс	СС	Wet, wooded, stream	No	Good	None	Permanent	None	R20
Walnut Street	6	13	0.21	сс	сс	Upland woods	No	Good	None	Permanent	None	R20
23 Walnut Street	6	14	0.12	Town	сс	Upland woods	No	Good	None	Permanent	None	R20
17 Walnut Street	6	19	0.24	сс	СС	Upland woods	No	Good	None	Permanent	None	R20
Sharon Street	6	28	0.17	Town	СС	Upland woods	No	Good	None	Permanent	None	R20
Sharon Street	6	29	0.15	Town	СС	Upland woods	No	Good	None	Permanent	None	R20
Sharon Street	6	30	0.09	Town	СС	Upland woods	No	Good	None	Permanent	None	R20
Sharon Street	6	31	0.12	Town	СС	Upland woods	No	Good	None	Permanent	None	R20
Polk Street	6	41	0.29	Town	сс	Upland woods	No	Good	None	Permanent	None	R20
Mather Street	6	42A	0.23	Town	сс	Upland woods	No	Good	None	Permanent	None	R20
Mather Street	6	45	0.23	Town	СС	Upland woods	No	Good	None	Permanent	None	R20
Wall Street	6	50	0.45	СС	СС	Upland woods	No	Fair	None	Permanent	None	R20
Mather Street	6	57	0.5	Town	СС	Wooded, partially wet	No	Good	None	Permanent	None	R20
Mather Street	6	58	0.4	сс	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Ashmont Street	6	61	0.85	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Scott Street	6	65	0.36	Town	сс	Wooded	No	Good	None	Permanent	None	R20
Byron Street	6	67	0.34	Town	сс	Wooded	No	Good	None	Permanent	None	R20

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Randolph Road	7	25A	0.69	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
154 Taft Road	7	83A	1.15	СС	сс	Wet, wooded	No	Good	None	Permanent	None	R20
20 Winston Avenue	8	86	1.15	СС	сс	Wet, wooded	No	Good	None	Permanent	None	R60
Winston Avenue	8	86A	0.92	СС	сс	Wet, wooded	No	Good	None	Permanent	None	R60
Elwood Road	8	87	1.47	СС	сс	Wet, wooded	No	Good	None	Permanent	None	R60
Harding Road	8	32	2.00	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
42 Forest Street	8	56	0.36	Town	сс	Wooded, stream	No	Good	None	Permanent	None	R20
40 Forest Street	8	57	0.14	Town	СС	Wooded, stream	No	Good	None	Permanent	None	R20
38A Forest Street	8	58	0.15	Town	сс	Wooded, stream	No	Good	None	Permanent	None	R20
2 Calumet Road	8	60A	0.69	Town	сс	Wooded, partially wet, stream	No	Good	None	Permanent	None	R20
Calumet Road	8	60B	2.50	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Randolph Road	8	62A	1.20	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
9 Randolph Road	8	64	0.92	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
Winston Avenue	8	69	0.69	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
Elwood Road	8	79	0.23	Town	СС	Wet, wooded, parking	No	Good-Fair	None	Permanent	None	R20
Winston Avenue	8	80	0.57	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
Winston Avenue	8	81	0.46	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Winston Ave	8	82	0.11	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
Calumet Road	8	83	0.8	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
Calumet Road	8	84	1.15	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
Calumet Road	8	85	0.57	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
15 Elwood Road	8	88	3.00	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R10/20

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Avery Street	9	23	0.69	Town	сс	Wooded, partially wet	No	Good	None	Permanent	None	R60
Avery Street	9	23A	0.11	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R60
Littlewood Road	9	24	0.11	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R60
Littlewood Road	9	38	2.75	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R60
Avery Street	9	39	0.11	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R60
Avery Street	9	40	0.11	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R60
Avery Street	9	41	0.11	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R60
Avery Street	9	42	0.11	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R60
3 Cambridge Avenue	9	67A	0.18	СС	сс	Wooded	No	Good	None	Permanent	None	R60
Cambridge Avenue	9	70	0.55	Town	сс	Wet, wooded	No	Good-Fair	None	Permanent	None	R60
Somerville Avenue	9	72F	0.23	СС	СС	Wet, wooded	No	Good	None	Permanent	None	R60
1 Wakefield Avenue	9	76	0.18	Town	сс	Wooded	No	Good	None	Permanent	None	R60
Daniels Drive	009	84	0.23	СС	сс	Wooded	No	Good	None	Permanent	None	R60
Alice Avenue	010	9	0.18	СС	сс	Wooded	No	Good	None	Permanent	None	R60
Bedford Street	010	18	0.4	СС	сс	Wooded, partially wet	No	Good	None	Permanent	None	R60
Revere Avenue	010	19	0.58	Town	сс	Wooded, partially wet	No	Good	None	Permanent	None	R60
Charles River Avenue	010	27	0.92	Town	сс	shrub swamp	No	Good	None	Permanent	None	R60
Charles River Avenue	010	28	0.51	Town	сс	shrub swamp	No	Good	None	Permanent	None	R60
Charles River Avenue	010	28A	0.25	Town	сс	shrub swamp	No	Good	None	Permanent	None	R60
Charles River Avenue	010	29	0.21	Town	сс	shrub swamp	No	Good	None	Permanent	None	R60
Charles River Avenue	010	30	0.70	Town	сс	shrub swamp, wooded	No	Good	None	Permanent	None	R60
Charles River Avenue	010	30A	0.19	Town	сс	shrub swamp	No	Good	None	Permanent	None	R60

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010	33	1.60	Town	сс	shrub swamp, stream	No	Good	None	Permanent	None	R60
010	34	0.17	Town	сс	shrub swamp, stream	No	Good	None	Permanent	None	R60
010	35	1.34	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R60
010	35A	0.04	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R60
010	43	0.56	Town	сс	Wooded, partially wet	No	Good	None	Permanent	None	R60
010	44	0.3	Town	сс	Wooded	No	Good	None	Permanent	None	R60
010	44A	0.17	Town	сс	Wooded	No	Good	None	Permanent	None	R60
010	46	0.17	Town	сс	Wooded	No	Good	None	Permanent	None	R60
010	47	0.09	Town	сс	Wooded	No	Good	None	Permanent	None	R60
010	54A	0.43	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R60
010	55	0.17	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R60
010	56	0.17	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R60
010	60	0.39	Town	сс	Wooded	No	Good	None	Permanent	None	R60
010	61	0.19	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R60
011	19A	0.34	Town	ICC:		No	Good	None	Permanent	None	R60
011	22A	0.25	Town	сс	wooded	No	Good	None	Permanent	None	R60
011	28	0.51	Town	сс	wooded	No	Good	None	Permanent	None	R60
011	29	0.14	Town	сс	wooded	No	Good	None	Permanent	None	R60
011	30	0.18	Town	сс	wooded	No	Good	None	Permanent	None	R60
011	32	0.91	Town	сс	wooded	No	Good	None	Permanent	None	R60
011	32A	0.28	Town	сс	wooded	No	Good	None	Permanent	None	R60
011	33	0.31	Town	СС		No	Good	None	Permanent	None	R60
	010 010 010 010 010 010 010 010 010 010	010 34 010 35 010 43 010 44 010 46 010 47 010 54A 010 55 010 56 010 60 010 61 011 19A 011 22A 011 29 011 32 011 32A	010 34 0.17 010 35 1.34 010 35A 0.04 010 43 0.56 010 44 0.3 010 44A 0.17 010 46 0.17 010 54A 0.43 010 55 0.17 010 56 0.17 010 60 0.39 010 61 0.19 011 19A 0.34 011 22A 0.25 011 28 0.51 011 30 0.18 011 32 0.91 011 32A 0.28	010 34 0.17 Town 010 35 1.34 Town 010 35A 0.04 Town 010 43 0.56 Town 010 44 0.3 Town 010 44A 0.17 Town 010 46 0.17 Town 010 47 0.09 Town 010 54A 0.43 Town 010 55 0.17 Town 010 56 0.17 Town 010 60 0.39 Town 010 61 0.19 Town 011 19A 0.34 Town 011 22A 0.25 Town 011 28 0.51 Town 011 30 0.18 Town 011 32 0.91 Town 011 32A 0.28 Town	010 34 0.17 Town CC 010 35 1.34 Town CC 010 35A 0.04 Town CC 010 43 0.56 Town CC 010 44 0.3 Town CC 010 44A 0.17 Town CC 010 46 0.17 Town CC 010 47 0.09 Town CC 010 54A 0.43 Town CC 010 55 0.17 Town CC 010 56 0.17 Town CC 010 61 0.19 Town CC 011 19A 0.34 Town CC 011 22A 0.25 Town CC 011 28 0.51 Town CC 011 29 0.14 Town CC 011 30	010 34 0.17 Town CC shrub swamp, stream 010 35 1.34 Town CC Wet, wooded 010 35A 0.04 Town CC Wet, wooded 010 43 0.56 Town CC Wooded, partially wet 010 44 0.3 Town CC Wooded 010 44A 0.17 Town CC Wooded 010 46 0.17 Town CC Wooded 010 47 0.09 Town CC Wet, wooded 010 54A 0.43 Town CC Wet, wooded 010 55 0.17 Town CC Wet, wooded 010 56 0.17 Town CC Wet, wooded 010 61 0.19 Town CC Wet, wooded 011 19A 0.34 Town CC Wet, wooded, river, floodplain 011	010 34 0.17 Town CC shrub swamp, stream No 010 35 1.34 Town CC Wet, wooded No 010 35A 0.04 Town CC Wet, wooded No 010 43 0.56 Town CC Wooded, partially wet No 010 44 0.3 Town CC Wooded No 010 44A 0.17 Town CC Wooded No 010 46 0.17 Town CC Wooded No 010 47 0.09 Town CC Wet, wooded No 010 54A 0.43 Town CC Wet, wooded No 010 55 0.17 Town CC Wet, wooded No 010 56 0.17 Town CC Wet, wooded No 010 61 0.19 Town CC Wet, woode	010 34 0.17 Town CC Shrub swamp, stream No Good		1010 34 0.17 Town CC Shrub swamp, stream No Good None Permanent	1010 34 0.17 Town CC Shrub swamp, stream No Good None Permanent None

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011	34	0.68	СС	СС	Wet, wooded	No	Good	None	Permanent	None	R60
011	36X	0.77	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R60
014	3	2.18	сс	СС	field	No	Good	None	Permanent	None	R60
014	5D	23.30	сс	СС	Wet, wooded, abuts well field	No	Good	None	Permanent	None	
016	48	0.19	сс	сс	Wet, wooded	No	Good	None	Permanent	None	R20
016	49	0.64	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
016	50	0.34	сс	сс	Wet, wooded	No	Good	None	Permanent	None	R20
017	6	2.01	СС	СС	Wet, wooded	No	Good	None	Permanent	None	R20
017	7	4.25	СС	сс	Wet, wooded	No	Good	None	Permanent	None	R20
017	8	0.76	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
017	9	0.31	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
020	126A	0.14	Town	сс	wooded	No	Good	None	Permanent	None	R20
021	1	11.90	сс	сс	Wet, brook, former cranberry bog	No	Good	None	Permanent	None	R60/R20
023	8K	0.69	Town	сс	wooded, river, floodplain	No	Good	None	Permanent	None	R60
024	34	0.48	Town	СС	wooded	No	Good	None	Permanent	None	GI
024	35	0.22	Town	сс	wooded	No	Good	None	Permanent	None	R20
024	36	0.07	Town	сс	wooded	No	Good	None	Permanent	None	GI
024	201	8.30	Town	сс	wooded	No	Good	None	Permanent	None	R20
027	8	0.15	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R60
027	10	0.32	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
029	11U	15.41	Town	сс	Wet, wooded, abuts former canal	No	Good	None	Permanent	None	R20
030	38	0.46	Town	СС	Wet, wooded, abuts river	No	Good	None	Permanent	None	R20
	011 014 014 016 016 016 017 017 017 017 020 021 023 024 024 024 024 027 027	011 36X 014 3 016 48 016 49 016 50 017 6 017 7 017 8 017 9 020 126A 021 1 023 8K 024 34 024 35 024 36 024 201 027 8 027 10 029 11U	011 36X 0.77 014 3 2.18 014 5D 23.30 016 48 0.19 016 49 0.64 017 6 2.01 017 7 4.25 017 8 0.76 017 9 0.31 020 126A 0.14 021 1 11.90 023 8K 0.69 024 34 0.48 024 35 0.22 024 36 0.07 024 201 8.30 027 8 0.15 029 11U 15.41	011 36X 0.77 Town 014 3 2.18 CC 014 5D 23.30 CC 016 48 0.19 CC 016 49 0.64 Town 016 50 0.34 CC 017 6 2.01 CC 017 7 4.25 CC 017 8 0.76 Town 020 126A 0.14 Town 021 1 11.90 CC 023 8K 0.69 Town 024 34 0.48 Town 024 35 0.22 Town 024 36 0.07 Town 024 201 8.30 Town 027 8 0.15 Town 029 11U 15.41 Town	011 36X 0.77 Town CC 014 3 2.18 CC CC 014 5D 23.30 CC CC 016 48 0.19 CC CC 016 49 0.64 Town CC 017 6 2.01 CC CC 017 7 4.25 CC CC 017 8 0.76 Town CC 020 126A 0.14 Town CC 021 1 11.90 CC CC 023 8K 0.69 Town CC 024 34 0.48 Town CC 024 35 0.22 Town CC 024 36 0.07 Town CC 024 201 8.30 Town CC 027 8 0.15 Town CC 029 11U 15.41 <td>011 36X 0.77 Town CC Wet, wooded 014 3 2.18 CC CC Wet, wooded, abuts well field 014 5D 23.30 CC CC Wet, wooded, abuts well field 016 48 0.19 CC CC Wet, wooded 016 49 0.64 Town CC Wet, wooded 016 50 0.34 CC CC Wet, wooded 017 6 2.01 CC CC Wet, wooded 017 7 4.25 CC CC Wet, wooded 017 8 0.76 Town CC Wet, wooded 017 9 0.31 Town CC Wet, wooded 020 126A 0.14 Town CC Wet, brook, former cranberry bog 023 8K 0.69 Town CC wooded, river, floodplain 024 34 0.48 Town CC wooded</td> <td>011 36X 0.77 Town CC Wet, wooded No 014 3 2.18 CC CC Wet, wooded, abuts well field No 014 5D 23.30 CC CC Wet, wooded, abuts well field No 016 48 0.19 CC CC Wet, wooded No 016 49 0.64 Town CC Wet, wooded No 016 50 0.34 CC CC Wet, wooded No 017 6 2.01 CC CC Wet, wooded No 017 7 4.25 CC CC Wet, wooded No 017 8 0.76 Town CC Wet, wooded No 017 9 0.31 Town CC Wet, wooded No 020 126A 0.14 Town CC Wet, brook, former No 021 1 11.90 CC CC</td> <td> </td> <td> 11</td> <td> 1</td> <td> 1</td>	011 36X 0.77 Town CC Wet, wooded 014 3 2.18 CC CC Wet, wooded, abuts well field 014 5D 23.30 CC CC Wet, wooded, abuts well field 016 48 0.19 CC CC Wet, wooded 016 49 0.64 Town CC Wet, wooded 016 50 0.34 CC CC Wet, wooded 017 6 2.01 CC CC Wet, wooded 017 7 4.25 CC CC Wet, wooded 017 8 0.76 Town CC Wet, wooded 017 9 0.31 Town CC Wet, wooded 020 126A 0.14 Town CC Wet, brook, former cranberry bog 023 8K 0.69 Town CC wooded, river, floodplain 024 34 0.48 Town CC wooded	011 36X 0.77 Town CC Wet, wooded No 014 3 2.18 CC CC Wet, wooded, abuts well field No 014 5D 23.30 CC CC Wet, wooded, abuts well field No 016 48 0.19 CC CC Wet, wooded No 016 49 0.64 Town CC Wet, wooded No 016 50 0.34 CC CC Wet, wooded No 017 6 2.01 CC CC Wet, wooded No 017 7 4.25 CC CC Wet, wooded No 017 8 0.76 Town CC Wet, wooded No 017 9 0.31 Town CC Wet, wooded No 020 126A 0.14 Town CC Wet, brook, former No 021 1 11.90 CC CC		11	1	1

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Hunt Road S/S Rear	031	13	3.00	Town	сс	shrub swamp floodplain, river	No	Good	None	Permanent	None	R20
Apple Road	031	46	0.13	Town	СС	wooded, abuts school	No	Good	None	Permanent	None	R20
Newbern Avenue	032	9	0.15	Town	сс	wooded	No	Good	None	Permanent	None	R20
Norfolk Avenue	032	10	0.15	Town	СС	wooded	No	Good	None	Permanent	None	R20
Newbern Avenue	032	13	0.3	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Nason Street	032	14	0.12	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Nason Street	032	15	0.16	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Newark Avenue	032	16	0.29	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
33 Auburn Avenue	032	102B	0.39	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
37 Aldrich Road	033	11	0.74	Town	сс	Woods	No	Good	None	Permanent	None	R20
168+ Shawsheen Avenue	033	30	1.29	Town	сс	Wet, wooded	No	Fair	None	Permanent	None	R20
Blanchard Road	033	42	0.466	Town	сс	Wooded floodplain	No	Good-Fair	None	Permanent	None	R20
Shawsheen Avenue	033	100	1.43	СС	сс	Wooded, partially wet, abuts well field	No	Good	None	Permanent	None	R20
Off Lake Street	034	71B	1.50	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R10
122+ Lake Street	034	72	2.77	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R10
2 Jaques Lane	035	22U	0.39	СС	сс	Wet, wooded, canal remnants	No	Good	None	Permanent	None	R20
24 Vermont Road	035	60	0.4	СС	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Rhode Island Road	035	72	0.18	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Rhode Island Road	035	72A	0.46	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Rhode Island Road	035	73	0.16	СС	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Fairmont Avenue	040	52	0.05	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Fairmont Avenue	040	53	0.05	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20

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040	61	0.08	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
040	104	0.11	Town	сс	Wooded, trail	No	Good	None	Permanent	None	R20
040	116	0.28	Town	сс	Wooded, trail	No	Good	None	Permanent	None	R20
040	117	0.11	Town	сс	Wooded, trail	No	Good	None	Permanent	None	R20
040	118	0.06	Town	сс	Wooded, trail	No	Good	None	Permanent	None	R20
040	119	0.17	Town	сс	Wooded, trail	No	Good	None	Permanent	None	R20
040	120	0.06	Town	сс	Wooded, trail	No	Good	None	Permanent	None	R20
040	121	0.69	Town	сс	Wooded, trail	No	Good	None	Permanent	None	R20
040	127	0.11	Town	сс	Wooded	No	Good	None	Permanent	None	R20
040	129	0.34	Town	сс	Wooded, trail	No	Good	None	Permanent	None	R20
040	131	0.17	Town	сс	Wooded, trail	No	Good	None	Permanent	None	R20
040	178	0.11	Town	сс	Wooded	No	Good	None	Permanent	None	R20
040	179	0.17	Town	сс	Wooded	No	Good	None	Permanent	None	R20
040	180	0.37	Town	сс	Wooded	No	Good	None	Permanent	None	R20
040	181	0.07	Town	сс	Wooded	No	Good	None	Permanent	None	R20
040	182	0.08	Town	сс	Wooded	No	Good	None	Permanent	None	R20
040	183	0.08	Town	сс	Wooded	No	Good	None	Permanent	None	R20
040	184	0.41	Town	сс	Wooded	No	Good	None	Permanent	None	R20
040	186	0.06	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
040	188	0.17	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
041	8	0.11	СС	сс	Wet, wooded		Good	None	Permanent	None	R10
041	64	0.46	Town	СС	Wet, wooded	No	Good	None	Permanent	None	GB
	040 040 040 040 040 040 040 040 040 040	040 104 040 116 040 117 040 118 040 119 040 120 040 127 040 129 040 178 040 179 040 180 040 181 040 183 040 184 040 186 040 188 041 8	040 104 0.11 040 116 0.28 040 117 0.11 040 118 0.06 040 119 0.17 040 120 0.06 040 121 0.69 040 127 0.11 040 129 0.34 040 178 0.17 040 179 0.17 040 180 0.37 040 181 0.07 040 183 0.08 040 184 0.41 040 186 0.06 040 188 0.17 041 8 0.11	040 104 0.11 Town 040 116 0.28 Town 040 117 0.11 Town 040 118 0.06 Town 040 119 0.17 Town 040 120 0.06 Town 040 121 0.69 Town 040 127 0.11 Town 040 129 0.34 Town 040 178 0.11 Town 040 179 0.17 Town 040 180 0.37 Town 040 181 0.07 Town 040 182 0.08 Town 040 183 0.08 Town 040 184 0.41 Town 040 186 0.06 Town 040 188 0.17 Town 041 8 0.11 CC	040 104 0.11 Town CC 040 116 0.28 Town CC 040 117 0.11 Town CC 040 118 0.06 Town CC 040 119 0.17 Town CC 040 120 0.06 Town CC 040 121 0.69 Town CC 040 127 0.11 Town CC 040 129 0.34 Town CC 040 131 0.17 Town CC 040 178 0.11 Town CC 040 180 0.37 Town CC 040 181 0.07 Town CC 040 183 0.08 Town CC 040 184 0.41 Town CC 040 186 0.06 Town CC 040 18	040 104 0.11 Town CC Wooded, trail 040 116 0.28 Town CC Wooded, trail 040 117 0.11 Town CC Wooded, trail 040 118 0.06 Town CC Wooded, trail 040 119 0.17 Town CC Wooded, trail 040 120 0.06 Town CC Wooded, trail 040 121 0.69 Town CC Wooded, trail 040 127 0.11 Town CC Wooded, trail 040 129 0.34 Town CC Wooded, trail 040 131 0.17 Town CC Wooded, trail 040 178 0.11 Town CC Wooded 040 180 0.37 Town CC Wooded 040 181 0.07 Town CC Wooded 040	040 104 0.11 Town CC Wooded, trail No 040 116 0.28 Town CC Wooded, trail No 040 117 0.11 Town CC Wooded, trail No 040 118 0.06 Town CC Wooded, trail No 040 119 0.17 Town CC Wooded, trail No 040 120 0.06 Town CC Wooded, trail No 040 121 0.69 Town CC Wooded No 040 127 0.11 Town CC Wooded, trail No 040 129 0.34 Town CC Wooded, trail No 040 131 0.17 Town CC Wooded No 040 178 0.11 Town CC Wooded No 040 180 0.37 Town CC Wo	040 104 0.11 Town CC Wooded, trail No Good 040 116 0.28 Town CC Wooded, trail No Good 040 117 0.11 Town CC Wooded, trail No Good 040 118 0.06 Town CC Wooded, trail No Good 040 119 0.17 Town CC Wooded, trail No Good 040 120 0.06 Town CC Wooded, trail No Good 040 121 0.69 Town CC Wooded No Good 040 127 0.11 Town CC Wooded, trail No Good 040 129 0.34 Town CC Wooded, trail No Good 040 178 0.11 Town CC Wooded No Good 040 180 0.37	040 104 0.11 Town CC Wooded, trail No Good None 040 116 0.28 Town CC Wooded, trail No Good None 040 117 0.11 Town CC Wooded, trail No Good None 040 118 0.06 Town CC Wooded, trail No Good None 040 120 0.06 Town CC Wooded, trail No Good None 040 121 0.69 Town CC Wooded, trail No Good None 040 127 0.11 Town CC Wooded, trail No Good None 040 129 0.34 Town CC Wooded, trail No Good None 040 178 0.11 Town CC Wooded No Good None 040 180 0.37 <td>040 104 0.11 Town CC Wooded, trail No Good None Permanent 040 116 0.28 Town CC Wooded, trail No Good None Permanent 040 117 0.11 Town CC Wooded, trail No Good None Permanent 040 118 0.06 Town CC Wooded, trail No Good None Permanent 040 129 0.17 Town CC Wooded, trail No Good None Permanent 040 121 0.69 Town CC Wooded, trail No Good None Permanent 040 127 0.11 Town CC Wooded, trail No Good None Permanent 040 129 0.34 Town CC Wooded, trail No Good None Permanent 040 131 0.17<</td> <td>040 104 0.11 Town CC Wooded, trail No Good None Permanent None 040 116 0.28 Town CC Wooded, trail No Good None Permanent None 040 117 0.11 Town CC Wooded, trail No Good None Permanent None 040 118 0.06 Town CC Wooded, trail No Good None Permanent None 040 120 0.06 Town CC Wooded, trail No Good None Permanent None 040 121 0.69 Town CC Wooded, trail No Good None Permanent None 040 127 0.11 Town CC Wooded, trail No Good None Permanent None 040 129 0.34 Town CC Wooded, trail No<</td>	040 104 0.11 Town CC Wooded, trail No Good None Permanent 040 116 0.28 Town CC Wooded, trail No Good None Permanent 040 117 0.11 Town CC Wooded, trail No Good None Permanent 040 118 0.06 Town CC Wooded, trail No Good None Permanent 040 129 0.17 Town CC Wooded, trail No Good None Permanent 040 121 0.69 Town CC Wooded, trail No Good None Permanent 040 127 0.11 Town CC Wooded, trail No Good None Permanent 040 129 0.34 Town CC Wooded, trail No Good None Permanent 040 131 0.17<	040 104 0.11 Town CC Wooded, trail No Good None Permanent None 040 116 0.28 Town CC Wooded, trail No Good None Permanent None 040 117 0.11 Town CC Wooded, trail No Good None Permanent None 040 118 0.06 Town CC Wooded, trail No Good None Permanent None 040 120 0.06 Town CC Wooded, trail No Good None Permanent None 040 121 0.69 Town CC Wooded, trail No Good None Permanent None 040 127 0.11 Town CC Wooded, trail No Good None Permanent None 040 129 0.34 Town CC Wooded, trail No<

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041	65	0.26	Town	сс	Wet, wooded	No	Good	None	Permanent	None	GB
041	66	2.00	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
041	67	1.10	Town	сс	Wet, wooded	No	Good	None	Permanent	None	GB/R20
041	81	0.46	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
041	91	0.06	сс	сс	Wet, wooded	No	Good	None	Permanent	None	R20
041	97	0.92	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
041	98	1.03	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
041	99	0.23	сс	СС	Wet, wooded	No	Good	None	Permanent	None	R20
041	101	0.47	сс	СС	Wet, partially wooded, some encroachment by abutter	No	Good	None	Permanent	None	R20
041	103	0.08	сс	сс	Wooded	No	Good	None	Permanent	None	R20
044	64	1.25	СС	СС	Wet, wooded, some encroachment from abutter	No	Good	None	Permanent	None	R10
044	71	0.92	сс	сс	Wet, wooded	No	Good	None	Permanent	None	R10
045	40	0.77	Town	сс	Wet, stream	No	Good	None	Permanent	None	R10
045	42	0.15	Town	сс	Wet, wooded	No	Fair	None	Permanent	None	NB
045	52	0.29	Town	СС	Wet, wooded	No	Fair	None	Permanent	None	R10
045	53	0.29	сс	СС	Wet, wooded	No	Good	None	Permanent	None	R10
045	93Y	1.80	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R10
045	93Z	2.00	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
045	94	0.14	Town	сс	Wet, wooded	No	Fair	None	Permanent	None	R10
045	95	0.23	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R10
	041 041 041 041 041 041 041 041 041 041	041 66 041 67 041 81 041 91 041 97 041 98 041 99 041 101 041 103 044 64 044 71 045 40 045 42 045 52 045 53 045 93Y 045 94	041 66 2.00 041 67 1.10 041 81 0.46 041 91 0.06 041 97 0.92 041 98 1.03 041 99 0.23 041 101 0.47 041 103 0.08 044 64 1.25 044 71 0.92 045 40 0.77 045 42 0.15 045 52 0.29 045 93Y 1.80 045 94 0.14	041 66 2.00 Town 041 67 1.10 Town 041 81 0.46 Town 041 91 0.06 CC 041 97 0.92 Town 041 98 1.03 Town 041 99 0.23 CC 041 101 0.47 CC 041 103 0.08 CC 044 64 1.25 CC 044 71 0.92 CC 045 40 0.77 Town 045 42 0.15 Town 045 52 0.29 Town 045 93Y 1.80 Town 045 93Z 2.00 Town 045 94 0.14 Town	041 66 2.00 Town CC 041 67 1.10 Town CC 041 81 0.46 Town CC 041 91 0.06 CC CC 041 97 0.92 Town CC 041 98 1.03 Town CC 041 99 0.23 CC CC 041 101 0.47 CC CC 041 103 0.08 CC CC 044 64 1.25 CC CC 044 71 0.92 CC CC 045 40 0.77 Town CC 045 42 0.15 Town CC 045 53 0.29 CC CC 045 93Y 1.80 Town CC 045 93Z 2.00 Town CC 045 94 0.14 Town CC	041 66 2.00 Town CC Wet, wooded 041 67 1.10 Town CC Wet, wooded 041 81 0.46 Town CC Wet, wooded 041 91 0.06 CC CC Wet, wooded 041 97 0.92 Town CC Wet, wooded 041 98 1.03 Town CC Wet, wooded 041 99 0.23 CC CC Wet, partially wooded, some encroachment by abutter 041 103 0.08 CC CC Wooded 041 103 0.08 CC CC Wet, wooded, some encroachment by abutter 041 103 0.08 CC CC Wet, wooded, some encroachment from abutter 044 64 1.25 CC CC Wet, wooded 045 40 0.77 Town CC Wet, stream 045 42 0.15 Town CC	041 66 2.00 Town CC Wet, wooded No 041 67 1.10 Town CC Wet, wooded No 041 81 0.46 Town CC Wet, wooded No 041 91 0.06 CC CC Wet, wooded No 041 97 0.92 Town CC Wet, wooded No 041 98 1.03 Town CC Wet, wooded No 041 99 0.23 CC CC Wet, wooded No 041 101 0.47 CC CC Wet, wooded No 041 103 0.08 CC CC Wet, wooded, some encroachment by abutter No 044 64 1.25 CC CC Wet, wooded, some encroachment from abutter 044 71 0.92 CC CC Wet, wooded No 045 40 0.77 Town CC<	041 66 2.00 Town CC Wet, wooded No Good 041 67 1.10 Town CC Wet, wooded No Good 041 81 0.46 Town CC Wet, wooded No Good 041 91 0.06 CC CC Wet, wooded No Good 041 97 0.92 Town CC Wet, wooded No Good 041 98 1.03 Town CC Wet, wooded No Good 041 99 0.23 CC CC Wet, wooded No Good 041 101 0.47 CC CC Wet, partially wooded, some encroachment by abutter No Good 041 103 0.08 CC CC Wooded No Good 044 64 1.25 CC CC Wet, wooded, some encroachment from abutter No Good 044	041 66 2.00 Town CC Wet, wooded No Good None 041 67 1.10 Town CC Wet, wooded No Good None 041 81 0.46 Town CC Wet, wooded No Good None 041 91 0.06 CC CC Wet, wooded No Good None 041 97 0.92 Town CC Wet, wooded No Good None 041 98 1.03 Town CC Wet, wooded No Good None 041 99 0.23 CC CC Wet, wooded No Good None 041 101 0.47 CC CC Wet, wooded No Good None 041 103 0.08 CC CC Wooded No Good None 044 64 1.25 CC <t< td=""><td>041 66 2.00 Town CC Wet, wooded No Good None Permanent 041 67 1.10 Town CC Wet, wooded No Good None Permanent 041 81 0.46 Town CC Wet, wooded No Good None Permanent 041 91 0.06 CC CC Wet, wooded No Good None Permanent 041 97 0.92 Town CC Wet, wooded No Good None Permanent 041 98 1.03 Town CC Wet, wooded No Good None Permanent 041 99 0.23 CC CC Wet, wooded, some encroachment by abutter No Good None Permanent 041 103 0.08 CC CC Wooded No Good None Permanent 044 64 1.25</td><td>041 66 2.00 Town CC Wet, wooded No Good None Permanent None 041 67 1.10 Town CC Wet, wooded No Good None Permanent None 041 81 0.46 Town CC Wet, wooded No Good None Permanent None 041 91 0.06 CC CC Wet, wooded No Good None Permanent None 041 97 0.92 Town CC Wet, wooded No Good None Permanent None 041 98 1.03 Town CC Wet, wooded No Good None Permanent None 041 101 0.47 CC CC Wet, wooded, some encroachment by abutter No Good None Permanent None 041 103 0.08 CC CC Wooded No</td></t<>	041 66 2.00 Town CC Wet, wooded No Good None Permanent 041 67 1.10 Town CC Wet, wooded No Good None Permanent 041 81 0.46 Town CC Wet, wooded No Good None Permanent 041 91 0.06 CC CC Wet, wooded No Good None Permanent 041 97 0.92 Town CC Wet, wooded No Good None Permanent 041 98 1.03 Town CC Wet, wooded No Good None Permanent 041 99 0.23 CC CC Wet, wooded, some encroachment by abutter No Good None Permanent 041 103 0.08 CC CC Wooded No Good None Permanent 044 64 1.25	041 66 2.00 Town CC Wet, wooded No Good None Permanent None 041 67 1.10 Town CC Wet, wooded No Good None Permanent None 041 81 0.46 Town CC Wet, wooded No Good None Permanent None 041 91 0.06 CC CC Wet, wooded No Good None Permanent None 041 97 0.92 Town CC Wet, wooded No Good None Permanent None 041 98 1.03 Town CC Wet, wooded No Good None Permanent None 041 101 0.47 CC CC Wet, wooded, some encroachment by abutter No Good None Permanent None 041 103 0.08 CC CC Wooded No

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York Street	045	96	1.25	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R10
York Street	045	97	0.77	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R10
Wild Avenue	045	101A	3.66	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R10
Woburn Street/End Dartmouth Ave	049	57C	11.00	СС	СС	shrub swamp floodplain	No	Good	None	Permanent	None	R20
Off Allenhurst Way	049	57F	6.30	сс	СС	shrub swamp floodplain	No	Good	None	Permanent	None	R20
Adams Street	050	3B	19.41	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
Quint Road	050	29	0.13	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
Lemonwood Road	050	32	0.11	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
Lemonwood Road	050	33	0.13	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Lemonwood Road	050	34	0.11	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
Lemonwood Road	050	36	0.34	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Marshall Street	050	37	4.50	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Marshall Street	050	38	2.50	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Dunne Street	050	39	2.25	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Dunne Street	050	40	0.13	Town	СС	Wet, wooded, abuts brook	No	Good	None	Permanent	None	R20
Dunne Street	050	41	0.76	Town	СС	Wet, wooded, abuts brook	No	Good	None	Permanent	None	R20
Dunne Street	050	42	2.25	Town	СС	Wet, wooded, abuts brook	No	Good	None	Permanent	None	R20
Marshall Street	050	43	0.26	Town	сс	Wet, wooded, abuts brook	No	Good	None	Permanent	None	R20
Marshall Street	050	44	0.53	Town	СС	Wet, wooded, abuts brook	No	Good	None	Permanent	None	R20
Marshall Street	050	45	0.1	Town	сс	Wet, wooded, abuts brook	No	Good	None	Permanent	None	R20
Marshall Street	050	46	0.18	Town	сс	Wet, wooded, abuts brook	No	Good	None	Permanent	None	R20
Parker Street	050	48	0.45	Town	сс	Wet, wooded, abuts brook	No	Good	None	Permanent	None	R20

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Riverside Road	050	49	1.38	Town	СС	Wet, wooded, abuts brook	No	Good	None	Permanent	None	R20
Riverside Road	050	50	0.56	Town	сс	Wet, wooded, abuts brook	No	Good	None	Permanent	None	R20
Fulton Road	050	51	0.59	Town	сс	Wet, wooded, abuts brook	No	Good	None	Permanent	None	R20
Fulton Road	050	57	0.34	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
Fulton Road	050	58	1.15	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Parker Street	050	67	0.05	Town	сс	Woods	No	Good	None	Permanent	None	R20
Parker Street	050	69	0.17	Town	СС	Woods	No	Good	None	Permanent	None	R20
Madison Road	050	72	0.83	Town	сс	Woods	No	Good	None	Permanent	None	R20
Wildwood Street	050	104	19.00	сс	СС	Wet, wooded, abuts brook	No	Good	None	Permanent	None	R20
Wildwood Street Rear	050	104A	9.00	Town	сс	Wet, wooded, abuts brook	No	Good	None	Permanent	None	R20
off Kidder Place	051	10A	5.29	сс	сс	wet, wooded, floodplain	No	Good	None	Permanent	None	R20
Hanover Street	051	51	0.46	Town	сс	vernal pool	No	Good	None	Permanent	None	R10
Atlantic Avenue	051	56	0.14	сс	сс	Wooded	No	Good	None	Permanent	None	R10
State Street	051	78	0.11	сс	сс	Wet, wooded	No	Good	None	Permanent	None	R10
State Street	051	79B	0.8	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
State Street	051	79C	0.17	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
State Street	051	79D	0.23	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
State Street	051	80	0.06	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
4 Kelley Road	051	85A	0.18	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R10
2 Kelley Road	051	85B	0.37	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R10
Kelley Road	051	94A	0.28	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R10
North Washington Avenue	053	14-114	2.70	СС	СС	Wet, wooded	No	Good	None	Permanent	None	R20

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053	15-115	0.37	сс	СС	Wet, wooded	No	Good	None	Permanent	None	R20
054	1D	0.81	Town	сс	wet, wooded, stream	No	Good	None	Permanent	None	R20
054	84E	0.28	сс	сс	Wet, wooded		Good	None	Permanent	None	R10
055	98	0.11	сс	сс	Wooded	No	Good	None	Permanent	None	R10
055	106	0.29	сс	сс	Wooded	No	Good	None	Permanent	None	R10
055	141	1.38	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
058	308	0.49	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R10
060	3C	18.85	сс	сс	Wooded, upland, partially wet	No	Good	None	Permanent	None	R20
060	7A	0.13	сс	сс	Woods, some encroachment by abutter	No	Good	None	Permanent	None	R20
060	17	6.00	сс	сс	Wet, wodded, abuts brook	No	Good	None	Permanent	None	R20
061	2	0.14	сс	СС	Wet, wooded, floodplain	No	Good	None	Permanent	None	R20
061	3	0.77	Town	сс	Wet, wooded, floodplain	No	Good	None	Permanent	None	R20
061	8B	3.00	Town	сс	Wet, wooded, floodplain, abuts brook	No	Good	None	Permanent	None	R20
065	4	2.50	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
066	53	8.00	сс	СС	Wet, wooded	No	Good	None	Permanent	None	R20
066	54	2.25	сс	СС	Wet, wooded	No	Good	None	Permanent	None	R10/R20
066	72	0.81	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
068	1	16.99	сс	сс	Wet, wooded	No	Good	None	Permanent	None	R20
068	41	1.43	сс	сс	Wet, wooded, abuts brook	No	Good	None	Permanent	None	R20
069	99	0.18	Town	сс	Wooded	No	Good	None	Permanent	None	R20
069	100	0.11	Town	СС	Wooded	No	Good	None	Permanent	None	R20
	054 054 055 055 058 060 060 061 061 061 065 066 066 066 068	054 1D 054 84E 055 98 055 106 055 141 058 308 060 3C 060 7A 060 17 061 2 061 3 061 8B 065 4 066 53 066 54 066 72 068 1 069 99	054 1D 0.81 054 84E 0.28 055 98 0.11 055 106 0.29 055 141 1.38 058 308 0.49 060 3C 18.85 060 7A 0.13 060 17 6.00 061 2 0.14 061 3 0.77 061 8B 3.00 065 4 2.50 066 53 8.00 066 54 2.25 066 72 0.81 068 1 16.99 068 41 1.43 069 99 0.18	054 1D 0.81 Town 054 84E 0.28 CC 055 98 0.11 CC 055 106 0.29 CC 055 141 1.38 Town 058 308 0.49 Town 060 3C 18.85 CC 060 7A 0.13 CC 060 17 6.00 CC 061 2 0.14 CC 061 3 0.77 Town 061 8B 3.00 Town 065 4 2.50 Town 066 53 8.00 CC 066 54 2.25 CC 066 72 0.81 Town 068 1 16.99 CC 069 99 0.18 Town	054 1D 0.81 Town CC 054 84E 0.28 CC CC 055 98 0.11 CC CC 055 106 0.29 CC CC 055 141 1.38 Town CC 058 308 0.49 Town CC 060 3C 18.85 CC CC 060 7A 0.13 CC CC 061 2 0.14 CC CC 061 3 0.77 Town CC 061 8B 3.00 Town CC 065 4 2.50 Town CC 066 54 2.25 CC CC 066 72 0.81 Town CC 068 1 16.99 CC CC 069 99 0.18 Town CC	054 1D 0.81 Town CC wet, wooded, stream 054 84E 0.28 CC CC Wet, wooded 055 98 0.11 CC CC Wooded 055 106 0.29 CC CC Wooded 055 141 1.38 Town CC Wet, wooded 058 308 0.49 Town CC Wet, wooded 060 3C 18.85 CC CC Woods, some encroachment by abutter 060 7A 0.13 CC CC Wet, wodded, abuts brook 061 2 0.14 CC CC Wet, wooded, floodplain 061 3 0.77 Town CC Wet, wooded, floodplain 061 8B 3.00 Town CC Wet, wooded, floodplain, abuts brook 065 4 2.50 Town CC Wet, wooded 066 54 2.25 CC CC Wet, woode	054 1D 0.81 Town CC wet, wooded, stream No 054 84E 0.28 CC CC Wet, wooded No 055 98 0.11 CC CC Wooded No 055 106 0.29 CC CC Wooded No 055 141 1.38 Town CC Wet, wooded No 058 308 0.49 Town CC Wet, wooded No 060 3C 18.85 CC CC Wet, wooded, upland, partially wet No 060 7A 0.13 CC CC Wet, wooded, some encroachment by abutter No 060 17 6.00 CC CC Wet, wooded, abuts No 061 2 0.14 CC CC Wet, wooded, floodplain No 061 3 0.77 Town CC Wet, wooded, floodplain No 063 4 2.50	054 1D 0.81 Town CC wet, wooded, stream No Good 054 84E 0.28 CC CC Wet, wooded Good 055 98 0.11 CC CC Wooded No Good 055 106 0.29 CC CC Wet, wooded No Good 055 141 1.38 Town CC Wet, wooded No Good 058 308 0.49 Town CC Wet, wooded No Good 060 3C 18.85 CC CC Woods, some No Good 060 7A 0.13 CC CC Wet, wodded, sbuts No Good 060 17 6.00 CC CC Wet, wodded, floodplain No Good 061 2 0.14 CC CC Wet, wooded, floodplain No Good 061 8B 3.00 Town </td <td>054 1D 0.81 Town CC wet, wooded, stream No Good None 054 84E 0.28 CC CC Wet, wooded Good None 055 98 0.11 CC CC Wooded No Good None 055 106 0.29 CC CC Wooded No Good None 055 141 1.38 Town CC Wet, wooded No Good None 058 308 0.49 Town CC Wet, wooded No Good None 060 3C 18.85 CC CC Woods, some encroachment by abutter No Good None 060 7A 0.13 CC CC Wet, wooded, floodplain No Good None 061 2 0.14 CC CC Wet, wooded, floodplain No Good None 061 8B 3.00 Town C</td> <td>054 1D 0.81 Town CC wet, wooded, stream No Good None Permanent 054 84E 0.28 CC CC Wet, wooded Good None Permanent 055 98 0.11 CC CC Wooded No Good None Permanent 055 106 0.29 CC CC Wooded No Good None Permanent 055 141 1.38 Town CC Wet, wooded No Good None Permanent 058 308 0.49 Town CC Wet, wooded No Good None Permanent 060 3C 18.85 CC CC CC Moods, some Good None Permanent 060 7A 0.13 CC CC CC Met, wooded, souts No Good None Permanent 061 2 0.14 CC</td> <td>054 1D 0.81 Town CC wet, wooded, stream No Good None Permanent None 054 84E 0.28 CC CC Wet, wooded Good None Permanent None 055 98 0.11 CC CC Wooded No Good None Permanent None 055 106 0.29 CC CC Wet, wooded No Good None Permanent None 055 141 1.38 Town CC Wet, wooded No Good None Permanent None 058 308 0.49 Town CC Wet, wooded No Good None Permanent None 060 3C 18.85 CC CC CC Wet, wooded, pland, p</td>	054 1D 0.81 Town CC wet, wooded, stream No Good None 054 84E 0.28 CC CC Wet, wooded Good None 055 98 0.11 CC CC Wooded No Good None 055 106 0.29 CC CC Wooded No Good None 055 141 1.38 Town CC Wet, wooded No Good None 058 308 0.49 Town CC Wet, wooded No Good None 060 3C 18.85 CC CC Woods, some encroachment by abutter No Good None 060 7A 0.13 CC CC Wet, wooded, floodplain No Good None 061 2 0.14 CC CC Wet, wooded, floodplain No Good None 061 8B 3.00 Town C	054 1D 0.81 Town CC wet, wooded, stream No Good None Permanent 054 84E 0.28 CC CC Wet, wooded Good None Permanent 055 98 0.11 CC CC Wooded No Good None Permanent 055 106 0.29 CC CC Wooded No Good None Permanent 055 141 1.38 Town CC Wet, wooded No Good None Permanent 058 308 0.49 Town CC Wet, wooded No Good None Permanent 060 3C 18.85 CC CC CC Moods, some Good None Permanent 060 7A 0.13 CC CC CC Met, wooded, souts No Good None Permanent 061 2 0.14 CC	054 1D 0.81 Town CC wet, wooded, stream No Good None Permanent None 054 84E 0.28 CC CC Wet, wooded Good None Permanent None 055 98 0.11 CC CC Wooded No Good None Permanent None 055 106 0.29 CC CC Wet, wooded No Good None Permanent None 055 141 1.38 Town CC Wet, wooded No Good None Permanent None 058 308 0.49 Town CC Wet, wooded No Good None Permanent None 060 3C 18.85 CC CC CC Wet, wooded, pland, p

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Allston Avenue	069	105	0.11	Town	СС	Wooded	No	Good	None	Permanent	None	R10
Allston Avenue	069	106	0.11	Town	сс	Wooded	No	Good	None	Permanent	None	R20
Allston Avenue	069	107	0.17	Town	СС	Wooded	No	Good	None	Permanent	None	R20
Allston Avenue	069	108	0.12	Town	СС	Wooded	No	Good	None	Permanent	None	R10/20
Allston Avenue	069	111A	0.06	Town	сс	Wooded, some encroachment by abutter	No	Good	None	Permanent	None	R10
Brookline Avenue	069	115	0.96	Town	сс	Wet, wooded, brook	No	Good	None	Permanent	None	R10/R20
Beeching Avenue	069	119	0.22	Town	СС	Partially wet, partially wooded	No	Good	None	Permanent	None	R10/R20
Beeching Avenue	069	120	0.49	Town	сс	Wet, wooded, abuts brook	No	Good	None	Permanent	None	R10/R20
Sudbury Avenue	070	5	1.24	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
Faulkner Avenue	070	9	2.25	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Faulkner Avenue	070	9A	0.05	Town	сс	Wooded	No	Good	None	Permanent	None	R20
Brookline Avenue	070	13	2.25	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Faulkner Avenue	070	14	0.11	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Allston Avenue	070	16	0.06	Town	СС	Wooded, partially wet	No	Good	None	Permanent	None	R20
Allston Avenue	070	17	0.06	Town	СС	Wooded	No	Good	None	Permanent	None	R20
Fairfield Road	070	23	0.11	Town	СС	Wooded	No	Good	None	Permanent	None	R10
Allston Avenue	070	27	0.23	Town	СС	Wooded	No	Good	None	Permanent	None	R20
Allston Avenue	070	28	0.11	сс	сс	Wooded	No	Good	None	Permanent	None	R20
W. Jamaica Avenue	070	30	0.56	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R10
W. Jamaica Avenue	070	38	0.06	Town	сс	Wooded	No	Good	None	Permanent	None	R10
Cabot Street	070	41	0.15	Town	сс	Wooded	No	Good	None	Permanent	None	R20

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Cabot Street	070	42	0.15	Town	сс	Wooded	No	Good	None	Permanent	None	R20
Cabot Street	070	43	0.15	Town	сс	Wooded	No	Good	None	Permanent	None	R20
Faulkner Avenue	070	48	0.05	Town	сс	Wooded	No	Good	None	Permanent	None	R20
Faulkner Avenue	070	49	0.05	Town	сс	Wooded	No	Good	None	Permanent	None	R20
Faulkner Avenue	070	51	0.13	Town	сс	Wooded	No	Good	None	Permanent	None	R20
Faulkner Avenue	070	52	0.06	Town	сс	Wooded	No	Good	None	Permanent	None	R20
Faulkner Avenue	070	53	0.16	Town	сс	Wooded	No	Good	None	Permanent	None	R20
Beeching Avenue	070	68	1.25	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R10
Sudbury Avenue	070	69	0.06	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Lloyd Road	070	71	0.19	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Fairfield Road	070	72	1.50	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R10
Lloyd Road	070	73	0.19	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Lloyd Road	070	74	0.39	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Fairfield Road	070	75	1.50	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R10
West Street	071	15	4.25	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20/GI
West Street	071	21	0.71	Town	сс	Wooded, vernal pool	No	Good	None	Permanent	None	R10
West Street	071	21A	0.54	Town	сс	Wet, wodded	No	Good	None	Permanent	None	R10
Oxford Road	073	19	1.25	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Kilmarnock Street	073	59A	2.6	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Woburn Street	075	1	29.4	СС	сс	Wet, wooded, river, Jenk's bridge, abuts interstate	No	Good	None	Permanent	None	R20
Grove Street	075	15	1.69	Town	сс	Wet, wooded, abuts interstate	No	Good	None	Permanent	None	R20

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Grove Street Rear	075	15A	1.29	Town	СС	Wet, wooded, abuts interstate	No	Good	None	Permanent	None	Rf20
Woburn Street Rear	075	16A	11.36	Town	сс	Wet, wooded, river, abuts interstate	No	Good	None	Permanent	None	R20
Federal Street	076	9	6.00	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
B&M RR Tracks	077	2	2.25	Town	сс	Wet, wooded, brook, floodplain	No	Good	None	Permanent	None	GI
Concord Street	077	4B	0.51	Town	сс	Wet, wooded, brook, floodplain	No	Good	None	Permanent	None	R20
Concord Street	077	11	9.10	сс	сс	Wet, wooded, brook, floodplain	No	Good	None	Permanent	None	GI
Somerset Place	078	1B	9.52	сс	сс	Wet, wooded, abuts commuter rail line and brook	No	Good	None	Permanent	None	R20
North Street	078	28	0.69	Town	сс	Wet, wooded, abuts commuter rail line and brook	No	Good	None	Permanent	None	R20
17 Shady Lane Dr.	079	15A	0.87	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
Douglas Avenue	079	111B	13.00	сс	сс	Wet, wooded, pond	No	Good	None	Permanent	None	R20
39 Shady Lane Drive	080	34	0.61	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
Salem Street	081	1A	0.94	сс	СС	Wet, wooded, brook	No	Good	None	Permanent	None	R20
Lawrence Street	081	7B	0.23	СС	сс	Wet, wooded, abuts commuter rail line	No	Good	None	Permanent	None	R20
Lawrence Street	081	7C	0.23	СС	СС	Wet, wooded, abuts commuter rail line	No	Good	None	Permanent	None	R20
Lawrence Street	081	7D	0.92	сс	сс	Wet, wooded, abuts commuter rail line and brook	No	Good	None	Permanent	None	R20
Lawrence Street	081	8B	7.50	сс	СС	Wet, wooded, brook	No	Good	None	Permanent	None	R20
Birchwood Road	081	14B	1.03	Town	сс	Wet, wooded	No	Fair	None	Permanent	None	R10
Birchwood Road	081	14C	1.03	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R10/R20
31-33 Birchwood Road	081	15	2.07	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R10/R20
30 Birchwood Road	081	28B	0.23	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R10

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26-28 Birchwood Road	081	29	0.46	СС	СС	Wet, wooded	No	Good	None	Permanent	None	R10
Corum Meadows	082	100	17.00	сс	сс	Wet, wooded, brook	No	Good	None	Permanent	None	R20
24 Biggar Avenue	082	132	0.52	Town	СС	Wet, wooded, some encroachment from abutter	No	Good	None	Permanent	None	R20
26 Biggar Avenue	082	133	0.52	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
28 Biggar Avenue	082	134	0.52	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
23 Biggar Avenue	082	146	0.52	Town	СС	Wooded	No	Fair	None	Permanent	None	R20
25 Biggar Avenue	082	148	0.52	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
27 Biggar Avenue	082	150	0.52	Town	сс	Wet, wooded, brook	No	Good	None	Permanent	None	R20
Pilcher Drive	082	152	0.52	Town	СС	Wet, wooded, brook	No	Fair	None	Permanent	None	R20
Pilcher Drive	082	153	0.52	Town	СС	Wet, wooded, brook	No	Good	None	Permanent	None	R20
10 Pilcher Drive	082	154	0.52	Town	СС	Wet, wooded, abuts brook	No	Good	None	Permanent	None	R20
5 Pilcher Drive	082	157	0.52	Town	СС	Wet, wooded, brook	No	Fair	None	Permanent	None	R20
7 Pilcher Drive	082	158	0.52	Town	сс	Wet, wooded, brook	No	Good	None	Permanent	None	R20
9 Pilcher Drive	082	159	0.52	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
11 Pilcher Drive	082	160	0.52	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
21 Royal Street, McGrane Woods CSD	84	10A	1.64	сс	сс	Upland	No	Good	None	Permanent	None	R60
8 McGrane Road, McGrane Woods CSD	84	52A	3.44	сс	сс	Upland	No	Good	None	Permanent	None	R60
9 McGrane Road, McGrane Woods CSD	84	52K	1.41	сс	сс	Upland	No	Good	None	Permanent	None	R60
Cheroke Lane	085	7C	12.62	сс	сс	Wet, wooded, river, stormwater basin	No	Good	None	Permanent	None	R20
Woburn Street	085	15	0.66	сс	сс	Wet, wooded, river, Jenk's bridge	No	Good	None	Permanent	None	R20
26 Concord Street	086	2	3.74	сс	сс	Wet, wooded, brook	No	Good	None	Permanent	None	R20

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088	15	2.50	Town	сс	Wet, wooded, brook, abuts commuter rail line	No	Good	None	Permanent	None	R20
088	32	2.98	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
088	44	3.25	СС	СС	Wet, wooded	No	Good	None	Permanent	None	R20
089	2	1.75	Town	СС	Wet, wooded, abuts commuter rail line	No	Good	None	Permanent	None	R20
089	17F	2.30	СС	СС	Wet, wooded, brook	No	Good	None	Permanent	None	R20
090	6	13.60	СС	сс	Wet, wooded	No	Good	None	Permanent	None	R20
092	2	0.98	СС	сс	Wet, wooded	No	Good	None	Permanent	None	R20
095	6-17G	1.26	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R20
100	61	0.69	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R20
100	228	14.88	СС	СС	Wet, wooded, brook	No	Good	None	Permanent	None	R20
101	255	0.94	Town	сс	Wet, wooded, brook	No	Fair	None	Permanent	None	R20
101	617	0.5	СС	сс	Wooded, partially wet, abuts brook	No	Fair	None	Permanent	None	R20
102	3	1.25	СС	СС	Wooded, partially wet, abuts pond	No	Fair	None	Permanent	None	R20
104	23	0.31	Town	сс	Wooded, partially wet	No	Good	None	Permanent	None	R60
104	24	0.23	Town	сс	Wooded, partially wet	No	Good	None	Permanent	None	R60
104	37	1.75	Town	СС	Wooded, partially wet	No	Good	None	Permanent	None	R60
104	39	0.11	Town	сс	wooded	No	Good	None	Permanent	None	R60
104	40	1.15	Town	сс	Wet, wooded	No	Good	None	Permanent	None	R60
104	41	0.11	Town	СС	Wet, wooded	No	Good	None	Permanent	None	R60
106	312	0.38	Town	сс	stormwater basin	No	Good	None	Permanent	None	R60
106	316	1.77	Town/CC	сс	Wet, wooded	No	Good	None	Permanent	None	R60
106	317	0.86	Town/CC	сс	Wet, wooded	No	Good	None	Permanent	None	R60
	088 089 089 090 092 095 100 100 101 101 102 104 104 104 104 104 106 106	088 32 088 44 089 2 089 17F 090 6 092 2 095 6-17G 100 61 100 228 101 617 102 3 104 23 104 24 104 37 104 39 104 40 104 41 106 312 106 316	088 32 2.98 088 44 3.25 089 2 1.75 089 17F 2.30 090 6 13.60 092 2 0.98 095 6-17G 1.26 100 61 0.69 100 228 14.88 101 617 0.5 102 3 1.25 104 23 0.31 104 24 0.23 104 37 1.75 104 39 0.11 104 40 1.15 104 41 0.11 106 312 0.38 106 316 1.77	088 32 2.98 Town 088 44 3.25 CC 089 2 1.75 Town 089 17F 2.30 CC 090 6 13.60 CC 092 2 0.98 CC 095 6-17G 1.26 Town 100 61 0.69 Town 100 228 14.88 CC 101 255 0.94 Town 101 617 0.5 CC 102 3 1.25 CC 104 23 0.31 Town 104 24 0.23 Town 104 37 1.75 Town 104 39 0.11 Town 104 40 1.15 Town 104 41 0.11 Town 106 312 0.38 Town	088 32 2.98 Town CC 088 44 3.25 CC CC 089 2 1.75 Town CC 089 17F 2.30 CC CC 090 6 13.60 CC CC 092 2 0.98 CC CC 095 6-17G 1.26 Town CC 100 61 0.69 Town CC 100 228 14.88 CC CC 101 255 0.94 Town CC 102 3 1.25 CC CC 104 23 0.31 Town CC 104 24 0.23 Town CC 104 39 0.11 Town CC 104 40 1.15 Town CC 104 41 0.11 Town CC 106 312 0.38 Town CC	088 32 2.98 Town CC Wet, wooded 088 44 3.25 CC CC Wet, wooded, abuts commuter rail line 089 2 1.75 Town CC Wet, wooded, abuts commuter rail line 089 17F 2.30 CC CC Wet, wooded, brook 090 6 13.60 CC CC Wet, wooded 092 2 0.98 CC CC Wet, wooded 095 6-17G 1.26 Town CC Wet, wooded 100 61 0.69 Town CC Wet, wooded 100 228 14.88 CC CC Wet, wooded, brook 101 617 0.5 CC CC Wet, wooded, partially wet, abuts brook 102 3 1.25 CC CC Wooded, partially wet, abuts pond 104 23 0.31 Town CC Wooded, partially wet 104 37 1.75 Town	088 15 2.50 Town CC abuts commuter rail line No 088 32 2.98 Town CC Wet, wooded No 088 44 3.25 CC CC Wet, wooded, abuts commuter rail line No 089 2 1.75 Town CC Wet, wooded, abuts commuter rail line No 089 17F 2.30 CC CC Wet, wooded, prook No 099 6 13.60 CC CC Wet, wooded No 099 6 13.60 CC CC Wet, wooded No 099 6 126 Town CC Wet, wooded No 099 6 126 Town CC Wet, wooded No 099 6 126 Town CC Wet, wooded No 100 228 14.88 CC CC Wet, wooded, prook No 101 617 0.5	088 15 2.50 Town CC abuts commuter rail line No Good 088 32 2.98 Town CC Wet, wooded No Good 088 44 3.25 CC CC Wet, wooded No Good 089 2 1.75 Town CC Wet, wooded, abuts commuter rail line No Good 089 17F 2.30 CC CC Wet, wooded, brook No Good 090 6 13.60 CC CC Wet, wooded No Good 092 2 0.98 CC CC Wet, wooded No Good 095 6-17G 1.26 Town CC Wet, wooded No Good 100 61 0.69 Town CC Wet, wooded, brook No Fair 101 617 0.5 CC CC Wet, wooded, partially wet, abuts brook No Fair	088 15 2.50 fown CC abuts commuter rail line No Good None 088 32 2.98 Town CC Wet, wooded No Good None 089 4 3.25 CC CC Wet, wooded, abuts commuter rail line No Good None 089 17F 2.30 CC CC Wet, wooded, brook No Good None 090 6 13.60 CC CC Wet, wooded No Good None 092 2 0.98 CC CC Wet, wooded No Good None 095 6-17G 1.26 Town CC Wet, wooded No Good None 100 61 0.69 Town CC Wet, wooded, brook No Good None 101 255 0.94 Town CC Wet, wooded, bratially wet, solutably wet, s	088 15 2.50 Town CC abuts commuter rail line NO GOOD None Permanent 088 32 2.98 Town CC Wet, wooded NO Good None Permanent 089 2 1.75 Town CC Wet, wooded, abuts commuter rail line NO Good None Permanent 089 1.77 2.30 CC CC Wet, wooded, abuts commuter rail line NO Good None Permanent 089 1.76 2.30 CC CC Wet, wooded NO Good None Permanent 090 6 13.60 CC CC Wet, wooded NO Good None Permanent 092 2 0.98 CC CC Wet, wooded NO Good None Permanent 100 61 0.69 Town CC Wet, wooded NO Good None Permanent 101	088 15 2.50 Town CC abuts commuter rail line No Good None Permanent None 088 32 2.98 Town CC Wet, wooded No Good None Permanent None 089 2 1.75 Town CC Wet, wooded, abuts commuter rail line No Good None Permanent None 089 1.77 2.30 CC CC Wet, wooded, abuts commuter rail line No Good None Permanent None 089 1.77 2.30 CC CC Wet, wooded, brook No Good None Permanent None 090 6 13.60 CC CC Wet, wooded No Good None Permanent None 095 6-17G 1.26 Town CC Wet, wooded, brook No Good None Permanent None 100 228 1.488 CC <

Lords Court	106	337	0.55	Town/CC	СС	stormwater basin	No	Good	None	Permanent	None	R60
Stonehedge Drive	107	31	23.96	Town/CC	СС	Wet, wooded	No	Good	None	Permanent	None	R20
Salem Street - Rear	R1	22	14.00	Town	СС	Pond	No	Good	None	Permanent	None	GI
Ballardvale Street, adj. B&M Railroad	R2	5	5.00	СС	CC	Wet, wooded, abuts commuter rail line	No	Good	None	Permanent	None	R20
Ramp off of 93	R2	6	32.40	СС	СС	Wet, wooded	No	Good	None	Permanent	None	R20/GI

Total 683.34

Private Conservation Restrictions (no public access)

Address	Map / Parcel	Size	Current Use	Recreation Potential	Protected Status, Restriction	Zone
423 Chestnut St	1/6	7.97 acres	Res.	Open space	Permanent	R-60
38 Mill Road	3 / 3G	30 ft. buffer to BVW; ~ 3,000 sq.ft.	Res.	Open space	Permanent	CSD / R-20
36 Mill Road	3 / 3F	30 ft. buffer to BVW; ~ 3,000 sq.ft.	Res.	Open space	Permanent	CSD / R-20
32 Mill Road	3 / 3D	30 ft. buffer to BVW; ~ 4,400 sq.ft.	Res.	Open space	Permanent	CSD / R-20
30 Mill Road	3 / 3C	30 ft. buffer to BVW; ~ 4,400 sq.ft.	Res.	Open space	Permanent	CSD / R-20
28 Mill Road	3 / 3B	30 ft. buffer to BVW; ~ 2,300 sq.ft.	Res.	Open space	Permanent	CSD / R-20
20 Murray Hill Circle	4 / 7B	1,188 sq.ft.	Res.	Open space	Permanent	CSD / R-20
26 Murray Hill Circle	4 / 7H	3,582 sq.ft.	Res.	Open space	Permanent	CSD / R-20
24 Eleanor Drive	4 / 12	2,811 sq.ft.	Res.	Open space	Permanent	CSD / R-20
31 Eleanor Drive	4 / 21	~ 2,500 sq.ft.	Res.	Open space	Permanent	CSD / R-20
29 Eleanor Drive	4 / 22	~ 2,500 sq.ft.	Res.	Open space	Permanent	CSD / R-20
188R Chestnut Street	15 / 10D		Res.	Open space	30-year	R-20
3 Harold Ave	23 / 1 / 101	~ 1 acre	Res.	Open space	30-year	R-60
5 Harold Ave	23 / 3 / 103	~ 0.75-1 acre	Res.	Open space	30-year	R-60
7 Harold Ave	23 / 5 / 105	~ 13,000-14,000 sq.ft.	Res.	Open space	30-year	R-60
534 Shawsheen Ave	23 / 8J		Res.	Open space	Permanent	R-60
905 Main Street	25 / 5		Res.	Open space	30-year	R-20
10 Burlington Ave	29 / 1	5.85 ac.	Res.	Open space	Permanent	LI / O
109 Eames Street	37 / 10		Res.	Open space	30-year	GI
12 Allenhurst Way	49 / 145		Res.	Open space	30-year	R-20
17 Broad Street	67 / 82	~ 9,000 sq.ft.	Res.	Open space	30-year	R-20
15 Broad Street	67 / 83	~ 7,800 sq.ft.	Res.	Open space	30-year	R-20
3 Tacoma Drive	68 / 2	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
7 Tacoma Drive	68 / 4	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20

11 Tacoma Drive	68 / 6	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
13 Tacoma Drive	68 / 7	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
13 Seneca Lane	68 / 8	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
15 Seneca Lane	68 / 9	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
17 Seneca Lane	68 / 10	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
19 Seneca Lane	68 / 11	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
21 Seneca Lane	68 / 12	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
23 Seneca Lane	68 / 13	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
25 Seneca Lane	68 / 14	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
27 Seneca Lane	68 / 15	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
26 Seneca Lane	68 / 16	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
24 Seneca Lane	68 / 17	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
22 Seneca Lane	68 / 18	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
20 Seneca Lane	68 / 19	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
18 Seneca Lane	68 / 20	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
16 Seneca Lane	68 / 21	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
14 Seneca Lane	68 / 22	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
12 Seneca Lane	68 / 23	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
10 Seneca Lane	68 / 24	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
8 Seneca Lane	68 / 25	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
6 Seneca Lane	68 / 26	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
4 Seneca Lane	68 / 27	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
2 Seneca Lane	68 / 28	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
4 Tacoma Drive	68 / 29	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
2 Tacoma Drive	68 / 36	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
5 Tacoma Drive	68 / 42	86 ft. Contour Floodplain	Res.	Open space	30-year	R-20
11 Scaltrito Drive	70 / 105E	~ 9,000 sq.ft.	Res.	Open space	30-year	R-20

12 Scaltrito Drive	70 / 105F	~ 9,000 sq.ft.	Res.	Open space	30-year	R-20
326 Woburn Street	86 / 14B	1.1 acre	Res.	Open space	Permanent	R-20
442 Middlesex Ave	89 / 17C		Res.	Open space	Permanent	R-20
22 Freeport Drive	100 / 624	~ 3,800 sq.ft.	Res.	Open space	30-year	R-20
20 Freeport Drive	100 / 625	~ 27,000 sq.ft.	Res.	Open space	30-year	R-20
18 Freeport Drive	100 / 626	~ 11,000 sq.ft.	Res.	Open space	30-year	R-20
16 Freeport Drive	100 / 627	~ 7,000 sq.ft.	Res.	Open space	30-year	R-20
29 Lucaya Circle	101 / 618	~ 0.5 acre	Res.	Open space	30-year	R-20
31 Lucaya Circle	101 / 619	~ 0.4 acre	Res.	Open space	30-year	R-20
33 Lucaya Circle	101 / 620	~ 0.55 acre	Res.	Open space	30-year	R-20
35 Lucaya Circle	101 / 621	~ 0.5 acre	Res.	Open space	30-year	R-20
401 Andover Street	R3/8	2.65 acres	Res.	Open space	Permanent	Over 55/R-60
42 Ashwood Avenue	R4 / 110	30 ft. buffer to BVW	Res.	Open space	30-year	CSD / R-60
44 Ashwood Avenue	R4 / 111	30 ft. buffer to BVW	Res.	Open space	30-year	CSD / R-60
50 Ashwood Avenue	R4 / 114	30 ft. buffer to BVW	Res.	Open space	30-year	CSD / R-60
58 Ashwood Avenue	R4 / 118	30 ft. buffer to BVW	Res.	Open space	30-year	CSD / R-60
62 Ashwood Avenue	R4 / 120	30 ft. buffer to BVW	Res.	Open space	30-year	CSD / R-60
61 Ashwood Avenue	R4 / 121	30 ft. buffer to BVW	Res.	Open space	30-year	CSD / R-60
59 Ashwood Avenue	R4 / 122	30 ft. buffer to BVW	Res.	Open space	30-year	CSD / R-60
57 Ashwood Avenue	R4 / 123	30 ft. buffer to BVW	Res.	Open space	30-year	CSD / R-60

Chapter 61A Properties								
Name / Location	Address	Map / Parcel	Size (Acres)	Mgmt	Current Use	Recreation Potential	Public Access	Zone
Foley Farm	33A West Street	59 / 1	1.46	Owner	Agriculture, partially wooded	Open space	No	R-20
Foley Farm	West Street	72 / 1 / 33:	0.52	Owner	Agriculture, partially wooded	Open space	No	R-20
Foley Farm	2 Kilmarnock Street	74 / 2	4.25	Owner	Agriculture	Open space	No	R-20
Krochmal Farm*	Ballardvale Street/ Tewksbury town line	R2/15	53.32	Owner	Agriculture	Open space	No	R-60/HI

^{* 69.83} acres total, p/o parcel under Ch.61A

Total 59.55

APPENDIX II: ADA Access Self-Evaluation

Date: April 27, 2021

To: Valerie Gingrich

Open Space and Planning Commission

From: Wilmington Commission on Disability

Regarding: Town Parks and Trails Community Access Monitor Survey

<u>Handicapped Parking</u>: The handicapped spaces need to be at least 8 feet wide with a 5 feet wide access aisle. Two spaces may share an access aisle. The van space needs to be 11 feet wide with an access aisle of at least 5 feet or at least 8 feet wide with an access aisle at least 8 feet. A sign with the international symbol of accessibility should be at the front of each space at a high no less than 5 feet and no taller than 8 feet. The access aisles must be marked to discourage parking in them.

<u>Signs</u>: Mounting height must be 60" to the centerline of the sign, within 18" of a door jamb or recessed, with letters and numbers being at least 1.25" high. The letters and numbers must also be raised .03'. The letters and numbers must contrast with the background color. They must also be written in braille. I will also attach ADAAG Regulation 703, which is 8 pages describing and diagramming how signs should appear for both visual and tactile characters.

Town Common:

<u>Parking lot</u>: There is designated handicapped parking, but the measurements are wrong. There needs to be a minimum of 5 handicapped and 1 van accessible spaces in this parking lot. The handicapped spaces need to be at least 8 feet wide with a 5 feet wide access aisle. Two spaces may share an access aisle. The van space needs to be 11 feet wide with an access aisle of at least 5 feet or at least 8 feet wide with an access aisle at least 8 feet.

There are no access aisles beside any of the handicapped spaces. The access aisles must be marked so as to discourage parking in them. Accessible spaces must be identified with a sign including the International Symbol of Accessibility, which must be at least 60 inches above the ground to bottom of sign and no greater than 8 feet at top of sign. The existing signs are at a height of 51" which is too short. There is no sign for a van space. Recommendation: handicapped lines need to be redrawn with access aisles and a van accessible space, along with appropriate height signs.

<u>Exterior accessible route in parking lot</u>: the surface is not stable, firm and slip-resistant. There are many wide cracks, breaks and bumps in the pavement. Recommendation: it needs to be resurfaced.

<u>Site access/Path of travel</u>: there is uneven paving at crosswalk. Part of the crosswalk is raised and rounded like a curb ramp. The slope of the curb is too steep. I would recommend flattening the area so the entire crosswalk is flat. Also, there is no texture on the side of the crosswalk on the parking lot side to alert someone to the transition of the road.

Once across the street by crosswalk and entering the Common, there is a grate on the ground. Grate openings are to be no larger than 0.5 inch. The openings here are 2.25 inches, which is dangerously too large for many reasons including that a cane would fall right through as well as a small foot of a child.

The Gazebo in not accessible. It has stairs. Recommendation: They do have ramps or lifts for gazebos. For the height of this gazebo, I would recommend a chair lift.

<u>Park benches:</u> should be 24" deep. They are only 15.5 inches deep. recommendation: replace benches with appropriate width, ready made accessible benches, with armrests. It is a big discrepancy.

Silver Lake:

Parking Lot: You need at least 5 handicapped spaces with at least 1 van accessible space. The handicapped spaces need to be at least 8 feet wide with a 5 feet wide access aisle. Two spaces may share an access aisle. The van space needs to be 11 feet wide with an access aisle of at least 5 feet or at least 8 feet wide with an access aisle at least 8 feet. There are no access aisles beside any of the handicapped spaces. The access aisles also must be marked so as to discourage parking in them. Accessible parking spaces must be identified with a sign including the International Symbol of Accessibility, which must be at least 60 inches above the ground to bottom of sign and no greater than 8 feet at top of sign. - The existing signs are too low at 46.5". Recommendation: Re-designate handicapped accessible spaces by remarking the appropriate widths including access aisles and van accessible space. Replace signs with appropriate height, lettering and international symbol.

<u>Swimming Facilities</u>: Must have accessible path to into water, concession stand and bathrooms. I understand you have mesh or plastic interlocking mats/walkways to meet this requirement. I was not able to view them.

<u>Play Areas</u>: Must have accessible path over sand to the play area. I understand you have the mesh or plastic interlocking mats/walkway which must be out to meet this requirement when beach and play area are open.

Concession Stand/Changing Room/Entrances: I did not have access inside. It looks like from your own survey that there are some access issues that would be of concern if you had an employee with a disability, i.e., wheelchair user or blind person with a cane. These include U-shaped handle which should be changed to a handle that can be opened with a closed fist, office and other interior door openings that are less than the minimum width of 32", office door handle which is a knob should be changed to one operable with a closed fist, and switches, controls and signals which I did not see, but have been identified in your survey as not meeting appropriate reachable height requirements. As well, you have identified that warning signals that must be visual as well as audible are not to code. This should be corrected immediately.

<u>Signs</u>: There are multiple signs on this site and the fishing pier. Most do not meet the requirements for height of 60" to the centerline of the sign, letters and numbers at least 1 ¼" high and raised .03", with contrasted color background with lettering, as well as in braille, including the beach sign on the fence, which is too low. Recommendation: Set up a project to redo all inaccessible signs at the beach, for the pier and for the Fisherman Access.

<u>Bathroom Facilities</u>: The sink extension is short in the family bathroom. Grab bars, toilet paper dispenser and hand dryer are all slightly high. Recommendation: Replace the missing tile in ceiling, which is not to code. Next time there is a renovation, update this bathroom to code. <u>Fishing Pier:</u>

Handicapped spaces in parking area for the pier: the markings for spaces are very faded including for the access aisle, which I could not see. There is no van accessible space. Recommendation: Remark the handicapped spaces including a space for van access and access aisles, along with appropriate van access sign. En route to the pier, where the surface of the path meets the pier, there is a height difference over ½". Recommendation: since the surface is dirt/gravel, it could be filled in to close the gap.

Rotary Park:

<u>Parking</u>: There are two handicapped spaces located at one end of the parking lot near the ball field with one shared access aisle. There is no van space or access aisle wide enough to accommodate. There is no accessible parking at the open space, trail, playground or gazebo entrance. Recommendation: Remark the handicapped spaces to include a van width with access aisle. It is not wide enough.

Site Access/Path of Travel/Entrances: Requirements according to ADA 206.2.2 "at least one accessible route shall connect accessible buildings, accessible facilities, accessible elements and accessible spaces that are on the same site." This includes outside spaces. Here it includes the open space, trail, ball park, playground, picnic area and gazebo. There is no access path to the gazebo. As well, there is a steep 9" step-up blocking access to the gazebo. Recommendation: Put in a path from the outer path to the gazebo and slope it for a ramp to make the gazebo accessible. Also, maintenance of the surfaces connecting all sites need to be completed, especially where it meets the parking area, and where broken pavement or ruts are greater than 0.5".

Restrooms/Porto Potties: Your evaluation of the Porto Potties occasionally used reveal you do not use accessible ones. It is a requirement that if you have porta potties on site, you must have a percentage that are accessible. If only one is on site, it is required to be a wheelchair accessible one. Two porta potties are on site and neither is accessible. Recommendation: Add an accessible porta pottie or replace one of the two there with an accessible one which has 60"x72" clearance for wheelchair turn around.

Signs: There is a sign identifying "Rotary Park" and several "2-hour parking" signs. They are required to be mounted at a height of 60" to the centerline of the sign, letters and numbers at least 1 ¼" high, raised .03", letters and numbers in contrast with the background cover, and must also include same in braille. You have a number of signs that do not comply. I am going to attach the regulations that carefully describes signage requirements. There should also be a sign at the beginning of the trail with appropriate lettering, braille, contrast and set at appropriate height.

Picnicking: There are a large number of picnic tables, but none of them are accessible. According to State and Federal Regulations, a minimum of 5% of the total tables must be accessible that have clear space under the table top, not less than 20" wide and 19" deep per seating space. It should not be less than 27" clearance from the ground to the underside of the table top. Also, to provide access, there must be 29" clear space beyond the 19" clear space under the table to equal a clear space of 48". Recommendation: purchasing accessible tables that are ready-made to replace some of the inaccessible ones around the park and trail.

Benches located on the site: There are benches located around the open space and near and around the gravel trail. ADA regulations require bench seats to be 42" minimum in length and minimum 20" to maximum 24" deep. The existing benches are only 17" deep. Benches are required to have back support or shall be affixed to a wall. They are required to be 42" long minimum and shall extend 2" maximum above seat surface at a maximum height of 18" above the seat surface. Recommendation is to replace these benches with ones that conform, which are readily easy to purchase.

<u>Ball Park</u>: Team or Player Seating: "At least one wheelchair space complying with 802.1 shall be provided in team or player areas serving areas of sport activity." Advisory 206.7.9: "Platform lifts shall be permitted to provide accessible routes to team or player seating areas of sport activity." Advisory 206.7.9: "While the use of platform lifts is allowed, ramps are recommended to provide access to player seating areas serving an area of sport activity." There is a 6" step up to player area, which is right next to the fence and gate to access the field. Recommendation: Ramping the area is needed, but not practical. My recommendation would be to buy a portable wooden ramp to keep in the dugout and have available should you have a player in a wheelchair, in each dug out.

Bleachers: They do make bleachers now with wheelchair cut-outs. If and when the bleachers get replaced, they should be with accessible ones. Recommendation for now is to make sure you have enough of a clearing space beside the bleachers to accommodate both a wheelchair and aisle for people to walk around to enter bleachers.

<u>Playground</u>: Ground surfaces in play areas: ADA Advisory 1008.2.6 "ground surfaces must be inspected and maintained regularly to ensure continued compliance with the ASTM F 1951 standard. The type of material selected and play area use levels will determine the frequency of inspection and maintenance activities." It is beyond my scope to assess all grounds materials.

<u>Trail</u>: There is an elevated walkway/bridge over a watery part of the trail. The edges of the bridge originally had edge protectors, which are required. They are worn and now vary from level with the ground to 6" above ground. Recommendation: one side of edge protection seems to have dwindled significantly. The surface is dirt and so the surface could be scraped down to give more of an edge should a blind person with a cane walk there. I would also recommend a sign for the trail.

<u>Fishing</u>: Fishing is allowed at from the edge of the water. Recommendation: The ground is fairly level, but a child in a wheelchair would have a difficult time getting close enough to the water to fish. The wheels would sink into the surface. I recommend adding a platform, about 60" with an edge protector, so a child in a wheelchair could fish along with his buddies. (I thinking child, but could also be adult). It would not need to extend over the water, just be at the water's edge.

Robert Palmer Park:

Parking Lot: There are 4 spaces closest to the Town Hall entry which shares this parking space. Two accessible spaces are 11.5' wide with a shared access aisle of 11', which is fine. The other two accessible spaces meet the width requirement, but do not have an access aisle on either side, which is necessary. There is no space delineated for Van parking. There are signs with the handicapped symbols. These are supposed to be at a height no less than 60" and no greater than 96". They are only 48". Recommendation: The signs should eventually be replaced. A space wide enough with an access aisle and proper signage for Van accessibility is needed. Access aisles need to marked aside the other wheelchair accessible spaces.

There are no handicapped parking spaces adjacent to the park. At least one designated space needs to be added there and it should be Van accessible with proper signage, access aisle and markings.

<u>Site Access/Path of Travel/Entrances</u>: Variable surfaces include some cracks in pavement and bumps, depressions and roots in dirt. Grooming and maintenance of surfaces should be done each year so that surfaces are evenly paved or hard-packed, with bumps less than 0.5". Roots and rocks should be removed and depressions filled in.

<u>Picnic Tables</u>: There are several picnic tables, but none meet the ADA requirements. A clear floor space positioned for a forward approach to table is required. Where knee clearance is required, it shall be 11" deep minimum at 9" above the floor or ground, and 8" deep minimum at 27" above the floor or ground. Recommendation: They do make wheelchair accessible picnic tables that can be purchased, so should be added.

<u>Benches</u>: Clear floor or ground space shall be provided and positioned at the end of the bench seat and parallel to the short axis of the bench. Changes in level of the ground is not permitted. At this site a level surface is not provided around any benches, nor maintained. The players' benches in the ballfield have unleveled areas around the benches themselves and are unlevel.

Benches shall have seats that are 42" long minimum and 20" deep minimum and 24" deep maximum. Benches outside the play area with backs have seats of only 17". Players benches in the ballfield have seat depths of only 9.5" Benches shall provide for back support or shall be affixed to a wall. All three benches outside the handball/racket court do not have back support. The players' benches in the ballfield do not have back support. Bench seat height shall be 17" minimum to 19" maximum above the floor or ground. Outside the handball court the benches are 23". Recommendation: eventually replace benches with ones that conform to ADA guidelines.

Entrances – small concession building with 2 bathrooms available for Pop Warner users, entrance ramp to playground: Because it is on Town property and open to Pop Warner, it must comply to access regulations. The entrance to the building has a step up. Recommendation is to either remove and ramp. There needs to be a level space extending 5' from the entrance door, which there is not. There needs to be 18" clearance on the pull side of the door. The door handle needs to be operable with a closed fist. The U handle does not comply. An alternate recommendation is to have a portable wooden ramp in concession building for when needed.

<u>Restrooms</u>: No accessible bathroom for all requirements inside and including sink, stall, toilet, grab bars, fixtures – mirror, toilet paper dispenser, and towel dispenser. Also, the entrances which have a step up are not to code, and door handles which is not operable with a closed fist. There was also a porta pottie on site, which is also not accessible. Recommendation in the short term: procure an accessible porta pottie for the site. It is required. A sign at the existing restrooms telling where the accessible porta pottie will be needed.

<u>Playground Entrance Ramp</u>: The running slope can be no steeper than for every 1" of height at least 20" of route run. For each section of the ramp. The slope of the ramp on each end is too steep going into the soft woodchip surface on the playground area. This should be replaced with an accessible portable ramp. There is no accessible play equipment. Something should be added.

Glen Road Berry Bog:

This trail connects with the trail which surrounds the ballfield at Robert Palmer Park. The trail around the ballpark is accessible in width, the ground surface is a continuous common surface that is fairly firm and level. The Berry Bog Trail, however is not. Apparently, there are several trails in here. The paths have some very narrow widths less than 2', excessive slopes and cross pitch greater than 5% and 2%, has many roots, pine needles and leaves with roots protruding higher than 0.5". There are also overgrown trees and shrubbery growing into the path. Recommendation: There is no signage or trail markers to let people know this trail is here. I would recommend adding them. Also, it looks like this trail could be accessible with grooming and maintenance.

Yentile Farm Recreational Facility:

This site is beautifully done according to ADA guidelines and regulations. The signage, however is not. There are many signs around the sight including educational ones. They are not compliant in height, letter height, to be raised .03" and in braille.

Town Park:

Upper parking lot is paved. It has 2 handicapped parking spaces with marked access aisles. The width of space with access aisle needs to be a minimum width of 13'. These spaces are not wide enough. There is no van accessible space, which needs to be a minimum of 16' wide – 8' plus 8' access aisle or 11' with 5' access aisle. There are two handicapped parking signs that are mounted too high. These spaces are closest to the entrance for the dog parks and are furthest from the ballfield.

<u>Dog Parks</u>: The entrance to the dog park is a dirt path that begins between two boulders. It is slightly narrower than 36". Alternatively, one would have to go around the boulder onto and across the grass and then reconnect on the path, which is not considered accessible. There is a 1" gap which is too steep between the parking surface and path. This could probably be filled in smooth the transition. Each of the dog parks has two gates attached to chain linked fences to pass through to get in, which are narrow. The handles on the doors are too high. They are 52" on the exterior and 48" on the interior fences. I was not able to operate the latches from my wheelchair. As well, the latches are not operable by a closed fist. Recommendation: Lower the latches minimum 36". (I could not try to bump the latches with a closed fist because they were too high, but could be checked as a possibility if they were moved to a lower height.)

Signs: There are many signs and most do not conform to ADA requirements. They need to be at 60" to centerline of the sign. There are signs on fences that are lower and other signs that are higher, need to be at least 1 ¼" high, raised .03", in contrast with the background color, and have braille. Middlesex Canal kiosk would be a good place to keep information in braille or large print about the park and trails here, as well as other Town locations. Information here needs to be accessible.

<u>Path of travel</u>: There is a paved roadway down to the ballfield, which is blocked by 2 very long metal swing gates. There is a grass path beside one gate but the entrance is very narrow due to a boulder there. The paved area ends near the ballfield and entrance to a trail. There is supposed to be a lower parking lot here, but it is not defined, not delineated parking or handicapped parking spaces. The ground is not level. There are lots of bumps and depressions as well as slope concerns. The slope from the top parking lot to the ballpark is much too steep for a wheelchair. Therefore, there should be a designate handicapped spot plus access aisle and at a van accessible width on a level surface. There needs to be a safe place to park or drop off a child or other person in a wheelchair of other disable condition.

<u>Ballfield</u>: The spectator seating does not have cut out for wheelchair seating. There does seem to be enough paved ground beside the bleachers for wheelchair seating, although not optimal. The players benches have adequate space aside them for a wheelchair, should they have a player in a wheelchair. However, there are 2 steep steps down to access this area, There is also a sidewalk/curbing 4" from the ground which makes it inaccessible for a wheelchair to enter either of the players seating areas, one set of bleachers and the ballfield. Recommendation: careful planning needs to occur to make this area accessible to a child or parent in a wheelchair by a qualified engineer.

<u>Bathrooms</u>: There was a porta pottie on site. It was not accessible. If you only have one porta pottie on site, it has to be accessible. Recommendation: Procure an accessible one. <u>Trail beginning at lower driveway</u>: Very wide, but bumps, depressions and lots of ruts. It looks like there may be 4-wheeling in here with deep mud ruts. The ground surface also had soft, loose and some muddy surfaces, which would not accommodate my wheelchair. My wheels would have gotten stick, so this is not accessible to even check the rest of the trail.

Town Forest:

There are two locations to trails with public parking. One location is not easily identifiable, with no sign, a small dirt area with no designated parking and no identifiable path or trail. This access point is completely inaccessible.

The other location across from 421 Andover Street has a large sign that is too high, does not have raised letters and no braille. It is set in a bit, so difficult to spot unless you are looking closely for it. The parking area has no designated spaces or handicapped parking spaces, access aisle or signage. The surface is not at all level for parking or drop-off for people with disabilities. The surface was a combination of crumbled asphalt, stone, rocks, and dirt and woodchips. There are many significant depressions and loose material that is not safe for wheelchairs or someone with shaky footing as are many people with different disabilities, and not conducive to a cane. Recommendation: Get a bobcat to clear the entire opening and remove asphalt. Either put something else down, or groom to have a packed dirt surface. Identify a handicapped parking space, van accessible-sized and put in a handicapped sign, probably one with a concrete block bottom.

The entrance to the trail is steep and between boulders. There is a large pile of woodchips/mulch in front of one border which is thick and too soft for a wheelchair to go over. The path begins quite narrow, but looks like it can be cleaned up and widened. There are a lot of areas of excessive slope and cross pitch, and not too far in a steep hill. There were lots of rocks, branches and sticks, and protruding roots. As is, this is not accessible at all. Recommendation: do some maintenance to clean up the trail that has a good width. There are several sites along the side of the trail where I think you could make a sitting area for people with disabilities who would like to soak up the environment in the woods, but would not be able to continue on the path due to the steep hill inaccessibility. You could make a clearing large enough for several wheelchairs to sit and possibly two ADA-guideline benches.

A CAM assessed the trail beyond the steep hill and reported most of the trails have excessive slope and had loose surface materials, twigs, protrusions, boulders, branches and some downed trees across path of travel, which at times is narrower than 36". Also reported was an elevated walkway over a swampy part of the trail. In the center is an elevated portion requiring a step up, then levels out and then requires another step down to continue onto the trail. There are no edge protections on the sides.

McGrane Woods:

There is parking available on the street although not designated. No designated handicapped parking space. There is a curb cut from the street to the sidewalk, width 4', but is not textured, nor does it have yellow paint to signal someone of the ground change. This is easily achievable and should be corrected. There is a paved incline slope from the sidewalk to the trail. The running slope should be no steeper than 1:20, which means for every 1" of height there are at least 20" of route run. This slope has a 3.25" rise with a 24" run for a slope equal to 2.7:20, which is too steep. This should be repaved to appropriate dimensions.

<u>Sign</u> There is a sign in a tree mounted approximately 79-82.25" off the ground, which is too high. The height should be 48" from the bottom of the letter characters to 60" from the top of the characters. The text size should be 1.25", but is only 0.25". The letters/characters should be raised. There should also be lettering in braille as both tactile and visible characters are required.

This trail was difficult to find. The surface is stone, dust, dirt, gravel, some grass. There are multiple downed branches, leaves roots and growth that block the path. The trail has deep ruts, apparently from 4-wheel drive vehicles. This trail is not at all accessible.

Leonard Estates:

There is one off-street parking spot with no signage to designate it. There is no curb from parking spot to path entrance, however at the other entrance on the opposite side of the street there is a driveway curb cut to get to the sidewalk. It does not have a textured surface or yellow paint needed to delineate surface change.

Neither entrance is accessible. One entrance transitions from sidewalk to grass to steep steps along a concrete wall with over a 1' drop for each of 3 steps, leading down to a dirt path. The other entrance surface starts out as a grass strip along a fence which then dips into a steep slope. It is supposed to lead to a path, but it is imperceptible. The trail is extremely overgrown. There are areas of excessive slope and cross pitch and is unlevel. The trail is supposed to be dirt, but is

covered heavily with leaves, pine needles and vegetation which can be very slippery. It also has some deep ruts.

There are many saplings growing through where the trail is supposed to be. Also noted are fallen tree branches, fallen trees, boulders and lots of hanging vegetation blocking what should be a path. This trail is not accessible to any persons and is definitely not accessible to persons with disabilities. There is also no signage. There are no trail markers for visual guide (which would also need to be in braille).

Marjorie Road:

There is no signage for the trail. There is one off-street parking spot which does not have a sign designated it as such. The entrance is a grass surface which then turns into a dirt and stone dust path. Most of the trail is too narrow, less than 3', which is not accessible. It has heavy leaf cover which is slippery, rocks, fallen trees and branches, roots protruding and lots of overgrowth. There are no visual trail markers. This is not accessible according to ADA guidelines. It was not accessible to the walking person trying to follow this trail. The trail was not discernable.

Kylie Estates:

I understand this trail connects to Garden of Eden and Murray Hill. We looked at this location on Mill Road. We had a very difficult time locating this trail. A neighbor walking his dog finally pointed it out to us. We found two entrances. One from a paved area looking like a driveway, which led to an off-street parking area with no designated spots, but looked to accommodate about three cars. After, we found a very faded sign at a height lower than 60" which was difficult to read. Recommendation: locate the sign nearer to the street entrance at the appropriate height and other ADA guidelines for signs. The parking should have a designated handicapped parking space with access aisle. Maybe a handicapped parking sign with the international symbol of disability in a moveable concrete base can be placed there. At this entrance we did not see a path to the trail, or where the trail began. There was a very large, what looked like a sink hole. The area was overgrown with grass.

Several yards below the paved area, we saw another entrance. We saw a faded sign, not at an appropriate height or easily located and as well very faded. There was a steep decline with rocks leaves, dirt, brush and branches. The trail did not seem delineated. I was not able to access this trail with my wheelchair to further assess for intersecting trails or bike trail.

Murray Hill Estates:

I did not personally evaluate this site. On-street parking was observed, but no accessible parking spots identified. One should be designated with appropriate signage. Recommendation: all entrances to trails should have curb cuts to access the path to trails, along with textured or painted yellow to alert people of surface change. Also, the entrance has a very steep slope. Noted were some trail markings, which ended after a point. Do these trail markings also include braille? This trail apparently comes out to Saw Mill Park area in Burlington. Reported were steep areas with excessive slope and cross pitch and areas of woodchip covering that made for unstable footing. As well, small creek crossings with step stones only, which make this trail inaccessible to those in wheelchairs or using a cane.

Jacques Lane:

We did find a paved area with three parking spots not designated for the trail. No designation for a handicapped space, access aisle or handicapped signage. We did find that residents park there regularly for their personal use 100% and all three spaces were taken when we arrived. There was no sign for the trail. There was no discernible path from parking to where the trail may have been. The area is steeply sloped and very overgrown with no discernible trail.

Heritage Pines:

The Community Access Monitor that assessed this trail could not find a sign for the trail, could not find designated parking or designated handicapped parking. As well, it is reported that the area is overgrown and indiscernible as a trail including entrance points.

Hathaway Acres:

*This site was assessed by a CAM. Reported a sign within appropriate height, but no braille, raised letters or contrast in background color. No designated parking spaces and no designated handicapped parking space or sign. Shrubs and trees are grown into the path with mud and leaves providing for a slippery surface. The trail width seemed appropriate, but trail not accessible due to condition of the surface.

Green Meadow:

*This site was assessed by a CAM. Sign noted, but no raised lettering, contrast coloring or braille. Also noted from entrance on this is inaccessible due to branches, rocks, overgrowth, excessive slope and cross pitch and fallen branches.

Fisherman's Access:

*Assessed by CAM. No designed parking. No designated handicapped parking space or sign. There is a large sign, but compliant in height only. Have to use nearby driveways to access entrance. The entrance from sidewalk to dirt path has a very steep decline. Established trails visible but path has heavy leaf coverage, ruts, excessive slopes including the path to the water, over grown vegetation and fallen tree, which make it inaccessible.

Alderwood Acres:

* Assessed by CAM. No designated parking on street. No handicapped accessible space or signage. There is a sign for trail but is obscured by brush. Uneven dirt path Drop off at entrance area to dirt path is very steep and should be corrected, possibly by ramp. The trail is dirt and leaf covered. No trail markers. Trees/branches across path and overgrown vegetation obstructing path.

Beeching Avenue:

*Assessed by CAM. No parking indicated for site. No handicapped parking or signage demarcated. Transition from pavement to dirt path entrance is uneven and steep. No signs at Beeching Ave entrance. Laite Street entrance sign complies with height requirement only. As noted by your assessment heavy pine needle cover may make it slippery and there are several instances of fallen trees across the whole path.

Corum Meadows:

*Assessed by CAM. No designated parking or handicapped accessible space or signage. No sign for trail or fishing path. Entrance is uneven and inaccessible. Noted it was muddy and unstable when wet. Trail described as unmaintained dirt path with uneven ground and significant overhang in some areas, and is difficult to navigate when wet. Not accessible.

Cormier Park:

*Assessed by CAM. No designated parking spaces or handicapped parking spaces. Entrances to trails on Blanchard Road, which has sign that is height compliant only, and entrance at Cambridge Ave which has no sing, but seems to start in a resident's front yard. Trail is off sidewalk. No curb cut, must use driveway cut/slope to enter sidewalk. Areas of excessive slopes, cross pitches, protruding shrubs, trees, roots and large rocks cause tripping hazard and make it inaccessible to wheelchairs.

Brookfield Estates:

*Not assessed.

General Recommendations:

- Trail markers for visual guide to also include braille.
- Signage for each sight set at proper height with appropriate-sized raised lettering on contrasting background, also with braille.
- Signage to designate Town Trail Parking spots at each site
- There does need to be an accessible path of travel for passengers disembarking from the parking area to the site entrance, which in the case of trails is the entrance to the trail itself.
- Grooming and maintenance of surfaces of all trails should be done each year so that surfaces are evenly paved or hard-packed, with bumps less than 0.5". Roots and rocks should be removed and depressions filled in. Shrubs and vegetation overgrowth should be trimmed.

<u>Suggestion</u>: As girl or boy scouts to take on a project to groom some of the trails. Ask an eagle Scout to take on a larger project to remove fallen trees and larger branches blocking trails.

On behalf of all Commissioners involved in this survey, Respectively submitted,

Dr. Dee Genetti, Vice-Chair Wilmington Commission on Disabilities 781-240-9455 dpgenetti@gmail.com

CHAPTER 7: COMMUNICATION ELEMENTS AND FEATURES

701 General

701.1 Scope. The provisions of Chapter 7 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

702 Fire Alarm Systems

702.1 General. Fire alarm systems shall have permanently installed audible and visible alarms complying with NFPA 72 (1999 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1), except that the maximum allowable sound level of audible notification appliances complying with section 4-3.2.1 of NFPA 72 (1999 edition) shall have a sound level no more than 110 dB at the minimum hearing distance from the audible appliance. In addition, alarms in guest rooms required to provide communication features shall comply with sections 4-3 and 4-4 of NFPA 72 (1999 edition) or sections 7.4 and 7.5 of NFPA 72 (2002 edition).

EXCEPTION: Fire alarm systems in medical care *facilities* shall be permitted to be provided in accordance with industry practice.

703 Signs

703.1 General. Signs shall comply with 703. Where both visual and *tactile characters* are required, either one sign with both visual and *tactile characters*, or two separate signs, one with visual, and one with *tactile characters*, shall be provided.

703.2 Raised Characters. Raised *characters* shall comply with 703.2 and shall be duplicated in braille complying with 703.3. Raised *characters* shall be installed in accordance with 703.4.

Advisory 703.2 Raised Characters. Signs that are designed to be read by touch should not have sharp or abrasive edges.

- 703.2.1 Depth. Raised characters shall be 1/32 inch (0.8 mm) minimum above their background.
- 703.2.2 Case. Characters shall be uppercase.
- **703.2.3 Style.** Characters shall be sans serif. Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms.
- **703.2.4 Character Proportions.** Characters shall be selected from fonts where the width of the uppercase letter "O" is 55 percent minimum and 110 percent maximum of the height of the uppercase letter "I".
- **703.2.5 Character Height.** Character height measured vertically from the baseline of the character shall be 5/8 inch (16 mm) minimum and 2 inches (51 mm) maximum based on the height of the uppercase letter "I".

EXCEPTION: Where separate raised and visual *characters* with the same information are provided, raised *character* height shall be permitted to be ½ inch (13 mm) minimum.

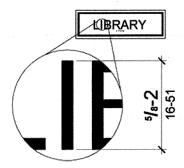


Figure 703.2.5
Height of Raised Characters

703.2.6 Stroke Thickness. Stroke thickness of the uppercase letter "I" shall be 15 percent maximum of the height of the *character*.

703.2.7 Character Spacing. Character spacing shall be measured between the two closest points of adjacent raised characters within a message, excluding word spaces. Where characters have rectangular cross sections, spacing between individual raised characters shall be 1/8 inch (3.2 mm) minimum and 4 times the raised character stroke width maximum. Where characters have other cross sections, spacing between individual raised characters shall be 1/16 inch (1.6 mm) minimum and 4 times the raised character stroke width maximum at the base of the cross sections, and 1/8 inch (3.2 mm) minimum and 4 times the raised character stroke width maximum at the top of the cross sections. Characters shall be separated from raised borders and decorative elements 3/8 inch (9.5 mm) minimum.

703.2.8 Line Spacing. Spacing between the baselines of separate lines of raised *characters* within a message shall be 135 percent minimum and 170 percent maximum of the raised *character* height.

703.3 Braille. Braille shall be contracted (Grade 2) and shall comply with 703.3 and 703.4.

703.3.1 Dimensions and Capitalization. Braille dots shall have a domed or rounded shape and shall comply with Table 703.3.1. The indication of an uppercase letter or letters shall only be used before the first word of sentences, proper nouns and names, individual letters of the alphabet, initials, and acronyms.

Table 703.3.1 Braille Dimensions

Minimum in Inches Maximum in Inches		
0.059 (1.5 mm) to 0.063 (1.6 mm)		
0.090 (2.3 mm) to 0.100 (2.5 mm)		
0.241 (6.1 mm) to 0.300 (7.6 mm)		
0.025 (0.6 mm) to 0.037 (0.9 mm)		
0.395 (10 mm) to 0.400 (10.2 mm)		

1. Measured center to center.

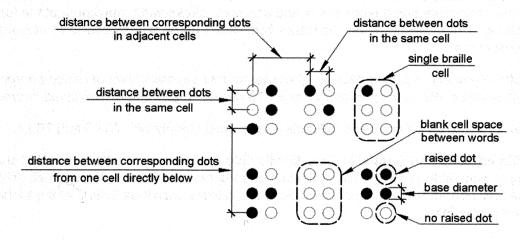


Figure 703.3.1 Braille Measurement

703.3.2 Position. Braille shall be positioned below the corresponding text. If text is multi-lined, braille shall be placed below the entire text. Braille shall be separated 3/8 inch (9.5 mm) minimum from any other *tactile characters* and 3/8 inch (9.5 mm) minimum from raised borders and decorative *elements*.

EXCEPTION: Braille provided on elevator car controls shall be separated 3/16 inch (4.8 mm) minimum and shall be located either directly below or adjacent to the corresponding raised *characters* or symbols.

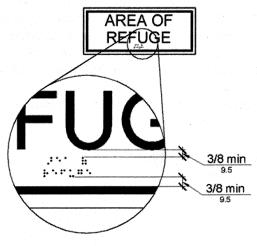


Figure 703.3.2 Position of Braille

703.4 Installation Height and Location. Signs with tactile characters shall comply with 703.4.

703.4.1 Height Above Finish Floor or Ground. *Tactile characters* on signs shall be located 48 inches (1220 mm) minimum above the finish floor or ground surface, measured from the baseline of the lowest *tactile character* and 60 inches (1525 mm) maximum above the finish floor or ground surface, measured from the baseline of the highest *tactile character*.

EXCEPTION: *Tactile characters* for elevator car controls shall not be required to comply with 703.4.1.

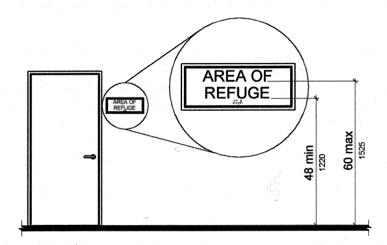


Figure 703.4.1
Height of Tactile Characters Above Finish Floor or Ground

703.4.2 Location. Where a *tactile* sign is provided at a door, the sign shall be located alongside the door at the latch side. Where a *tactile* sign is provided at double doors with one active leaf, the sign shall be located on the inactive leaf. Where a *tactile* sign is provided at double doors with two active leafs, the sign shall be located to the right of the right hand door. Where there is no wall *space* at the latch side of a single door or at the right side of double doors, signs shall be located on the nearest adjacent wall. Signs containing *tactile characters* shall be located so that a clear floor *space* of 18 inches (455 mm) minimum by 18 inches (455 mm) minimum, centered on the *tactile characters*, is provided beyond the arc of any door swing between the closed position and 45 degree open position.

EXCEPTION: Signs with *tactile characters* shall be permitted on the push side of doors with closers and without hold-open devices.

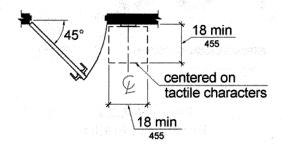


Figure 703.4.2

Location of Tactile Signs at Doors

703.5 Visual Characters. Visual characters shall comply with 703.5.

EXCEPTION: Where visual *characters* comply with 703.2 and are accompanied by braille complying with 703.3, they shall not be required to comply with 703.5.2 through 703.5.9.

703.5.1 Finish and Contrast. Characters and their background shall have a non-glare finish. Characters shall contrast with their background with either light characters on a dark background or dark characters on a light background.

Advisory 703.5.1 Finish and Contrast. Signs are more legible for persons with low vision when characters contrast as much as possible with their background. Additional factors affecting the ease with which the text can be distinguished from its background include shadows cast by lighting sources, surface glare, and the uniformity of the text and its background colors and textures.

703.5.2 Case. Characters shall be uppercase or lowercase or a combination of both.

703.5.3 Style. Characters shall be conventional in form. Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms.

703.5.4 Character Proportions. Characters shall be selected from fonts where the width of the uppercase letter "O" is 55 percent minimum and 110 percent maximum of the height of the uppercase letter "I".

703.5.5 Character Height. Minimum *character* height shall comply with Table 703.5.5. Viewing distance shall be measured as the horizontal distance between the *character* and an obstruction preventing further approach towards the sign. *Character* height shall be based on the uppercase letter "I".

Table 703.	5.5 Visual	Character	Height
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Height to Finish Floor or Ground From Baseline of Character	Horizontal Viewing Distance	Minimum Character Height	
40 inches (1015 mm) to less	less than 72 inches (1830 mm)	5/8 inch (16 mm)	
than or equal to 70 inches (1780 mm)	72 inches (1830 mm) and greater	5/8 inch (16 mm), plus 1/8 inch (3.2 mm) per foot (305 mm) of viewing distance above 72 inches (1830 mm)	
Greater than 70 inches (1780	less than 180 inches (4570 mm)	2 inches (51 mm)	
mm) to less than or equal to 120 inches (3050 mm)	180 inches (4570 mm) and greater	2 inches (51 mm), plus 1/8 inch (3.2 mm) per foot (305 mm) of viewing distance above 180 inches (4570 mm)	
greater than 120 inches	less than 21 feet (6400 mm)	3 inches (75 mm)	
(3050 mm)	21 feet (6400 mm) and greater	3 inches (75 mm), plus 1/8 inch (3.2 mm) per foot (305 mm) of viewing distance above 21 feet (6400 mm)	

703.5.6 Height From Finish Floor or Ground. Visual *characters* shall be 40 inches (1015 mm) minimum above the finish floor or ground.

EXCEPTION: Visual *characters* indicating elevator car controls shall not be required to comply with 703.5.6.

- **703.5.7 Stroke Thickness.** Stroke thickness of the uppercase letter "I" shall be 10 percent minimum and 30 percent maximum of the height of the *character*.
- **703.5.8 Character Spacing.** Character spacing shall be measured between the two closest points of adjacent *characters*, excluding word *spaces*. Spacing between individual *characters* shall be 10 percent minimum and 35 percent maximum of *character* height.
- **703.5.9** Line Spacing. Spacing between the baselines of separate lines of *characters* within a message shall be 135 percent minimum and 170 percent maximum of the *character* height.

703.6 Pictograms. Pictograms shall comply with 703.6.

2010 Standards: Titles II and III - 191

703.6.1 Pictogram Field. *Pictograms* shall have a field height of 6 inches (150 mm) minimum. *Characters* and braille shall not be located in the *pictogram* field.

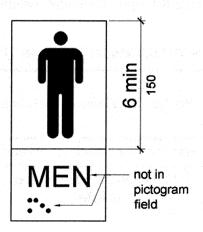


Figure 703.6.1 Pictogram Field

703.6.2 Finish and Contrast. *Pictograms* and their field shall have a non-glare finish. *Pictograms* shall contrast with their field with either a light *pictogram* on a dark field or a dark *pictogram* on a light field.

Advisory 703.6.2 Finish and Contrast. Signs are more legible for persons with low vision when characters contrast as much as possible with their background. Additional factors affecting the ease with which the text can be distinguished from its background include shadows cast by lighting sources, surface glare, and the uniformity of the text and background colors and textures.

703.6.3 Text Descriptors. *Pictograms* shall have text descriptors located directly below the *pictogram* field. Text descriptors shall comply with 703.2, 703.3 and 703.4.

703.7 Symbols of Accessibility. Symbols of accessibility shall comply with 703.7.

703.7.1 Finish and Contrast. Symbols of *accessibility* and their background shall have a non-glare finish. Symbols of *accessibility* shall contrast with their background with either a light symbol on a dark background or a dark symbol on a light background.

Advisory 703.7.1 Finish and Contrast. Signs are more legible for persons with low vision when characters contrast as much as possible with their background. Additional factors affecting the ease with which the text can be distinguished from its background include shadows cast by lighting sources, surface glare, and the uniformity of the text and background colors and textures.

703.7.2 Symbols.

703.7.2.1 International Symbol of Accessibility. The International Symbol of *Accessibility* shall comply with Figure 703.7.2.1.



Figure 703.7.2.1 International Symbol of Accessibility

703.7.2.2 International Symbol of TTY. The International Symbol of *TTY* shall comply with Figure 703.7.2.2.



Figure 703.7.2.2 International Symbol of TTY

703.7.2.3 Volume Control Telephones. Telephones with a volume control shall be identified by a *pictogram* of a telephone handset with radiating sound waves on a square field such as shown in Figure 703.7.2.3.



Figure 703.7.2.3 Volume Control Telephone



TOWN OF WILMINGTON

121 GLEN ROAD WILMINGTON, MA 01887

OFFICE OF THE TOWN MANAGER (978) 658-3311 FAX (978) 658-3334 TTY (978) 694-1417

December 4, 2013

Ms. Myra Berloff Director Massachusetts Office on Disability One Ashburton Place, Room 1305 Boston, MA 02108

Dear Ms. Berloff,

This is to confirm that the ADA Coordinator for the Town of Wilmington is George Hooper, Director of Public Buildings. His contact information is below.

George Hooper Director of Public Buildings 30 Church Street Wilmington, MA 01887 (978) 658-3017 ghooper@wilmingtonma.gov

Please be advised that the Town of Wilmington is conducting a review of its ADA Policy and intends to update it within the next year. The Policy was last reviewed in 2002.

The review will include an assessment of current compliance, an update of information and accommodation services, and a review of the policy's adherence to current laws and regulations.

I anticipate this review will be completed by July of 2014. If it results in a change in the designated ADA Coordinator, I will provide the new information upon adoption of the revised policy.

Please contact Kendra Amaral, Assistant Town Manager/HR Director at 978-658-3311 or at kamaral@wilmingtonma.gov if you have any questions.

Sincerely,

Jeffrey M. Hull Town Manager

Town of Wilmington - ADA Policy

I. ADMINISTRATION

A. Notice of Compliance:

TOWN OF WILMINGTON



PUBLIC NOTICE AMERICANS WITH DISABILITIES ACT

The Town of Wilmington does not discriminate on the basis of disability. Program applicants, participants, members of the general public, employees, job applicants and others are entitled to participate in, and benefit from, all town programs, activities and services without regard to disability.

Copies of this notice are available, upon request, in alternate print formats (large print, audiotape, Braille, computer disk, etc.) Our grievance procedure, self-evaluation, as well as ADA policies, practices and procedures are available upon request.

The Town of Wilmington has designated the following person to coordinate its efforts to comply with the ADA. Inquiries, requests and complaints should be directed to:

George W. Hooper, II, Superintendent
Public Buildings Department
30 Church Street
Wilmington, MA 01887
VOICE (978) 658-3017
FAX (978) 658-6506
TTY (978) 694-1417 {Town Hall}
TTY (978) 657-8368 {Emergency – Public Safety Dispatch}
TTY (978) 657-4625 {Wilmington Memorial Library}

Individuals who need auxiliary aids for effective communication in programs and services of the Town of Wilmington are invited to make their needs and preferences known to the ADA Compliance Coordinator.

This notice is available in large print, on audiotape, and in Braille, from the ADA Compliance Coordinator.

This public notice is posted prominently at all sites and on all program brochures and manuals.

B. Town of Wilmington ADA Grievance Procedure:

The Town of Wilmington has adopted an internal grievance procedure providing prompt and equitable resolution of complaints alleging any action prohibited by the U.S. Department of Justice regulations implementing title II of the Americans with Disabilities Act. Title II states, in part, that "no otherwise qualified disabled individual shall, solely by reason of such disability, be excluded from participation in, denied the benefits of, or be subjected to discrimination" in employment, programs or activities sponsored by a public entity.

Complaints should be addressed to the ADA Coordinator, Town Hall, 121 Glen Road, Wilmington, MA 01887-3597, phone (978) 658-3017. George W Hooper, II, Public Buildings Superintendent, has been designated to coordinate ADA compliance efforts.

- 1. A complaint should be filed in writing and should contain the name and address of the person filing it, a brief description of the alleged violation(s), when the alleged violation(s) occurred, the name of any witnesses to the alleged violation(s) and the location of the alleged violation(s).
- 2. A complaint should be filed as soon as possible after the complainant becomes aware of the alleged violation(s). It is suggested that such complaint be filed within fourteen (14) days from the alleged violation(s).
- 3. An investigation, as may be appropriate, shall follow the filing of a complaint. The investigation shall be conducted by the ADA Coordinator. The ADA Coordinator may request that one or more members of the ADA Advisory Committee assist with the investigation. The investigation is intended to be informal but thorough in process affording all interested persons and their representatives, if any, an opportunity to submit evidence relevant to the complaint.
- 4. A written determination as to the validity of the complaint and a description of the resolution, if any, shall be issued by the ADA Coordinator and a copy forwarded to the complainant no later than thirty (30) calendar days after receipt of the complaint.

- 5. The complainant may appeal the decision to the Town Manager by submitting the request for appeal in writing with a copy of the determination made by the ADA Coordinator. The Town Manager may conduct his own investigation, as he deems appropriate. He shall render a written decision to the complainant not later than thirty (30) calendar days after receipt of the request for appeal.
- 6. The ADA Coordinator shall maintain the files and records relating to all complaints received regarding violations of the ADA and the town's responses to these complaints.
- 7. The right of a person to a prompt and equitable resolution of the complaint filed hereunder shall not be impaired by the person's pursuit of other remedies such as filing of an ADA complaint with the responsible federal department or agency. Use of the grievance procedure is not a prerequisite to the pursuit of other remedies.
- 8. This policy shall be construed to protect the substantive rights of interested persons to meet appropriate due process standards and to assure that the Town of Wilmington complies with the ADA and the implementing regulations.

II. EMPLOYMENT

A. Reasonable Accommodation Policy

It is the policy of the Town of Wilmington that no otherwise qualified individual with a disability shall, solely by reason of his/her disability, be excluded from employment with the Town of Wilmington. Employment review and hiring will be based on the employee/prospective employee's ability to perform what the Town of Wilmington determines to be the essential functions of a job.

Further, it is the policy of the Town of Wilmington that reasonable accommodation will be made to the known physical or mental limitations of an otherwise qualified applicant or employee with a disability, unless the Town of Wilmington can demonstrate that the accommodation imposes an undue financial or administrative hardship on the operation of its programs. The Town will provide reasonable accommodations to ensure equal employment opportunity in the application process; to enable a qualified individual with a disability to perform the essential functions of the job; and to enable an employee with a disability to enjoy equal benefits and privileges of employment.

The duty to provide reasonable accommodation is on-going, and may arise at any time that an employee's job changes or an employee develops a disability.

When attempting to identify what is a reasonable accommodation, the appointing authority and department head should do the following:

- 1. Examine the particular job involved, to determine its purpose and its essential functions.
- 2. Consult with the individual with the disability to determine his or her specific physical or mental abilities and limitations.
- 3. In consultation with the individual, identify potential accommodations and assess how effective each would be.
- 4. If an individual requests an accommodation which the appointing authority or department head considers to be unnecessary, the department head may request written documentation from a physician or other professional with knowledge of the individual's functional limitations.

Notice of the availability of reasonable accommodations for job applicants will be included in postings and advertisements and will be made available upon request to applicants with disabilities during the pre-employment process, if necessary, to provide equal opportunity to secure employment with the Town of Wilmington.

All prospective employees will be informed at the initial interview that the Town of Wilmington does not discriminate on the basis of disability and that requests for reasonable accommodations needed for the performance of essential job functions or for the enjoyment of other benefits of employment should be made by prospective employees following receipt of a conditional offer of employment, preferably at the post employment offer meeting.

It is the obligation of the individual with the disability to request reasonable accommodations from their immediate supervisor or from their department head. Requests for reasonable accommodations should be made verbally and in writing describing the nature and purpose of the requested accommodation. Assistance will be made available upon request to any individuals who need assistance in identifying or documenting the reasonable accommodations needed.

A decision regarding reasonable accommodation requests will be made within five (5) business days of the submission of the request and any supporting documentation required by the Town of Wilmington. The effectiveness of the accommodation and need for modifications or additional accommodation will be assessed during the first month of use of the accommodation.

Current employees seeking reasonable accommodations should make requests to their immediate supervisor who will inform the ADA Coordinator. Requests for accommodation can be made at any time when they become necessary to the performance of essential job functions or the enjoyment of benefits of employment. A decision regarding the requested accommodation will be made within ten (10) working days of the submission of the request and any supporting documentation required.

The final decision concerning any requested accommodation that may represent an undue financial or administrative hardship will be made by the department head. Applicants or employees have the right to appeal the denial of any accommodation request using the ADA Grievance Procedure.

B. <u>Employment Training Assurance</u>

It is the policy of the Town of Wilmington that staff training and development activities provided to town personnel and volunteers include information about rights and obligations under Title I of the ADA. Information about disability rights and this policy will be made available to new hires with the orientation material that they receive.

All materials include information on reasonable accommodations, grievance procedures, and essential versus nonessential job functions, permissible and impermissible inquiries. Training will be conducted regularly. The ADA material in the orientation package will be reviewed with each new hire. The ADA Coordinator is the employee responsible for ensuring that the practice is followed.

Details of disability are kept separate from other employment information. Employee rights to confidentiality (whenever confidential information regarding disability, etc. is divulged) will be assured.

III. NON-DISCRIMINATORY OPERATIONS

A. Equal Opportunity Policy

The Town of Wilmington does not discriminate in employment practices against qualified job applicants or employees on the basis of disability in the areas of: hiring; promotion; demotion; transfer; recruitment; job advertisements; termination; post job offer; and training, etc. No qualified person with a disability shall be denied the benefits of, be excluded from participation in or otherwise be subjected to discrimination under any of the Town of Wilmington's programs or activities.

The Town of Wilmington shall:

1. Provide a program of information and awareness training about persons with disabilities to all supervisors and interviewers;

- 2. Review all job descriptions to ensure that they do not tend to screen out qualified individuals;
- 3. Eliminate unnecessary, non-job related mental and/or physical requirements for entry into each job;
- 4. In the area of promotion, when a vacancy occurs, institute an internal search to determine if there is a qualified employee with a disability who could be promoted; and
- 5. Provide alternate methods of informing employees with disabilities of relevant information (such as informing blind individuals of announcements posted on bulletin boards).

In providing its services, programs and activities, the Town of Wilmington will not:

- 1. Deny a qualified individual with a disability the opportunity to participate in, or benefit from, a benefit, service or activity.
- 2. Afford a qualified individual with a disability the opportunity to participate in, or benefit from, any aid, benefit or service that is not equal to that afforded to others.
- 3. Deny a qualified individual with a disability the opportunity to participate as a member of any board, committee or commission, or any other entity of the Town of Wilmington.
- 4. Otherwise limit a qualified individual with a disability the enjoyment of any right, privilege, advantage or opportunity enjoyed by other qualified individuals receiving the aid, benefit or service.
- 5. As earlier stated, it is the policy of the Town of Wilmington to ensure that persons with disabilities are provided maximum opportunity to participate in, and benefit from, programs, services and activities.

 Moreover, it is our goal that such participation be in the same manner as those of non-disabled persons and in fully integrated settings.

It is understood that the obligation to comply with this policy is not obviated or alleviated by any state or local law or other requirement that, based on disability, imposes inconsistent or contradictory prohibition. Any prohibitions or limits upon the eligibility of qualified individuals with disabilities to receive services or practice any occupation or profession are not allowed under this policy.

B. Reasonable Modification Policy

The Town of Wilmington will make reasonable modifications to policies and procedures necessary to accommodate the needs of a person with a disability whenever an otherwise qualified person with a disability requests such modification, unless it can be demonstrated that such an accommodation would impose an undue burden or fundamental alteration to the program.

The Town of Wilmington will comply with all applicable federal and state laws and regulations relative to the use of assistive equipment and trained assistance animals. In addition, no arbitrary restrictions or limitations will be placed on the type of assistive equipment or trained assistance animals that consumers may bring with them to Town of Wilmington facilities.

Reasonable modifications will be made when they are needed to afford persons with disabilities access to services and programs. Persons requesting a particular modification may be asked to furnish documentation to support the need for the modification. Final decisions regarding requests for reasonable modifications will be made by the ADA Coordinator in a timely fashion (no longer than ten (10) working days).

Individuals seeking to contest a denial of a request for reasonable modification will be given the grievance procedure in a format appropriate to their needs.

C. <u>Eligibility Requirements Assurance</u>

Any prohibitions or limits on the eligibility of qualified individuals with disabilities to receive services or practice any occupation or profession are not allowed under this policy. Eligibility requirements have been reviewed by the applicable department head and the ADA Coordinator and updated as necessary to comply with the requirements of the ADA. Whenever programs formulate new eligibility policies or new programs are developed, policies will be reviewed with the ADA Coordinator to ensure compliance. Staff will be informed of, and trained on, any changes in eligibility requirements that may arise.

- The Town may not unreasonably refuse to allow a person with a disability to participate in a program, service, or activity because of disability.
- 2. The Town must eliminate unnecessary eligibility standards which result in denial of equal opportunity to persons with disabilities.
- 3. The Town is required to modify policies, practices and procedures that tend to deny equal access unless fundamental alteration of programs would result.

- 4. The Town must furnish auxiliary aids and services to ensure effective communication.
- 5. All safety requirements are reviewed to ensure that they are based on actual risks. It has been determined that there are no discriminatory requirements. The determination of the existence of a direct threat must be based on objective factual evidence and not stereotypes or misconceptions about a person's disability. As an example, it has been determined that the requirement that elder residents requiring the use of a wheelchair, who will be transported in the Elderly Services minivan, must have their chair properly secured in the lift and must be properly secured in their wheelchair is reasonable and appropriate. If any new criteria are developed, their impact on persons with disabilities will be reviewed by the ADA Coordinator and the department head and all effected personnel will be informed of changes in eligibility requirements that may arise.

D. Assurance Regarding Surcharges

It is the policy of the Town of Wilmington that surcharges will not be charged to persons with disabilities, their family members or organizations representing them for the provision of reasonable accommodations, reasonable modifications to policies and procedures, auxiliary aids and services or any other costs related to the participation of a person with a disability.

E. <u>Integrated Services Assurance</u>

It is the policy of the Town of Wilmington that all of our services, programs and activities are provided in the most integrated setting possible. People with disabilities will not be required to participate in separate programs even if separate programs specifically designed to meet the need of persons with disabilities are offered.

Services will not be provided to any person with a disability in a manner or at a location different from that available to other service recipients unless the potential for removal of architectural barriers or the use of assistive devices and equipment have been found to be inadequate or inappropriate to the needs of the individual. In all cases, the affected individuals, family members and other representatives when appropriate will be fully involved in the consideration and decision-making processes.

F. Significant Assistance Assurance

It is the policy of the Town of Wilmington that programs to whom we provide significant support may not discriminate against people with disabilities. All contracts and all program sites are regularly assessed to ensure nondiscrimination against people with disabilities. All new contracts and programs are assessed prior to approval to ensure they do not discriminate against people with disabilities.

G. <u>Accessible Transportation Policy</u>

It is the policy of the Town of Wilmington that transportation services provided are accessible to participants in our programs regardless of disability. When programs are offered in which the Town provides transportation, the Town shall ensure that such modes of transportation are accessible to individuals with disabilities. As noted previously the Elderly Service minivan is handicapped accessible. Senior citizens seeking transportation may call the Elderly Services Department at (978) 657-7595 or contact the Town Manager's Office using TTY at (978) 694-1417. Trips sponsored by the Recreation Department that require use of buses include handicapped accessible buses. Individuals with disabilities who wish to participate in a recreation trip should notify the Recreation Department of their requirements by calling the department at (978) 658-4270 or contacting the Town Manager's Office using TTY at (978) 694-1417. Calls should be made during normal business hours between 8:30 a.m. and 4:30 p.m. Monday through Friday.

H. <u>Community Referral Assurance</u>

Whenever the Town of Wilmington provides a referral to another program or service, it is our policy to determine whether primary referral agencies (those commonly used) are accessible to persons with disabilities and aware of the obligations of the ADA. When making referrals, the Town of Wilmington provides clients with disabilities information regarding community programs that, to the best of our knowledge, are accessible and/or in compliance with ADA and which are not. In each program area operated by the referral agency, we have determined by telephone survey that there is at least one accessible provider in each of the categories of services in which we typically make referrals. A list of accessible community referrals is available from the applicable department heads.

I. Training Assurance Regarding Non-Discriminatory Program Operation

The Town of Wilmington will provide ADA awareness training as part of its in-service training program. The town's programs operate in such a manner that does not discriminate against people with disabilities. Training shall include a full explanation of the town's ADA policies, procedures, and practices. The ADA Coordinator has the overall responsibility for ensuring that all staff are trained, including new employees.

IV. EFFECTIVE COMMUNICATION

A. Effective Communications Policy

It is the policy of the Town of Wilmington that auxiliary aids and services will be provided when necessary to ensure effective communication with persons whose disabilities effect communication. Persons with communications disabilities will be given the opportunity to request the aid or service that they prefer and the requested aid or service will be given primary consideration by the Town of Wilmington and will be provided unless doing so would impose an undue burden or a fully effective alternative is available.

The procedure for anyone who requests accessible formats (or any type of effective communication) is:

- 1. To specify his/her accessible format either in person, over the telephone, or in writing to the ADA Coordinator at least 30 days in advance of the event.
- 2. Within five (5) business days, the town will provide the most reasonable and appropriate format to the requester at no charge.

Such a determination of undue burden or reasonable and appropriateness will be made by the ADA Coordinator. In deciding what type of aid or service to provide, primary consideration is given to the type of aid or service preferred by the person with a disability.

B. <u>TTY/TDD Assurance</u>

TTY machines are available at the Town of Wilmington Town Hall, 121 Glen Road: Wilmington Public Safety Building, Adelaide Street and the Memorial Library at 175 Middlesex Avenue. TTY training will be provided for all employees and updated on an annual basis. The TTY number for Town Hall is (978) 694-1417, for the Public Safety Central Dispatch is (978) 657-8368 and for the Memorial Library (978) 657-4625 and are listed under Wilmington, Town of in the telephone directory. The TTY number is printed on all documents and mailings that contain the agency's voice telephone number.

C. Alternative Format Policy and Procedures

It is the policy of the Town of Wilmington to make all documents, publications and materials used in agency programs available to persons with disabilities who need them in alternate formats. Procedures have been established for the provision of alternative formats including large print, Braille, audiotape and computer disks. Braille materials may be purchased through:

National Braille Press, Inc. 88 St. Stephen Street, Boston, MA (617) 266-6160

Mass Association for the Blind, 200 Ivy Street, Brookline, MA (617) 738-5110

Large print, short audiotapes and computer disks in ASCII formats will be prepared by the department from which the request is made. Preparation of long audiotapes may be purchased through:

Mass Association for the Blind, 200 Ivy Street, Brookline, MA (617) 738-5110

Recording for the Blind & Dyslexic, 43 Thorndike St., Cambridge, MA (617) 577-1111

Large print resources include:

Resources for Rehabilitation, 33 Bedford St., Suite 19A, Lexington, MA 02420 (781) 862-6455

Sight Line Productions, 505 Paradise Road, Suite 200, Swampscott, MA 01901 (781) 595-9800

The procedure for requesting alternate formats is:

- 1. The person making the request should identify the materials desired and specify his/her preferred alternate format to the department either in person, by phone or in writing at least ten (10) days in advance of the event or activity for which the material is needed.
- 2. The materials will be provided in the requested format at no charge. (Every attempt will be made to meet requests made less than ten (10) days before an event or activity.)

3. The ADA Coordinator shall make the final determination as to whether the request presents an undue burden or whether the format requested can be accommodated. If, after primary consideration has been given to the preferred format, the request cannot be met, an alternative effective format will be offered. If a request cannot be met, the person making the request will be informed as soon as possible but at least two (2) days in advance of the event or activity.

D. Interpreter Services Policy

It is the policy of the Town of Wilmington that sign language interpreters will be provided upon request to any person needing interpreter services in order to participate in any meeting, program or activity of the town. Requests should be made at least fourteen (14) days in advance of the scheduled event or meeting. (Every reasonable effort will be made to meet requests made with less than fourteen (14) days notice.) Requests should be made either in person, by telephone or in writing to the ADA coordinator or Assistant Town Manager. The ADA Coordinator shall make the final determination as to whether the request represents an undue burden.

Upon receipt of the request, the ADA Coordinator or other responsible employee will contact the Massachusetts Commission for the Deaf and Hard of Hearing (MCDHH), 210 South Street, Boston, MA 02111 (800) 882-1155 or (617) 695-7500 (voice), (617) 695-7600 (TTY) to schedule the interpreter service. If informed that MCDHH has not been successful in scheduling interpreters as requested, staff of the Town of Wilmington will immediately attempt to contact and schedule a freelance interpreter.

If an interpreter service cannot be obtained, the ADA Coordinator will offer the option of an alternative effective form of communication. If an alternative format is not available the Town Manager or his designee will offer to postpone the meeting until such a time as an interpreter can be scheduled.

It is the Town of Wilmington's policy to ensure funds are available for interpreting services.

E. Assistance Listening Device Assurance

It is the policy of the Town of Wilmington that assistive listening devices will be provided upon request to persons needing such devices to participate in programs, services and activities of the agency. Assistive listening devices will be rented through:

ADCare Educational Institute (ADC) (508) 752-7313 (508) 754-0039 (TTY)

The procedure for requesting an assistive listening device is for the person needing the device (or his/her representative) to identify his/her need for a device in person, by telephone or in writing to the ADA Coordinator or Assistant Town Manager at least ten (10) business days before the scheduled event or activity will take place.

The ADA Coordinator or Assistant Town Manager or other responsible member of the staff will contact ADC upon receipt of the request and arrange for rental and timely delivery of the device by express mail. (Every reasonable effort will be made to meet requests made with less than ten (10) days notice.)

F. TV Captioning Assurance

If television is used by the Town of Wilmington, it will be equipped with a captioning decoder chip. If necessary, staff will be instructed in the use of the decoder.

G. <u>Video Assurance</u>

It is the policy of the Town of Wilmington to provide captioned versions of video tapes when such captioning is available in order to ensure that presentations are accessible to all individuals with disabilities.

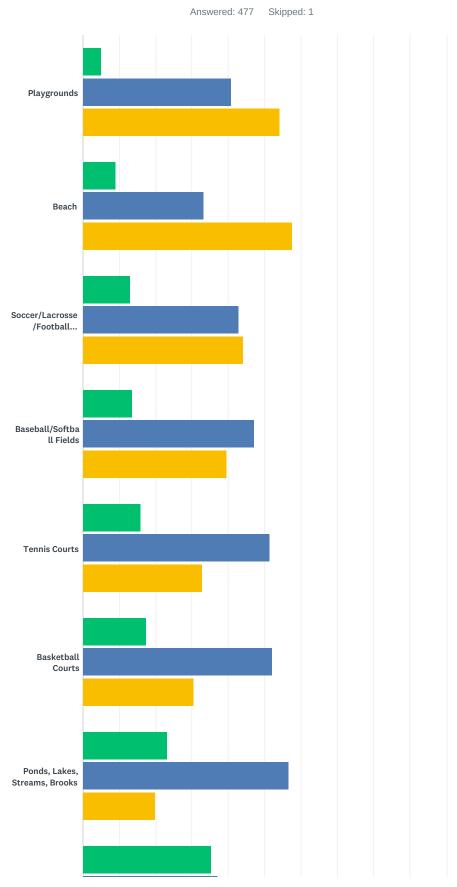
H. Training Assurance

It is the policy of the Town of Wilmington that, in addition to staff training and other staff development activities provided to town personnel and volunteers, including training on the use of a TTY and other equipment necessary to assure effective communication, personnel also receive training in procedures and policies on receiving and handling requests for auxiliary aids and services and for ensuring that primary consideration is given to the type of service or format preferred by the person with the disability. Training on effective communication will be provided periodically as needed.

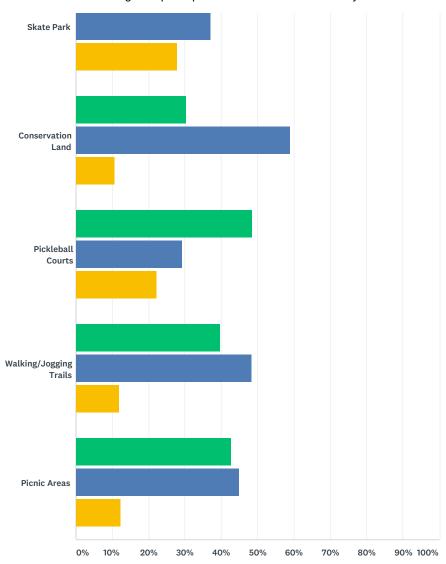
Date:	
Town Manager	Board of Selectmen

APPENDIX III: 2019 Community Survey

Q1 How familiar are you with the open spaces/recreational spaces in Town?



Town of Wilmington Open Space & Recreation Plan Survey October 2019



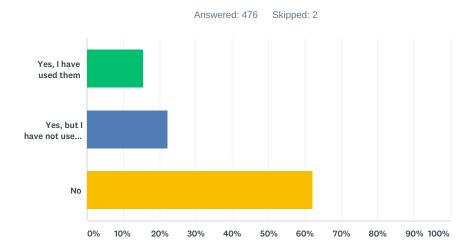
	NOT AT ALL FAMILIAR	SOMEWHAT FAMILIAR	VERY FAMILIAR	TOTAL	WEIGHTED AVERAGE
Playgrounds	5.04% 24	40.76% 194	54.20% 258	476	2.49
		194	230	470	2.49
Beach	9.07%	33.33%	57.59%		
	43	158	273	474	2.49
Soccer/Lacrosse/Football	12.95%	42.89%	44.16%		
Fields	61	202	208	471	2.31
Baseball/Softball Fields	13.50%	47.05%	39.45%		
	64	223	187	474	2.26
Tennis Courts	15.86%	51.37%	32.77%		
	75	243	155	473	2.17
Basketball Courts	17.41%	52.02%	30.57%		
	82	245	144	471	2.13
Ponds, Lakes, Streams,	23.31%	56.78%	19.92%		
Brooks	110	268	94	472	1.97
Skate Park	35.26%	36.97%	27.78%		
	165	173	130	468	1.93
Conservation Land	30.36%	59.02%	10.62%		
	143	278	50	471	1.80

Not at all familiar Somewhat familiar Very familiar

48.61%	29.21%	22.17%		
228	137	104	469	1.74
39.79%	48.30%	11.91%		
187	227	56	470	1.72
42.62%	44.94%	12.45%		
202	213	59	474	1.70
	228 39.79% 187 42.62%	228 137 39.79% 48.30% 187 227 42.62% 44.94%	228 137 104 39.79% 48.30% 11.91% 187 227 56 42.62% 44.94% 12.45%	228 137 104 469 39.79% 48.30% 11.91% 187 227 56 470 42.62% 44.94% 12.45%

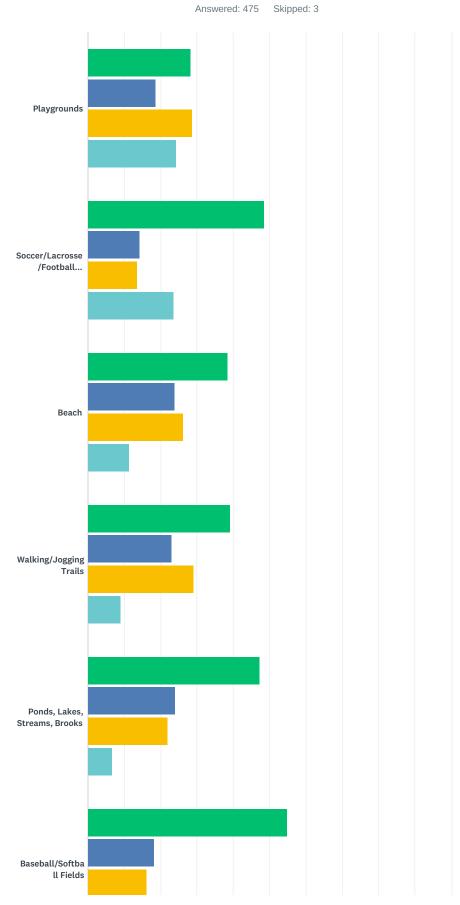
#	OTHER (PLEASE SPECIFY)	DATE
1	Middlesex Canal	11/8/2019 1:14 PM
2	Dog park - Somewhat familiar	11/7/2019 6:56 PM
3	The towns youth would truly benefit from a new park designated for freestyle scooters and bikes	11/5/2019 8:03 AM
4	Field Hockey High school	10/24/2019 1:33 PM
5	senior center	10/24/2019 9:40 AM
6	Wish we had a community pool- esp with Silver lake closings this year	10/23/2019 10:16 AM
7	Dog Park	10/20/2019 5:17 PM
8	Dog park	10/19/2019 8:09 AM
9	public gardening	10/19/2019 6:51 AM
10	Dog park	10/19/2019 6:37 AM
11	We love the skate park	10/18/2019 10:24 PM
12	No	10/18/2019 9:26 PM
13	Dog park	10/18/2019 3:20 PM

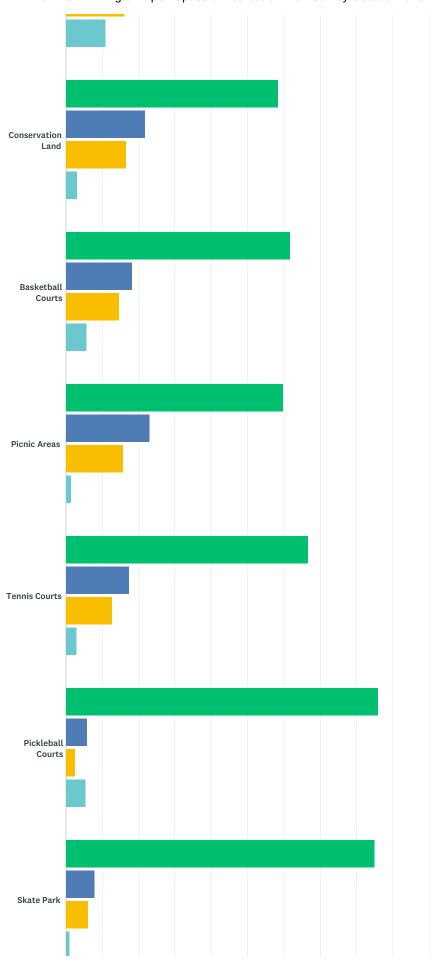
Q2 Are you aware of the GIS maps on the Town's website?



ANSWER CHOICES	RESPONSES	
Yes, I have used them	15.55%	74
Yes, but I have not used them	22.27%	106
No	62.18%	296
TOTAL		476

Q3 How often do you use these open spaces/recreational spaces?





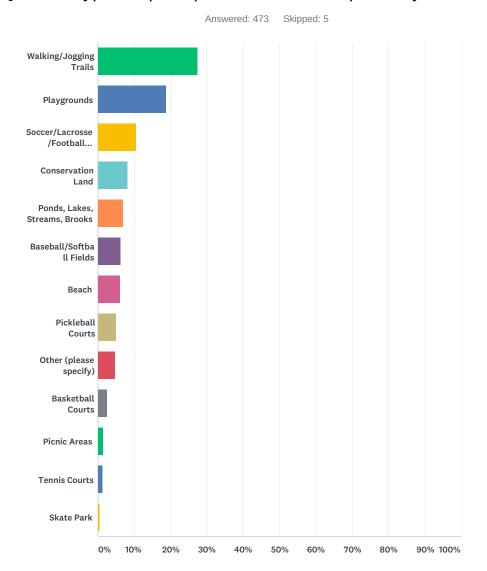


Never	Rarely	Sometimes	Regularly
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	NEVER	RARELY	SOMETIMES	REGULARLY	TOTAL	WEIGHTED AVERAGE
Playgrounds	28.33%	18.60%	28.75%	24.31%	470	0.40
	134	88	136	115	473	2.49
Soccer/Lacrosse/Football Fields	48.51%	14.26%	13.62%	23.62%		
	228	67	64	111	470	2.12
Beach	38.59%	23.88%	26.23%	11.30%		
	181	112	123	53	469	2.10
Walking/Jogging Trails	39.07%	22.93%	29.09%	8.92%		
	184	108	137	42	471	2.08
Ponds, Lakes, Streams, Brooks	47.35%	23.99%	21.87%	6.79%		
	223	113	103	32	471	1.88
Baseball/Softball Fields	54.80%	18.12%	16.20%	10.87%		
	257	85	76	51	469	1.83
Conservation Land	58.46%	21.84%	16.49%	3.21%		
	273	102	77	15	467	1.64
Basketball Courts	61.67%	18.20%	14.56%	5.57%		
	288	85	68	26	467	1.64
Picnic Areas	59.83%	23.08%	15.60%	1.50%		
	280	108	73	7	468	1.59
Tennis Courts	66.81%	17.45%	12.77%	2.98%		
	314	82	60	14	470	1.52
Pickleball Courts	85.96%	5.96%	2.55%	5.53%		
	404	28	12	26	470	1.28
Skate Park	84.98%	7.94%	6.01%	1.07%		
	396	37	28	5	466	1.23

#	OTHER (PLEASE SPECIFY)	DATE
1	Dog park - never	11/7/2019 6:56 PM
2	We need more open space and less development!!!!! Using the space can simply mean enjoying the view.	11/5/2019 9:02 AM
3	My son and I ride scooters and the current skate park is posted skateboards and online skates only. This has created a bit of conflict, while we are teaching our son right from wrong.	11/5/2019 8:03 AM
4	Walking/Jogging Trails: (because I don't know where they are!) Conservation Land (I wish I knew where more of it was!)	10/29/2019 10:37 AM
5	How do I answer the question about use of conservation land?	10/26/2019 10:03 AM
6	My kids playing with other School. (Field Hockey)	10/24/2019 1:33 PM
7	senior center	10/24/2019 9:40 AM
8	Dog Park	10/21/2019 11:16 AM
9	Town Forest regularly	10/19/2019 1:37 PM
10	I take my grandchildren to some - not all What are you going to create for	10/19/2019 10:01 AM
11	Used to use some when my kids were in school	10/19/2019 8:58 AM
12	Yrntile farm	10/19/2019 8:31 AM
13	Use the track to wall at Yentile	10/19/2019 7:27 AM
14	I would love to use walking trails	10/19/2019 6:53 AM
15	Hiking in other towns because they miles of trails	10/19/2019 6:22 AM

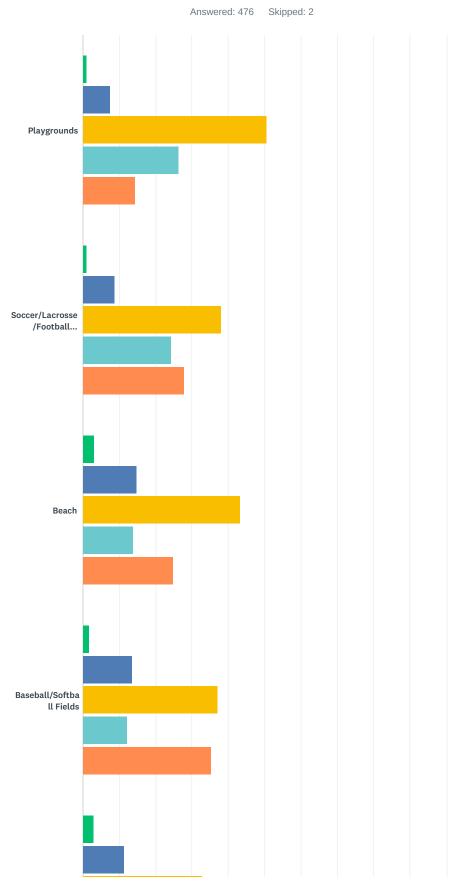
Q4 What type of open space/recreational space is your favorite?

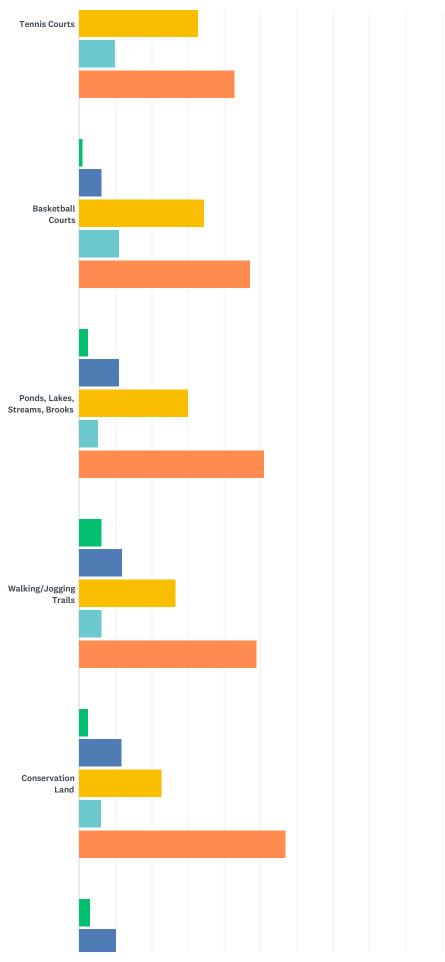


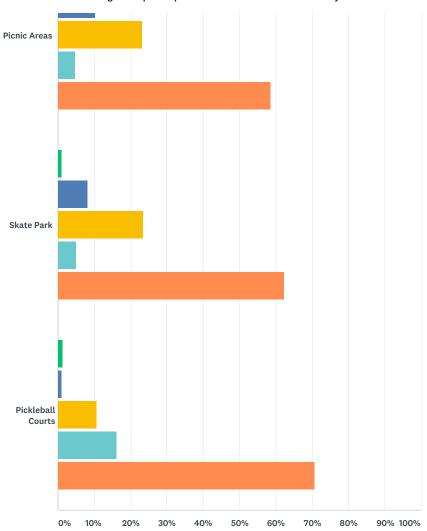
ANSWER CHOICES	RESPONSES	
Walking/Jogging Trails	27.48%	130
Playgrounds	18.82%	89
Soccer/Lacrosse/Football Fields	10.36%	49
Conservation Land	8.25%	39
Ponds, Lakes, Streams, Brooks	6.98%	33
Baseball/Softball Fields	6.34%	30
Beach	6.13%	29
Pickleball Courts	5.07%	24
Other (please specify)	4.86%	23
Basketball Courts	2.54%	12
Picnic Areas	1.48%	7
Tennis Courts	1.27%	6
Skate Park	0.42%	2

# OTHER (PLEASE SPECIFY) DATE 1 Walking/Jogging Trails & Beach 11/14/2019 8:25 AM 2 Walking Trails & Indoor track @ High School 11/14/2019 8:23 AM 3 Conmon 11/8/2019 2:19 PM 4 I have no favorite space. They are all useful in their own way, even if my family and I don't utilize them often. 11/17/2019 6:56 PM 5 Walking/Jogging Trails & Conservation Land & Ponds, Lakes, Streams, Brooks 11/1/2019 11:09 AM 6 Beach & Ponds, Lakes, Streams, Brooks. I would love these [Walking/Jogging Trails, Picnic Areas, Conservation Land] if I knew more about where they were. 10/22/2019 10:33 AM 7 You cannot limit this choice to one. 10/22/2019 10:03 AM 8 Playgrounds & Beach 10/22/2019 10:34 AM 9 Walking/Jogging Trails & Pronds, Lakes, Streams, Brooks 10/24/2019 10:34 AM 10 Playgrounds & Picnic Areas 10/24/2019 10:34 AM 11 Walking/Jogging Trails & Picnic Areas 10/24/2019 10:14 AM 12 Playgrounds & Picnic Areas & Basketball Courts 10/24/2019 10:14 AM 13 Playgrounds & Picnic Areas & Beach & Ponds, Lakes, Streams, Brooks 10/24/2019 10:01 AM 14	TOTAL		473
1 Walking/Jogging Trails & Beach 11/14/2019 8:25 AM 2 Walking Trails & Indoor track @ High School 11/14/2019 8:23 AM 3 Conmon 11/8/2019 2:19 PM 4 I have no favorite space. They are all useful in their own way, even if my family and I don't utilize them often. 11/1/2019 6:56 PM 5 Walking/Jogging Trails & Conservation Land & Ponds, Lakes, Streams, Brooks 11/1/2019 11:09 AM 6 Beach & Ponds, Lakes, Streams, Brooks. I would love these [Walking/Jogging Trails, Picnic Areas, Conservation Land] if I knew more about where they were. 10/29/2019 10:37 AM 7 You cannot limit this choice to one. 10/26/2019 10:03 AM 8 Playgrounds & Beach 10/24/2019 10:45 AM 9 Walking/Jogging Trails & Ponds, Lakes, Streams, Brooks 10/24/2019 10:33 AM 10 Playgrounds & Picnic Areas 10/24/2019 10:32 AM 11 Walking/Jogging Trails & Picnic Areas 10/24/2019 10:34 AM 12 Playgrounds & Tennis Courts & Basketball Courts 10/24/2019 10:14 AM 13 Playgrounds & Picnic Areas & Beach & Ponds, Lakes, Streams, Brooks 10/24/2019 10:07 AM 14 Walking/Jogging Trails & Ponds, Lakes, Streams, Brooks 10/24/2019 10:05 AM 15 senior center	#	OTHER (DI EASE SPECIFY)	DATE
2 Walking Trails & Indoor track @ High School 11/14/2019 8:23 AM 3 Conmon 11/8/2019 2:19 PM 4 I have no favorite space. They are all useful in their own way, even if my family and I don't utilize them often. 11/7/2019 6:56 PM 5 Walking/Jogging Trails & Conservation Land & Ponds, Lakes, Streams, Brooks 11/1/2019 11:09 AM 6 Beach & Ponds, Lakes, Streams, Brooks. I would love these [Walking/Jogging Trails, Picnic Areas, Conservation Land] if I knew more about where they were. 10/29/2019 10:37 AM 7 You cannot limit this choice to one. 10/24/2019 10:03 AM 8 Playgrounds & Beach 10/24/2019 10:45 AM 9 Walking/Jogging Trails & Ponds, Lakes, Streams, Brooks 10/24/2019 10:38 AM 10 Playgrounds & Picnic Areas 10/24/2019 10:34 AM 11 Walking/Jogging Trails & Ponds, Lakes, Streams, Brooks 10/24/2019 10:19 AM 12 Playgrounds & Picnic Areas & Beach & Ponds, Lakes, Streams, Brooks 10/24/2019 10:01 AM 13 Playgrounds & Picnic Areas & Beach & Ponds, Lakes, Streams, Brooks 10/24/2019 10:01 AM 14 Walking/Jogging Trails & Ponds, Lakes, Streams, Brooks 10/24/2019 10:01 AM 15 senior center		,	
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8 Playgrounds & Beach 10/24/2019 10:45 AM 9 Walking/Jogging Trails & Ponds, Lakes, Streams, Brooks 10/24/2019 10:38 AM 10 Playgrounds & Picnic Areas 10/24/2019 10:32 AM 11 Walking/Jogging Trails & Picnic Areas 10/24/2019 10:19 AM 12 Playgrounds & Tennis Courts & Basketball Courts 10/24/2019 10:07 AM 13 Playgrounds & Picnic Areas & Beach & Ponds, Lakes, Streams, Brooks 10/24/2019 10:07 AM 14 Walking/Jogging Trails & Ponds, Lakes, Streams, Brooks 10/24/2019 10:01 AM 15 senior center 10/24/2019 9:40 AM 16 Outdoor rink. Summer and winter 10/23/2019 10:52 PM 17 I am a Senior Citizen that would like a new Sr Center. I also have 2 Grandchildren in the Wilmington Schools 10/19/2019 12:45 PM 18 Pickleball 10/19/2019 10:51 AM 20 None 10/19/2019 10:31 AM 21 Yentile 10/19/2019 2:48 AM 22 Bicycling, road and trail 10/19/2019 2:48 AM	6		10/29/2019 10:37 AM
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17 I am a Senior Citizen that would like a new Sr Center. I also have 2 Grandchildren in the Wilmington Schools 10/21/2019 1:05 PM 18 Pickleball 10/19/2019 12:45 PM 19 none of the above 10/19/2019 10:51 AM 20 None 10/19/2019 10:31 AM 21 Yentile 10/19/2019 6:26 AM 22 Bicycling, road and trail 10/19/2019 2:48 AM	15	senior center	10/24/2019 9:40 AM
Wilmington Schools 18 Pickleball 10/19/2019 12:45 PM 19 none of the above 10/19/2019 10:51 AM 20 None 10/19/2019 10:31 AM 21 Yentile 10/19/2019 6:26 AM 22 Bicycling, road and trail 10/19/2019 2:48 AM	16	Outdoor rink. Summer and winter	10/23/2019 10:52 PM
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20 None 10/19/2019 10:31 AM 21 Yentile 10/19/2019 6:26 AM 22 Bicycling, road and trail 10/19/2019 2:48 AM	18	Pickleball	10/19/2019 12:45 PM
21 Yentile 10/19/2019 6:26 AM 22 Bicycling, road and trail 10/19/2019 2:48 AM	19	none of the above	10/19/2019 10:51 AM
22 Bicycling, road and trail 10/19/2019 2:48 AM	20	None	10/19/2019 10:31 AM
	21	Yentile	10/19/2019 6:26 AM
23 Rotary Park 10/18/2019 9:03 PM	22	Bicycling, road and trail	10/19/2019 2:48 AM
	23	Rotary Park	10/18/2019 9:03 PM

Q5 Generally, what is the quality of the open spaces/recreational spaces in Town?







	POOR	FAIR	GOOD	EXCELLENT	DON'T KNOW	TOTAL	WEIGHTED AVERAGE
Playgrounds	1.07%	7.46%	50.53%	26.44%	14.50%		
7.5	5	35	237	124	68	469	2.73
Soccer/Lacrosse/Football Fields	1.06%	8.72%	38.09%	24.26%	27.87%		
	5	41	179	114	131	470	2.30
Beach	3.23%	14.84%	43.23%	13.76%	24.95%		
	15	69	201	64	116	465	2.18
Baseball/Softball Fields	1.71%	13.65%	37.10%	12.15%	35.39%		
	8	64	174	57	166	469	1.89
Tennis Courts	2.99%	11.30%	32.84%	10.02%	42.86%		
	14	53	154	47	201	469	1.64
Basketball Courts	1.07%	6.21%	34.48%	11.13%	47.11%		
	5	29	161	52	220	467	1.61
Ponds, Lakes, Streams, Brooks	2.56%	11.09%	30.06%	5.33%	50.96%		
	12	52	141	25	239	469	1.36
Walking/Jogging Trails	6.21%	11.99%	26.55%	6.21%	49.04%		
	29	56	124	29	229	467	1.35
Conservation Land	2.59%	11.64%	22.84%	6.03%	56.90%		
	12	54	106	28	264	464	1.19
Picnic Areas	3.22%	10.30%	23.18%	4.72%	58.58%		
	15	48	108	22	273	466	1.12
Skate Park	1.07%	8.15%	23.39%	4.94%	62.45%		
	5	38	109	23	291	466	1.07

Excellent

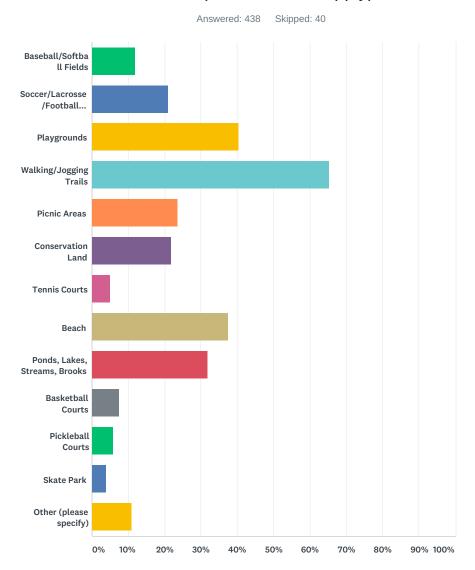
Don't Know

Good

Fair

Pickleball Courts	1.29%	1.08%	10.75%	16.13%	70.75%		
	6	5	50	75	329	465	1.00

Q6 Which of these open spaces/recreational spaces do you use in other towns? (Check all that apply)



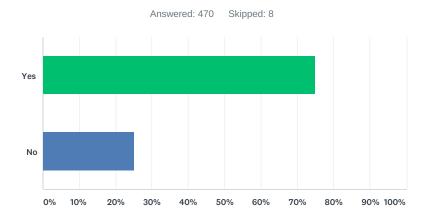
ANSWER CHOICES	RESPONSES	
Baseball/Softball Fields	11.87%	52
Soccer/Lacrosse/Football Fields	21.00%	92
Playgrounds	40.41%	177
Walking/Jogging Trails	65.30%	286
Picnic Areas	23.74%	104
Conservation Land	21.69%	95
Tennis Courts	5.02%	22
Beach	37.44%	164
Ponds, Lakes, Streams, Brooks	31.74%	139
Basketball Courts	7.53%	33
Pickleball Courts	5.94%	26
Skate Park	3.88%	17

Other (please specify)	10.96%	48
Total Respondents: 438		

#	OTHER (PLEASE SPECIFY)	DATE
1	Wells Beach Maine	11/14/2019 8:23 AM
2	None	11/9/2019 1:18 PM
3	None	11/8/2019 2:38 PM
4	spray park	11/8/2019 12:30 PM
5	None	11/8/2019 9:25 AM
6	Bike path	11/8/2019 6:30 AM
7	Dog park	11/7/2019 7:25 PM
8	bike trails; rail to trails; AVIS properties in Andover, other state and local parks, i.e Trustees of Reservations and other reservations, willowdale, Boxford Forest, etc.	11/1/2019 8:36 PM
9	Biking Trails	11/1/2019 11:16 AM
10	None	10/30/2019 5:40 PM
11	Ipswich River Park is nice.	10/29/2019 3:41 PM
12	dog parks	10/29/2019 10:37 AM
13	None	10/27/2019 8:55 AM
14	[Conservation land] Harold Parker? Warren Manning?	10/24/2019 9:57 AM
15	senior center	10/24/2019 9:40 AM
16	Pool/splash pad	10/23/2019 4:17 PM
17	I often go to Tewksbury, Lynnfield, Reading Senior Centers	10/21/2019 1:05 PM
18	Dog Park	10/21/2019 11:16 AM
19	None	10/20/2019 5:57 PM
20	I typically don't	10/20/2019 2:02 PM
21	none	10/19/2019 12:22 PM
22	None	10/19/2019 10:53 AM
23	none	10/19/2019 10:51 AM
24	None	10/19/2019 10:31 AM
25	WE ATTEND HIGH SCHOOL FOOTBALL GAMES OUT OF TOWN	10/19/2019 10:05 AM
26	None	10/19/2019 9:30 AM
27	Splash pads	10/19/2019 9:23 AM
28	None	10/19/2019 9:12 AM
29	None	10/19/2019 8:09 AM
30	Splash pads and water parks	10/19/2019 7:55 AM
31	None	10/19/2019 7:46 AM
32	Bike trails	10/19/2019 7:04 AM
33	Rail trails	10/19/2019 6:49 AM
34	None	10/19/2019 6:47 AM
35	Hiking trails	10/19/2019 6:22 AM
36	Dog parks	10/19/2019 6:05 AM
37	splash pad	10/19/2019 6:04 AM
38	Ice rink	10/19/2019 4:41 AM
39	Bicycling paths and trails	10/19/2019 2:48 AM
40	None	10/18/2019 9:25 PM
41	Street hockey rink	10/18/2019 9:17 PM
42	Walking areas for dogs	10/18/2019 8:34 PM
43	Splash pad	10/18/2019 8:27 PM
44	None	10/18/2019 8:26 PM

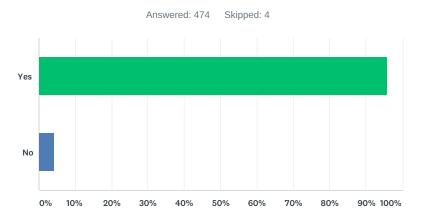
45	Splash pads	10/18/2019 8:10 PM
46	None of the above	10/18/2019 7:36 PM
47	bike paths	10/18/2019 3:14 PM

Q7 Should the Town focus on purchasing/pursuing new open spaces?



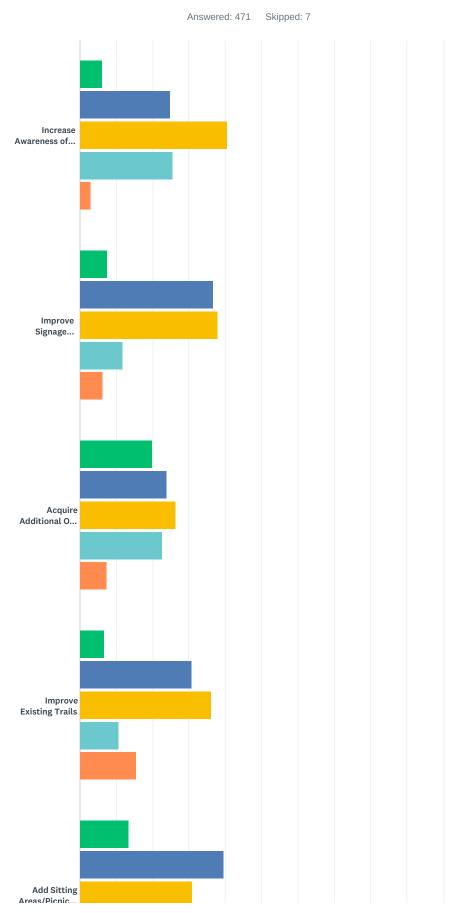
ANSWER CHOICES	RESPONSES	
Yes	74.89%	352
No	25.11%	118
TOTAL		470

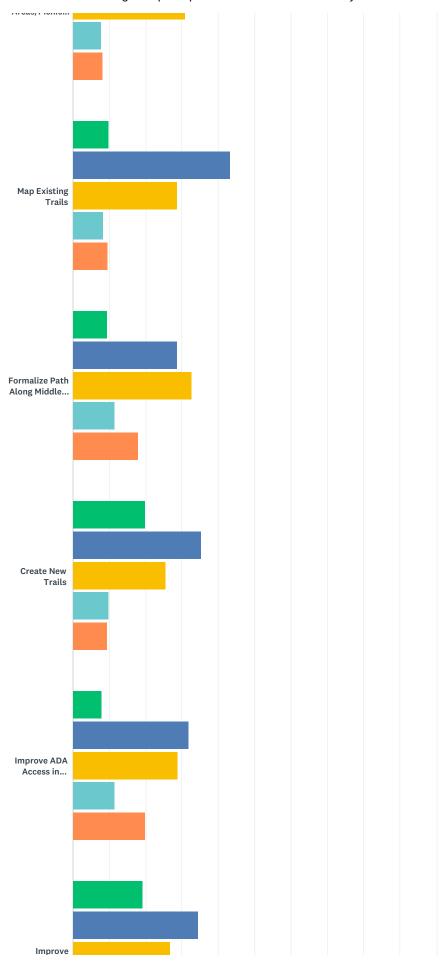
Q8 Should the Town focus on improving/maintaining existing open spaces/recreational spaces?

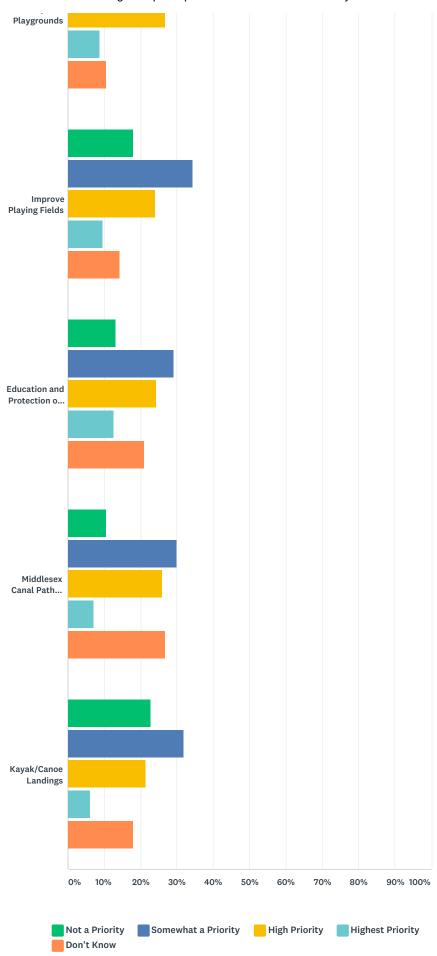


ANSWER CHOICES	RESPONSES	
Yes	95.78% 45	54
No	4.22%	20
TOTAL	47	74

Q9 What action items should the Town focus on?







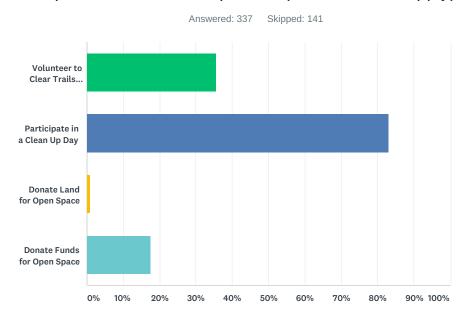
	NOT A PRIORITY	SOMEWHAT A PRIORITY	HIGH PRIORITY	HIGHEST PRIORITY	DON'T KNOW	TOTAL	WEIGHTED AVERAGE
Increase Awareness of Existing Open Spaces/Recreational Spaces	6.05% 28	24.84% 115	40.60% 188	25.49% 118	3.02% 14	463	2.79
Improve Signage (Educational, Trailheads, Trail Markers, Parking)	7.58% 35	36.58% 169	37.88% 175	11.69% 54	6.28% 29	462	2.41
Acquire Additional Open Space/Recreational Space	19.91% 92	23.81% 110	26.41% 122	22.51% 104	7.36% 34	462	2.37
Improve Existing Trails	6.78% 31	30.85% 141	36.11% 165	10.72% 49	15.54% 71	457	2.20
Add Sitting Areas/Picnic Areas in Existing Open Spaces/Recreational Spaces	13.45% 62	39.48% 182	31.02% 143	7.81% 36	8.24% 38	461	2.17
Map Existing Trails	9.91% 45	43.39% 197	28.63% 130	8.37% 38	9.69% 44	454	2.16
Formalize Path Along Middlesex Canal	9.33% 43	28.63% 132	32.54% 150	11.50% 53	18.00% 83	461	2.10
Create New Trails	19.91% 90	35.40% 160	25.44% 115	9.73% 44	9.51% 43	452	2.06
Improve ADA Access in Existing Open Spaces/Recreational Spaces	8.04% 37	31.74% 146	28.91% 133	11.52% 53	19.78% 91	460	2.04
Improve Playgrounds	19.34% 88	34.51% 157	26.81% 122	8.79% 40	10.55% 48	455	2.04
Improve Playing Fields	17.90% 82	34.28% 157	24.02% 110	9.61% 44	14.19% 65	458	1.97
Education and Protection of Flora and Fauna	13.16% 60	29.17% 133	24.34% 111	12.50% 57	20.83% 95	456	1.95
Middlesex Canal Path Bridge Over Maple Meadow Brook at Town Park	10.53% 48	29.82% 136	25.88% 118	7.02% 32	26.75% 122	456	1.76
Kayak/Canoe Landings	22.83% 105	31.74% 146	21.30% 98	6.09% 28	18.04% 83	460	1.75

#	OTHER (PLEASE SPECIFY)	DATE
1	Purchasing/pursuing new open space for senior housing	11/14/2019 8:25 AM
2	Swimming Pool - Indoors	11/14/2019 8:23 AM
3	provide trash at all open spaces	11/8/2019 2:00 PM
4	more Pickleball courts at a separate site	11/8/2019 10:06 AM
5	Canal path	11/8/2019 6:30 AM
6	More pickleball courts- turn Woburn St or Wildwood tennis courts into pickleball	11/3/2019 7:22 PM
7	bike paths	11/1/2019 8:36 PM
8	It would be great to have a dog park	10/29/2019 10:37 AM
9	Maintain what we have so we do not have to replace or rebuild.	10/24/2019 9:57 AM
10	new senior center	10/24/2019 9:40 AM
11	Splash pad for town citizens use	10/23/2019 2:09 PM
12	Town should get an open space for a pool -that would bring a lot of revenue in	10/23/2019 10:16 AM
13	BUILD A "NEW SENIOR CENTER" OUR CENTER IS OUTDATED COMPARED TO SURROUNDING TOWNS	10/21/2019 1:05 PM
14	Splash park	10/20/2019 2:39 PM
15	Small boat launch @ Silver Lake/ area of public fishing pier.	10/20/2019 1:38 PM
16	Trails that are stroller friendly	10/19/2019 8:29 PM
17	Purchase Textron land for recreational use with ice rink & street hockey rink	10/19/2019 8:07 PM
18	Town should focus on purchasing the farm on Andover St. for open space	10/19/2019 7:17 PM
19	Need to protect the remaining open space in town before it turns into hundreds more horrific vinyl grey mansions with plastic black shutters built 20 feet from each other.	10/19/2019 1:37 PM
20	more pickleball courts	10/19/2019 11:19 AM

Town of Wilmington Open Space & Recreation Plan Survey October 2019

21	ACQUIRE THE TEXTRON TENNIS/BALL FIELD PROPERTY, HIGHEST PRIORITY	10/19/2019 10:05 AM
22	More pickle ball courts	10/19/2019 9:28 AM
23	Add a splash pad	10/19/2019 9:23 AM
24	Improve the baseball and softball fields as a highest priority. They are in rough shape. Each field should also have covered dugouts for the players.	10/19/2019 8:55 AM
25	My answers apply to just open space more than recreational space	10/19/2019 8:09 AM
26	The town needs a sports complex/ice rink/courts and should focus on that instead of being so concerned with conservation and unused space that is useless	10/19/2019 7:26 AM
27	We should design a park like Ipswich River - we use it regularly and it is highly used by all	10/19/2019 6:53 AM
28	we need a place for garening	10/19/2019 6:51 AM
29	Think about an ice rink outdoor/indoor	10/19/2019 6:26 AM
30	Add more spaces for individuals and families with dogs	10/19/2019 6:05 AM
31	Build an ice rink	10/19/2019 4:41 AM
32	Add bicycling lanes to town roads, add bicycling path	10/19/2019 2:48 AM
33	Improve the skate park	10/18/2019 10:24 PM
34	As far as improving playing fields how about trash barrels Town hall field is a disgrace baseball softball and football coaches should make sure to pick up after their teams play I'm appalled at the trash that's there after games and practices	10/18/2019 9:17 PM
35	Install a splash pad	10/18/2019 8:27 PM
36	Shawsheen field	10/18/2019 7:52 PM

Q10 Would you be willing to do any of the following relative to open spaces/recreational spaces? (Check all that apply)



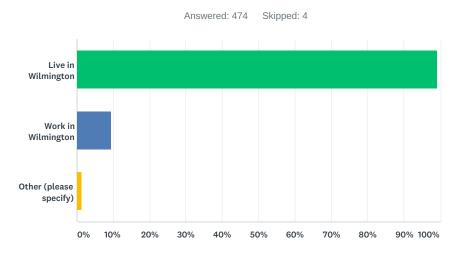
ANSWER CHOICES	RESPONSES	
Volunteer to Clear Trails or Adopt a Trail as a Land Steward	35.61%	120
Participate in a Clean Up Day	83.09%	280
Donate Land for Open Space	0.89%	3
Donate Funds for Open Space	17.51%	59
Total Respondents: 337		

#	IF YOU WOULD LIKE TO BE NOTIFIED OF VOLUNTEER OPPORTUNITIES PLEASE ENTER YOUR EMAIL ADDRESS:	DATE
1	Lisabrabant@yahoo.com	11/9/2019 1:18 PM
2	Nicole5395@hotmail.com	11/9/2019 8:30 AM
3	lissa1978@aol.com	11/8/2019 2:00 PM
4	Lopeyp@gmail.com	11/8/2019 1:24 PM
5	Racquet.ball@verizon.net	11/8/2019 1:14 PM
6	Andrew.etherington12@gmail.com	11/8/2019 10:47 AM
7	ksclarkin@comcast.net	11/8/2019 10:06 AM
8	lisamvelozo@yahoo.com	11/7/2019 11:39 PM
9	K.drake1124@gmail.com	11/7/2019 11:32 PM
10	Jdrolet883@gmail.com	11/7/2019 9:27 PM
11	farfellina77@yahoo.com	11/7/2019 9:25 PM
12	tsaragosa@comcast.net	11/7/2019 7:53 PM
13	Mdoheney@yahoo.com	11/7/2019 7:50 PM
14	Lorilee14@gmail.com	11/7/2019 7:25 PM
15	5bzz@verizon.net	11/5/2019 9:38 AM
16	leejordan29@gmail.com	11/5/2019 8:03 AM
17	jeannette1867@gmail.com	11/4/2019 11:45 AM
18	ejsc.derrickson@gmail.com	11/2/2019 12:12 PM
19	hpalmer.fournature@verizon.net	11/1/2019 8:36 PM
20	jalloyd@verizon.net	11/1/2019 11:09 AM

Town of Wilmington Open Space & Recreation Plan Survey October 2019

21	bfay122@gmail.com	10/29/2019 10:37 AM
22	Dugas.jon@gmail.com	10/29/2019 8:17 AM
23	Deannajd@gmail.com	10/24/2019 6:24 PM
24	gscottsull@hotmail.com	10/24/2019 11:08 AM
25 25	No	10/23/2019 10:52 PM
26 27	Tsmaroff@aol.com vndoan@gmail.com	10/23/2019 10:16 AM 10/22/2019 12:07 PM
	- •	10/21/2019 12:07 PM
28	grmtnman@gmail.com	
29	kerianne_barry@hotmail.com	10/21/2019 8:13 AM
30	amuniz84@gmail.com	10/20/2019 1:06 PM
31	Rickeaton41@gmail.com	10/20/2019 7:06 AM
32	clcrniv@comcast.net	10/19/2019 10:51 PM
33	Emilyamcinerney@gmail.com	10/19/2019 9:53 PM
34	lss23360@comcast.net	10/19/2019 7:17 PM
35	I am already made aware/have participated.	10/19/2019 1:37 PM
36	pnickerson71@gmail.com	10/19/2019 12:14 PM
37	Jojobarrett@comcast.net	10/19/2019 11:04 AM
38	No	10/19/2019 10:31 AM
39	Nancy.dalton@rocketmail.com	10/19/2019 10:27 AM
40	NO,	10/19/2019 10:05 AM
41	markg@guarinodesign.com	10/19/2019 10:05 AM
42	loch-jess-monster@comcast.net	10/19/2019 9:42 AM
43	robbentley1@gmail.com	10/19/2019 9:14 AM
44	Idk	10/19/2019 9:13 AM
45	michael.emmons@comcast.net	10/19/2019 9:01 AM
46	sak8405@verizon.net	10/19/2019 9:00 AM
47	kscr777@gmail.com	10/19/2019 8:55 AM
48	Liann@comcast.net	10/19/2019 8:54 AM
49	Betsyloisel@gmail.com	10/19/2019 8:54 AM
50	kda8mitch@gmail.com	10/19/2019 8:39 AM
51	Danacorrinesaylor@gmail.com	10/19/2019 8:09 AM
52	Tjf@fitzpatrick.bz	10/19/2019 8:03 AM
53	mrpruslin@aol.com	10/19/2019 8:03 AM
54	sandpiper1218@hotmail.com	10/19/2019 7:56 AM
55	Arowe77@yahoo.com	10/19/2019 7:29 AM
56	tracyejoyce@gmail.com	10/19/2019 7:27 AM
57	Post to Apple; advertise through in town .org (wow etc)	10/19/2019 6:31 AM
58	Dgray0604@comcast.net	10/18/2019 8:03 PM
59	julie.broussard@comcast.net	10/18/2019 6:48 PM
60	chioccok@comcast.net	10/18/2019 5:34 PM
61	dsl.mcinnis@verizon.net	10/18/2019 3:20 PM

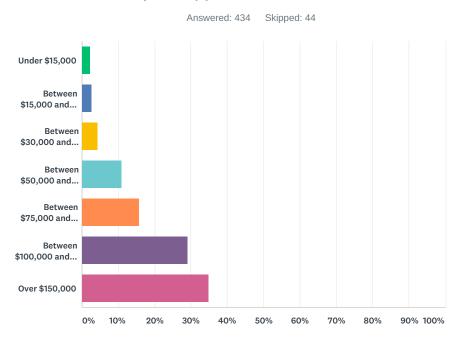
Q11 Which of the following best describes you? (Check all that apply)



ANSWER CHOICES	RESPONSES	
Live in Wilmington	99.16%	470
Work in Wilmington	9.49%	45
Other (please specify)	1.27%	6
Total Respondents: 474		

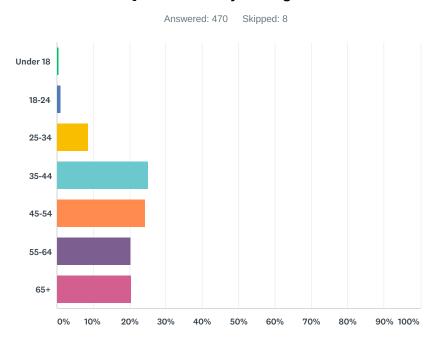
#	OTHER (PLEASE SPECIFY)	DATE
1	Live in town my whole life and concerned with the over development and high traffic situation.	11/7/2019 10:28 AM
2	previously lived in Wilmington but my church is still here so I am here very often.	10/29/2019 10:37 AM
3	Retired	10/24/2019 10:32 AM
4	Senior that has paid taxes for many years and now would like a MODERN SENIOR CENTER TO ENJOY	10/21/2019 1:05 PM
5	Have kids that go to school in Wilmington	10/20/2019 10:19 PM
6	Lived in Wilmington over 52 years	10/18/2019 11:13 PM

Q12 What is your approximate household income?



ANSWER CHOICES	RESPONSES	
Under \$15,000	2.30%	10
Between \$15,000 and \$29,999	2.76%	12
Between \$30,000 and \$49,999	4.38%	19
Between \$50,000 and \$74,999	10.83%	47
Between \$75,000 and \$99,999	15.67%	68
Between \$100,000 and \$150,000	29.03%	126
Over \$150,000	35.02%	152
TOTAL		434

Q13 What is your age?



ANSWER CHOICES	RESPONSES	
Under 18	0.43%	2
18-24	1.06%	5
25-34	8.51%	40
35-44	25.11%	118
45-54	24.26%	114
55-64	20.21%	95
65+	20.43%	96
TOTAL		470

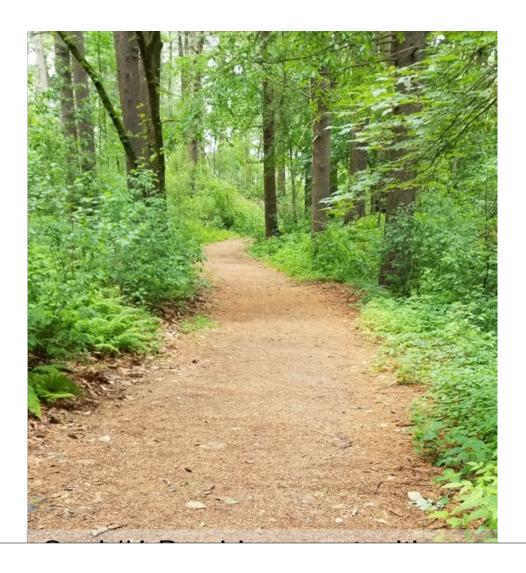
APPENDIX IV: 2020 Community Survey



Open Space and Recreation Plan 2021-2026 - Draft Goals and Action Items

The Town of Wilmington Open Space Committee asks you to take five minutes to view this informational survey and provide feedback on draft action items for the Open Space and Recreation Plan Update covering 2021-2026.

A survey was conducted in 2019 to get resident feedback on open space use and needs. Over 400 responses were received. This information was used to help develop draft open space and recreational goals for the next five years.



Goal #1 Provide opportunities for open space appreciation and environmentally friendly walking and biking trails.

The 2019 survey indicated that trails are still the #1 favorite open space in Town.

However, over 40% of respondents have never used trails in Town and trails were the #1 open space used in other towns.

1. Do you use trails in Wilmington?
○ Yes
○ No
2. Has your use of trails changed with the coronavirus pandemic
○ Yes
○ No
If yes, how?

3.

Survey data helped the Committee develop the following action items for Goal #1:

Goal #1 Provide opportunities for open space appreciation and environmentally friendly walking and biking trails.

OBJECTIVE 1: Increase visibility and awareness of trails.

- Draft signage plan for trailheads and trails.
- Create checklist for volunteer groups who want to do trail projects.
- · Coordinate with volunteers, including Eagle Scouts, on trail projects.
- · Map all existing and new trails to include on GIS webpage.
- Create downloadable, printable maps with locations of parking.

OBJECTIVE 2: Create trail connections that link large sections of trail.

- Coordinate with Middlesex Canal Commission on a grant application to construct a bridge over the Maple Meadow Brook Aqueduct at Town Park.
- Ensure that trail connections between Green Meadow Drive, Mill Road, Murray Hill Circle, and the Town of Burlington are seamless.

OBJECTIVE 3: Identify and take advantage of opportunities to enhance walkability in commercial and mixed-use areas through private development.

 Require/encourage streetscape improvements, publicly accessible open space (pocket parks, lawns, seating areas), and passive recreational opportunities in commercial and mixed-use areas.



4. If grant money can be acquired, should a pedestrian bridge be installed across the Maple Meadow Aqueduct along the Middlesex Canal linking trails from Town Park to Patches Pond?

No
Mavbe

Yes

5.	Would you be more li	ikely to use town	trails if there	were easily	accessible m	ıaps
ar	nd clear trail signs?					

Yes

O No

Maybe

Goal #2 Balance resources to meet open space demands and provide a variety of open space amenities for a full range of users and interests.



In the 2019 survey, it became clear that many residents aren't aware of existing open space amenities. One comment was that the Town needs a dog park, highlighting the need to provide more awareness of existing open space such as the dog park at Town Park off Main Street. The survey information aided the Committee in developing the following objectives and actions to meet Goal #2.

Survey information helped the Committee develop the following action items for Goal #2:

OBJECTIVE 1: Increase awareness of the full range of open space amenities.

- · Add content to Town website regarding existing open space amenities.
- Create new outdoor educational programming at existing open spaces.
- Establish a regular local media/Twitter program for educating and promoting open space topics and events (tree planting, composting, invasive species, volunteer opportunities).

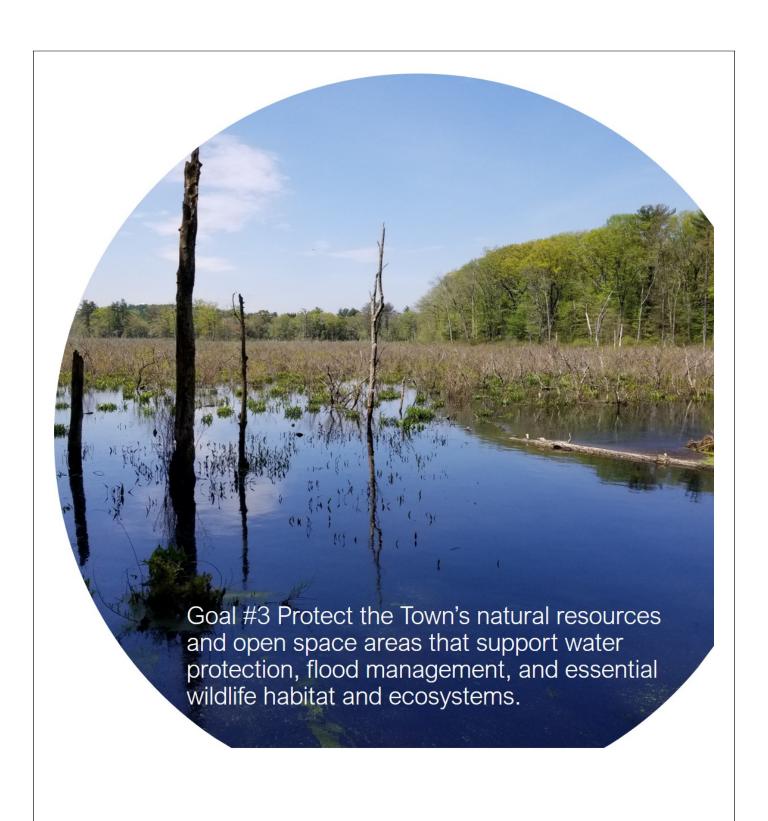
OBJECTIVE 2: Focus on high quality maintenance of existing open spaces.

- Continue tree planting efforts and pursue Tree City USA designation.
- Offer more frequent, more localized neighborhood clean-up days and engage businesses to participate in promoting and sponsoring clean up efforts.
- Continue to promote the Town's Land Stewardship Program.

OBJECTIVE 3: Improve accessibility of existing open spaces.

- TBD from ADA Evaluations
- 6. What open space topics would you be interested in hearing about through social media?

7. Would you like to volunteer for open space efforts such as cleanup days and trail maintenance? If so, please provide your email address so that we can add you to our contact list.



	3%
	12%
	19%
	25%
Sı	urvey information helped the Committee develop the following action items for Goal #3
OI • •	BJECTIVE 1: Provide education of flora and fauna. Coordinate with the Wilmington Memorial Library on environmental programming opportunities during April for Earth Day. Create an invasive species monitoring program for resident volunteers. Identify locations and themes for interpretive/educational signs for development in the next OSRP (similar to signs at Yentil Farm Rec. Facility).
DE •	BJECTIVE 2: Acquire additional open space through donation, private development, or other means. Continue to encourage use of Conservation Subdivisions that avoid valuable natural resource areas and create open space. Accept donations of land that will serve as resource protection, habitat, and preservation of Town character. Transfer appropriate town-owned parcels to care and custody of Conservation Commission (3-5 parcels annually at Tow Meeting).
OI • •	BJECTIVE 3: Identify certified vernal pools and locations of potential vernal pools. Using GIS and existing databases, identify certified vernal pools. Using GIS and existing databases, identify potential vernal pools. Draft an action plan for certifying vernal pools for inclusion in next OSRP.
OE •	BJECTIVE 4: Complete a Municipal Vulnerability Preparedeness (MVP) Plan. Complete MVP Plan to identify climate ready action items.

Educational/Interpretive Signage



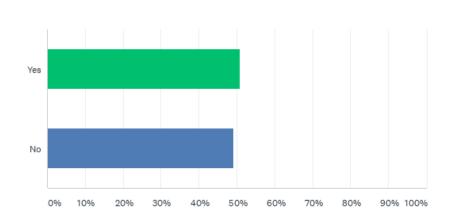
10. The MVP planning process will begin this winter. Please stay tuned for more information. You can provide your email if you would like to be added to our contact list.
11. Thank you for your time! Do you have any additional feedback on the draft open space goals and action items for the Committee to consider?

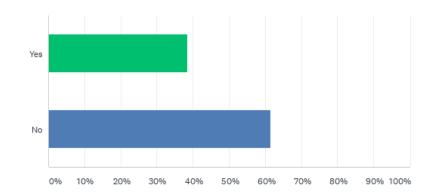
November 2020 OSRP Survey Results

Q1 Do you use trails in Wilmington?

Q2 Has your use of trails changed with the coronavirus pandemic?

Q3 If yes, how?





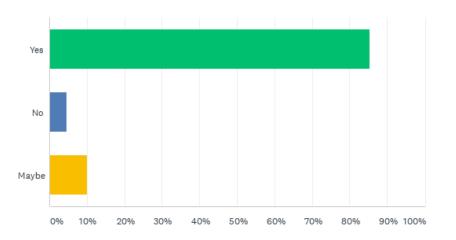
use often now Increased people go family frequently needs

USE time trails home Walk new Wilmington places often

don t know town hikes

Q4 If grant money can be acquired, should a pedestrian bridge be installed across the Maple Meadow Aqueduct along the Middlesex Canal linking trails from Town Park to Patches Pond?

Yes No Maybe Q5 Would you be more likely to use town trails if there were easily accessible maps and clear trail signs?



Q6 What open space topics would you be interested in hearing about through social media?

Q9 Where would you suggest installing educational/interpretive signage?

paths nature walk open near buildings talks Bike Hiking areas clean
Wilmington dog Open space community town space
trails Locations Walking hiking trails parks maintained Maps
safe USE Anything Walking trails interested think dog park new

schools wilmington historical Yes along walking town Start

Along trails trail heads parks town forest trails

people **areas** Beginning **near** Rotary park **Middlesex canal**Trailheads **locations** know