



OPEN SPACE AND RECREATION PLAN

Town of Charlton

2017

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Open Space and Recreation Plan

2017

Prepared for: Town of Charlton
Town of Charlton
37 Main Street
Charlton, MA 01507

Prepared by: Central Massachusetts Regional Planning Commission
2 Washington Square, Union Station, 2nd Floor
Worcester, MA 01604-4016

Acknowledgements

CHARLTON OPEN SPACE AND RECREATION COMMITTEE

Deborah Ceccarini
Darlene Emco-Rollins
Robert Hartwig
Paul Kolesnikovas
Lisa Westwell
Todd Girard

SPECIAL THANKS TO THE FOLLOWING TOWN OF CHARLTON STAFF

Robin Craver, Town Administrator
Todd Girard, Conservation Agent
Alan Gordon, Town Planner
Kevin Paicos, Interim Controller, Charlton Water/Sewer Department

CENTRAL MASSACHUSETTS REGIONAL PLANNING COMMISSION

Jayne M. Armington, Principal Planner

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SECTION ONE: PLAN SUMMARY

This Open Space and Recreation Plan, completed in 2017, was developed with public input to continue coordination efforts of town departments, private organizations, landowners, and citizens on the management and acquisition of passive and active recreation lands and facilities as well as the protection of sensitive habitats and open space. This plan updates Charlton's open space and recreation goals and objectives that were articulated in the 1996 Charlton Open Space and Recreation Plan (OSRP). This OSRP first reviews demographic and development trends confronting the Town of Charlton and then assesses existing environmental features and characteristics. This assessment coupled with public input received at public meetings and through the survey has informed the identification of open space, conservation and recreational needs in the Town of Charlton.

The Town of Charlton has taken many steps to expand, improve and enhance its open space and recreation resources since the preparation of its first Five-Year Open Space and Recreation Plan in 1996. Some of the major accomplishments over the last ten years include the establishment of the Charlton Heritage Preservation Land Trust to protect natural resources and Charlton's rural character, the development of the Maynard Farm Recreation Area with new recreation fields and the acquisition and preservation of the agricultural land at Fay Mountain Farm. In fact, many of the goals articulated in the first plan were achieved, and many of the recommended actions were implemented. The purpose of this plan is to continue this progress and momentum by outlining a series of actions that will continue to protect valuable open space resources and enhance recreational facilities and opportunities in the community.

As was the case in 1996, Charlton continues to be a desirable place to live and is still facing the demand and pressures associated with residential development. Between 2000 and 2010, Charlton's population grew by 1,718 residents (15%) from 11,263 residents to 12,981 residents. The Central Massachusetts Regional Planning Commission projects an additional 1,798 residents by 2030, which would be a 14% increase in population. In addition to residential development, Charlton has also experienced commercial and industrial growth and efforts are underway to attract even more quality businesses into the community to create jobs and expand the tax base. As a result, the landscape of Charlton continues to evolve from a community once known for its farms, woodlands and small clusters of manufacturing businesses to a community more suburban in character on its major roads.

The theme of the 2017 Charlton Open Space and Recreation Plan is ***preservation, recreation and connectivity***. The Town and the Land Trust will continue to work together to acquire and ***preserve*** important natural and cultural resources. Additional ***recreational*** facilities are needed to support the needs of the growing local population, and new facilities as well as the rehabilitation of existing facilities is proposed. A desire for better ***connectivity*** between existing and proposed open space resources will start to establish a greenway system in Town with linkages to abutting communities.

Charlton residents identified the preservation and protection of open space in specific areas in north and south Charlton, enhancing the network of multi-use trails in and around the town center, the long-term protection of surface and groundwater resources, and the protection of natural habitats as the town's greatest needs. Residents also desired greater access to and awareness of open space and recreation existing resources. Funding and availability of staff or volunteers are the top two needs relative to open space and recreation management in Charlton.

The Town will continue to work together with its partners to acquire and preserve important natural and cultural resources. Additional recreational facilities will be rehabilitated and maintained and new recreational facilities will be built to support the needs of the growing local population. A desire for better connectivity between existing and proposed open space resources will start to establish a greenway system in Town with linkages to abutting communities. Goals were developed to accomplish this vision.

- Protected land for open space, farming, forestry, habitat, and water supply.
- Long-term protection of surface and groundwater resources
- Increased awareness of and enhanced access to open space and recreation resources
- Expanded opportunities for passive and active recreation



Figure 1: Fay Mountain Farm, "Pick Your Own Pumpkin," Fall 2016

SECTION TWO: INTRODUCTION

A. STATEMENT OF PURPOSE

The Town of Charlton developed this plan to coordinate the efforts of town departments, private organizations, landowners, and citizens on acquisition, protection and management of open space and recreation resources particularly in light of continued residential and commercial development pressures. This 2017 Charlton OSRP Plan builds on recent planning initiatives and seeks to provide a framework for additional action. An approved plan is necessary to qualify for State program funding for acquisition and protection of open space and recreational facilities.

B. PLANNING PROCESS AND PUBLIC PARTICIPATION

PLANNING PROCESS

The Town of Charlton funded this 2017 Open Space and Recreation Plan Update. In the spring of 2015, the Town of Charlton contracted the Central Massachusetts Regional Planning Commission (CMRPC) to assist with a comprehensive update of the Town's 1996 Open Space and Recreation Plan. The town's Conservation Agent provided staff support and overall project management. Additional staff assistance came from the Town Administrator, Town Planner, and Interim Water Controller. The Town of Charlton organized an Open Space Recreation Plan Committee (OSRP Committee), organized the community forum, promoted the forum and survey, and conducted the ADA survey. The Committee was specifically charged with planning the forum, reviewing and commenting on drafts of the OSRP and survey, and promoting the forum and survey. CMRPC was tasked with: data collection and research related to the update of the Plan, facilitating OSRP committee meetings, creating the community survey, facilitating the community forum, and overall plan development.

Town residents supported the recent development of the 2008 Charlton Master Plan, which addressed open space and recreation needs in town. The town held public forums in November 2006 and June 2007 during this master plan process. Town staff also drafted an OSRP update in 2008 but the plan was never formally submitted to the state or formally adopted by the town. Despite this, much time and effort went into the production of this 2008 draft update and this 2017 update builds on the information gathered and momentum built during this time. The Planning Board also hosted a public meeting in January 2017 on the redevelopment of the Trolley Crossing business neighborhood. Trail and sidewalk connections from to this area to nearby destinations featured prominently in discussions at this meeting.

The planning project kicked-off with a review of Charlton's 2008 draft OSRP and 2008 Master Plans. The Open Space Committee met five times from May 2016 through March 2017. The community survey was launched on July 18, 2016 and was closed on September 23, 2016. The OSRP Committee held a community forum on February 8 2017 to obtain public feedback on open space and recreation issues, opportunities and needs as well as draft goals, objectives, and actions. Based on the comments received from the public visioning process, the CMRPC completed a draft plan in March 2017. Drafts of the chapters and maps were available on the town website as they were

finished prior to the final draft being completed. This plan will be active for seven years. The plan is physically available at Town Hall and the Library as well as on the town's website.

PUBLIC PARTICIPATION

The five member OSRP committee featured representation from the Conservation Commission, Council on Aging, Assessor's Office and Library Board of Trustees as well as citizens at large. All of the OSRP Committee meetings were held at the Charlton Senior Center, which is located on the basement level of Town Hall and were open to the public. The committee met five times between May 2016 and March 2017 and these meetings were posted at Town Hall. Drafts of Plan chapters and maps were made available to the public as soon as they were finished.

The OSRP Committee launched a survey on July 18, 2016 to understand the needs and concerns of residents of Charlton regarding its open space and recreation facilities. The Committee publicized the survey through a press release to the local newspapers, town wide email blast, and an email to town boards and committees. Committee members also made targeted invites. Hard copies of the survey were also made available at the town hall, senior center and library. The survey "closed" on September 23, 2016 with 214 respondents. The survey results can be found in the Appendix of the plan and key findings are also included throughout this document.

The OSRP Committee held a public forum on February 8, 2017 at the Charlton Senior Center, which is located on the basement level of Charlton Town Hall to obtain public feedback on open space and recreation issues, opportunities and needs as well as draft goals, objectives, and actions.¹ During this forum, participants were asked to name important natural resources, open spaces, recreation areas and landmarks in Charlton and then identify associated issues or conflicts. Based on this conversation, participants then identified open space and recreational needs. The final exercise involved the drafting of goals and objectives and associated actions. The Committee publicized the forum through a press release to the local newspapers, town wide email blast, emails to town boards and committees, the posting of flyers in key locations in town. Committee members also made targeted invites. Thirteen people attended the forum.



Figure 2: Cover Page of the Online Version of the Open Space and Recreation Survey

¹ This forum had been scheduled for October 26th, 2016, November 9th, 2016 and January 31, 2017 but were cancelled due to health emergencies and snow.

SECTION THREE: COMMUNITY CONTEXT

REGIONAL CONTEXT

Charlton is a land rich community of 43.95 square miles located in southern Worcester County. Charlton is the third largest town in Worcester County in terms of land area. It is located in what is locally referred to as the tri-community area, which includes Charlton, Southbridge and Sturbridge. Historically, Southbridge served the service and industrial needs of the tri-community area, Sturbridge had a tourist-based economy and Charlton was more of the agricultural based community. But these distinctions have blurred over the last two decades. Majority of the respondents in the 2016 OSRP Survey characterized Charlton as rural, historic, slow-paced, not crowded, and safe. Many also considered Charlton to be a bedroom community, a farming community, a community in transition, and a suburb of Worcester.

The 2014 Town Census placed Charlton's population at 12,462 residents. Since the 1980's, Charlton has been one of the fastest growing communities in the greater Worcester region for population, housing and commercial/industrial growth. In general, the Southwest sub-region (Auburn, Oxford, Webster, Dudley, Southbridge, Sturbridge and Charlton) has been one of the fastest growing areas in Central Massachusetts for new residential and industrial development. The OSRP Survey showed that people live in Charlton for its accessibility to highways (66% of respondents), its farmland, forests, and other open space (almost 80% of respondents), low-crime and vandalism (over 85% of respondents), schools (over 80% of respondents), small town character (85% of respondents), air quality (almost 70% of respondents). Factors such as community life, having family and friends in Charlton, and library resources received support for being important although less important than the above mentioned factors. People indicated that recreational opportunities, access to water, church life, job opportunities and water quality were less important reasons for living in Charlton.

Charlton's primary transportation link is via Route 20, which runs through the town in an east/west orientation. This main artery provides quick access to major interstate highways. A ten-minute drive to the east provides access to the Mass Turnpike, Route 290 and Route 395 in Auburn. A ten-minute drive to the west provides access to the Mass Turnpike and Route 84 in Sturbridge. This access, along with an abundance of land, is the main reason why Charlton has evolved into more of a bedroom community in recent years.

The town's public services and facilities have tried to keep pace with the demands of its rapidly growing population but financial constraints have often delayed needed projects. Despite these challenges, the town completed important facilities and services.

- An expansion and renovation of the library in 2007.
- A new animal shelter in 2010
- A new highway department building in 2011
- Town Hall was made fully ADA compliant and accessible, including a renovated senior center on the basement level.

- The Charlton playground as well as the pathway from the parking lot to the playground was made 100% ADA compliant.
- Fay Mountain Farm is fully leased out and the Farm hosts seasonal events and activities such as fishing derbies, wreath making workshops, and pick-your-own in berries and orchard crops.

The town is currently focusing on a new fire station as well as an expansion of the Charlton Housing Authority's Meadowbrook development. In an effort to boost its tax base, Charlton continues to attract new industry, commercial development, and tourism into the area.



Figure 3: ADA Compliant Town Hall and Senior Center Entrance

In spite of this growth, Charlton continues to retain its rural character. A drive through many of Charlton's back roads reveals an abundance of forestland, open fields and pastures. However, proactive planning through processes such as this Open Space Plan and the 2008 Master Plan are necessary for the town to continue its traditional pattern of denser development in and around vibrant villages and along Route 20, separated by open landscapes of natural resource areas and rural scale development. Zoning regulations such as the new Village District and flexible development zoning have encouraged this type of desired growth.

Politically, Charlton is located in the 2nd Massachusetts Congressional District and the 6th Worcester State Representative District. Charlton operates under the Home Rule Charter, with a Board of Selectmen, Town Administrator and Open Town Meeting. Elected officials include the Board of Selectmen, Town Clerk, Town Moderator, Planning Board, Recreation Commission, Board of Health, Housing Authority, Library Trustees and School Committee. The Board of Selectmen or Town Moderator appoints all other town positions and commission members.

HISTORY OF THE COMMUNITY

In 1755, the district of Charlton was established from what was previously the western two-thirds of Oxford. Charlton became a "town" by a law making all districts towns in 1775. By 1907, Charlton's boundaries were finalized with Oxford and Southbridge. The main reason for forming Charlton from Oxford was the difficulty of traveling up to ten miles from one's home to the church and school buildings in Oxford center. Therefore, within 3 months after Charlton was established, the inhabitants voted to construct a new school and a new meetinghouse in a more convenient location which would eventually become Charlton Center.

Early in its development, Charlton was located on the old "turnpike" between Boston, Worcester and Hartford, which was an advantageous location for those industries needing transportation for movement of goods. In the early history of Charlton, the "Northside" of town contained tanneries, manufacturers of hoes and scythes, a gin distillery, a malt house and brewery, and a pot and pearl ash works. All were located within reach of the Worcester and Stafford Turnpike, which opened in 1806, bringing more business into this area. From 1750 and 1840, this area was the predominant economic, social and religious center in Charlton. However, the coming of the railroad through Charlton in 1837 marked the beginning of Northside's decline as a business center. In 1977, the Northside Historic District was established to protect the historic resources in this area. It is a local historic district, which means development activity is regulated by the Charlton Historic District Commission (CHDC).² Northside Village is also a National Register Historic District. Northside contains sites of the original stores, schools, a tannery, blacksmith shop, distillery, a shoe shop, a hat shop, a whip shop and a military training ground. The Rider Tavern is the largest remaining domestic-type building, and the best known historic structure remaining in this area. The Rider Tavern and Northside School are protected by preservation restrictions, which are one of the strongest preservation strategies available.³



Figure 4: Rider Tavern in Northside Village

² The Northside local historic district is composed of three segments – (1) Northside Historic District Central, (2) Northside Historic District East, and (3) Northside Historic District South – which are regulated by the Charlton Historic District Commission (CHDC). Additionally, the Northside School is a contributing element to the Northside Village Historic District.

³ A preservation restriction (PR) runs with the deed in perpetuity. See MGL Chapter 184, Sections 31-33 for more information.

In the early 1800's, Charlton Center, including the Dresser Hill area, was another principal business area in Charlton. Industry here included the manufacturing of furniture, wagons, carriages and farming equipment. The "Center" also included the seat of town government, two churches, schoolhouses, the post office, a public house and general store. Charlton Center is the second of Charlton's two National Register Historic Districts.

The villages of Charlton City, Charlton Depot, Lelandville, Millward, Morseville and Putnamville were also home to many small manufacturing operations in the 1800s. The railroad, which was completed through Charlton in 1838, serviced the Charlton Depot area and helped businesses prosper in that area. Industrial activity declined by the late 1800s and the town's economic base became more rooted in agricultural. Dairying, poultry farming, hog-raising, and fruit orcharding remained prominent agricultural industries into the 1970s. In the more recent years, the agricultural output has greatly diminished as the town has become more of a bedroom community.



Figure 5: Signage that highlights one of Charlton's former manufacturing operations

Commercial and residential development began along Route 20 after its completion in 1930. The Route 20 regional highway corridor continues to be a major stimulus of residential, industrial and commercial development. The conversion of recreational cottages that date from the early to mid-1900s to year-round residences along ponds such as Glen Echo Lake, South Charlton Reservoir, and Cranberry Meadow Pond has been another important development that has facilitated population growth and affected the town's water resources. The shores of most ponds and lakes in town are now heavily built up.

In the late 1950's, Charlton was spared a natural disaster which could have changed Charlton's appearance and heritage. The Glen Echo flood would have wiped out much more of the Charlton City area than it did but the recently constructed Massachusetts Turnpike acted as a huge dam and saved much of Charlton City. The Masonic Home, Charlton's largest employer at that time, was immensely helpful in housing the displaced flood victims.

POPULATION CHARACTERISTICS

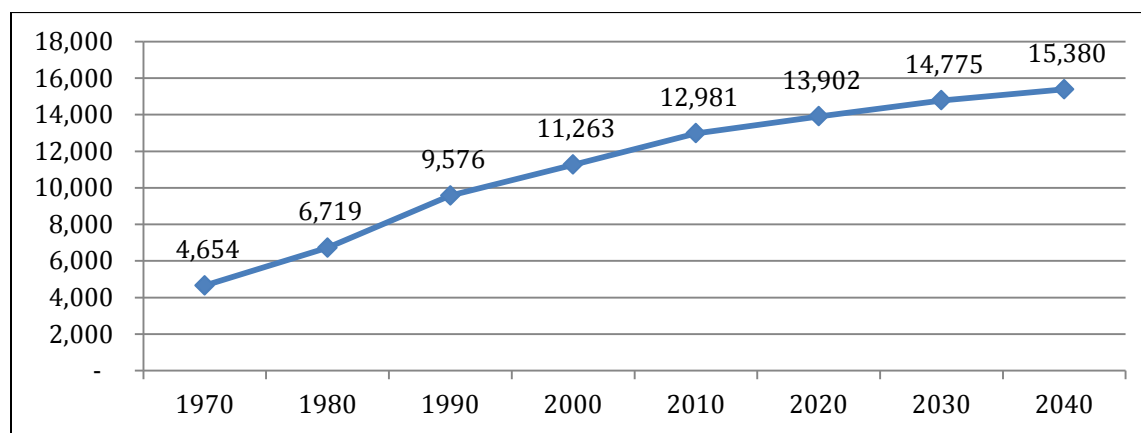
POPULATION AND HOUSEHOLD TRENDS AND DENSITY

Charlton's location and topography has facilitated the town's population growth and subsequent increase in new homes. Charlton has experienced steady growth in the last century, with the most substantial growth being in the 1970's and 1980's (Figure 1). Charlton's population grew by over 1,700 persons between 2000 and 2010, an increase of 15 percent. Since the 2010 decennial census, the population has continued to increase and was placed at 13,126 residents by the U.S. Census Bureau.

The Central Massachusetts Regional Planning Commission (CMRPC) projections show continued growth for the town with an estimated 13,902 residents by 2020 and 14,775 residents by 2030. CMRPC regularly publishes population projections for its constituent communities based on Census estimates. The town level projections were vetted with the communities for transportation planning purposes as part of the 2016 Long Range Transportation Plan. The control totals for the CMRPC region are provided by the Massachusetts Department of Transportation. Town level projections were developed based upon past growth trends, land use and infrastructure capacity, planned future projects, and stakeholder input, including that of the Central Massachusetts Metropolitan Planning Organization (CMMPO), CMMPO Advisory Committee and CMRPC Community Development and Planning staff. Along with Sturbridge, Charlton is expected to lead this subregion of Worcester County in terms of population growth (Table 1). This rate of growth will have a major impact on the community in terms of housing demand and spending on goods and services.

With a total landmass of 43.8 square miles, Charlton's population density is 296 people per square mile. The most densely populated areas of Charlton are within its villages such as the Village Center, Charlton Depot, and Charlton City. By contrast, Worcester had a population density of 4,815.03 people per square mile in 2010 and Worcester County as a whole had a population density of 527.77 people per square mile.

Figure 6: Charlton Population Trends and Projections, CMRPC



Source: U.S. Census Bureau and the Central Massachusetts Regional Planning Commission

Table 2 shows Charlton's changing household dynamics. Household growth outpaced population growth in Charlton from 2000 to 2010. Charlton's population grew by 15 percent from 2000 to 2010 while household growth was 22 percent. This is not surprising when one considers the national trend towards smaller household sizes. The number of people living in a housing unit (a household) has been declining for decades in the United States as more people choose to live alone, have no children or have fewer children. Charlton's average household size went from 2.92 in 2000 to 2.78 in 2010 and its average family size similarly declined over this same period. There are fewer family households with children in Charlton now than there were in 2000. At the same time, single-person households went from 15 percent of all households in Charlton in the year 2000 to 17 percent in the year 2010. The addition of over 200 housing units for senior citizens at Overlook may also have contributed to these local demographic changes.

Table 1: Population and Employment Projections, CMRPC

Municipality	CMRPC Population Projections			CMRPC Employment Projections		
	2010	2030	Percent change	2010	2030	Percent change
Charlton	12,981	14,775	14%	3,740	4,157	11%
Dudley	11,390	12,294	8%	2,720	2,997	10%
East Brookfield	2,183	2,347	8%	420	401	-5%
Leicester	10,970	11,844	8%	2,290	2,339	2%
Oxford	13,709	15,170	11%	3,760	4,513	20%
Southbridge	16,719	17,682	6%	5,820	6,487	11%
Spencer	11,688	11,737	0.4%	3,090	3,233	5%
Sturbridge	9,268	11,502	24%	4,470	4,990	12%
Regional Total	556,698	615,363	11%	224,000	241,213	8%
<i>Source: U.S. Census Bureau and the Central Massachusetts Regional Planning Commission</i>						

Table 2: Charlton Household and Population Summary

	2000 Number	2000 Percent	2010 Number	2010 Percent	Percent Change
Population	11,263	100	12,981	100	15%
Households	3,788	100	4,608	100	22%
Family households with children	1,716	45%	1,670	36%	-3%
Householder living alone	551	15%	780	17%	42%
Households with individuals under 18 years	1,830	48%	1,816	39%	-1%
Households with individuals 65 years and over	527	14%	998	22%	89%
Median Age	35.4		41.2		
Average household size	2.92		2.78		
Average family size	3.24		3.14		
<i>Source: U.S. Census Bureau 2000 and 2010 Census and 2010-2014 American Community Survey</i>					

POPULATION BY AGE

Similar to regional and national trends, Charlton's population is aging. However, the significant increase in the median age of Charlton's population from the year 2000 to 2010 may owe a lot to the expansion that took place at Overlook, which is a continuing care retirement community. This facility added over 200 housing units during this time period. The median age in Charlton went from 35.4 in the year 2000 to 41.2 in the year 2010. Populations under the age of 40, including families with young children, continue to decrease. Different segments of the population have different recreation needs and desires. Growth or decline in the population of the various age groups has implications for recreation facilities and activities as well as municipal services. Younger and school aged residents have a need for more active recreation facilities such as soccer and baseball fields. For middle aged residents, active recreation areas for league sports may be needed as well as passive recreation facilities for activities like hiking and picnicking with the family. For the older generations, passive recreation facilities and special provisions like wheelchair accessibility may be needed. In sum, these age trends taken with the increase in the Town's total population will create additional pressures for the provision of open space and recreation facilities.

Table 3: Charlton Residents by Age

	2000		2010		2014	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Total population	11,263	100%	12,981	100%	13,126	100%
Under 5 years	810	7%	669	5%	630	5%
5 to 9 years	1,020	9%	889	7%	728	6%
10 to 14 years	979	9%	1,018	8%	1,149	9%
15 to 19 years	812	7%	985	8%	792	6%
20 to 24 years	412	4%	630	5%	826	6%
25 to 34 years	1,519	13%	1167	9%	1,187	9%
35 to 44 years	2,354	21%	2057	16%	1,857	14%
45 to 54 years	1,668	15%	2511	19%	2,469	19%
55 to 59 years	484	4%	871	7%	1,169	9%
60 to 64 years	338	3%	659	5%	798	6%
65 to 74 years	424	4%	727	6%	880	7%
75 to 84 years	266	2%	491	4%	341	3%
85 years and over	177	2%	307	2%	300	2%
Median age (years)	35.4		41.2		42.2	
<i>Source: U.S. Census Bureau 2000 and 2010 Census and 2010-2014 American Community Survey</i>						

INCOME AND EDUCATION

In 2014, the median household income in Charlton was an estimated \$91,287 and the median family income was an estimated \$103,250. The median household and family incomes of Charlton remain much higher than the estimates for Worcester County and Massachusetts for this same period. Several attribute Charlton's high median household and family income to the number of residents at Overlook with higher than average incomes. A slightly higher percentage of Charlton residents were high school graduates when compared to Worcester County and the state as a whole but Charlton had a smaller percentage of residents with a bachelor's degree or higher.

Table 4: Estimated Income of Charlton Households and Families

	Households	Families
Charlton	\$91,287	\$103,250
Worcester County	\$65,453	\$82,736
Massachusetts	\$67,846	\$86,132
<i>Source: 2010-2014 American Community Survey</i>		

Table 5: Educational Attainment 2010-2014

	Percent high school graduate or higher	Percent bachelor's degree or higher
Charlton	94%	33%
Worcester County	90%	34%
State	90%	40%
<i>Source: 2010-2014 American Community Survey</i>		

ENVIRONMENTAL JUSTICE POPULATIONS

There are no Environmental Justice populations in Charlton. Charlton is primarily a middle class community of mixed ethnic groups of European descent. In 2014, Charlton was 97% white, non-Hispanic and less than one percent Hispanic. Of Charlton's population age five years and older, approximately 5 percent spoke a language other than English at home according to the ACS 2010-2014. Charlton's neighbor Southbridge has environmental justice populations that fall within the criteria categories of Minority, Minority and Income, and Minority, Income and English isolations. The Worcester region in general is continuing to become more diverse in race and ethnicity. Immigration and subsequent births to the new arrivals during the last few decades of the 21st century continue to play a major role in the changing the racial and ethnic composition of the Worcester region as well as the U.S. population as a whole. In 2014, Worcester County was 80 percent white, non-Hispanic and 10 percent Hispanic.

ECONOMIC CHARACTERISTICS

The American Community Survey (ACS) 20100-2014 estimated 74% of Charlton residents over the age of 16 were active in the labor force and estimated an unemployment rate of 6.6%. The mean travel time to work was almost thirty minutes and almost 90 percent of residents drove to work alone.

Charlton is home to approximately 320 businesses employing approximately 3,900 people, ranging from mom and pop type retail and service firms to large scale manufacturing companies. Key contributors to the economic base in Charlton include: Incom Inc, Karl Storz Endovision, rEVO Biologics (formerly GTC Biotherapeutics) and Overlook/Masonic Home. Charlton has also become a hub for commercial solar energy over the last decade. Seventeen commercial solar generation array projects have been permitted to-date via Planning Board site plan approval, with at least 6 more in the pre-application design pipeline. The 2008 Master Plan noted that most of Charlton's businesses are small with fewer than ten employees. The 2008 Master Plan highlighted a growth in the number of private companies and workforce levels in Charlton and stated "The trend toward more businesses and the relatively stable workforce levels support the fact that Charlton is a small business community." Table 7 shows that the number of businesses has grown by 25 and employment by almost 500 people over the last ten years. Table 1 shows that CMRPC projects continued employment growth into the 2030s.

Table 6: Charlton Employment Information, 2015

Description	Number of Establishments	Total Wages	Average Monthly Employment	Average Weekly Wages
Total, All Industries	324	\$187,991,504	3,949	\$915
23 - Construction	63	\$15,098,363	276	\$1,052
31-33 - Manufacturing	15	\$48,442,449	802	\$1,162
42 - Wholesale Trade	16	\$20,720,999	303	\$1,315
44-45 - Retail Trade	31	\$8,501,995	268	\$610
48-49 - Transportation and Warehousing	11	\$4,230,912	105	\$775
51 - Information	8	\$6,315,526	102	\$1,191
52 - Finance and Insurance	11	\$2,064,186	43	\$923
53 - Real Estate and Rental and Leasing	4	\$199,786	7	\$549
54 - Professional and Technical Services	34	\$7,764,397	113	\$1,321
56 - Administrative and Waste Services	14	\$1,259,064	34	\$712
61 - Educational Services	7	\$24,278,670	467	\$1,000
62 - Health Care and Social Assistance	52	\$20,324,275	633	\$617
71 - Arts, Entertainment, and Recreation	4	\$718,556	61	\$227
72 - Accommodation and Food Services	18	\$6,770,127	397	\$328
81 - Other Services, Ex. Public Admin	19	\$2,250,327	75	\$577
92 - Public Administration	9	\$10,306,221	127	\$1,561
<i>Source: Massachusetts Employment and Wages Report (ES-202). Totals by 2-Digit NAICS Code. Employment and Wage (ES-202) data are derived from reports filed by all employers subject to unemployment compensation laws, both state and federal. Industry employment</i>				

Table 7: Charlton Employer and Employment Growth 2006-2015

Description	Number of Establishments		Numeric Change	Average Monthly Employment		Numeric Change
	2006	2015		2006	2015	
Total, All Industries	299	324	25	3,456	3,949	493
23 - Construction	68	63	-5	300	276	-24
31-33 - Manufacturing	17	15	-2	605	802	197
42 - Wholesale Trade	16	16	0	92	303	211
44-45 - Retail Trade	31	31	0	290	268	-22
48-49 - Transportation and Warehousing	10	11	1	157	105	-52
51 - Information	4	8	4	54	102	48
52 - Finance and Insurance	9	11	2	40	43	3
53 - Real Estate and Rental and Leasing	5	4	-1	12	7	-5
54 - Professional and Technical Services	26	34	8	204	113	-91
56 - Administrative and Waste Services	20	14	-6	94	34	-60
61 - Educational Services	6	7	1	435	467	32
62 - Health Care and Social Assistance	13	52	39	398	633	235
71 - Arts, Entertainment, and Recreation	Not reported	4	N/A	Not reported	61	N/A
72 - Accommodation and Food Services	29	18	-11	408	397	-11
81 - Other Services, Ex. Public Admin	26	19	-7	134	75	-59
92 - Public Administration	Not reported	9	N/A		127	N/A

Source: Massachusetts Employment and Wages Report (ES-202). Totals by 2-Digit NAICS Code. Employment and Wage (ES-202) data are derived from reports filed by all employers subject to unemployment compensation laws, both state and federal. Industry employment

Charlton's overall economic development strategy is to guide non-residential growth including a mix of commercial, office, research and development and service business to the village center and to the Route 20 corridor. The town has an active Economic Development Commission (EDC) that has worked closely with the Charlton Planning Board, the business community and other community partners to promote economic development opportunities. In addition, the Town is active participant in the Worcester Area Comprehensive Economic Development (CEDS) Strategy process. Charlton has four large, vacant parcels along the Route 20 corridor currently designated on the CEDS list priority development areas. One of Charlton's newest permitted businesses, Tree House Brewery, has opted to develop under the town's flexible business development bylaw and will result in nineteen acres of preserved space as well as trail connections to adjacent Capen Hill Nature Sanctuary.

GROWTH AND DEVELOPMENT PATTERNS

PATTERNS AND TRENDS

The evolution of land use within a community is the product of local economic conditions and topography. Growth and development is based on such factors as access to jobs and employment and the availability of affordable land for new housing or commercial development. Charlton's topography is predominantly gentle to rolling hills and valleys; elevations range from less than 500 feet to 1,070 feet above sea level. The flatter lands have been conducive for agriculture and, later,

housing development. Charlton also contains over 700 acres of water, which consists of ponds, reservoirs and streams. Charlton's water resources also have attracted housing development.

Prior to 1950, Charlton was primarily a farming community, with a notable number of dairy farms. In addition, a limited amount of industry was located in and around one of Charlton's many villages. Residential development occurred adjacent to these employers or around Charlton's many lakes and ponds. Charlton's mills began to close in the 1960's and farming began a slow decline. From 1960 to 1970, American Optical in Southbridge became a major employer of Charlton as farming and local manufacturing decreased. In addition, the Cranston Print Works of Webster employed many of the former Charlton Woolen and Ashworth Mills employees.

The 1970s marked the beginning of Charlton's population boom. The population increased over 40 percent from 4,654 to 6,719 residents from 1970 to 1980. Many attribute the increased demand for new house lots and the subsequent population boom in Charlton to construction of the Massachusetts Turnpike in 1954/55 and the shift to employment outside of Charlton. Though Charlton does not have direct access to the Turnpike, it is located between the Auburn and Sturbridge exits which provide easy access to this east-west connector. The sale of farmland for new house lots began the transformation of Charlton's landscape from agricultural to more of a suburban appearance, with "ribbon" development along many of Charlton's existing roadways. Farmlands and forest gave way to 60,000 square foot lots, filling up the vacant areas along existing roads.

In the 1990's, a significant number of family farms, summer camps and recreational campgrounds were sold or auctioned off, opening up hundreds of acres of "internal land" to development. This type of sub-division development was new to Charlton, which previously experienced in-fill and "ribbon" development along existing roads

In 1987, the community fulfilled a major accomplishment by adopting Charlton's first Zoning Bylaws. This action did a lot to control and direct development within Charlton. Map #2 shows the existing zoning designations in Charlton.

New residential development has been the predominant land use in Charlton in recent years. The Southwest subregion (Auburn, Oxford, Webster, Dudley, Southbridge, Sturbridge and Charlton) continues to be one of the fastest growing areas in Central Massachusetts. Much of this new development has occurred on converted farmland. As noted earlier, population and housing unit growth is anticipated to continue in the coming decade. The Town has a number of unbuilt homes in several subdivisions and significant amount of developable land.

Charlton has become a hub for commercial solar energy and solar has become one of the town's biggest economic drivers over the last decade. The town estimates annual tax revenues of \$600,000 from these businesses with no financial impact to the local schools. Seventeen solar projects have been permitted or built thus far and the town anticipates more. Many of the projects have been built on the fields of former farms.

Table 8: Charlton Housing Characteristics, 2010-2014

	Estimate	Percent
HOUSING OCCUPANCY		
Total housing units	4,800	100%
Occupied housing units	4,617	96%
Vacant housing units	183	4%
HOUSING TENURE		
Occupied housing units	4,617	100%
Owner-occupied	3,728	81%
Renter-occupied	889	19%
UNITS IN STRUCTURE		
Total housing units	4,800	100%
1-unit, detached	3,744	78%
1-unit, attached	199	4%
2 units	110	2%
3 or 4 units	287	6%
5 to 9 units	200	4%
10 to 19 units	40	1%
20 or more units	220	5%
YEAR STRUCTURE BUILT		
Total housing units	4,800	100%
Built 2010 or later	15	0%
Built 2000 to 2009	974	20%
Built 1990 to 1999	887	19%
Built 1980 to 1989	860	18%
Built 1970 to 1979	892	19%
Built 1960 to 1969	339	7%
Built 1950 to 1959	369	8%
Built 1940 to 1949	125	3%
Built 1939 or earlier	339	7%
<i>Source: 2010-2014 American Community Survey 5-Year Estimates</i>		

Charlton has also continued to see commercial and industrial development interest along Route 20. Over the last decade, there has been a strong uptick in small retail and warehousing. The town has also seen much interest in self-storage. The community introduced the Business Enterprise Park (BEP) zoning district in the 2000s to encourage certain types of commercial and industrial uses to locate, in appropriate areas, along Route 20. Remaining commercial sites are primarily located along Route 20, with some isolated commercial sites on Carpenter Hill Road, Route 169, and Route 31.

Charlton's housing stock is currently, and has historically been, single-family homes, as shown on Table 8. Of the estimated 4,800 housing units in Charlton, approximately 80 percent of Charlton's housing units are attached and detached single-family units. Charlton has a higher percentage of single-family housing units when compared with most of its neighboring communities. Over 80 percent of Charlton homes are owner-occupied while less than 20 percent are renter-occupied. Corresponding with Charlton's population trends, most housing units were built after 1970.



Figure 7: SolarFlair Energy, on Route 20 in Charlton, MA. The farm consists of over 7,000 solar panels and occupies approximately 9 acres.

INFRASTRUCTURE

ROADS

Charlton's residential and commercial growth can also be attributed to its highway access and road network. The major east-west roadways in Charlton are the Massachusetts Turnpike (Interstate 90) and Route 20. Interstate 90 provides access between Boston and New York State (via Interstate 84). The nearest access point to Interstate 90 is located approximately six miles west from the center of Charlton. Route 20 parallels Interstate 90 to the south and provides regional east-west access. The posted speed limit is 50 mph along various stretches of Route 20, and vehicular speed has been an ongoing safety concern. State of good repair and safety improvements to Route 20 are continually being made, by segment: 1) Richardson's Corner to .25 mile east of MA-169 (completed 2005); 2) MA-169 to MA-149, 3.2 miles (completed 2008), and 3) interim safety improvements (including selective widening, new barriers and signage) along the corridor in Oxford (January 2016). Reconstruction of a 3.2 mile segment between Richardson's Corner and MA-12 in Oxford is now in design, with an expected start date of Spring 2020. Each project is improving this roadway's safety by providing wider traffic lanes for trucks, wider shoulder lanes and a concrete median

barrier to prevent future head-on collisions. This work will make travel easier for both cars and trucks, and, as expected, will further enhance Charlton's development and growth. However, safe pedestrian access across Route 20 continues to be of concern.

The major north-south roadways in Charlton are Route 169 located on the westerly side of town and Route 31 located in the center of town. Route 169 runs from Route 20 at the western end of Charlton southward to Southbridge. Wetlands limit additional development potential along this roadway. Route 31 runs through the center of Charlton providing access to Spencer to the north and Dudley to the south. Despite Charlton's regional accessibility, the majority of Charlton's developable land is not directly accessible from its major access routes, specifically Route 20 and Route 169, which limits development potential.

In addition to the aforementioned numbered routes, Stafford Street, Brookfield Road, Oxford Road, and Center Depot Road, are connector roads that link the neighboring towns and carry significant commuter traffic. All other roadways in the town principally serve local traffic. The 2008 Master Plan noted that the town struggles to keep up with local road improvements in the face of continued residential and commercial development.

The majority of roadways in Charlton are narrow, windy roads that provide limited sight lines to drivers. Additionally, vehicular speeds have been cited as an area of concern. These conditions create an unsafe environment for pedestrians and bicyclists. In order to address these issues, Charlton has adopted bylaws that require subdivision developers, site plan applicants and special permit applicants to include sidewalks in their respective projects.

The Midstate Trail is an off-street trail system that runs north-south through fourteen Worcester County communities. This trail passes through Charlton on its route from Ashby to Douglas and is maintained by the Worcester Chapter of the Appalachian Mountain Club. There are no existing statewide designated bicycle routes in Charlton, nor are any proposed.

Charlton is working with CMRPC staff on a Complete Streets Policy that would apply to the Village Center. A Complete Street is one that provides safe and accessible options for all travel modes: walking, bicycling, transit, and vehicles, for people of all ages and abilities. Improvements related to Complete Streets can take many forms, from corridor wide projects, to smaller-scale fixes that are focused on a single mode of travel. MassDOT has recently kicked-off a Complete Streets Funding Program to provide technical assistance and incentives for adoption of Complete Streets policies at the municipal level. The goal of the program is to encourage municipalities to adopt a strategic and comprehensive approach to Complete Streets, rather than simply seeking funding for a single project, through Complete Streets Prioritization Plans. The Planning Board expects to adopt the policy in September 2016.

The Worcester Regional Transit Authority (WRTA) began operating Route 29 weekday bus service through Charlton in 2013, and added Saturday trips in 2016. Route 29 originates at Union Station in downtown Worcester, stops at the Auburn Mall in Auburn and then makes "flag stops" along the remainder of the route, before terminating in downtown Southbridge. A flag stop means that the bus will stop for anyone flagging it down whenever it is safe to do so; however, the WRTA has

determined a section of the route in Charlton along US Route 20 is not safe to stop. The route passes by Harrington Hospital Clinic on North Main Street in Charlton, Charlton Town Hall and Public Library, Overlook/Masonic Home on Masonic Home Road, and Charlton Family Practice and Incom on Route 169. The total ridership on Fiscal Year 2016 for this route was 59,438 unlinked passenger trips, a 13% growth when compared to FY2015.

The WRTA offers paratransit service, through SCM Elderbus, to Charlton residents age 60 and over and Charlton residents with disabilities of all ages during normal service hours. Outside normal service hours of the Elder Bus, the WRTA provides van service. Venture Community Services (formerly RRI) offers paratransit service on a private basis to people with disabilities during limited service hours.

WATER

The town of Charlton does not have its own public water supply. Since the late 1980s, the Town has been actively searching for a solution to its water supply needs to support economic development along Route 20 and respond to groundwater contamination issues. Historically, most residents and businesses have relied on private wells for water needs. In addition, there are 11 community groundwater wells in Charlton as well as 52 non-community wells, 31 of which are transient. A community well means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. In the 1990s, water lines were brought up from Southbridge along 169 to serve the two heavily used rest areas along the Massachusetts Turnpike as well as some homes and businesses in these areas with contaminated groundwater. Through improvements to Charlton's water infrastructure that have been ongoing over the last several decades, which is detailed in the following paragraphs, about 300 homes and business have public water while the remaining residents have their water needs served by private wells.

Evidence of groundwater contamination in several areas of town has precipitated the need for a comprehensive water system and water supply. Road salt contamination has been found in wells along the Route 20 and Mass Turnpike corridors, and a vein of naturally occurring arsenic runs through the subsurface soils in the center of town from north to south. Several wells in the Charlton City area have shown levels of trichloroethylene (an industrial solvent) in excess of regulatory levels. The source of this contamination is not known. Benzene, and MBTE, both gasoline additives, have been detected in some wells in the vicinities of the Mass Turnpike 6W and 5E service facilities. The underground plume of contamination has migrated a substantial distance from the turnpike and Charlton City areas to a large part of Charlton, polluting dozens of private wells. The Mass Turnpike Authority and several oil companies were identified by the Department of Environmental Protection (DEP) as potentially responsible parties. Exxon Mobil was identified by Mass DEP as responsible party for the release of gasoline at LaMountain's Exxon on Worcester Road. The Town and Mass DEP reached an agreement with Exxon in April 2016 (detailed below). Other known releases causing groundwater contamination in Charlton include releases of gasoline at the Honey Farms on Worcester Road and releases of petroleum products from the Charlton Highway Department on North Main Street. In all these petroleum releases, bedrock has been a problem because the oil spreads in unexpected ways due to fissures. Finally, DEP named Casella

Waste Systems, operator of the nearby Southbridge landfill, the potential responsible party for the residential water contamination by 1-4 dioxin of 21 Charlton residences in area of H. Foote Road and Berry Corner Road in the western part of Town, and the Town is still in discussions with DEP and Casella regarding this issue. More on information on contamination can be found on page__ of this report.

In the late 1990s, a water line was brought from Southbridge along 169 to supply the two rest areas on the Mass Pike and to service an area of Charlton City with contaminated wells (Stafford Street, Route 20, Brookfield Road area). This section was owned and operated by the Town of Southbridge. In the 2000s, Charlton and Southbridge cooperated to bring the line along North Main Street and Main Street to service the center of the Town. In addition Charlton installed water lines along Route 20 from the Oxford town line, including a pump station and a 750,000 gallon water storage tank. The plan was to utilize public water from Oxford (owned and operated by the private water supply company Aquarian) to service homes and businesses in this area of town. Prior to the water system being activated, the Massachusetts Department of Environmental Protection determined that the transfer of water from Oxford to Charlton would be an inter-water basin transfer, and that the search for local supplies, required before an inter-basin transfer would be granted, had not been sufficiently completed. The pipe and tank, therefore, was never activated. The waterline infrastructure remained in place and inactivate until an agreement was reached with the Town of Southbridge to interconnect the existing Southbridge operated water system in the Town of Charlton to parts of the inactive Town of Charlton water system to a point on Stafford Street (however, much of the pipe installed to bring water from Oxford and the tank, remain dry. The Inter-Municipal Agreement (IMA) between Southbridge and Charlton agreed to provide up to 100,000 gallons of water to the Town of Charlton, in April 2009. In 2010, a water line was installed on North Main Street, to provide water to the multiple properties with natural and petroleum contamination.

Activation of the Charlton water system is still ongoing. Currently to date, upper Stafford Street area, Northside Road, Route 20 from Northside Road to North Main Street have all been activated. In April of 2015, the Towns of Charlton and Southbridge completed an Inter-municipal Agreement (IMA) for 200,000 gpd and another 300,000 gpd, upon completion of certain system improvements detailed in the IMA for a total of 500,000 gpd available to Charlton. This amount was a prerequisite for building new infrastructure in and near the town center known as the “school loop”. Once that agreement was complete, Charlton officials along with the Department of Environmental Protection met with ExxonMobil representatives to develop an agreement that would provide water to a suspected migrating gasoline plume.

The Town entered into an agreement with ExxonMobil in April of 2016, estimated to be worth \$30,000,000, regarding releases at various sites including the LaMountain Gas Station. The agreement will fund new water infrastructure to bring public water to sites contaminated by MtBE including the Charlton Middle School, Charlton Heritage Elementary School and Bay Path Regional High School. The Masonic Home will also be hooked up to the new water line. In addition, the agreement provides funds for a water master plan as well as a water superintendent.

The water infrastructure east of Northside Road on Route 20 and to the Oxford town line will remain inactive. The cost to provide water to this area, as well as the source of that water, have not been included in the calculations of the ExxonMobil settlement. These costs will be considered with activation of that section of waterline at a later time. In general, residents and businesses have been reluctant to pay for a water system as the contamination was not their fault.

The Water-Sewer Commission has hired an interim water controller to build the new water system resulting from the Exxon settlement and to oversee other planned water infrastructure. The 2015 IMA with Southbridge stipulated that Charlton would own all water infrastructure that had previously been owned by Southbridge but Southbridge would continue to operate the water system. The goal is for the town to eventually operate its own water system and Charlton is working with DEP on these steps. The town is still looking for a source of water to supply its water infrastructure. The Water and Sewer Commission did a study around 10 years ago that showed the availability of a public well in the Buffumville fold control Dam area, and the Town petitioned DEP for a permit to conduct a long-term draw-down test on that well site. However, DEP denied the request because: the well would be wholly located in the flood area, there would be a potential for infiltration of surface water into the well water, and DEP requires a redundant water supply in case of flood emergency. At that time, the agreement and connection to Southbridge was not extant. The Town is also working with Oxford to potentially supply areas of town not covered by water supply from Southbridge and/or to potentially develop groundwater supplies in that area. The full extent of ground water contamination is unknown. The Town is actively pursuing several grants to further study this issue. In addition, the town has expressed interest in developing a Water Resources Management Plan.

SEWER

The Town completed the first and second phases of a sewer system and treatment plant project. The first phase was installed along the western section of Route 20 and portions of Stafford Street. The primary impetus for the first phase was to provide sewer service to the Massachusetts Turnpike service areas. The Phase 1 sewer system also included three pumping stations, one on J. Hammond Road, one on Route 20 and one off of Route 20. The second phase provided service to the Glen Echo Lake area, the center of Town and the schools and included 8 pumping stations. The Water and Sewer Commission is responsible for the oversight of the operation and maintenance of Charlton's wastewater facilities. There are no current plans to expand the collection system but extensions are occasionally permitted by the WS Commission to facilitate connection by private developers at their own expense.

The Massachusetts Turnpike Authority paid to extend the sewers to their services areas, while the Town paid for replacing the sewers in Charlton City. After evaluating Town-operated versus contract-operated wastewater treatment plant, the Town decided it was more cost effective to provide operations and maintenance of the collection system/treatment plant with a private contractor, and does so to this day. The treatment facility has a design capacity of 450,000 GPD with discharge to Cady Brook. Daily average use is around 250,000 gpd leaving a substantial unused capacity. The expense of the new facility was also shared by the Town (40 percent) and the MTA

(60 percent). Completed in March 1997, the wastewater treatment plant (WWTP) began operating in September 1997.

LONG-TERM DEVELOPMENT PATTERNS

Charlton has three important documents that guide land use in town: the Zoning Bylaw, Subdivision Regulations and Master Plan. Charlton's zoning bylaw was adopted in 1987 (and subsequently amended) and it regulates land use by:

- Specifying and distinguishing different land use types;
- Creating development standards for the size and shape of lots and the buildings erected on those lots;
- Addressing lots, buildings and uses that pre-dated the adoption of the zoning bylaw (non-conformities);
- Establishing criteria for the evaluation of permit applications for new buildings;
- Establishing procedures for permitting uses not specifically allowed by right;
- Defining terms that have specific meanings under the bylaw; and,
- Creating a map that displays the geographic extent of each zoning district

Charlton contains a total of seven zoning districts and three overlay districts (Flood Plain, Wireless Telecommunication Facilities and Adult Entertainment). The majority of land in town is zoned for Agriculture, which primarily allows the lowest density residential uses. All non-residential uses require Site Plan Review.

Permitted uses within each of the zoning districts, as well as dimensional and density regulations for building sizes and yard areas are set forth within the Zoning Bylaw. The bylaw includes three residential districts (A, R-40 and R-SE), two commercial districts (NB and CB), and two industrial districts (I-G and BEP). The Residential Small Enterprise (R-SE) district also allows certain commercial uses, in keeping with a traditional "Mill Village."

Table 9: Charlton Zoning Districts

Zoning District	Acres	Percent of Town
Agricultural (A)	23,141	83%
Business Enterprise Park (BEP)	645	2.3%
Community Business (CB)	463	1.7%
Industrial General (IG)	658	2.3%
Neighborhood Business (NB)	33	0.1%
Low Density Residential (R-40)	2,096	7.5%
Residential-Small Enterprise (R-SE)	241	0.9%
Village (V)	747	2.7%
<i>Source: MassGIS</i>		

All residential districts allow Flexible Development on parcels of 10 acres or more, by Special Permit from the Planning Board. Such subdivisions are allowed a greater density of housing and waivers from typical subdivisions standards in exchange for the permanently restricted open space equal to at least 25 percent of the total land area of the subdivision. For example, in Agricultural districts, the minimum lot size is reduced from 60,000 to 45,000 square feet. Landscaped buffers of 20 feet in width are required along the lot frontage in both BEP and IG districts. In addition, any use in these districts abutting an R-40, an Agricultural, or a Historic District must have a landscaped strip of 100 feet in width along the site boundary. Residential development, particularly subdivisions, is regulated through Charlton's Rules and Regulations Governing the Subdivision of Land in Charlton, Massachusetts (the Subdivision Regulations).

The current Subdivision Regulations were adopted in December of 1989 and are reviewed annually by the Planning Board and its engineering consultant for considered revisions and updates. As is typical, the main purpose of Subdivision Regulations is to protect the "health, safety, convenience and welfare of the inhabitants of Charlton" by specifying construction standards for new roads that ensure safe roads, adequate access to all lots, and provision of utilities within subdivisions. For example, the Subdivision Regulations require streetlights, sidewalks, street trees and specify pavement widths for each type of subdivision road. These regulations are significant in determining what new residential subdivisions will look like.

The Charlton Master Plan was adopted in 2008 to guide future growth and development. The Master Plan is a policy document that reviews existing conditions and recommends actions for guiding future growth and development in Charlton in a way that maintains Charlton's desired community character. Ideally, the Master Plan is the blueprint for the Town and the zoning bylaw is the regulation that implements the plan. The Town Planning Department and Planning Board have been tasked with implementing its recommendations and many have been implemented since its adoption. One of the major initiatives to come out of the Master Planning process was the adoption of Village Center Zoning in 2008, which promotes mixed use, mobility and open space. Boundaries of the district have expanded two additional times since its adoption and it now includes the Overlook property holdings.

Table 10: Charlton ANR's 2010-2015

Year	Number of ANR's	Lots Created
2010	12	21
2011	14	12
2012	11	11
2013	20	13
2014	15	17
2015	16	22
<i>Total</i>	<i>88</i>	<i>96</i>
<i>Source: Charlton Department of Planning</i>		

Housing development has occurred both in the form of “Approval Not Required” (ANR) lots and subdivisions. Development of individual house lots along existing public ways requires only the submittal of an ANR plan to the Planning Board. Over the last six years 96 lots have been created through the ANR process. It’s important to note that less than half of the lots approved in permitted subdivisions since 1999 have been built upon.

The town’s flexible development bylaw has generated a significant amount of preserved open space in the Community. Table 12 shows that over 500 acres have been permanently preserved since the bylaw’s passage.

As previously mentioned, Charlton is projected to grow by 2,000 residents by 2030. The Charlton Planning Director expects the pattern of residential development will “fill in the blanks” between the existing roads which currently reach most of the areas around town. The Planning Board anticipates that Blair Builders will eventually apply for a definitive subdivision plan approval to develop a single-family home residential subdivision at the former Kastigian Farm located westerly off of Route 31 toward the Charlton-Spencer town line. Blair Builders, Inc. purchased the site in 2005. To date, a portion of the former farm has been leased for a commercial solar energy generation array. In regards to commercial development, the Town expects that it is likely to continue along Route 20, which has been zoned for this use.

Currently there are a number of areas that could be saved as open space corridors within town and corridors with adjacent communities. These corridors, be they for wildlife or for people, are the natural links that are most vulnerable to development in Charlton, and they need to be protected to help conserve the integrity of the bioregion, to conserve biological diversity and to provide natural pathways for quality recreation experiences. As development in Charlton occurs, these potential corridors will quickly decrease in both size and length.

Table 11

Subdivisions Approved Since 1999 Subdivision Name	Year Approved	Approved Lots	Acres	Houses Built	Status
Angalie Estates	2005	5	35.87	5	Completed
Buffum Estates	2003	5	11.9	5	Completed
Cranberry Shores	2007	7	32	7	Completed
Dresser Hill	2005	10	23.5	4	Active
Elly Pond Estates	2002	21	45.7	17	Active
Gunter Estates	2013	59	192	0	Active
Haggerty Landing	2004	6	17	0	Active
Hammond Woods	2003	23	69	18	Active
Heritage Oaks	2003	4	15.5	4	Completed
Jennings Road Extension	2010	55	87	17	Active
Lambs Farm Estates	2005	30	66.73	3	Active
Lambs Pond Estates	2010	10	15	10	Completed
Manor Ridge	2003	9	14.5	9	Completed
Ponnakin Hill Estates	2004	57	93.7	21	Active
Preservation Estates	2003	12	19	12	Completed
Reindeer Estates	1999	20	35.98	20	Completed
Scott Drive Extension	2001	9	39.67	9	Completed
Stevens Estates	2003	2	3.11	2	Completed
Stonegate Estates (Phase II)	1999	10	16.27	10	Completed
St. Mary's Way	2011	4	11	1	Active
The Reserve At Barton Hill - East	2007	46	99	0	Active
The Reserve At Barton Hill - West	2007	84	165	0	Active
Tucker Farm Estates	2004	25	97.25	0	Active
Turner Woods	1999	13	26.4	13	Completed
Water's Edge	2000	18	52.59	18	Completed
Willow Tree Estates	2007	10	23.25	8	Active
Totals		544	1,284.6 7	213	
<i>Source: Charlton Department of Planning</i>					

Table 12: Flexible Subdivision Open Space Inventory

Name	Preserved Open Space	% Of Subdivision	Designated Open Space Owner
Angalie Estates	21.75 Acres	61.0%	Town of Charlton
Applewood	46.25 Acres	32.70%	Town of Charlton
Cranberry Meadows	57 Acres	84%	Charlton Heritage Preservation Trust
Dresser Hills Subdivision	5.96 Acres	39.1%	Charlton Heritage Preservation Trust
Gunter Estates	103.12 Acres	53 %	Greater Worcester Land Trust
Hammond Woods	27.44 Acres	39.87%	Charlton Heritage Preservation Trust
Henry Richard Circle	6.38 Acres	30%	Town of Charlton
Jennings Road Extension	22 Acres	25%	To be determined
Lambs Pond Estates	3.72 Acres	24.8%	Charlton Heritage Preservation Trust
Learned Hill Farm	4.58 Acres	18.7%	National Heritage Foundation
McKinstry Drive Extension	9 Acres	35%	Homeowners Association
Pike's Pond	15.7 Acres	28%	National Heritage Foundation
Ponnakin Hill Estates	27.68 Acres	29.5%	Greater Worcester Land Trust
Potter Village Estates	13.88 Acres	44%	Homeowners Association
Preservation Estates	6.2 Acres	30%	Charlton Heritage Preservation Trust
Reindeer Estates	10.72 Acres	50%	Charlton Heritage Preservation Trust
St. Mary's Way	2.66 Acres	24.18%	To be determined
Scott Drive Extension	18.66 Acres	47%	Town of Charlton
Stonegate Estates	4.4 Acres	22.49%	Town of Charlton
The Reserve At Barton Hill-East	32.5 Acres	32.8%	To be determined
The Reserve At Barton Hill-West	51 Acres	30.9%	To be determined
Tucker Farm	17.9 Acres	18.0%	Division Of Fisheries & Wildlife
Water's Edge	6.63 Acres	18.25%	Charlton Heritage Preservation Trust
Willow Tree Estates	5.29 Acres	22.75%	Charlton Heritage Preservation Trust
<i>Source: Charlton Planning Department, August 2016</i>			

SECTION FOUR: ENVIRONMENTAL INVENTORY AND ANALYSIS

GEOLOGY AND SOILS

Central Massachusetts lies within the Appalachian structural province, a long zone of disturbed and altered bedrock that stretches from Alabama to Newfoundland. Generally, there is a north-south alignment of rock units, structural lines and major ridges and valleys. The types of bedrock in the area represent the early formed parts of a thick sequence of deformed sediments that became the Appalachian Mountain belt. They fall into either the metamorphic or igneous rock families.

This topography is predominantly gently rolling hills and valleys with slopes varying from 0 to slightly over 25 percent. Elevations within town vary from less than 500 feet above mean sea level to over 1,700 feet above at Little Mugget Hill. The high clay content in the high lands often precludes intense domestic development because of the lack of on-site sewage possibilities. They, however, are optimum sites for passive recreational, scenic overlooks and non-intensive sports.

The soil characteristics within Charlton can be placed into seven categories for development purposes based on a combination of their soil and slope characteristics. This information is presented in Table 13 and is also shown on the Soils and Geologic Features Map. The majority of town has well drained soils, which historically have supported agriculture and more recently facilitated housing development. Areas with less than ideal soil characteristics are spread throughout town; although, there is a swath of very poorly drained land on either side of Bond Road as well as south of Route 20 at the Oxford Town line. In areas of town with public water and sewer, soil constraints play a relatively minor role in development. It is important to note that even though new public wastewater and water infrastructure will diminish the importance of specific soil characteristics, they still impact development on a location-specific basis. Shallow soils may cause the need for blasting and thus add to expense. Other types that are relatively unstable may necessitate special berms or embankments.

Table 13: Charlton Soil Survey by Dominant Drainage Class

Dominant Drainage Class	Acres	Percent of Town
Not Classified	1,245	4%
Excessively drained	212	1%
Moderately well drained	3,501	12%
Poorly drained	1,583	6%
Somewhat excessively drained	249	1%
Very poorly drained	3,200	11%
Well drained	18,036	64%
<i>Source: United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) and MassGIS</i>		

Presently, most of the underdeveloped land lies within the transitional land between the hilltops and valleys where there are steep slopes and high possibilities of erosion. On the western portion of Charlton, many of these steep slopes break out into ledge terraces. Suitable intensive recreational use can be assigned to specific optimum areas mainly in the southeast portion of Charlton and other smaller areas in the area of Town near Buffumville.

Charlton's remaining farms and fields are still located throughout town and are not concentrated in any one area. Over 4,200 acres of land in Charlton has been categorized as prime farm land, which is defined as "land that has the best combination of physical and chemical characteristics for economically producing sustained high yields of food, feed, forage, fiber, and oilseed crops, when treated and managed according to acceptable farming methods." The Soils and Geologic Features Map also shows the locations of prime farmland soils, which can be found throughout Charlton although there is a concentration along and north of Stafford Street.



Figure 8: Agricultural Landscapes off of Jones Road

TOPOGRAPHY AND LANDSCAPE CHARACTER

Charlton is situated in the southwesterly portion of the county, about thirteen miles from Worcester. The town contains some of the highest ground in southern Worcester County. A hill town with uneven ground formed by a concentration of drumlins, elevations range from about 600 feet above sea level in the river valleys in the southeastern corner of the town to more than 1,000 feet above sea level in the north-central portion of the town. Most hills range between 800 and 1,000 feet above sea level. This high, uneven topography initially deterred settlement during the early 18th century. When the area was finally occupied and the land brought under cultivation, the soils were found to be very productive and rich. They consist largely of Charlton loams which take their name from the town and extend in a narrow band from the Connecticut border near Southbridge and Dudley north to Lunenburg, Winchester, and Winchendon. This is one of three major north-south soil zones in Worcester County, bounded on the west by Brookfield soils and on the east by Gloucester soils. Except for the band of Brookfield loam and stony loam found along the western border of the town, Charlton's surface is covered by Charlton and some Paxton loams on the ridge and drumlin tops, and Charlton fine sandy loam and stony fine sandy loam on the hillsides and the few level areas. Except for the stony fine sandy loam, most of the soil types are free from stone and well suited to mowing, pasture, and cultivated crops of grains and potatoes.

Numerous streams flow among the hills in a north-south direction and provided many small water power sites utilized during the 18th and 19th centuries. The drainage of the town's streams is divided by the central north-south ridge. The waters to the west drain into Cady Brook and the Quinebaug River, and into the French River on the east.

The landscape character of Charlton is dominated by vistas consisting of distant views over hilly fields and wooded valleys for distances up to 80 miles. The view from Dresser Hill (Route 31) is one of the most outstanding in Central Massachusetts and includes vistas to neighboring towns with the church spires piercing the panorama. Brilliant fall foliage is reflected in the numerous ponds strung along a necklace of streams which abound in Charlton. Actions which can be taken to preserve these vistas include zoning regulations, the purchase of scenic easements and the purchase of open space.

There are currently 10 designated scenic roads in town. After a road has been designated as a scenic road, any cutting or removal of trees of more than four (4) inches in diameter, measured two (2) feet above the ground, is prohibited except with the prior written consent of the Planning Board and after a public hearing has been held. These roads are:

- Buteau Road
- Cemetery Road
- Gould Road
- Horne Homestead Road
- Jones Road
- McIntyre Road
- North Sturbridge Road
- Smith Road
- Tucker Road
- Wheelock Road



Figure 9: View from Dresser Hill, facing west.

WATER RESOURCES

Charlton contains over 1,000 acres of water consisting of ponds, reservoirs and streams including the Buffumville flood control reservoir. This abundance of water bodies and streams add to its rural charm. Many of these are man-made and are the result of old industrial operations or farms. These numerous water bodies provide the town with water-oriented recreation areas, attractive residential sites and conservation areas. Some of the water resources in town are publically accessible but this planning process showed that there are many in town that are unaware of this. In addition, many of these publically accessible resources could be improved with parking and other amenities to facilitate greater use. This section describes the water resources found in Charlton and provides a brief description of their character. Their locations are shown on the Water Resources Map.

WATERSHED AND DRAINAGE

Charlton's surface drainage network of streams, ponds and wetlands is the direct result of its topography and soils. These surface waters are important to consider in open space planning. They connect ponds, wetlands, wildlife habitats, rich flood plain soils, historic sites and other important community resources. Roadways have followed stream and river valleys or hill ridge ways.

The drainage network can be divided into drainage basins. Often called watersheds, drainage basins are land areas which collect the water from precipitation and replenish waterways. Streams and brooks are, in turn, fed by smaller sub-watersheds that comprise a large drainage basin. Three of the state-defined 27 major river basins receive water draining from Charlton's over 100 miles of rivers and streams. Most of the town lies within the Quinebaug (14,861 acres) and French River (13,164 acres) Watersheds. A very small 255 acre portion in the upper northwestern section of Charlton lies in the Chicopee River Watershed.

- Cady Brook is a moderately flowing stream with an average width of 15 feet. It runs from the outlet structure of Glen Echo dam to the confluence with Quinebaug River in Southbridge approximately parallel to Route 169 for a distance of 6.6 miles
- Little River is a gradual flowing stream with an average width of 15 feet running for approximately 3.5 miles starting at the discharge of Pikes Pond to the confluence of Buffums Reservoir. This stream has open access for fishing with occasional large open pools.
- McKinstry Brook is a shallow low flowing stream which originates east of Brookfield Road flowing toward Southbridge to the confluence with the Quinebaug River. It averages 10 feet in width, runs for 7.3 miles with large pools and riffle areas. The Brook is a DFW cold water fishery.
- Potter Brook is a 1.6 mile stream with an average width of 6 feet. It contains several small rock dams causing the creation of large deep pools. It has easy access for fishing. Originating at the outfall of Granite Reservoir flowing southerly reaching the confluence with Buffum Reservoir. The Brook is a DFW cold water fishery.



Figure 10: Little River in Charlton

SURFACE WATER

Charlton has several ponds and lakes of conservation and recreation interest as well as private enjoyment. Much progress has been made in the last 15 years to minimize water quality degradation. However, old, on-site waste disposal systems, runoff from roads, and runoff from farming operations, continue to threaten water quality. As a requirement of the MS4 Storm water Permit, the Town of Charlton, through the Conservation Commission, annually conducts dry and wet weather water quality monitoring. In addition, the Last Green Valley organization conducts water quality monitoring within the Quinebaug and French River watersheds and the Army Corps of Engineers within Buffumville. In total, lakes and ponds comprise over 1,000 acres in Charlton.

- Baker (Gore) Pond is an enhanced Great Pond of approximately 169 acres. It was created by the construction of a dam for water power in the 1830's. Its shoreline is populated with approximately 40 homes and an additional 30 plus homes are situated within 500 feet of the shoreline. A diagnostic feasibility study was completed in 1987 resulting in a winter drawdown for weed control. In addition, the pond was treated for blue-green algae. The pond continues to exhibit a serious phosphate loading problem that should be addressed before the problem spreads downstream.
- Granite Reservoir is a 198 acre great pond with a maximum depth of 14 feet and an average depth of 8 feet. It is privately owned and used for swimming and boating.
- Buffumville Lake is a 488 acre man-made lake which was constructed for flood control purposes. It is used for swimming, boating and fishing. Public access is allowed. The site is owned and managed by the Army Corps of Engineers.

- Pikes Pond is 32 acres in size and without great pond status. It is a man-made body of water which is privately owned and used for passive recreation and fishing.
- Little Nugget Lake is man made with public access provided.
- Glen Echo Lake is a 112 acre man-made lake without great pond status. Its maximum depth is 25 feet with an average depth of 12 feet. It is heavily built-up on all shorelines. It previously exhibited various water quality problems, but this was addressed with the construction of town sewer. The lake is used for fishing, boating, swimming and other recreational water activities. Public access is provided.
- Prindle Lake is a 71 acre lake without great pond status. It is man-made and public access is provided.
- Pierpoint Meadow Pond is a 90 acre great pond with a maximum depth of 14 feet.

The following ponds are privately owned and little data is available on them at this time.

- | | |
|-------------------------|-----------------|
| • Putnam Pond | • Sibley Pond |
| • Snow Pond | • Blood Pond |
| • Cranberry Meadow Pond | • McIntyre Pond |
| • Lambs Pond | • Ashworth Pond |
| • Jones Pond | • Dodge Pond |
| • Wee Laddie Pond | • Flowing Water |
| • Hultered Pond | |

Charlton has several water bodies that were identified as impaired or polluted by MassDEP and a listing of these water bodies can be found in the Environmental Challenges subsection of this report.

Charlton does not have any “Outstanding Resource Waters” within its boundary, which are waters given special protection under the Massachusetts Surface Water Quality Standards, 314 CMR 4.00 (WQS) based on their outstanding socio-economic, recreational, ecological and/or aesthetic values.⁴

⁴ According to 314 CMR 4.04(3): "Certain waters are designated for protection under this provision in 314 CMR 4.06. These waters include Class A Public Water Supplies (314 CMR 4.06(1)(d)1.) and their tributaries, certain wetlands as specified in 314 CMR 4.06(2) and other waters as determined by the Department based on their outstanding socio-economic, recreational, ecological and/or aesthetic values. The quality of these waters shall be protected and maintained."



Figure 11: Hammond Woods Pond



Figure 12: Pratt's Pond

AQUIFER RECHARGE AREAS, GROUNDWATER RESOURCES, AND SOURCE PROTECTION AREAS

The town of Charlton currently does not have its own municipal water supply and continues to search for a potential source within its boundary. There are no high-yield aquifers. The town has one medium yield aquifer that covers 62 acres of land at the end of Potter Village Road, and partially within land owned by the Army Corps of Engineers. There are a few low-yield aquifer recharge areas in town. The largest stretch coincides with lands at Buffumville Lake. The second area exists at Sibley Pond. The town should consider working with the state to develop guidelines for their protection. Charlton has 11 community groundwater wells which are encircled by Interim Wellhead Protection Areas. Charlton does not contain any Zone II Wellhead Protection Areas within its boundary.

Charlton signed an agreement in 2015 with its neighbor Southbridge to supply water to Charlton residents and businesses for up to 500,000 gallons per day along existing and planned infrastructure in the center and western areas of town. The Town is also working with Oxford to potentially supply areas of town not covered by water supply from Southbridge and/or to potentially develop groundwater supplies in that area. The town is still looking for a source of water to supply its water infrastructure.

WETLANDS

There are over 2,000 acres of wetlands in Charlton, covering approximately seven percent of its land area. The location of these wetlands is shown on the Water Resources 1 Map as well as the Habitat Features Map. A wetland is an area of land whose soil is saturated with moisture either permanently or seasonally. Such areas may also be covered partially or completely by shallow pools of water. Wetlands include swamps, marshes, and bogs, among others and tend to occur in areas where, because of underlying geology, the water table intersects with the ground surface or where slowly permeating soils prevent drainage. Wetlands are important places for resource protection because they provide many benefits to the Town including: flood control by slowing floodwaters,

recharge of the groundwater supply, protection of public water supply, prevention of pollution, and protection of wildlife habitat.

Wetlands are located throughout town with significant concentrations around or between:

- H Foote Road in the western part of town
- North Sturbridge Road and Fitzgerald Roads in the northwestern corner of town
- Near King Road in the southwestern corner of town
- South of Route 20 at the Oxford-Charlton town line
- Bond Road, north of Colburn Road
- Haggerty and Baker Pond Roads
- Gould Road and Smith Road in the northeastern part of town

FLOOD HAZARD AREAS

The flood hazard areas within Charlton are limited due to the hilly topography which limits flood zones to those areas immediately surrounding Charlton's streams, rivers, ponds and lakes. The location of the 100 year Flood Areas are shown on the Water Resources 2 Map. Approximately, 2,200 acres lie within the 100 year flood zone and 1,500 acres within the 500 year flood zone. The term "100-year flood" is used in an attempt to simplify the definition of a flood that statistically has a 1-percent chance of occurring in any given year. While the Federal Emergency Management Agency (FEMA) now uses "1% Annual Chance Flood Boundary", the 100-year flood plain (previously used) is still a great indicator of the area potentially affected by rising flood waters.

VEGETATION

Charlton is dominated by open fields of former farmland, forests and vegetated wetlands. Only two commercial farms remain in Charlton—Signal Rock Farm and Fay Mountain Farm. Trees and other forms of vegetation provide important resources for a community. Open space planning should protect the volume and diversity of vegetation.

The forested areas are scattered throughout Charlton, though the predominance of uninterrupted forested areas are found on the outskirts of Town in all four quadrants. As of 1985, approximately 70% of Charlton was covered by forest. The forest type is Northern Mixed Hardwood characterized by beech, sugar maple, birch, oaks and other associated hardwoods. White pine is also a significant species, occurring on its own or mixed with hemlock in wetter areas.

Wetland vegetated areas are interspersed throughout the Town associated with the numerous water bodies and streams. Wetland species native to the Town include trees such as Red Maple, Speckled Alder, Canadian Serviceberry, Silky Dogwood, and Eastern Hemlock. Other vegetation includes jack-in-the pulpit, sedge, sweet pepper, winterberry, arrowwood, spice bush, sensitive fern, cinnamon fern, swamp honeysuckle, pussy willow and highbush blueberry. These indicators are taken from the National List of Plant Species that Occur in Wetlands: Northeast, distributed by

the Fish and Wildlife Service, U. S. Department of the Interior. The national indicators reflect the range on possibility of a species occurring in a wetland versus a non-wetland.

It should be noted that Charlton has been listed in the Champion Trees of New England, through the Department of Environmental Management's Urban Forestry program, as home of largest Black Cherry (*Prunus serotina*) tree in Massachusetts. Charlton does not have a public shade tree program. However, developers of new subdivision roads are required to plant shade trees within the right-of-way. Trees, of a size and species approved by the Tree Warden and the Planning Board, shall be installed at an average spacing of fifty (50) feet on both sides of the proposed roadway. All trees shall be subject to a one (1) year guarantee for one (1) year or, if less, for one full growing season.

Many different vegetative species live throughout Charlton. The Natural Heritage and Endangered Species Program of the Massachusetts Division of Fisheries and Wildlife identifies three rare vascular plants that have been observed in Charlton and these are shown in Table 14. None of these species have federal status. Since the 2000s, American Bittersweet was added as a "Threatened" plant in Charlton, and the Appalachian Bulrush went from "Watch List" to no longer appearing on NESA's list. Charlton does not have any "Areas of Critical Environmental Concern" within its boundary.⁵

Table 14: Rare Vascular Plants Observed in Charlton

Scientific Name	Common Name	MESA Status	Most Recent Observation
<i>Celastrus scandens</i>	American Bittersweet	T	2013
<i>Ophioglossum pusillum</i>	Adder's-tongue Fern	T	1933
<i>Viola adunca</i>	Sand Violet	SC	2009
<i>Source: Natural Heritage and Endangered Species Program, accessed summer of 2016</i>			
<i>Notes: T=Threatened, SC=Special Concern</i>			

FISHERIES AND WILDLIFE

FISHERIES

The town of Charlton has diverse and abundant aquatic habitats consisting of cold water and warm water streams and ponds. These habitats are home to many fish species: native, introduced, and stocked. Angling opportunities are excellent due to ample public land access.

Warm water: Buffumville reservoir has good public access. Granite Reservoir, Prindle Lake, Glen Echo Lake and Gore Pond have limited access. There are a number of other small warm water ponds. These ponds have similar fish species such as Bass, Pickerel, Perch, Sunfishes, Bullhead, various minnows, dace and shiners. Water depth, chemistry and aquatic vegetation varies from

⁵ Areas of Critical Environmental Concern (ACECs) are places in Massachusetts that receive special recognition because of the quality, uniqueness and significance of their natural and cultural resources. These areas are identified and nominated at the community level and are reviewed and designated by the state's Secretary of Energy and Environmental Affairs.

pond to pond. This results in different quality and quantity of fish species composition. Some shallow smaller ponds are subject to oxygen depletion during winter months and breeding stress in spring/summer resulting in some fish mortality. Generally, Charlton ponds have good fish production capability. Northern Pike have been stocked in Buffumville reservoir in 1984, 1988 and 1994.

Cold water: Trout fisheries are primarily confined to streams and brooks. There is one (1) designated Coldwater Fishery Resources in Charlton, Mckinstry Brook having excellent native trout species. Eastern Brook Trout is the prime species.

Stocked Trout: DFW stocks trout in Snow's Pond, Little River, South Fork of the Little River, Potter and McKinstry Brooks. Species stocked are Rainbow and Brown Trout.

WILDLIFE

TYPES OF WILDLIFE

The wildlife species found in Charlton are common to all of central Massachusetts. There are occasional uncommon animals seen in Charlton. Moose, Turkey Vulture and American Bald Eagle have large home ranges and expanding populations. A complete listing of wildlife species including mammals, birds, fishes, reptiles and amphibians is too extensive to be noted here. There are many excellent field guides available for reference. The Division of Fisheries and Wildlife stocks about 140 Ring Necked Pheasants annually on open covers and suitable habitat in Charlton. These birds are hunted during the fall upland game season.

The Natural Heritage and Endangered Species Program of the Massachusetts Division of Fisheries and Wildlife identifies three rare species that have been observed in Charlton. NESA has delisted the four-toed salamander, spotted turtle, and triangle floater with its latest list update. Estimated habitats of rare wildlife are located in northeast Charlton along the Little River corridor down to Buffumville, as well as in southern Charlton near East Baylies Road and another area in northwest Charlton. Prime habitat areas for wood turtles in Charlton are located along river corridors, predominantly the Little River Basin. In addition, marbled salamanders have been sighted numerous times in Charlton associated with vernal pools.

Table 15: Rare Species in Charlton

Taxonomic Group	Scientific Name	Common Name	MESA Status	Most Recent Observation
Amphibian	Ambystoma opacum	Marbled Salamander	T	2010
Reptile	Glyptemys insculpta	Wood Turtle	SC	2013
Dragonfly/Damselfly	Neurocordulia obsoleta	Umber Shadowdragon	SC	2007
<i>Source: Natural Heritage and Endangered Species Program, accessed summer of 2016</i> <i>Notes: T=Threatened, SC=Special Concern</i>				

AREAS WITH WILDLIFE

Diversity and variety of wildlife are the strong points of the environment of Charlton. Wildlife habitat includes upland forested areas, many different wetland types, early successional brushy fields, active agricultural fields and suburban backyards. All these habitats are high quality and wildlife production reflects this. Several large more or less unbroken tracts of land can still be found in the western part of Charlton as well as in the northwestern area of town where Bennett Wildlife Management Area and Powers Memorial Forest are located.

Private lands: Most of the wildlife habitats on private land consist of suburban backyards and farmland. Raccoon, whitetail deer, cottontail rabbit, gray squirrel, red fox, New England coyote and various species of songbirds are found in this diverse environment. The abundant wildlife species are ones that can adapt to this changing habitat. The adaptability to humans can present problems at times. Crop damage, livestock predation, property damage and health and safety concerns result from the interaction of people and wildlife. This is a small price to pay for the enjoyment, recreation and adventures associated with living near wild animals.

Public lands: The Division of Fisheries and Wildlife and the U. S. Army Corps of Engineers are major land stewards. Bennett Wildlife Management Area is open to the public for wildlife related recreation. It consists of 281 acres of old fields and forest. Wildlife species such as Whitetail Deer, Ruffed Grouse, Gray Fox, Coyote and Turkey benefit from forest habitat management conducted on state and private lands. Hunting is popular on state lands for Whitetail Deer and stocked pheasant.

Wildlife Corridors: Charlton has three primary wildlife corridors, each following one of the rivers in Town. A wildlife corridor is an area of habitat connecting wildlife populations separated by human activities (such as roads, development, or logging). This allows an exchange of individuals between populations, which may help prevent the negative effects of inbreeding and reduced genetic diversity (via genetic drift) that often occur within isolated populations. Corridors may also help facilitate the reestablishment of populations that have been reduced or eliminated due to random events (such as fires or disease). This may potentially moderate some of the worst effects of habitat fragmentation.

Cady Brook corridor, located in the westerly portion of town, is a riparian corridor running the length of Cady Brook this corridor is conducive to fluvial fish passage, amphibian, reptile, mammal,



Figure 13: Deer tracks



Figure 14: Turkey tracks

and avian usage. Cady Brook is also listed as a core habitat area, estimated habitat area, and priority habitat by NHESP.

Little River is a wildlife corridor located on the easterly portion of town. This riparian corridor shadows the Little River from Pikes Pond to Buffumville Reservoir. This area is conducive to wood turtle usage and fluvial fish passage. This area is also noted as estimated and priority habitat by NHESP. Bennett Wildlife Management Area is located in the northernmost section of this corridor.

McKinstry Brook, located on the northwesterly portion of town, is the final corridor. This area is a cold water fishery with a naturally reproducing population of brook trout. McKinstry Brook is listed as a core habitat area, estimated habitat area, and priority habitat by NHESP.

Vernal Pools: NHESP has identified twelve (12) certified vernal pools and two hundred twenty four (224) potential vernal pools in Town. Certified vernal pools are located in the above noted McKinstry Brook, Little River and Cady Brook wild life corridors as well as one on the west side of Bond Road on currently designated Chapter Land and one on Baker Road near South Charlton Reservoir.

SCENIC RESOURCES AND UNIQUE ENVIRONMENTS

Charlton has an abundance of scenic resources and unique environments. These include scenic landscapes, unique geological features, and cultural, archaeological and historic areas. These features are depicted on the Scenic and Unique Resources Map.

There are currently 10 designated **scenic roads** in town. These roads are:

- Buteau Road
- Cemetery Road
- Gould Road
- Horne Homestead Road
- Jones Road
- McIntyre Road
- North Sturbridge Road
- Smith Road
- Tucker Road
- Wheelock Road

There are numerous **agricultural landscapes**, which are highlighted in green on the map.

Charlton's unusual **geological features** can be described as follows and noted on the map:

1. Brookfield Road/Bond Sawmill Road - erratic boulder with a large concave area used as a rock shelter.
2. McKinstry Farm/Capen Hill - wolf den, jumbled mass of boulders containing many small cavities. The site of the last wolf sighting in Charlton.
3. Upper/Lower Gorge of Little River - streams cut deeply through ledges forming waterfalls and rapids.
4. Wolf's Den/Beech Falls - small stream with a spectacular fall in the midst of a deep beech grove off of Northside Road.



Figure 15: Mill Ruins



Figure 16: Mill Ruins

Charlton does contain a few known ***archaeological sites***. These include:

1. Lelandville, South Charlton - the remains of an old mill and foundations mark the site of a once prosperous manufacturing village.
2. North Charlton - Adjacent to the Rider tavern on Stafford Street are the contents of a tannery, saw and grist mill, distillery, and scythe shop and militia field.
3. Bay Path - ancient aboriginal trail from the bay to the Connecticut Valley, still undeveloped.
4. Midsection - prehistoric Indian site on the Little River, Old Worcester Road, for the Mashamugget and Algonquin Indians.
5. Fulling Mill on Little River- made wool fluffy at this “fulling mill.”

Historic features can be found throughout Charlton many of which are located in a National Register Historic District or local historic district (See Section Three—History of the Community). Areas with a concentration of historic buildings include:

1. Northside Village-An agriculturally based village community with a period of significance from 1750-1840 that retains its rural character.
2. Charlton Center - typifies an 18-19th early century lineal village. The ecclesiastical and governmental center of the town.
3. Charlton City - this is a concentrated area of industrial development containing mills, mill housing, stores and businesses in a densely built area.
4. Charlton Depot - the Village of Charlton Depot resulted from the building of a railroad line in 1838 and the establishment of the depot on this site in town. Now mainly residential, it once was the center of business activity in town.



Figure 17: Northside Cemetery



Figure 18: Tucker Cemetery

ENVIRONMENTAL CHALLENGES

Charlton's industrial and agricultural activity has left a legacy of environmental problems, particularly with regard to the abundant water resources in town. Many of the sources of point pollution have been identified and contained, but potential problems may continue to exist from new development, hazardous waste sites, erosion, and sedimentation that threaten ground and surface water. Charlton's historical legacy also has an impact on environmental quality. The soil's retention of toxic materials from numerous processes at many locations will pose a threat well into the future.

Roadway construction, maintenance, and typical highway use are all potential sources of contamination. Accidents can lead to spills of gasoline and other potentially dangerous transported chemicals. Roadways are sometimes sites for illegal dumping of hazardous or other potentially harmful wastes. De-icing salt, automotive chemicals, and other debris on roads are picked up by storm water and washed into catch basins; impervious surfaces concentrate runoff and contaminants.

HAZARDOUS WASTE AND BROWNFIELD SITES

The Massachusetts Department of Environmental Protection currently lists 238 "21E" sites (also known as "brownfields") in Charlton. Four of these sites are TIER 1 disposal sites.⁶ Nine of these sites are Tier 1D disposal sites.⁷ These sites have contributed to the town's groundwater

⁶ Disposal sites are classified as Tier 1 if (a) there is evidence of groundwater contamination with oil and/or hazardous material at concentrations equal to or exceeding the applicable RCGW-1 Reportable Concentration set forth in 310 CMR 40.0360, and such groundwater is located within an Interim Wellhead Protection Area, Zone II, or within 500 feet of a Private Water Supply Well; (b) an Imminent Hazard is present; (c) one or more remedial actions are required as part of an Immediate Response Action pursuant to 310 CMR 40.0414(2); or (d) one or more response actions are required as part of an Immediate Response Action to eliminate or mitigate a Critical Exposure Pathway pursuant to 310 CMR 40.0414(3).

⁷ Mass DEP deems sites as Tier 1D disposal sites if any of the following apply: (a) an Responsible Party (RP), Potentially Responsible Party (PRP) or Other Person for such disposal site fails to submit to MassDEP one of the following by the applicable deadline in 310 CMR 40.0501: 1. a Permanent Solution Statement; or 2. a Tier Classification Submittal; or (b) the person undertaking response actions is in noncompliance with M.G.L. c. 21E, 310 CMR 40.0000 or any other

contamination issues as discussed previously in the section on Water and in the sections below on surface water pollution and ground water pollution. The town of Charlton and its partners are currently working with many of the property owners at the identified sites to ensure compliance.

Several wells in the Charlton City area have shown levels of trichloroethylene (an industrial solvent) in excess of regulatory levels. The source of this contamination is not known. Benzene, and MBTE, both gasoline additives, have been detected in some wells in the vicinities of the Mass Turnpike 6W and 5E service facilities. The underground plume of contamination has migrated a substantial distance from the turnpike and Charlton City areas to a large part of Charlton, polluting dozens of private wells. The Mass Turnpike Authority and several oil companies were identified by the Department of Environmental Protection (DEP) as potentially responsible parties. Exxon Mobil was identified by Mass DEP as responsible party for the release of gasoline at LaMountain's Exxon on Worcester Road. The Town and Mass DEP reached an agreement with Exxon in April 2016 (detailed below). Other known releases causing groundwater contamination in Charlton include releases of gasoline at the Honey Farms on Worcester Road and releases of petroleum products from the Charlton Highway Department on North Main Street. In all these petroleum releases, bedrock has been a problem because the oil spreads in unexpected ways due to fissures. Mass DOT has also been faulted for salt contamination at its salt shed on Route 20.

Finally, DEP named Casella Waste Systems, operator of the nearby Southbridge landfill, the potential responsible party for the residential water contamination by 1-4 dioxin of 21 Charlton residences in the area of H. Foote Road and Berry Corner Road in the western part of Town, and the Town is still in discussions with DEP and Casella regarding this issue.

LANDFILLS

Charlton does not operate a landfill facility. The town has two decommissioned landfills on Flint Road by the DPW facility. The topic of landfills though is of importance to Charlton residents. Massachusetts DEP named Casella Waste Systems, operator of the nearby Southbridge landfill, the potential responsible party for the residential well water contamination by 1-4 dioxin of 21 Charlton residences in area of H. Foote Road and Berry Corner Road in the western part of town, with eight exceeding the state drinking water regulation. Casella has asserted that the landfill is not the source of the contamination in the nearby Charlton wells, and the town is still in discussions with DEP and Casella regarding this issue. Casella, doing business as Southbridge Recycling & Disposal Park, assumed operation of the Southbridge landfill at 165 Barefoot Road in 2004. The landfill has been in operation since 1980. As of June 2016, Casella is providing bottled water to 10 homes with valid contaminate detections. Two homes have received water filtration systems. Another 19 homes, in a defined area, are receiving courtesy, or voluntary, bottled water from Casella. Casella is to submit a status report on its immediate response action plan to the Charlton BOH every 60 days.

applicable requirement, and MassDEP reclassifies the disposal site as a Tier ID disposal site pursuant to 310 CMR 40.0583.

EROSION AND SEDIMENTATION

Presently, no area in Town has severe erosion or sedimentation problems. Erosion and sedimentation can become serious issues when developers build on steep terrain without taking proper precautions. Bylaws have been adopted in regards to storm water management, erosion control, and illicit discharges to address existing problem areas and aid in the future developments in Town. MA has introduced storm water management regulations that Charlton is required to follow to mitigate storm water run-off. The Charlton Lakes and Ponds Committee was reestablished and reorganized in 2012. One of its areas of focus is storm water management, and the committee continues to work with Charlton's Conservation Agent to address storm water issues that affect Charlton's lakes and ponds. In addition, the Committee is also investigating weed control and water drawdown options to improve water flow, water level regulation, address new storm water management requirements, and maximize the success of weed control programs. In addition, Charlton is a member of the Central Massachusetts Regional Storm Water Coalition (CMRSWC).

SURFACE WATER POLLUTION AND GROUND WATER POLLUTION

Charlton's primary environmental challenge is improving the water quality of its lakes, ponds, rivers and streams. Both state and local water quality monitoring efforts highlight the town's water quality issues. Past development has negatively affected Charlton's water resources, including failing septic systems, excessive shoreline development, poor erosion control, hazardous waste spills or non-point pollution such as salt from roadway maintenance efforts, manure seepage from agricultural uses, fertilizers from lawn maintenance, or pesticide applications. In addition, there is a naturally occurring vein of arsenic that runs through the center of town.

Since the 1996 OSRP and 2008 Town Master Plan, Charlton has made important strides in improving water quality through its illicit discharge bylaw, erosion bylaw and water testing quality testing through the Board of Health at new construction sites. The Sewage Treatment Plant has also reduced pharmaceutical load and discharge into Cady Brook. Such efforts have been further strengthened with the mandates of the EPA storm water permit. As discussed in the subsection on infrastructure in Section Three, evidence of groundwater contamination continues to draw attention to the need for a comprehensive water system and water supply.

In addition, the town and its partners continue to work with the Massachusetts Department of Environmental Protection (DEP) to address water that the state has identified as polluted or impaired. If a water body is identified as impaired, a plan is developed to bring it back into compliance with the Massachusetts Water Quality Standards. Waters exhibiting impairment for one or more uses are placed in either Category 4 (impaired, but not requiring a total maximum daily load calculation (TMDL) or Category 5 (impaired, and requiring one or more TMDLs) according to the EPA guidance.⁸ Category 4 is further divided into three sub-categories – 4a, 4b and 4c –

⁸ Once a water body is identified as a Category 5, DEP is required by the Federal Clean Water Act to essentially develop a "pollution budget" designed to restore the health of the impaired body of water. The process of developing this budget, generally referred to as a Total Maximum Daily Load (TMDL), includes identifying the source(s) of the pollutant from direct discharges (point sources) and indirect discharges (non-

depending upon the reason that TMDLs are not needed. Category 4a includes waters for which the required TMDL(s) have already been completed and approved by the EPA. However, since MassDEP chooses to list each segment in only one category, waters that have an approved TMDL for some pollutants, but not others, remain in Category 5 until TMDLs are approved for all of the pollutants impairing those waters. Water bodies in Charlton that were a Category 4 or 5 on the 2014 integrated list are shown in the table below:

Table 16: Category 4a “TMDL is completed” Water Bodies in Charlton, 2014

Name	Description	Size	Pollutants Addressed by TMDL
Buffumville Lake	Charlton/Oxford	199 acres	Non-native aquatic plants
			Excess algal growth
			Mercury in fish Tissue
Dresser Hill Pond	Charlton	8 acres	Turbidity
Gore Pond	Dudley/Charlton	169 acres	Non-native aquatic plants
			Excess algal growth
			Oxygen, dissolved
			Turbidity
Granite Reservoir	Charlton	207 acres	Non-native aquatic plants
			Aquatic plants (macrophytes)
Jones Pond	Charlton/Spencer	30 acres	Aquatic plants (macrophytes)
Pierpont Meadow Pond	Dudley/Charlton	95 acres	Non-native aquatic plants
			Aquatic plants (macrophytes)
Pike Pond	Charlton	28 acres	Turbidity
<i>Source: Massachusetts DEP, Massachusetts Year 2014 Integrated List of Waters: Final Listing of the Condition of Massachusetts' Waters Pursuant to Sections 305(b), 314 and 303(d) of the Clean Water Act</i>			

Table 17: Category 4C “Impairment not caused by a pollutant—TMDL not required” Water Bodies in Charlton, 2014

Name	Description	Size	Impairment Cause
Buffum Pond	Charlton/Oxford	23 acres	Non-native aquatic plants
Railroad Pond	Charlton	7 acres	Non-native aquatic plants
<i>Source: Massachusetts DEP, Massachusetts Year 2014 Integrated List of Waters: Final Listing of the Condition of Massachusetts' Waters Pursuant to Sections 305(b), 314 and 303(d) of the Clean Water Act</i>			

point sources), determining the maximum amount of the pollutant that can be discharged to a specific water body to meet water quality standards, and developing a plan to meet that goal.

Table 18: Category 5 “Waters requiring a TMDL” Water Bodies in Charlton, 2014

Name	Description	Size	Impairment Cause
Little River	Headwaters, outlet Pikes Pond, Charlton to inlet Buffumville Lake, Charlton	3.5 miles	Aquatic Macroinvertebrate Bioassessments
			Oxygen, Dissolved
Cady Brook	Headwaters, outlet of Glen Echo Lake, Charlton to Charlton City WWTP outfall, Charlton.	1.5 miles	(Low flow alterations*)
			Ambient Bioassays -- Chronic Aquatic Toxicity
			Fecal Coliform
Cady Brook	Charlton City WWTP outfall, Charlton to confluence with Quinebaug River, Southbridge	5.1 miles	(Low flow alterations*)
			Nutrient/Eutrophication Biological Indicators
Glen Echo Lake	Charlton	115 acres	Oxygen, Dissolved
McKinstry Brook	Headwaters, east of Brookfield Road, Charlton (excluding intermittent portion) to the confluence with the Quinebaug River, Southbridge.	7.3 miles	(Debris/Floatables/Trash*)
			Escherichia coli
Sibley Pond	North Basin, Charlton	22 acres	Aquatic Plants (Macrophytes)
			Oxygen, Dissolved
			Turbidity
Sibley Pond	South Basin, Charlton	19 acres	Aquatic Plants (Macrophytes)
			Oxygen, Dissolved
			Turbidity
<i>Source: Massachusetts DEP, Massachusetts Year 2014 Integrated List of Waters: Final Listing of the Condition of Massachusetts' Waters Pursuant to Sections 305(b), 314 and 303(d) of the Clean Water Act</i>			

CHRONIC FLOODING

The sub regional Hazard Mitigation plan noted that Charlton has a limited number of isolated areas that are subject to flooding due to the influence of beavers and the existing topography, such as the frequent beaver-related flooding on Guelphwood Road that can be severe enough to close the road. This situation is presently being evaluated and an action plan is being formulated to address these situations. The Army Corps of Engineers flood control system protects the area from severe flooding associated with the Little River. The Town contains three High Hazard dams and all three are in good condition. The town now owns one of these dams, Prindle Dam. Glen Echo Lake and South Charlton Reservoir each have dam monitors assigned to them and these monitors are responsible for directing drawdowns and ensuring the integrity of the dams.



Figure 19: Beaver Dam at Haggerty Road Estates

INVASIVE SPECIES

Charlton's trees and forests have suffered defoliation from the gypsy moth, hemlock wooly adelgid, fall webworm, and eastern tent caterpillar. The subsection above on impaired and polluted water bodies in town noted the presence of non-native aquatic plants in some of Charlton's water bodies. This issue is being actively addressed through an aggressive weed control and drawdown program by the various lakes and ponds groups as well as the town conservation agent. The most problematic vegetative invasive species is the Japanese Knotweed.



Figure 20: Eastern Tent Caterpillar (Invasive)



Figure 21: Japanese Barberry (Invasive)



Figure 22: Rigosarose (Invasive)

FORESTRY

Charlton Conservation Commission takes an active role in forest management on both private and public lands. The challenge with forestry in Charlton is that managed forestry can be misunderstood by the public. All forest management plans and timber harvest plans are reviewed by Charlton Conservation and sites are physically inspected. Charlton has a high amount of forest lands; cutting and management plans are kept on file and reviewed on as needed and annual basis. The town of Charlton does not have a forest warden although the town does have a tree warden whose primary concern is dangerous trees on town-owned property. The town Conservation Commission relies heavily on the expertise of the state forester for forestry related issues.

NEW DEVELOPMENT

Although past development has resulted in a host of negative impacts to Charlton's water resources, Charlton has taken steps to greatly reduce these issues over the last decade. Town adopted an illicit discharge bylaw and storm water bylaw in the early 2010's. Charlton's subdivision regulations require all storm water produced by the new development to be handled on site, decreasing the risk of erosion, sedimentation and groundwater pollution. The Planning Board conducts an annual review of its Subdivision Control Regulations with a peer review engineering consultant to consider any potential needed revisions to the regulations. These reviews have resulted a few times in upgrading design requirements pertaining to storm water management and erosion/sedimentation control infrastructure design. The Conservation Commission works with the Planning Board's consultants to address construction and post construction storm water on sites across town, which is a dynamic process that changes from site to site.

SECTION FIVE: INVENTORY OF LANDS

More than just an open field or an area of cleared land, “open space” in the context of the open space and recreation planning includes conservation land, recreation and park land, agricultural land, cemeteries, and any undeveloped land with conservation or recreation interests. Open space can serve a variety of purposes, including passive recreation, active recreation, wildlife habitat, protection of wetlands or water resources. Lands or areas with scenic or historic value are also essential components of a community's public spaces. Using these working definitions, approximately 30 percent of land or 7,800 acres in Charlton can be considered “open space.”⁹ Over 2,400 acres of land in Charlton is protected in perpetuity as some form of open space, which is approximately nine percent of all land in town.

This Section describes ownership, management agency, current use, condition, recreation potential, public access, and degree of protection for lands of conservation and recreation interest. This information is summarized and also depicted graphically on the Open Space Inventory Map. This Map was compiled principally from data reported to CMRPC by the Town of Charlton. The map also relies on data from the Commonwealth of Massachusetts' Office of Geographic Information (MassGIS).



Figure 23: Snow Pond (Town-owned protected land)

⁹ Percentage and acreage derived from the sum of all lands categorized as “Open Space” in the MassGIS open space data layer plus Chapter Lands, plus lands owned by the Charlton Heritage Preservation Trust plus permanently protected lands resulting from the town’s flexible subdivision bylaw.

PERMANENT PROTECTION OR PROTECTION IN PERPETUITY

These lands are legally protected in perpetuity and recorded as such in a deed or other official document. Land is considered protected in perpetuity if it is owned by the Town's conservation commission or, sometimes, by the water department; if a town has a conservation restriction on the property in perpetuity; if it is owned by one of the state's conservation agencies (thereby covered by article 97); if it is owned by a non-profit land trust; or if the Town received federal or state assistance for the purchase or improvement of the property. Private land is considered protected if it has a deed restriction in perpetuity, if an Agriculture Preservation Restriction has been placed on it, or a Conservation Restriction has been placed on it.

Many permanently protected lands are protected by Article 97 of the State Constitution, which provides permanent protection for certain lands acquired for natural resources purposes. Removing the permanent protection status of such lands is extremely difficult, as is evidenced by the following steps:

- The municipal Conservation Commission or Parks and Recreation Committee must vote that the land in question is surplus to its needs.
- The removal of permanent protection status must be approved at a Town Meeting/City Council vote and pass by a two-thirds (2/3) vote.
- The municipality must file an Environmental Notification Form with the EOEEA's Massachusetts Environmental Policy Act (MEPA).
- The removal of permanent protection status must be approved by both the State House of Representatives and the State Senate and pass by a two-thirds (2/3) vote.
- In the case of land either acquired or developed with grant assistance from the EOEEA's Division of Conservation Services, the converted land must be replaced with land of equal monetary value and recreational or conservation utility.

LIMITED AND TEMPORARY PROTECTION

These lands include those legally protected for less than perpetuity (e.g. short term conservation restriction or Chapter 61 lands), or temporarily protected through an existing functional use. For example, some water district lands are only temporarily protected while water resource protection is their primary use. These lands could be developed for other uses at the end of their temporary protection or when their functional use is no longer necessary. These lands might be protected by a requirement of a majority municipal vote for any change in status. This designation also includes lands that are likely to remain open space for other reasons (e.g. cemeteries and municipal golf courses).

NO PROTECTION

Lands that are privately owned and that could be sold without legal restriction at any time for another use (e.g. scout camps, private golf course, and private woodland) are considered to be totally unprotected.

PRIVATE PARCELS

Privately-owned parcels described in this subsection include land with agricultural preservation restrictions or conservation restrictions, Chapter 61, 61A, and 61B land, and lands with no protections but of open space, recreation or conservation interest. The Appendix provides more detailed information on these properties.

Most of the trails that exist in Charlton are on private land. The Midstate Trail runs through the southeastern corner of Charlton, and is maintained by the Worcester Chapter of the Appalachian Mountain Club; this is the primary trail in Charlton and it connects to subsidiaries via side trails. These subsidiary trails include: Fay Mountain Farm, Charlton Orchard, the former Bement Camp, and the Engineers trails at Buffumville Lake among others. Much of the Midstate Trail in Charlton consists of off-road trails, although several local roads are also used. Most property owners have historically accepted the use of their property to access a trail or open space parcel; however, increasing population and development has caused more strain between the user and the owner. With the instruction of groups like the AMC, cross country skiers and hikers have earned the respect of property owners by minimizing their impact on trails. However, these are typically low impact uses; other higher impact uses have faced more stringent restrictions in recent years, among these are: mountain biking, hunting, horse riding, fishing, and four wheeling.

PERMANENT PROTECTION

AGRICULTURAL PRESERVATION RESTRICTION (APR)

Charlton has over 855 acres of land under the APR program in three areas of town: Dresser Hill, H K Davis Road and Carpenter Hill Road. A complete list of APRs in Charlton can be found in the table below. The Agricultural Preservation Restriction program is a voluntary program that offers a non-development alternative to farmland owners for their agricultural lands who are faced with a decision regarding future use and disposition of their farms. The program offers farmers a payment up to the difference between the “fair market value” and the “fair market agricultural value” of their farmland in exchange for a permanent deed restriction, which precludes any use of the property that will have a negative impact on its agricultural viability. (MA DAR, 2013)

Table 19: Agricultural Preservation Restriction Lands

PARCEL ID	ACRES	LOCATION	OWNER
11-C-7	7.00	H K DAVIS	MCCARTHY KEVIN P (1)
11-C-8	15.91	H K DAVIS	MCCARTHY KEVIN P
10-C-1	89.73	62 H K DAVIS	MCCARTHY KEVIN P
10-A-5	2.10		MCCARTHY KEVIN P
11-B-5	30.54		MCCARTHY KEVIN P
18-A-8.3	1.62		MCCARTHY KEVIN P
18-A-19	7.50		MCCARTHY KEVIN P
18-B-4	70.56		MCCARTHY KEVIN P
19-A-4	18.33		MCCARTHY KEVIN P

<i>Subtotal</i>	243.29		
33-A-2	35.00	SOUTHBRIDGE RD	KASZOWSKI FAMILY TRUST
33-B-19	88.00	CARPENTER HILL RD	KASZOWSKI FAMILY TRUST
34-A-13	42.75	CARPENTER HILL RD	KASZOWSKI FAMILY TRUST
<i>Subtotal</i>	165.75		
75-B-7	66.08	292 NO.6 SCHOOLHOUSE	BIGELOW NURSERY(2)
76-A-5	159.00	16 SANDERSDALE RD	BIGELOW NURSERY
INCL:75-A-2			
76-B-1			
76-B-2			
76-D-1	66.13	NO 6 SCHOOLHOUSE	BIGELOW NURSERY
INCL;81-A-1,2,3			
79-D-1	30.00	NO 6 SCHOOLHOUSE	BIGELOW NURSERY
76-C-1	126.82	Sandersdale Rd	
<i>Subtotal</i>	448.03		

*TOTAL APR
LANDS*

857.07

*(1) McCarthy lands are currently
associated with the "Signal Rock
Farm."
(3) There is no public access on
these APR lands*

*(2) Lands Owned by Bigelow Nursery
are historically associated with the
dairying operations in Dresser Hill area.*



Figure 24: APR Land on Dresser Hill, owned by Bigelow Nursery

CONSERVATION RESTRICTIONS

There is one property at 9.91 acres, at 231 Stafford Street, with a conservation restriction in Charlton. The land, owned by John Cook, has a Wetland Reserve Program Conservation Easement, which was a voluntary program through the federal Natural Resources Conservation Service that offered landowners the opportunity to protect, restore, and enhance wetlands on their property.

Table 20: Conservation Restrictions

Parcel ID	Acreage	Location	Property Owner	Conservation Restriction Owner	Protection Status	Public Access	Recreation Potential
19-E-2	9.91	231 Stafford Street	John Cook	Charlton	Perpetuity	Limited	None, primary purpose is conservation
<i>Total</i>	<i>9.91</i>						

Source: Charlton Assessor's Office.

TEMPORARY PROTECTION

CHAPTER 61, 61A, AND 61B LANDS

154 properties, over 4,300 acres, in Charlton participate in the state's Chapter 61, 61A, and 61B programs. The Open Space Map shows their location. Chapter 61, 61A, and 61B is a voluntary program designed by the Massachusetts Legislature to tax real property in the Commonwealth at its timber resources, agricultural, or recreational value rather than its highest and best use (development) value. Owners of ten or more acres who manage their land for forestry uses can enroll in Chapter 61. Owners of five or more acres can enroll in Chapter 61A if they use their land for agriculture, or they can enroll in Chapter 61B if their land is used for open space/recreation purposes. Stewardship of privately-owned lands preserves open fields and hilltops, productive forests and scenic stream valleys throughout the Town.

Table 21: Chapter 61, 61A AND 61B Land in Charlton

Chapter Lands Summary	Parcels	Acres
Mixed Use	72	2,654
Chapter 61 (Forestry Use)	21	578
Chapter 61A (Agricultural /Horticultural Use)	49	928
Chapter 61B (Recreation Use)	12	143
Total Chapter Lands	154	4,302

Source: Charlton Assessor's Office. Note: Mixed Use refers to the parcel having part of land (at least 5 acres) designated Chapter 61, 61A OR 61B as well as having a residential, commercial or industrial use. Acreage on the table reflects the parcel's actual acreage of Chapter lands and does not include non-Chapter lands.

Landowners who enroll their land in the program receive property tax reductions in exchange for a lien on their property. The terms of the lien require that enrolled land remain in an undeveloped state and be managed for forest production, agricultural production, or recreation. Furthermore,

the lien provides the municipal government of the city/town in which the enrolled property is located a right of first refusal should the landowner put the land up for sale while it is enrolled in the program. Towns may assign their right of first refusal to a state agency or a non-profit land trust. Landowners who develop their land while enrolled in the program, or for a period of time after withdrawing from the program, may be required to pay penalties. These lands are considered to have temporary protection because the owner can sell the property or choose to unenroll his property in the special taxation program and thus the open space public benefit goes away.

The Town's right of first refusal on Chapter 61 properties is an important conservation and recreation opportunity. Often, Chapter 61 lands have been owned by families for generations and are important places in Charlton's history. The Town has a policy and a well-defined process for working with a Chapter 61 landowner who decides to divest the property. The Right-of-First Refusal process in Charlton is handled by the Board of Selectmen who consult with other town boards per the policy.

NO PROTECTION

Charlton has a few privately owned parcels of open space or recreation interest that have no protections. These include the following facilities:

- Heritage Country Club Golf Course, which is a 300 acre, 18 hole public golf course located on Sampson Road off of Route 20.
- 508 International (formerly known as Sunset City) is sports entertainment facility set on 23 acres along Brookfield Road (formerly Sunset Hill Farm). The company expects to open in the Spring of 2017 and offer a variety of sporting activities such as off-road motorsports, cycling, boarding, slacklining, climbing, obstacle course racing, yoga, and disc golf..
- (Former) Bement Camp and Conference Center: A former camp and conference center in the northern part of town with a 28-acre pond, 25 buildings and acreage that extends into Spencer. There are a total of 285 acres in Charlton. The Episcopal Diocese of Western Massachusetts sold Bement in late 2011 to Bement LLC, who initially operated disc golf at the facility; however, the property and facility are no longer in operation. For this reason, *there may be an opportunity for a partnership for open space or recreation.*
- Dresser Hill, which is a vista which offers unparalleled views of the region. The vista is closely associated with Dresser Hill's Clam box, a seasonal restaurant that offers outdoor seating.
- Kid Power gymnastics at 159 Worcester Road (Route 20), which is a 5,000 square foot gymnastics facility.
- Practice Makes Perfect, a driving range at 31 Southbridge Road (Route 169).
- Putters miniature gold at 360 Worcester Road (Route 20)
- Ye Olde Commons at 120 Northside Road, which offers live action role playing (LARP) activities with a medieval flair. The site is used for many different gatherings, including LARP camps, fairs, re-enactments, and receptions.

The Town of Charlton has many parcels of land characterized in the Town Assessor's Database as vacant based on its land use code. Each vacant parcel is described as residential, commercial, or

industrial and then also described as developable, potentially developable or undevelopable. These parcels are possibly accessory lots, possibly storage lots, or simply undeveloped or undevelopable land. The table below summarizes the privately-owned vacant parcels. These parcels might represent opportunities to add on to protected open space or provide habitat for unique species.

Table 22: Summary of Private Unprotected Vacant Parcels

Category	Number of Parcels	Total Acreage	Smallest Parcel (acres)	Largest Parcel (acres)
Vacant land in a residential zone, developable	33	522	0.03	86
Vacant land in a residential zone, potentially developable	513	3,225	0.1	78
Vacant land in a residential zone, Undevelopable	681	2,227	0.0	83
Vacant land in a commercial zone, Developable	3	47	4.0	38
Vacant land in a commercial zone, Potentially developable	16	86	0.2	30
Vacant land in a commercial zone, Undevelopable	9	19	0.0	9
Vacant land in an industrial zone, Potentially Developable	5	242	1.5	210
Vacant land in an industrial zone, Undevelopable	5	13	0.5	8

Source: Charlton Assessor Department

PUBLIC AND NON-PROFIT PARCELS

This section provides information on public and non-profit owned lands of open space or recreation significance. The Appendix identifies the location, ownership, managing agency, land use description, level of protection, public access, and acreage. And, in the case of town-owned conservation and recreation properties, information is provided regarding managing agency, condition and recreation potential. For many parcels the condition is unknown. A more thorough assessment of condition is suggested as an action step for inclusion in future plans.

PERMANENTLY PROTECTED

FEDERAL AND STATE LANDS

Often the state or federal government will own land within a municipality as a State Park or State Forest or as a means to protect valuable or unique water supplies or habitat. The United States of America is the second largest public land owner in Charlton with 450 acres as part of the Buffumville dam area, which is managed by the Army Corps of Engineers. This is a unique recreation and conservation resource for the town, offering swimming, fishing, boating, hiking and hunting opportunities. The Commonwealth of Massachusetts owns over 350 acres of land in Charlton. The largest of these holdings is Bennett Meadows Wildlife Management Area, which is a little over 280 acres in the northern part of town.



Figure 25: Bennett Meadows Wildlife Management Area

TOWN LANDS

In terms of permanently protected land, the Town of Charlton owns 108 acres in 9 parcels ranging in size from 0.36 acres to 39 acres. Two of these parcels comprise Fay Mountain Farm, which is a 65 acre farm off Cemetery Road. This farm consists of 32 acres of orchard, 28 acres of conservation land, a pond, woods, open fields for passive recreation and a historic barn. The Farm was purchased by the town in 2002 with a grant provided by DCR and funding from the Masonic Home. The town has preserved this property as an active farm and leases space for continued apple production as well as the growing and sale of other crops. The site also hosts events throughout the year such as apple picking in the fall. Passive recreation also exists on site through the Mid-State Trail and on other fields and wooded areas. The town also owns three parcels of conservation land for a total of almost 68 acres.



Figure 26: Orchard Path at Fay Mountain Farm

The Last Green Valley Quinebaug-Shetucket Heritage Corridor awarded the Town of Charlton and the Charlton Heritage Preservation Trust the 2008 “Green Neighbor Award” for coming together to build a strong working relationship that has resulted in the recent preservation of 142 acres of open space set aside in flexible subdivisions; and for forging other partnerships for trail creation, maintenance, and stewardship, and for helping to keep the Last Green Valley green.”

NON-PROFIT LANDS

Charlton is fortunate to have a non-profit entity whose purpose is to protect the natural beauties and rural character within the town of Charlton. The Charlton Heritage Preservation Trust (Trust), formed in 1999, stewards 19 parcels totaling almost 200 acres in Charlton. All of these properties are open to the public for passive, non-motorized, recreation and are all accessible to the public by parking in the subdivisions and then walking onto the properties. Many of properties are not marked, not bound, and not advertised for use since the Trust has not been able to properly steward the properties over the years to maintain existing trails. However, information on some of the properties are readily available on the Trust’s website. The most heavily used property is the Little River Trout Park trail that that connects to the Mid State Trail and Buffumville (Parcel 55-B-11.19).

As reported in Section Three, the town’s flexible development bylaw has generated over 500 acres in preserved open space. The protected open space in these 24 parcels are managed by several non-profits, including the Trust, as well as the Town of Charlton. Besides the Trust, the Opacum Land Trust and the Greater Worcester Land Trust are some of the active land conservation groups active in Charlton and serve as resources to town staff. Regional organizations such as Massachusetts Audubon and New England Forestry Foundation, and national organizations such as the Trust for Public Land, could all potentially lend assistance to the Town in helping preserve open space.

Powers Memorial Forest is a 62 acre property that is managed by the New England Forestry Foundation. In 1980, the Episcopal Diocese of western Massachusetts gave NEFF this forest land within the 400-acre woodland facility known as the Bement Camp and Conference Center. Old stone walls crisscross the property, attesting to its past use as a farm likely up until the late 1940s. Today the property is primarily woodland, with an extensive red maple swamp lying at the base of a high ridge.

LIMITED OR TEMPORARY PROTECTION

Not all publicly owned land is permanently protected. Town lands that are managed for conservation and water supply purposes and town parks are classified as protected, but school sites and land owned for general municipal purposes are listed as having limited protection because any sale of the property would require a public process. All Town-owned property, especially conservation and recreation lands, should be reviewed to evaluate the actual level of protection, so recommendations can be made to address these management issues. In addition, all Town-owned lands should be reviewed to determine potential suitability for future low-impact recreation activities.



Figure 27: Charlton Playground



Figure 28: Athletic fields behind the library area

The Charlton-Dudley Regional School District owns and manages 135 acres of property housing classroom buildings, administration offices, utility buildings, recreation fields, playgrounds, and accessory open space at the Charlton Middle School and Heritage School off of Muggett Hill Road. The Town of Charlton owns the seven acre parcel where Charlton Elementary School is located along Burlingame Road.

In addition, Bay Path Regional Vocational High School owns approximately 190 acres of land housing classroom buildings, administration offices, utility buildings, recreation fields, playgrounds, and accessory open space. Unrestricted public access, such as on its athletic fields, is not allowed at the high school at this time. However, Bay Path offers numerous after-hours adult classes that are recreation and leisure- oriented such as programs on cooking, language, genealogy, art, music,

nutrition, and golf. There is a significant amount of undeveloped land at Bay Path, and the school, along with the Town, is currently reviewing options, including recreation opportunities.

The Nature's Classroom owns land located off Prindle Road at Prindle Pond and has enrolled some of this property in the Chapter 61 program. The Natures Classroom has 14 educational sites in New York and New England, but it is headquartered in Charlton. The group works with elementary and nursery school age students to foster an appreciation for the natural environment. The summer camp offers both residential and day programs and serves children from Charlton and beyond.

NO PROTECTION

Several non-profit organizations own property in Charlton. These are identified the Appendix. Though these properties may have open space or recreation value, they are not protected. Of particular note are the following:

- The Tri-Community YMCA's Camp Foscett is located on the beautiful South Charlton Reservoir (189 Daniels Road). Situated on 114 acres of woodlands and wide open fields, Camp Foscett provides an opportunity for children ages 3-15 to learn and appreciate the great outdoors. This day camp has modern facilities, a sanded beach area for daily aquatic activities, offers numerous programs throughout the summer.
- Capen Hill Nature Sanctuary consists of an 86 acre nature sanctuary located on Capen Road, directly off of Route 20 in Charlton. This free sanctuary is open to the public. Capen Hill maintains trails and staffs a visitor center that houses a library, mineral collection, live animals, and gift shop. It hosts many environmental programs as well as runs nature and science camps in the summer.
- Charlton Little League and the Charlton Youth Soccer organization have property on Bond Street. The Soccer organization owns the largest of these properties with 27 acres.
- Elliot Joslin Camp, operated by the Barton Center for children with diabetes, is located off Richardson Corner Road and features beautiful woodlands, athletic fields, a 20-acre pond and dining hall.

In addition several non-profit organizations, churches, or social service agencies own property in Charlton. The town may want to consider exploring these holdings to determine if any partnerships would result in additional open space or recreation opportunities to town residents.

The town has a partnership with Masonic Hill / Overlook Communities for use of walking trails on their massive complex and is working to enhance access to these trails. The walking trails on the property are in the process of being mapped. Overlook is a continuing care retirement community on approximately 450 acres along Masonic Home Road. The facility includes cross-country ski trails, walking paths, fishing, tennis courts, horseshoe pits, dog park and beautiful gardens. The facility is supported by the Masonic Health System of Massachusetts. The Open Space and Recreation Plan committee also expressed interest in exploring a partnership with St. Mark's Coptic Church, which owns a spiritual center in northern Charlton with over 100 acres of land. The Church's land is in close proximity to other protected and open space lands in this area of town.

Charlton Open Space

Public Open Space

Level of Protection	GIS Acres
Limited	375
Perpetuity	883
Total Acreage	1,258

Private Open Space

Level of Protection	GIS Acres
None	598
Perpetuity	863
Total Acreage	1,461

Non-profit Open Space

Level of Protection	GIS Acres
None	331
Perpetuity	93
Total Acreage	421

Chapter Lands

Chapter 61	578
Chapter 61 A	928
Chapter 61B	143
Mixed Use Chapter	2,654
Total Acreage	4,302

Flexible Subdivisions Permanent Protected	520
Heritage Trust Lands not included in above (Permanent)	99

Total land in Town	28,025
Total Open Space (Mass GIS Open Space plus Chapter, Trust and Flex Subdivision)	8,062
Percent Open Space	29%
Percent Protected Open Space	9%
Acres Protected Open Space	2,459

Private Open Space

Parcel ID	Site Name	Fee Owner	Primary Purpose	Public Access	Level of Protection	GIS Acres
4-A-5, 4-A-6, 3-B-7, 10-A-3, 4-A-1.1, 4-A-1.2, 4-A-3, 4-A-4.1, 5-A-1	(Former) Camp Bement	Bement LLC	Recreation	None	None	285.0
45-A-17	Heritage Country Club	Planplow Realty Corp.	Recreation	Limited	None	313.0
79-D-1	Grimes APR	Robert E Maynard Land Trust	Agriculture	None	Perpetuity	30.4
Part of 76-A-5	Grimes APR	Robert E Maynard Land Trust	Agriculture	None	Perpetuity	0.5
Part of 76-A-5	Grimes APR	Robert E Maynard Land Trust	Agriculture	None	Perpetuity	0.3
76-C-1	Grimes APR	Robert E Maynard Land Trust	Agriculture	None	Perpetuity	126.7
Part of 75-B-7	Grimes APR	Robert E Maynard Land Trust	Agriculture	None	Perpetuity	0.8
Part of 76-D-1	Grimes APR	Robert E Maynard Land Trust	Agriculture	None	Perpetuity	65.1
Part of 75-B-7	Grimes APR	Robert E Maynard Land Trust	Agriculture	None	Perpetuity	62.3
76-A-5	Grimes APR	Robert E Maynard Land Trust	Agriculture	None	Perpetuity	158.6
Part of 76-A-5	Grimes APR	Robert E Maynard Land Trust	Agriculture	None	Perpetuity	0.8
Part of 75-B-7	Grimes Farm	Robert E Maynard Land Trust	Agriculture	None	Perpetuity	0.0
Part of 75-B-7	Grimes APR	Robert E Maynard Land Trust	Agriculture	None	Perpetuity	3.3
Part of 76-D-1	Grimes APR	Robert E Maynard Land Trust	Agriculture	None	Perpetuity	5.5
79-C-12	Wood	Wood Charlie	Agriculture	None	Perpetuity	7.5
18-A-18.3	Blomberg	Blomberg Patrick and Dorothy	Agriculture	None	Perpetuity	1.8
19-A-4	Blomberg	Blomberg Patrick and Dorothy	Agriculture	None	Perpetuity	17.8
18-A-19	Blomberg	Blomberg Patrick and Dorothy	Agriculture	None	Perpetuity	7.8
18-B-4	Blomberg	Blomberg Patrick and Dorothy	Agriculture	None	Perpetuity	71.7
11-C-7 & 11-C-8	Blomberg	Blomberg Patrick and Dorothy	Agriculture	None	Perpetuity	22.0

Private Open Space

Parcel ID	Site Name	Fee Owner	Primary Purpose	Public Access	Level of Protection	GIS Acres
10-A-5	Blomberg	Blomberg Patrick and Dorothy	Agriculture	None	Perpetuity	3.5
11-B- (no lot number, water or row)	Blomberg	Blomberg Patrick and Dorothy	Agriculture	None	Perpetuity	31.9
10-C-1	Blomberg	Blomberg Patrick and Dorothy	Agriculture	None	Perpetuity	89.2
33-B-19.2 & 33-B-19 & 33-B-20	Gay West Farm	Pickard William L and Joseph Winsten	Agriculture	None	Perpetuity	99.8
34-A-13	Gay West Farm	Pickard William L and Joseph Winsten	Agriculture	None	Perpetuity	45.5
19-E-2	231 Stafford Street	John Cook	Conservation	Limited	Perpetuity	9.9
				Level of Protection	None	598.0
				Level of Protection	Perpetuity	862.6
					Total	1,460.6

Chapter Lands

Parcel ID	Lot Size	Use Code	Site Address	Owner	Zoning
15-B-6	3.4	16	215 BROOKFIELD RD	JENNINGS GARY W	A
61-A-6.1	42.8	16	0 CARPENTER HILL RD	SANTOS IRREVOCABLE TRUST (1/03	A
64-C-17	29.8	16	0 DENFIELD RD	SANTOS IRREVOCABLE TRUST (1/03	A
64-C-3	18.2	16	61 HARRINGTON RD	WHITEHEAD MARY (7/99)	A
64-C-4	25.0	16	75 HARRINGTON RD	WHITEHEAD SANTOS MARY (7/99)	A
29-A-1	44.8	167	16 N SULLIVAN RD	LAVERGNE JEAN B	A
13-A-4	53.3	17	133 N STURBRIDGE RD	NYLIN G KENDALL ESTATE	R40
13-A-6	56.7	17	68 FITZGERALD RD	HENSEL ERIC A (1/04)	A
14-B-21	34.4	17	241 N STURBRIDGE RD	SMITH ANDREW D (3/14)	A
17-B-13	38.6	17	45 J DAVIS RD	ROCKAWAY REALTY TRUST (8/02)	A
19-C-11.72	14.3	17	234 STAFFORD ST	POULIN MICHAEL A (8/05)	A
2-A-5	27.0	17	134 CRANBERRY MEADOW RD	NYLIN G KENDALL ESTATE	A
24-A-4.1	35.2	17	106 NORTHSIDE RD	ABBOTT CURTIS K (6/99)	A
27-D-1	62.9	17	53 STURBRIDGE RD	KASZOWSKI FAMILY REALTY TRUST	IP
28-A-5	14.5	17	29 N SULLIVAN RD	RICHARDS DAVID V (10/02)	A
29-A-2.1	9.1	17	0 SULLIVAN RD	SISCO ORRIN J (7/04)	A
29-A-2.2	6.8	17	38 N SULLIVAN RD	SISCO ORRIN J (7/04)	A
30-B-10	7.6	17	66 SULLIVAN RD	SISCO ORRIN J (7/04)	A
30-B-8	38.7	17	0 SULLIVAN RD	SISCO ORRIN J (7/04)	A
40-B-45	9.1	17	36 HORNE HOMESTEAD RD	COUTURE ROBERT L (1/10)	A
40-B-45.1	20.5	17	19 HORNE HOMESTEAD RD	ZILIOLI ROBERT A (11/03)	A
40-B-8	74.7	17	0 BOUCHER RD	GUNTER LLC (1/11)	A
42A-A-18	18.0	17	20 BURLINGAME RD	GILLESPIE TIMOTHY M (10/16)	R40
43-A-1.10	49.1	17	115 CARPENTER HILL RD	SCANLON MICHAEL R JR	A

Chapter Lands

Parcel ID	Lot Size	Use Code	Site Address	Owner	Zoning
50-A-2	72.7	17	100 T HALL RD	DAM SANDRA M (11/02)	A
52-A-3.3	9.0	17	74 DRESSER HILL RD	GREEN ROBIN V (7/05)	A
52-B-3	71.0	17	0 DRESSER HILL RD	FRANK E MAGIERA 2011 IRR TR	A
53-A-3	7.2	17	55 FREEMAN RD	LETOURNEAU ANDREW (12/98)	R40
56-A-5	25.4	17	245 OXFORD RD	JAMES W DAVIS FAMILY TRU (9/12	A
57-A-19	128.2	17	107 COLBURN RD	STEVENS DANIEL S (4/04)	A
67-C-1	18.0	17	189 DRESSER HILL RD	BAYLIES JOHN	A
67-C-2	83.0	17	14 BAYLIES RD	BAYLIES JOHN	A
68-A-9	44.0	17	95 NO 6 SCHOOLHOUSE RD	WHITE WARREN E JR	A
68-B-6	7.0	17	193 FREEMAN RD	STELMACH HENRY P. JR.	A
68-B-7.1	23.5	17	0 FREEMAN RD	STELMACH HENRY P. JR. (3/12)	A
69-B-12	17.9	17	139 COLBURN RD	LANDRY JUSTIN C (3/15)	A
69-C-8	20.0	17	118 COLBURN RD	DAVIS JENNIFER A (2/16)	A
70-A-6	20.9	17	1 A F PUTNAM RD	STEVENS HERBERT C	A
78-B-19	116.0	17	22 ROBBINS RD	KORCH IRREVOCABLE TRUST (10/13	A
80-A-1	102.9	17	27 E BLOOD RD	BOISCLAIR JOSEPH K (1/98)	A
9-A-1	50.0	17	9 SMITH RD	HEBERT DONALD S.	A
9-B-5	15.4	17	311 STAFFORD ST	CAIRNS ZACHARY (4/13)	A
32-B-2	40.2	17	0 SAMPSON RD	MCKINSTRY MARK A	<Null>
40-B-7.14	6.5	17	11 PRENIER RD	THE BREault FAMILY NOMINEE TRU	A
68-B-10	6.0	17	159 FREEMAN RD	WHITNEY KAREN J (12/10)	<Null>
32-B-2.3	5.0	17	7 SAMPSON RD	MCKINSTRY MARK A (4/04)	A
36-C-10.1	7.2	17	7 L TURNER RD	BENJAMIN NATHAN R JR (9/07)	A
51-B-3.1	47.9	176	81 BURLINGAME RD	JACKSON NANCY L	A

Chapter Lands

Parcel ID	Lot Size	Use Code	Site Address	Owner	Zoning
23-A-9	7.0	18	105 HAMMOND HILL RD	JOHNSON KEITH A (1/99)	A
24-A-9	15.8	18	2 HAYES POND CR	SOOBITSKY STUART P.	A
32-A-7	26.2	18	0 SAMPSON RD	PLANPOW REALTY CORPORATION	R40
44-B-10	3.5	18	124 CARPENTER HILL RD	RUSSELL LAUREL A (8/04)	A
45-A-17.1	53.6	18	0 BERRY CORNER RD	PLANPOW REALTY CORPORATION	A
45-A-18	5.8	18	0 SAMPSON RD	PLANPOW REALTY CORPORATION	A
48-A-4.4	20.0	18	50 H FOOTE RD	VIRJO REALTY TRUST (12/13)	A
50-A-5	52.0	18	32 T HALL RD	CAPLETTE EUCLID E	A
58-A-2	63.3	18	0 FREEMAN RD	DEROSE JOHN L (12/04)	A
25-B-1	9.0	18	50 NORTHSIDE RD	HULTGREN WILLIAM	A
83-A-1	15.0	18	55 RAMSHORN RD	BARCH MICHAEL (2/10)	A
47-A-1.4	47.9	18	194 BERRY CORNER RD	COOPER PETER S JR (9/04)	A
28-A-8	47.5	317	111 BROOKFIELD RD	JMF & B REALTY LLC (6/09)	A
58-B-1	62.8	36	103 BOND RD	CHARLTON BEAGLE CLUB INC (8/02)	A
61-A-5	85.5	36	19 HARRINGTON RD	SANTOS IRREVOCABLE TRUST (1/03	A
62-A-6	65.1	36	294 SOUTHBRIDGE RD	INCOM INC	IG
65-A-1	63.0	36	73 PUMPKIN LN	SANTOS IRREVOCABLE TRUST (1/03	A
16-A-5	92.0	376	0 BROOKFIELD RD	JMF & B REALTY LLC (6/09)	A
19-C-5	41.7	46	31 J HAMMOND RD	BURLINGAME J HAMMOND RD REALTY	A
15-A-15	33.3	67	0 BROOKFIELD RD	JENNINGS IRIS A	A
14-B-1	94.6	71	0 N STURBRIDGE RD	KASZOWSKI KENNETH P	A
16-A-2	56.3	71	0 BROOKFIELD RD	MITCHELL MARK E (9/11)	A
53-A-3.2	5.1	71	0 FREEMAN RD	LETOURNEAU ANDREW (9/07)	<Null>
15-A-12	8.9	76	0 BROOKFIELD RD	JENNINGS GARY W	A

Chapter Lands

Parcel ID	Lot Size	Use Code	Site Address	Owner	Zoning
14-B-19	86.7	601	0 FITZGERALD RD	LEGEND DEVELOPMENT LLC (6/02)	A
15-A-14	0.7	601	0 BROOKFIELD RD	JENNINGS, GARY W. + IRIS A.	A
21-A-9	7.8	601	0 A YOUNG RD	LOZORAITIS SUSAN H 1/3 INT	A
22-B-1	70.0	601	0 A YOUNG RD	LOZORAITIS SUSAN H 1/3 INT	R40
29-A-10	32.5	601	0 SULLIVAN RD	JABLONSKI REALTY TRUST (6/13)	R40
29-A-11	3.7	601	0 BROOKFIELD RD	JABLONSKI STANLEY J	A
4-A-3	11.7	601	0 JONES RD	BEMENT LLC (11/11)	A
4-A-4.1	2.7	601	0 JONES RD	BEMENT LLC (11/11)	A
56-A-4	84.8	601	0 BUFFUM RD	HANNA PAUL C. III,TRUSTEE	A
62-B-2.2	17.4	601	294 SOUTHBRIDGE RD	INCOM INC	IG
64-C-10	9.1	601	0 DENFIELD RD	SANTOS IRREVOCABLE TRUST (1/03	A
64-C-18	41.0	601	0 DENFIELD RD	SANTOS IRREVOCABLE TRUST (1/03	A
64-C-19	14.3	601	0 HARRINGTON RD	SANTOS IRREVOCABLE TRUST (1/03	A
78-B-14	1.6	601	0 SANDERSDALE RD	GORMLEY KATHERINE	A
78-B-15	50.0	601	0 SANDERSDALE RD	GORMLEY KATHERINE	A
78-B-21	40.0	601	0 KING RD	GORMLEY KATHERINE	A
78-B-25	7.2	601	0 SANDERSDALE RD	GORMLEY KATHERINE	A
80-A-2.2	32.1	601	0 BAKER POND RD	LEONE REALTY TRUST	A
42-A-4.2	17.3	601	0 BURLINGAME RD	BURQUE GLORIA A (9/00)	A
14-B-19.1	2.9	601	0 FITZGERALD RD	LEGEND DEVELOPMENT LLC (6/02)	A
55-A-6.1	44.5	601	37 TURNER RD	SMITH LEONARD C	A
50-B-2	26.0	711	0 T HALL RD	DAM SANDRA M (11/02)	A
52-A-3.5	1.2	712	0 DRESSER HILL RD	GREEN ROBIN V (7/05)	A
2-A-5.11	15.3	712	0 N STURBRIDGE RD	RICHARDSON JEFFREY N (1/15)	<Null>

Chapter Lands

Parcel ID	Lot Size	Use Code	Site Address	Owner	Zoning
15-A-12.1	13.7	713	0 BROOKFIELD RD	KASZOWSKI ROBERT, BRIAN	A
18-A-18.3	1.6	713	0 G FRENCH RD	MCCARTHY KEVIN P (8/05)	A
32-B-2.1	6.6	713	0 SAMPSON RD	MCKINSTRY FORREST A.	A
32-B-4	36.2	713	0 STURBRIDGE RD	KASZOWSKI ROBERT	R40
37-A-3	24.2	713	0 WORCESTER RD	GUNTER LLC (9/10)	IP
67-A-1.1	5.5	713	0 DRESSER HILL RD	YVES-LYNN REALTY NOMINEE TRUST	A
69-B-13	7.8	713	0 PARTRIDGE HILL RD	STEVENS HERBERT C	A
73-B-1	7.8	713	0 PARTRIDGE HILL RD	STEVENS HERBERT C	A
59A-A-35	7.6	716	0 DRESSER HILL RD	BAYLIES LOWELL L	A
67-D-4	0.8	716	0 BAYLIES RD	BAYLIES JOHN	A
14-B-16	8.3	717	0 N STURBRIDGE RD	SMITH ANDREW D (3/14)	A
28-A-3	3.4	717	0 N SULLIVAN RD	SISCO ORRIN J (7/04)	A
28-A-3.1	3.9	717	0 N SULLIVAN RD	SISCO ORRIN J (7/04)	A
29-A-2	24.6	717	0 SULLIVAN RD	SISCO ORRIN J (7/04)	A
29-A-2.3	5.3	717	0 SULLIVAN RD	SISCO ORRIN J (7/04)	A
29-A-2.4	1.7	717	0 SULLIVAN RD	SISCO ORRIN J (7/04)	A
29-A-2.5	2.0	717	0 SULLIVAN RD	SISCO ORRIN J (7/04)	A
29-A-2.6	2.1	717	0 SULLIVAN RD	SISCO ORRIN J (7/04)	A
30-B-4	0.2	717	0 SULLIVAN RD	SISCO ORRIN J (7/04)	A
30-B-5	128.0	717	0 SULLIVAN RD	SISCO ORRIN J (7/04)	R40
33-A-2	35.0	717	0 SOUTHBRIDGE RD	KASZOWSKI FAMILY REALTY TRUST	R40
40-B-3	23.0	717	0 OLD WORCESTER RD	GUNTER LLC (1/11)	A
40-B-4	8.8	717	0 OLD WORCESTER RD	GUNTER LLC (1/11)	A
40-B-9	1.0	717	0 OLD WORCESTER RD EXT	GUNTER LLC (1/11)	A

Chapter Lands

Parcel ID	Lot Size	Use Code	Site Address	Owner	Zoning
53-C-1	17.1	717	0 OXFORD RD	MAY OLIVER E	A
59-B-5	10.0	717	0 FREEMAN RD	FRANK E MAGIERA 2011 IRR TR	A
67-B-2	42.6	717	0 DRESSER HILL RD	BAYLIES JOHN	A
67-B-3	33.0	717	0 DRESSER HILL RD	BAYLIES JOHN	A
73-B-4	39.9	717	0 PARTRIDGE HILL RD	MARCH RICHARD P	A
81-A-6	45.5	717	0 HAGGERTY RD	BOISCLAIR JOSEPH (4/98)	A
67-A-1.9	3.0	717	0 E BAYLIES RD	YVES-LYNN REALTY NOMINEE TRUST	A
40-B-45.2	124.0	717	0 HORNE HOMESTEAD RD	GUNTER LLC (9/10)	A
2-A-5.12	9.2	717	0 N STURBRIDGE RD	NYLIN PATRICIA F	A
15-B-4	60.4	718	0 BROOKFIELD RD	JENNINGS IRIS	A
15-B-4.2	22.0	718	0 BROOKFIELD RD	JENNINGS IRIS	A
15-B-9.1	13.9	718	0 BROOKFIELD RD	JENNINGS GARY	A
28-A-6	4.3	718	0 N SULLIVAN RD	LAVERGNE JEAN B.	A
29-A-8	18.5	718	0 BROOKFIELD RD	JENNINGS GARY W (12/02)	R40
29-A-9	48.0	718	0 BROOKFIELD RD	JENNINGS GARY	A
68-A-11	11.4	718	0 BAYLIES RD	BAYLIES JOHN	A
68-A-11.1	0.8	718	0 BAYLIES RD	WHITE WARREN E	A
68-B-9	2.3	718	0 FREEMAN RD	WHITNEY KAREN J (12/10)	A
73-A-4	5.7	718	0 PARTRIDGE HILL RD	PENA JANICE A (2/16)	A
73C-A-3.1	3.3	718	192 PARTRIDGE HILL RD	MARCH RICHARD P	A
52-A-3.15	1.4	718	0 FLINT RD	GREEN ROBIN V (7/05)	A
13-A-2.11	10.0	720	0 FITZGERALD RD	HANSEN ROBERT J.P.	A
74-B-7	10.2	801	0 RAMSHORN RD	CAVANAUGH RICHARD	A
1-A-7	35.1	803	0 N STURBRIDGE RD	TREADWELL FAMILY IRREVOCABLE	A

Chapter Lands

Parcel ID	Lot Size	Use Code	Site Address	Owner	Zoning
29-A-3	18.0	803	0 SULLIVAN RD	JENNINGS GARY W	A
29-A-6	25.3	803	0 SULLIVAN RD	JENNINGS IRIS	R40
56-A-4.1	6.4	803	0 OXFORD RD	PRUNIER LOUIS	A
17-B-13.5	5.3	803	0 CITY DEPOT RD	HAMMOND FRANKLIN D. (7/02)	A
79-C-4	20.6	803	0 KING RD	DAUBNEY WALTER G	A
13-A-10.14	15.0	803	0 N STURBRIDGE RD	RICHARDSON JEFFREY N (10/12)	A
44-B-11	2.3	806	0 CARPENTER HILL RD	RUSSELL LAUREL A (8/04)	A
48-A-3.1	2.1	806	0 H FOOTE RD	VIRJO REALTY TRUST (12/13)	A
44-B-11.1	1.4	806	0 CARPENTER HILL RD	RUSSELL LAUREL A	A
44-B-11.2	1.4	806	0 CARPENTER HILL RD	RUSSELL LAUREL A	A
Total Acreage	4,302.5	154	Parcels		
Chapter 61	578.0	21	Parcels		
Chapter 61 A	927.7	49	Parcels		
Chapter 61B	142.9	12	Parcels		
Mixed Use Chapter	2,653.9	72	Parcels		

Public Open Space

Parcel ID	Site Name	Fee Owner	Owner Type	Manager	Primary Purpose	Public Access	Level of Protection	GIS Acres	Condition	Recreation Potential
41-A-31 & 53-A-1	Bay Path Vocational School	Bay Path Regional Voc.	Municipal	Bay Path Regional Voc.	Recreation	Limited	Limited	190.8	Good	Yes, at 53-A-1
42A-C-5	Charlton Elementary	Charlton-Dudley School District	Municipal	Charlton-Dudley School District	Recreation	Limited	Limited	7.1	Good	Existing
53-C-2	Heritage School	Charlton-Dudley School District	Municipal	Charlton-Dudley School District	Recreation	Limited	Limited	89.3	Good	Existing
53-C-1.5	Charlton Middle School	Charlton-Dudley School District	Municipal	Charlton-Dudley School District	Recreation	Limited	Limited	48.4	Good	Existing
42A-A-16	Memorial Athletic	Town of Charlton	Municipal	Recreation Commission	Recreation	Full	Limited	3.9	Good	Existing
42A-A-8	Old Ballfield	Town of Charlton	Municipal	Recreation Commission	Recreation	Full	Limited	5.6	Good	Existing
42A-B-11	Undeveloped land behind town hall	Town of Charlton	Municipal	Recreation Commission	Recreation	Full	Limited	3.3	Fair	Yes
42-B-1	Maynard Recreation Fields	Town of Charlton	Municipal	Recreation Commission	Recreation	Full	Limited	20.0		Existing-Athletic Fields
42-B-1.2	Maynard Recreation Fields	Town of Charlton	Municipal	Recreation Commission	Recreation	Full	Limited	3.2	Good	Existing-Parking
42.B-1.1	Community Center at 4 Dresser Hill	Town of Charlton	Municipal	Recreation Commission	Recreation	Full	Limited	3.4	Good	Existing
20-B-4	N/A	Town of Charlton	Municipal	Conservation Commission	Conservation	Full	Perpetuity	2.3	Fair	Improvements needed
5-B-3	Bennett WMA	Department of Fish and Game	State	State of Massachusetts	Conservation	Full	Perpetuity	289.4	Good	Existing
17A-G-14.1	Glen Echo Lake Access	Department of Fish and Game	State	State of Massachusetts	Recreation and Conservation	Full	Perpetuity	0.9	Fair	Improvements needed

Public Open Space

Parcel ID	Site Name	Fee Owner	Owner Type	Manager	Primary Purpose	Public Access	Level of Protection	GIS Acres	Condition	Recreation Potential
9-B-1	Stafford Street Conservation Area	Town of Charlton	Municipal	Conservation Commission	Conservation	Full	Perpetuity	40.4	Unknown	Potential
61A-C-4	Prindle Pond	Town of Charlton	Municipal	Conservation Commission	Recreation and Conservation	Full	Perpetuity	2.2	Good	Improvements needed
19-E-6.2, 20-A-1	Fay Mountain Farm Conservation Area	Town of Charlton	Municipal	Conservation Commission	Recreation and Conservation	Full	Perpetuity	65.0	Good	Existing
8-A-6.12	Solar Heights Estates Conservation Area	Town of Charlton	Municipal	Conservation Commission	Conservation	Full	Perpetuity	18.2	Unknown	Unknown
60-E-3	Blood Road Conservation Area	Town of Charlton	Municipal	Conservation Commission	Conservation	Full	Perpetuity	14.6	Unknown	Unknown
56-A-6; 72-B-7	Buffumville Lake Flood Risk Management Project	Army Corps of Engineers	Federal	ACOE	Flood Control	Full (some restrictions)	Perpetuity	450.4	Good	Existing
						Level of Protection	Limited	374.9		
						Level of Protection	Perpetuity	883.3		
						Total		1,258.2		

Non-Profit Open Space

Parcel ID	Site Name	Fee Owner	Primary Purpose	Public Access	Level of Protection	GIS Acres
33-A-1	Capen Hill Nature Sanctuary	Capen Hill	Conservation	Full	None	86.0
54-A-4, 54-A-11, 54-B-4, 54-A-9, 54-A-7	Elliot Joslin Camp	Barton Center for Diabetes	Recreation	None	None	102.6
82-B-2,82-C-1	Camp Foskett	YMCA of Southbridge	Recreation	Limited	None	112.0
5-A-3, 5-A-5.1, 5-A-5.2, 5-A-5	Donald Powers Memorial Forest	New England Forestry Foundation	Conservation	Full	Perpetuity	93.3
58-A-7.3	Charlton Little League Fields-90 Bond Road	Charlton Little League	Recreation	Limited	None	2.8
58-A-7	Charlton Youth Soccer Fields -106 Bond Road	Charlton Youth Soccer Inc.	Recreation	Limited	None	27.3
				Level of Protection	None	330.7
				Level of Protection	Perpetuity	93.3
					Total	424.0

Charlton Heritage Preservation Trust Properties

Parcel ID	Parcel Size	Location	Owner (Manager)	Primary Purpose	Public Access	Recreation Potential / Use	Level of Protection
13-A-2.8	1.45	FITZGERALD R D	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
2-A-6	57.00	N STURBRIDGE RD	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
21-A-32	3.29	MEADOW LN	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
21-A-5.55	8.10	PHEASANT LN	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
21-A-6A	7.13	A YOUNG RD	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
73-A-1	18.98	DANIELS RD	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
81-A-7	4.50	HAGGERTY RD	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
85-A-1	14.00	LELANDVILLE RD	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
55-B-11.19	6.70	FULLING MILL DR	Charlton Heritage Preservation Trust	Passive	Full	Existing: Trails	Perpetuity
55-B-11.21	7.44	FULLING MILL DR	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
55-B-11.22	1.03	MANOR FOREST CR	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
7-B-2.18	4.21	MARRISSAS CR	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
7-B-2.19	1.58	STAFFORD ST	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
15-B-9.17	4.41	SYDNEY CR	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
37-A-5.4	27.44	HYDE RD	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
70-A-7.13	5.37	WILLOW TREE LANE	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
15-A-15.23	8.89	JENNINGS RD	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
3-B-5.16	3.72	LAMBS POND C IRCLE	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
15-A-12.2	12.92	BROOKFIELD R D	Charlton Heritage Preservation Trust	Passive	Full	Potential	Perpetuity
Total	198.16						

Other Non-Profits with Unprotected Lands

Parcel ID	Parcel Size	Owner	Location	
34-A-15.1	0.2	Overlook / Masonic Home		GILLESPIE RD
34-A-14	50.0	MASONIC NURSING HOME INC		GILLESPIE RD
34B-A-37.2	17.7	OVERLOOK COMMUNITIES INC	2	CORINTHIAN W AY
34B-A-37.3	4.3	MASONIC HOME INC		MASONIC HOME RD
34B-A-37.4	1.6	OVERLOOK COMMUNITIES INC	2	DORIC CR
34B-A-37.5	1.7	OVERLOOK COMMUNITIES INC		CORINTHIAN W AY
34B-A-37.6	2.6	OVERLOOK COMMUNITIES INC		ATHENS ARCH WAY
34B-A-37.7A	347.2	OVERLOOK COMMUNITIES INC	1	DORIC CR
34B-A-37.7B	7.3	MASONIC HOME INC		COMPOSITE CR
10-D-1	112.6	ST MARK COPTIC ORTHODOX CHURCH	74	GOULD RD
22-A-1.2	2.8	CHARLTON BAPTIST CHURCH	50	HAMMOND HILL RD
23-B-8	0.5	CHURCH OF CHRIST	81	HAMMOND HILL RD
26-C-2	5.5	CHARLTON CITY UNITED METHODIST	72	STAFFORD ST
31-D-1	6.2	ASSEMBLIES OF GOD	307	STURBRIDGE R D
35-A-1	32.5	ROMAN CATHOLIC BISHOP OF WORC	10	H PUTNAM RD
73B-L-13	3.9	FIRST SWEDISH EVANGELICAL	30	PINELAND DR
74-A-4	7.2	CHARLTON BIBLE FELLOWSHIP		NO 6 SCHOOLHOUSE RD
74-A-5	1.5	THE EASTERN REGIONAL ASSOC	6	HAGGERTY RD
74-A-6	0.5	THE EASTERN REGIONAL ASSOC	6	HAGGERTY RD
35-D-27.3	7.2	CARMELITE SISTERS	188	OLD WORCESTER RD
42A-C-3	1.5	FEDERATED CHURCH OF CHARLTON	62	MAIN ST

SECTION SIX: COMMUNITY VISION

DESCRIPTION OF PROCESS

Public input was sought over a one and a half year period to guide the development of this plan. The current Open Space and Recreation Plan Committee was appointed in April 2016 and first met in May 2016. The Committee met five times from May 2016 to March 2017 during the plan's development, review and approval. Drafts of Plan chapters and maps were made available to the public as soon as they were finished. The final draft plan was posted on the website.

In June 2016, the Committee developed and administered a survey to assess the needs and concerns of citizens regarding open space and recreation issues, opportunities and needs. The survey was adapted from successful surveys used by other communities in their open space and recreation planning processes, and tailored specifically to Charlton. The survey was available online from July 19, 2016 to September 23, 2016. The Committee publicized the survey through a press release to the local newspapers, town wide email blast, and an email to town boards and committees. Committee members also made targeted invites. Hard copies of the survey were also made available at the town hall, senior center and library. The survey "closed" on September 23, 2016 with 214 respondents. The resulting information was then integrated into an action plan for implementation. The survey results can be found in the Appendix of the plan.

The Committee publicized and organized a Public Forum at the Charlton Council of Aging, which is located on the basement level of Town Hall, on the evening of February 8, 2017 to discuss the draft plan, the draft survey results, draft goals, objectives, and action plan. Approximately 15 people attended the forum. The participants' comments were reviewed and incorporated into this plan.

The Committee worked closely with the Central Massachusetts Regional Planning Commission (CMRPC) on the development, distribution and collection of the resident surveys, facilitated the community forum, reviewed and commented on chapter drafts, and most importantly synthesized the wealth of information in the context of their collective experience and developed a shared set of goals, objectives and action steps.

At one of the Open Space and Recreation Plan Committee meetings, there was a detailed discussion of the 1996 OSRP Goals and Objectives and 2008 DRAFT OSRP Goals and Objectives where the following was evaluated:

- What actions had been accomplished and how successful was the action;
- What actions were not achieved and why;
- Were the actions not achieved still relevant and should they be incorporated into this OSRP Update, and;
- How could the community build upon past accomplishments to further enhance and protect its open space and recreation resources.

Through an iterative process between the Committee, town officials, town staff, and the public, past accomplishments and current needs were evaluated and goals were established to support community concerns and desires over the next five years. The end product was the set of goals described below with more specific objectives for each goal described in Section 8 of this report.

STATEMENT OF OPEN SPACE AND RECREATION GOALS

The theme of this 2017 Open Space and Recreation Plan is preservation, recreation and connectivity. The Town will continue to work together with its partners to acquire and preserve important natural and cultural resources. Additional recreational facilities will be rehabilitated and maintained and new recreational facilities will be built to support the needs of the growing local population. A desire for better connectivity between existing and proposed open space resources will start to establish a greenway system in Town with linkages to abutting communities. Goals were developed to accomplish this vision.

- Protected land for open space, farming, forestry, habitat, and water supply.
- Long-term protection of surface and groundwater resources
- Increased awareness of and enhanced access to open space and recreation resources
- Expanded opportunities for passive and active recreation

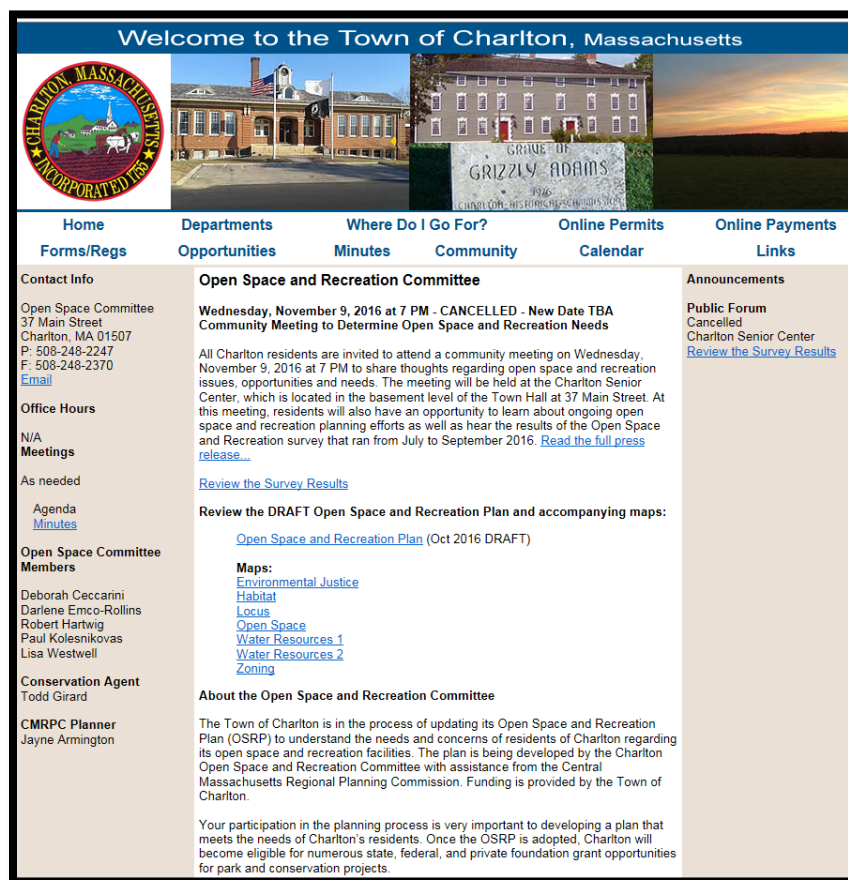


Figure 29: Website of the Open Space and Recreation Committee

SECTION SEVEN: ANALYSIS OF NEEDS

This section presents resource protection needs, community needs and management needs that were garnered through an examination of the data and trends presented in Sections Three through Five, the 2016 OSRP Survey, Community Forum, Committee input, and staff input.

SUMMARY OF RESOURCE PROTECTION NEEDS

Resource protection is based upon the need to preserve existing natural and cultural resources that are finite in quantity and otherwise irreplaceable. These resources include wetlands, rivers, streams, aquifers, farmland, historical resources and scenic views. Once these resources are lost they cannot be replaced.

The primary resource protection needs identified include the preservation and protection of open space and farmland, protection of natural habitats and landscapes, the assembly and protection of large blocks of open space, and the long-term protection of surface and groundwater resources. Several forum attendees believed that many people in town very much support the idea of resource protection but that perceived increased taxpayer costs have made it more difficult to adopt local measures that result in greater resource protection or to ask for town funds for land acquisitions.

PRESERVATION AND PROTECTION OF OPEN SPACE

Majority of Survey respondents characterized Charlton as rural, historic, slow-paced, not crowded, and safe. Many also considered Charlton to be a bedroom community, a farming community, a community in transition, and a suburb of Worcester. Throughout the public process residents expressed the need to protect land—farmland and other natural areas—from development. This will be challenging as Charlton continues to be one of the fastest growing areas in Central Massachusetts. Population and housing unit growth is anticipated to continue in the coming decade. Much of this new development will occur on former farmland as it has already.

The need to preserve land extends to commercial and industrial development. Charlton is expected to continue to see commercial and industrial development interest along Route 20 and potentially along Carpenter Hill Road and 31 (North).

The Town of Charlton Zoning Bylaw includes Flexible Development for residential subdivisions (§200-5.7) and Flexible Business Development (§200-5.14) for commercial development with the intent of providing “the most efficient use of services and infrastructure, to maintain the Town’s traditional New England rural character and land use patterns and to encourage the permanent preservation of open space.” The Planning Board routinely reviews these bylaws with the assistance of outside consultants to ensure that they balance the need for development with the desire for publically accessible open space. Since passage, hundreds of acres of open space have been permanently protected. The Planning Board, working in conjunction with other town boards/committees/staff, independent consultants, and the public, when appropriate, should continue to review the residential and business Flexible Development bylaws regularly to promote open space dedication with emphasis on public access and connectivity.

Town staff and boards should also continually promote state programs such as APR and the Chapter Program. A further objective of preserving farmland through programs such as APR is to ensure the community has land available to grow its own food should food security become an issue and to make available local products to encourage healthy eating. Food security and obesity prevention are also priorities of the state and federal government and they have invested resources in these areas. Indirectly, the development of solar energy generation facilities has temporarily preserved the fields of former farms in town. More study should be conducted to determine if the structures that cover these former fields will result in negative environmental impact.

The survey and forum showed that residents also value Charlton's historic character. Farmland and other conservation areas that include a historic resource and are not already under APR or another form of permanent protection should be evaluated for possible enrollment in the APR program or protected through a creative use of local funds. The preservation of Fay Mountain Farm is a recent example. The town should identify historic properties that have not been already surveyed and cataloged with the Charlton Historical Commission. Adoption of the Community Preservation Act (CPA) would offer additional funding opportunities for recreation projects and open space purchases.

Support for the adoption of the Community Preservation Act, which imposes a surcharge on property tax bills to raise money for local projects in open space, historic preservation and affordable housing, was varied however. Just over 40 percent of survey respondents indicated that they would support to strongly support the adoption while just over 30 percent indicated little to no support and almost 25 percent were neutral on the matter. Attendees of the forum were less enthusiastic about the CPA mostly because they—many of which serve as the town's core group of open space and recreation advocates—were hesitant in the investment of time that such an adoption process would take if only to be overwhelmingly defeated. Certainly, the CPA should be given more consideration in the next couple of years as there is demonstrated interest.

The Town of Charlton has many parcels of land characterized in the Town Assessor's Database as vacant based on its land use code. Each vacant parcel is described as residential, commercial, or industrial and then also described as developable, potentially developable or undevelopable. The Town should have these parcels mapped and consider if they might be candidates for protection or preservation efforts to augment the Town's open space and recreational resources. They also might represent opportunities to add on to protected open space or provide habitat for unique species.

PROTECTION OF NATURAL HABITATS AND LANDSCAPES

Currently there are a number of core habitats and critical natural landscapes that are not permanently protected areas or have temporary protection that could be saved as open space and wildlife corridors within town. The protection of these habitats and landscapes is also a regional and statewide priority and the State has invested in mapping and associated data to help communities identify the most critically important wildlife habitat to protect.¹⁰ Some of these areas connect to adjacent communities and extend these corridors even further. These areas are

¹⁰ Massachusetts Executive Office of Energy and Environmental Affairs, Massachusetts Statewide Comprehensive Outdoor Recreation Plan, 2012.

identified on the Habitat Features Map. These corridors, be they for wildlife or for people, are the natural links that are most vulnerable to development in Charlton, and they need to be protected to help conserve the integrity of the bioregion, to conserve biological diversity and to provide natural pathways for quality recreation experiences. As development in Charlton occurs, these potential corridors will quickly decrease in both size and length. Participants in this process also noted how Interstate 90 and Route 20 challenge wildlife migration. The action plan recommends working with the Massachusetts Department of Transportation to identify opportunities for creating wildlife crossings when reconstruction projects are proposed.

ASSEMBLY AND PROTECTION OF LARGE BLOCKS OF OPEN SPACE

Charlton has a few large contiguous blocks of protected open space such as the parcels that comprise Charlton's three APR's, Buffumville, and Bennett Wildlife Management Area. Blocks of contiguous open space have the potential to serve many functions such as wildlife habitat, passive recreation such as hiking or cross-country skiing, groundwater recharge, scenic landscapes, working farms and forest lands to name just a few. Particularly in the north part of town, with the existing protected lands of the Powers Memorial Forest, Stafford Street Conservation Ares and Fay Mountain Farm in addition to Bennett and the Blomberg APR holdings, there may be opportunities for further connections between these parcels of protected open space. For example, town could discuss protection or easement opportunities with the new owners of the Bement Camp and Conference Center as its owners have not finalized plans for this property, which is approximately 285 acres, in this area of town. The Town should also examine opportunities for assembling protected land when new development is proposed. While the Flexible Development bylaw has protected over 500 acres of land since the bylaw's passage, the bylaw has not been effective at protecting open space that can be assembled into contiguous blocks or corridors. By nature of where the subdivision is proposed, there may not be the occasion for forming a larger block of protected open space; however, the town should continue to pursue this overall objective. Approximately 65 percent of survey respondents indicated that they would support town funding to increase town owned open space.

LONG-TERM PROTECTION OF SURFACE AND GROUNDWATER RESOURCES

As discussed in the subsection on infrastructure in Section Three, evidence of groundwater contamination continues to draw attention to the need for a comprehensive water system and water supply. The town of Charlton does not have its own public water supply. Since the late 1980s, the Town has been actively searching for a solution to its water supply needs to support economic development along Route 20 and respond to groundwater contamination issues. Residents look to the town to find a source of water to supply its water infrastructure. Groundwater contamination in Charlton is also a regional and statewide issue that involves multiple entities as pollution transcends municipal boundaries. The 2012 SCORP statewide phone survey found that drinking water was among the most important non-outdoor recreation value of the land respondents visit (just behind wildlife and quality of life, but far above all other values). Forests are the best source of treatment for public water supplies. The dense canopies and complex soils filter rainfall and non-point source pollution from developed areas.

The town has been challenged by this as the full extent of ground water contamination is unknown. In addition, residents and businesses have been reluctant to pay for a water system as the contamination was not their fault. Charlton should continue discussions with Oxford to potentially supply areas of town not covered by water supply from Southbridge and/or to potentially develop groundwater supplies in that area. The Town is actively pursuing several grants to further study this issue. In addition, the town has expressed interest in developing a Water Resources Management Plan. A balance between water resource protection and development can only be achieved through thoughtful long-term planning.

The protection of surface water in Charlton will continue to be a need although the town has made significant progress over the last two decades to minimize water quality degradation. The protection of surface water is also a regional and statewide priority.¹¹ However, old, on-site waste disposal systems, runoff from roads, and runoff from farming operations, continue to threaten water quality. As a requirement of the MS4 Storm water Permit, the Town of Charlton, through the Conservation Commission, annually conducts dry and wet weather water quality monitoring. In addition, the town and its partners continue to work with the Massachusetts Department of Environmental Protection (DEP) to address water that the state has identified as polluted or impaired. In 2014, over 900 acres and 17 miles of water in Charlton were classified with a Category 4a, 4c or 5 impairment. Funding town staff to monitor water quality issues will continue to be critical to the health of Charlton's lakes, ponds, and streams. Over 75 percent of Survey respondents indicated that they would support town funding to increase open space to protect water resources.

Regional and statewide open space and recreation needs were also considered through this planning process, The 2012 Massachusetts Statewide Comprehensive Outdoor Recreation Plan. The last regional level survey on recreation needs and preferences was conducted in 2006 through the Massachusetts Outdoors 2006 State-wide Comprehensive Outdoor and Recreation Plan. This survey concluded the following for the Central Region, where Charlton is located: Historic and cultural sites receive the highest satisfaction levels for the Central Region and the highest statewide. Bikeways were also high in satisfaction. Lower levels of satisfaction were reported in regards to wetlands, rivers and streams, lakes and ponds, coastal beaches, agricultural lands and golf courses, neighborhood parks, playgrounds and tot lots. The strongest dissatisfaction ratings were given for trails and greenways, agricultural lands, and wildlife conservation areas. No dissatisfaction was reported for historic and cultural sites, albeit residents reported traveling longer distance than most for such experiences. The overall pattern of preferences among Central Region residents regarding new funding initiatives followed that of the statewide patterns. However, feeling was strongest in this region for supporting acquisition of new recreation areas (81%).

¹¹ Massachusetts Executive Office of Energy and Environmental Affairs, Massachusetts Statewide Comprehensive Outdoor Recreation Plan, 2012.

PRIORITY PRESERVATION AREAS IDENTIFIED IN THE CENTRAL 13 PRIORITIZATION PROJECT

The Central Thirteen Prioritization Project was a regional-level planning process conducted by CMRPC in 2012 that: 1) established community-based priorities and strategies in the study area; 2) integrated those priorities into regional development and preservation strategies; and 3) provided a direction for public investments that conserve the intrinsic qualities of the region while capitalizing on its economic strength in the state. The Central Thirteen region is made up of the following communities: Auburn, Boylston, Charlton, Dudley, Holden, Leicester, Oxford, Paxton, Southbridge, Spencer, Sturbridge, Webster, and West Boylston.

This process identified: Priority Areas for Development, Priority Areas for Preservation, and Priorities for Significant Infrastructure Investments. Priority development areas (PDAs) are areas within a town that have been identified as capable of supporting additional development or as candidates for redevelopment. These are areas on which a town is focusing its energy to promote thoughtful economic development that is closely tied to the community's goals. Priority Preservation Areas (PPAs) are areas within a town that deserve special protection due to the presence of significant environmental factors and natural features, such as endangered species habitats or areas critical to drinking water supply, scenic vistas, areas important to a cultural landscape, or areas of historical significance.

There were twelve PPA's identified in Charlton, which can be found in Table 23 below as well as the Seven Year Action Plan. Three of these twelve were identified to be regionally significant by the Central 13 Committee. Now five years later, several of these parcels are in the development process, have development interest or have partially been subdivided.

Table 23: Priority Preservation Areas Identified in the Central Thirteen Prioritization Project, 2012

Project ID	Property	Category	2017 Status
54-12	Fay Mountain Farm	Preservation	
54-13	Buffumville Reservoir	Preservation	
54-14	Mid-State Trail	Preservation/ Transportation	
54-15	Nylin parcel abutting Cranberry Meadow	Preservation	In development process
54-16	Sisco parcel abutting Manor Ridge	Preservation	
54-17	McDougle parcel	Preservation	In development process
54-18	McKinstry parcel abutting Capen Hill	Development/ Preservation	In development process
54-19	Jencent, LLC parcel abutting Capen Hill	Development/ Preservation	In development process
54-20	Boisclair parcel abutting Haggerty Road	Preservation	
54-21	Potter Village Road parcels	Preservation	In development process
54-22	Flint Road Recreation	Preservation	Partially developed
54-23	Stafford Street Recreation	Preservation	Development interest
<i>Source: Central Massachusetts Regional Planning Commission with local input</i>			

SUMMARY OF COMMUNITY NEEDS

The survey showed that residents value Charlton's farmland, forests, and other open space (almost 80% of respondents), small town character (85% of respondents), air quality (almost 70% of respondents). Open space, particularly places with historic value, ranked high with survey respondents. Specifically, residents gave the following importance to the below objectives:

- Preserving and maintaining places with historical value and/or have buildings with historical or architectural interest were identified as being very important to important (almost 90% of respondents).
- Preserving and maintaining farmland was identified as being very important to important (almost 90% of respondents).
- Preserving and maintaining open spaces to meet water and conservation needs was identified as being very important to important (95% of respondents).
- Preserving and maintaining open spaces to meet recreational needs was identified as being very important to important (almost 90% of respondents).
- Preserving and maintaining open spaces to meet aesthetic, scenic, or passive recreation needs was identified as being very important to important (over 90% of respondents).

Almost ninety percent of survey respondents rated the need to preserve open space and natural areas in Charlton as very important to important. Yet, respondents were evenly divided as to whether Charlton is currently adequately served by open space with 51 percent answering yes that Charlton is adequately served and 49 percent answering no. In addition, respondents were evenly divided as to whether there was enough town-owned open space with 49 percent answering yes and 51 percent answering no. 65 percent of respondents indicated that they would support town funding to increase town owned open space. Support for the adoption of the Community Preservation Act, which imposes a surcharge on property tax bills to raise money for local projects in open space, historic preservation and affordable housing, was varied. Just over 40 percent of respondents indicated that they would support to strongly support the adoption while just over 30 percent indicated little to no support and almost 25 percent were neutral on the matter.

In regards to recreation, over 65 percent of respondents believed that the town is not adequately served by recreational facilities. Respondents were evenly split in as to their level of satisfaction with the places for individuals under the age of 18 to play in Town. Over 70 percent of survey respondents indicated that they would support town funding to increase the general maintenance of existing facilities. Almost fifty percent of respondents indicated they would support town funding to increase athletic fields. Over 60 percent of respondents indicated that they would support town funding to increase children's play equipment.

The demand for active and passive recreational facilities was very evident throughout this planning process. In addition to improving the existing facilities there was a strong desire to provide additional facilities in order to meet the recreational needs of all age groups and the growing population. The town's public services and facilities have tried to keep pace with the demands of its rapidly growing population but financial constraints have often delayed needed projects. Despite

these challenges, the town completed important open space and recreation facilities and services in the recent years.

- An expansion and renovation of the library in 2007.
- Town Hall was made fully ADA compliant and accessible, including a renovated senior center on the basement level.
- The Charlton playground as well as the pathway from the parking lot to the playground was made 100% ADA compliant. This was an all-volunteer effort that the town is particularly proud of. Extensive fundraising and a grant funded this project. In addition, the playground was designed to have all storm water remediated on site.
- Fay Mountain Farm is fully leased out and the Farm hosts seasonal events and activities.

In general, the town should continue its progress in renovating and building ADA compliant parks. Increasing access to usable parks has a positive impact on residents' health as parks get people moving. The state has an obesity prevention initiative that stresses the importance of healthy eating and physical activity. The town is currently focusing on a new fire station as well as an expansion of the Charlton Housing Authority's Meadowbrook development. The town may be able to fold in opportunities for open space and recreation into these projects. The town and its partners should continue to explore ways to use existing public facilities (or publicly funded facilities) and open spaces for arts, entertainment and recreational events. Preserving and maintaining recreational facilities such as Fay Mountain Farm was identified as being very important to important by almost 80% of respondents.



Figure 30: Fundraising for future playground facilities

About 50 percent of respondents indicated that they participate in “organized” activities through the school, town, or community/league. Most respondents were very satisfied to satisfied with organized youth sports (63%) or neutral (30%). The majority of respondents were neutral in regards to their satisfaction with organized adult sports. Over 80 percent of respondents participated in informal recreation such as walking, hiking, skateboarding, running, cycling, etc. Facilities to support these types of uses received the highest support as shown on Table 24. Over

75 percent of respondents participated in passive recreation activities such as appreciating nature, photography, bird watching, picnicking, reading/relaxing, etc.

Table 24: Ranking of Most Needed Recreational facilities

Question: Rank the five most needed recreational facilities, in order of importance. (1 as most important or needed), (Check only 5, only one per column.)	
Answer Options	Response Count
Sidewalks and walking trails	88
Bike trails/paths	81
Public access to water bodies for swimming, boating, or fishing	73
Hiking and cross country skiing trails	64
Children's play areas	62
Outdoor amphitheater or performance space	53
Community recreation center/building	50
Conservation areas	50
Swimming pool	49
Spray or splash park	47
Dog park	42
Community gardens	41
Ice skating facility	34
Soccer fields	27
Skateboard park	25
Basketball courts	23
Tennis courts	20
Baseball fields	19
Softball fields	16
Football / rugby fields	11
Lawn games (Horseshoes, etc)	8
Lacrosse or field hockey fields	6
Volley ball courts	5
Golf course	2
Disc golf/frisbee golf	2

The survey and conversation at the public forum showed great support for more sidewalks and trails and that residents desire a safe and comfortable environment for walkers, runners, and bikers. Table 24 showed that over 80 respondents ranked sidewalks and walking trails as one of the most needed recreation facilities in Charlton. Over 65 percent of respondents indicated that it was important to access open space and recreation destinations in Charlton by walking or biking. Almost sixty percent of respondents indicated that they would support town funding to improve and/or expand sidewalks as well as improve and/or create safe bike lanes on existing roads.

Residents who attended the forum identified the area in and around the town center as priority area for enhancing walking opportunities. In particular, residents expressed interest creating a “loop” from the town center, up Masonic Home Road to the Trolley Crossing neighborhood and back down H Putnam Road Extension to the Town Center again as well as the possibility of a path

from Overlook to St. Joseph's Church and then to Trolley Crossing Road. Forum attendees also noted how Route 20 thwarts connectivity between the two halves of Charlton and that passage across Route 20 was "scary." Charlton should continue interdepartmental work on making certain roads in town more safe and accessible options for all travel modes: walking, bicycling, transit, and vehicles, for people of all ages and abilities. Charlton is currently working with CMRPC staff on this objective in the form of a Complete Streets Policy.



Figure 31: Opportunity areas to enhance connections identified at the Forum

Forum attendees discussed the results of Table 24 and noted that many of these facilities already exist in town, are in the process of being built, or are in adjacent communities. For example, Buffumville offers swimming, boating and fishing as well as conservation areas and walking paths. The Tri-Community YMCA in Southbridge has a pool. The town's skateboard park was taken down in 2015 for safety reasons and a fundraising effort is being reestablished to construct a new park at the same location, directly behind the library.

Forum attendees lamented the lack of a centralized sports / recreation complex. Such a complex was proposed on Sampson Road in 2015 but was defeated. There are residents in town who still would like to see such a complex get constructed and the idea still figures prominently on the Recreation Commission's webpage. Recreational fields are currently scattered all over town. Attendees noted the need for more field space but acknowledged that added fields would result in increased maintenance costs.

Overall, the survey and forum conversation suggested that residents want enhanced or better to access to information about the town's existing open space and recreation resources. Over 75 percent of survey respondents did not know about Bennett Meadows Wildlife Management Area and another 13 percent indicated that they knew about the WMA but never visited. Over 50 percent of respondents did not know about Charlton Heritage Preservation Trust properties and almost 25 percent indicated that they knew about the properties but never visited. Almost 40 percent of respondents indicated that they did not know about the Midstate Trail and over 25 percent indicated that they knew about the Midstate Trail but never visited. When respondents were asked how they currently get information about open spaces, recreational opportunities and events in Charlton, through "Family, friends, word of mouth" received the most responses. Other sources that received more than fifty votes included through an internet search, town of Charlton website, flyers and signs around town, local newspapers, and Facebook.

Residents also expressed that having designated parking areas is important in their decision to utilize open space and recreation destinations. Many of the town's facilities do not have clearly designated parking areas or these areas are not advertised on maps.



Figure 32: Parking at Bennett Meadows Wildlife Management Area

Survey respondents expressed interest in greater public access to Charlton's 1,000 acres of water (ponds, reservoirs and streams) in the form of actual "right-to-access," designated parking areas, public access or safe access to the water. 65 percent of respondents indicated that they would support town funding to provide public access to water resources. Forum attendees noted that enhancing water access would be difficult due to lack of overall political will. Some attendees also noted, again, that Buffumville offers swimming, boating, and fishing opportunities and that Prindle Pond is the town's official "town beach." Forum conversation again noted that a central theme perhaps was the lack of awareness of these existing resources. The need for improvements at Prindle Pond, Snow's Pond and Glen Echo Lake car top access parcel were also noted.

MANAGEMENT NEEDS, POTENTIAL CHANGE OF USE

Funding and availability of personnel are the top two needs relative to open space and recreation management in Charlton. Most of the actions identified in the Seven Year Action in Chapter nine will require a significant investment of time from staff and members of the town's volunteer boards and committee let alone the actual availability of volunteers. Like many smaller towns, the Charlton would benefit from more residents getting involved on a local board or committee or committing to a local initiative. Many of the actions will also require funding for implementation. Dedicated personnel to research grant funds for some of these projects will be needed.

The Open Space and Recreation Committee that has been formed to facilitate the update of this plan should remain active, overseeing the coordination of open space planning town-wide. The town's Open Space and Recreation Committee and Conservation Committee should also continue its partnerships with the Charlton Heritage Preservation Trust, Opacum Land Trust and the Greater Worcester Land Trust on land conservation efforts in Charlton. The Town is also particularly interested in any future opportunities to provide access to the Midstate Trail.

The town should continue to monitor the plans for the former Bement Camp and Conference Center, which is approximately 285 acres, to see if there are any opportunities for future public access for hiking, swimming, boating or for the protection of open space. Another potential partnership that the Committee expressed interest in exploring was that with the Coptic Church. In addition the town should continue its partnership with the Overlook continuing care retirement community to ensure public access to the trails on its 450 acre property and opportunities for use of their other facilities.

There is also a need for the town to continue dialogue on how certain roads in town can be made more safe and accessible to walkers, bikers, and runner, which would be a "change of use." The majority of roadways in Charlton are narrow, windy roads that provide limited sight lines to drivers. Additionally, vehicular speeds have been cited as an area of concern. These conditions create an unsafe environment for pedestrians and bicyclists. In order to address these issues, Charlton has adopted bylaws that require subdivision developers, site plan applicants and special permit applicants to include sidewalks in their respective projects. Charlton is working with CMRPC staff on a Complete Streets Policy that would apply to the Village Center. A Complete Street is one that provides safe and accessible options for all travel modes: walking, bicycling, transit, and vehicles, for people of all ages and abilities.

Charlton has over 1,000 acres of lakes, pond and streams and addressing surface water quality will be an ongoing need. The town should continue to staff the Charlton Lakes and Ponds Committee as well as monitor the progress of the individual lake associations on water flow, water level regulation, storm water management, and weed control program.

SECTION EIGHT: GOALS AND OBJECTIVES

As outlined in Section 6 the following four (4) overarching goals were developed for open space and recreation activities in the Town of Charlton. These goals can be described as outcome statements that define what the Town is trying to accomplish both programmatically and organizationally.

- Protected land for open space, farming, forestry, habitat, and water supply.
- Long-term protection of surface and groundwater resources
- Increased awareness of and enhanced access to open space and recreation resources
- Expanded opportunities for passive and active recreation

In comparison, objectives help to define the actions that must be taken with a time period (the duration of an OSRP) to reach toward the strategic goals. The objectives listed below are not solely tied to one single goal, but may help move the town toward accomplishing multiple goals. The following objectives are listed below with the principle goal that they help advance. These goals and objectives are further elaborated in Section 9 “Seven Year Action Plan.”

Goal One: Land is preserved for open space, farming, forestry, habitat, and water supply.

Objectives

- Advocate for open space preservation with relevant town boards and committees through the updating of bylaws and regulations.
- Create opportunities for natural habitats to thrive through a protected greenway along the Little River.
- Maintain scenic and cultural attributes.
- Preserve agriculture and forestry land which are important components of the Town’s character.
- Protect the remaining large tracts of land in Town that are currently unprotected by fee, conservation restriction, donation, or easement in perpetuity.
- Preserve open space in contributing areas for public water supply.

Goal Two: Surface water and Groundwater are protected as clean and abundant resources

Objectives

- Critical land areas necessary for water supply protection are acquired.
- Surface water sedimentation is controlled and minimized
- Local regulations support maintaining good water quality as a primary objective
- Create general awareness relative to point source and nonpoint source pollution issues among residents, businesses, and institutions.

Goal Three: The public has a heightened awareness of and better access to open space and resources

Objectives

- Provide funding for promoting open space and recreational facilities as well as for outreach and education
- Improve the awareness of open space and recreation facilities among residents
- Increase public access to water bodies
- Improve access to recreational facilities in accordance with the Americans with Disabilities Act.
- Build partnerships with state, federal, conservation groups, and non-profit owners of land in Charlton.

Goal Four: Facilities for passive and active recreation are improved and expanded to meet the needs of residents.

Objectives

- Maintain playgrounds and recreational facilities to the safety standards applied to schools
- Provide funding for recreational and open space improvements and new facilities
- Maintain private and public conservation lands
- Create an improved network of multi-use trails, sidewalks, and bike lanes between public destinations, neighborhoods, conservation and recreation lands and commercial areas. Ensure that trail development includes trails that are ADA/ABA compliant.

SECTION NINE: SEVEN YEAR ACTION PLAN

Abbreviations for Responsible Entities: Board of Selectmen (BOS), Open Space Committee (OSC), Conservation Commission (ConCom), Conservation Agent (CA), Recreation Commission (RC), Planning Board (PB), Highway Department (HD), Water and Sewer Commission (WSC), Lakes and Ponds Committee (LPC), Fay Mountain Farm Committee (FMFC), Board of Health (BOH), Board of Assessors (BOA), Assessors Department

The “lead” entity is listed first under responsible entities.

Goal One: Land is preserved for open space, farming, habitat, and water supply	Responsible Entities	Resources	Timeline / Priority
1.a Continue the role of the Open Space and Recreation Committee to oversee the coordination of open space planning town-wide.	BOS	Volunteer time	2017
1.b Hold annual meetings with the Charlton Heritage Preservation Trust, Opacum Land Trust and the Greater Worcester Land Trust on land conservation efforts in Charlton.	OSC, ConCom, Con Agent	Volunteer time, staff time	Ongoing
1.c Map parcels categorized as vacant by the assessor’s office and evaluate if and how these lands connect to existing protected open space or contribute to a future habitat corridor.	OSC, ConCom, Con Agent	Volunteer time, staff time, CMRPC mapping	2020
1.d Ensure all departments and committees have been provided with ample time to review lands withdrawn from the Chapter 61 program or tax title lands in order to determine if the parcel in question could benefit the town’s open space network, open space needs, recreation needs as well as other town needs. Town departments and committee should be encouraged to develop review criteria.	BOS	Staff time, volunteer time, town funds and/or grant funds would be required to purchase property	2017

1.e Consider adoption of the Community Preservation Act, which imposes a surcharge on property tax bills to raise money for local projects in open space, recreation, historic preservation and affordable housing	OSC, ConCom, RC	Volunteer time	ongoing
1.f Pursue new APR's by identifying farmland not already under APR or another form of permanent protection. This should include a thorough review of all Chapter 61A properties that may be imminent for development.	OSC, BOA, Assessors Department	Staff time, volunteer time	2017
1.g Promote state programs such as APR and the Chapter Program by holding public informational meetings, One or more of these events should specifically address financial planning for large property owners.	OSC, ConCom	Staff time, volunteer time	2017
1.h Discuss protection and / or recreation opportunities with the new owners of the Bement Camp and Conference Center with the objective of creating additional publically accessible resources for hiking, swimming, boating and/or expanding the network of protected space in this area of town.	OSC,RC, ConCom, BOS	Staff time, volunteer time	2020
1.i Consider the adoption of a transfer of development rights bylaw (TDR), which assigns development rights to parcels of land and gives landowners the option of using those rights to develop or sell their land	PB, OSC, Planning Dept	Staff time, volunteer time	2021
1.j Work with the Massachusetts Department of Transportation to identify opportunities for creating wildlife crossings when reconstruction projects are proposed for Interstate 90 and Route 20.	OSC, ConCom, BOS, PB	Staff time, volunteer time	Ongoing
1.k Continue regular review of residential and business Flexible Development bylaws.	PB	Staff time, volunteer time	Ongoing
1.l Continue to explore protection options for the Priority Preservation Areas (PPAs) identified in the Central Thirteen Prioritization Project.	OSC, BOS, ConCom, PB	Staff time, volunteer time	Ongoing

Goal Two: Surface water and Groundwater are protected as clean and abundant resources	Responsible Entities	Resources	Timeline / Priority
2.a Continue research to identify potential municipal groundwater supplies	WSC, BOS	Staff time, consultant funds	Ongoing
2.b Fund property acquisitions for lands that would contribute to a local municipal groundwater supply	BOS	Town funds, grant funds	Ongoing
2.c Continue discussions with Oxford to potentially supply areas of town not covered by water supply from Southbridge and/or to potentially develop municipal groundwater supplies in that area.	WSC, BOS	Staff time	2018
2.d Pursue grants to further study this issue.	WSC, BOS	Staff time	Ongoing
2.e Develop a Water Resources Management Plan.	WSC, BOS	Staff time and consultant funds	2020
2.f Continue to apply strict enforcement of regulations to old, on-site waste disposal systems, runoff from roads, and runoff from farming operations that threaten water quality.	BOH, HD, ConCom	Staff time	Ongoing
2.g Work with the Massachusetts Department of Environmental Protection (DEP) to address water that the state has identified as polluted or impaired.	ConCom	Staff time	Ongoing
2.h Support the Charlton Lakes and Ponds Committee as well as monitor the progress of the individual lake associations on water flow, water level regulation, storm water management, and weed control program.	ConCom, Conservation Agent	Staff time	Ongoing

2.i Expand sewer system into areas where it is needed to protect water resources	BOS, WSC	Staff time, town funds, municipal bonds	2022
2.j Maintain the fund that has been established for environmental management of lakes and watershed areas and also to maintain town-owned dams.	Conservation Agent, LPC	Staff time, maintenance of town funds	Ongoing

Goal Three: The public has a heightened awareness of and better access to open space and resources	Responsible Entities	Resources	Timeline / Priority
3.a Identify amenities (type of parking, number of parking spaces, bathrooms, garbage receptacles, shelters, etc), and potential ADA access at each open space and recreation destination in town. Develop a list of maintenance, accessibility, and usability needs and wishes and work to fund such improvements.	Recreation Coordinator, Recreation Commission	Staff time, volunteer time	2018
3.b Establish a standard signage system, map and guidebook to identify open space and recreation facilities, their access points, parking availability and other amenities	Recreation Coordinator, Recreation Commission	Staff time, volunteer time, consultant funds for publication and website development, funds for production of publications	2017
3.c Continue to enhance and re-organize Memorial Field and the Town Hall Annex Field.	Recreation Coordinator, Recreation Commission	Staff time, volunteer time	Ongoing

3.d Introduce facilities for diverse winter recreation activities into existing and future facilities, such as cross country ski trails, skating areas and snow shoeing trails.	Recreation Coordinator, Recreation Commission	Staff time, volunteer time, potential funding from Mass Wildlife, National Wild Turkey Federation Grant, Ruffed Grouse Society	2017
3.e Review opportunities for swimming or car top boat launch along the town's major lakes by: a) reviewing existing town owned parcels along the waters and determine any problems that are preventing full access. Fund maintenance of these parcels to ensure safe access to the water and appropriately managed parking. B) mapping parcels categorized as vacant by the assessor's office or properties in tax title and determine if characteristics support such a future public acquisition.	Recreation Coordinator, Recreation Commission	Staff time, volunteer time	2022
3.f Enhance web presence of existing recreation facilities in the community such as Buffumville, Prindle Pond, and Fay Mountain Farm to make residents aware of the existing facilities for swimming, boating, fishing, hiking, biking, skate boarding, etc.	Recreation Coordinator, Recreation Commission	Staff time, volunteer time	2020

Goal Four: Facilities for passive and active recreation are improved and expanded to meet the needs of residents.	Responsible Entities	Resources	Timeline / Priority
4.a Establish a community agriculture program at Fay Mountain	Fay Mountain Farm Committee	Volunteer time	Ongoing
4.b Establish permanent easement along mid-state trail in Charlton.	OSC, Greater Worcester Land Trust	Staff time, volunteer time, funding for easement purchase through grants or town funds	Ongoing

4.c Continue to maintain and upgrade existing recreation facilities to assure minimal recreation needs are met for the citizens of Charlton.	HD, Recreation Coordinator	Staff time, town funds	Ongoing
4.d Continue fundraising efforts to increase children's play equipment.	Recreation Commission	Volunteer time	Ongoing
4.e Continue progress in renovating and building ADA compliant parks.	Recreation Coordinator, Recreation Commission, BOS	Staff time, volunteer time	Ongoing
4.d Construct a bandstand for community events at one of the Recreation facility sites.	RC, HD, BOS, Rec Coordinator,	Staff time, town funds	2022
4.e Rebuild a skateboard park in the community	Recreation Commission	Staff time, volunteer time, Funding by Friends of Charlton Recreation and Recreation Commission	Ongoing
4.f Re-establish tennis courts in one or more locations.	Recreation Commission	Volunteer time, Funding by Friends of Charlton Recreation and Recreation Commission.	2020
4.g Explore opportunities for open space and recreation facilities with new commercial and residential developments, expansions or transfer of ownership. Current opportunities may include: the development of a new fire station, the expansion of the housing authority's Meadowbrook development, the former Bement Camp and Conference Center, the Coptic Church parcels, and redevelopment of the Trolley Crossing area.	PB, Planning Dept, RC, Rec Coordinator, Con Com, OSC	Staff time, volunteer time	Ongoing

4.h Continue municipal partnership with the Overlook continuing care retirement community to ensure public access to the trails on its 450 acre property and opportunities for use of their other facilities.	OSC, RC, Rec Coordinator	Staff time, volunteer time	Ongoing
4.i Develop recreation facility Plans for Stafford Road property that has been designated for use by the Recreation Commission.	RC, Rec Coordinator	Staff time, volunteer time, funding potentially from timber harvest sales from the parcel.	2020
4.j Discuss options for safe pedestrian access in Charlton City, specifically across Route 20, with MassDOT, Town officials and other stakeholders.	PB, HD, BOS	Staff time, volunteer time	Ongoing
4.k Evaluate pedestrian access from the town center to adjacent areas such as Bay Path High School, CVS, St. Joseph's, Overlook, Trolley Crossing, and Charlton City and examine opportunities to connect Overlook to St. Josephs to Trolley Crossing through multi-use trail.	PB, OSC, RC, Planning Dept, Rec Coordinator	Staff time, volunteer time	Ongoing
4.l Continue work with CMRPC to develop a Tier Two Prioritization plan, which would make the town eligible for up to \$400,000 in construction work in Tier Three.	PB	Staff time, volunteer time	2017

SECTION TEN: PUBLIC COMMENTS

SECTION ELEVEN: REFERENCES

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APPENDICES

Appendix A Maps (folded at the end of the document)

Map 1 - Regional Context Map
Map 2 - Zoning Map
Map 3 - Environmental Justice Map
Map 4 - Soils and Geologic Features Map
Map 5 - Water Resources Map 1
Map 6 - Water Resources Map 2
Map 7 - Habitat Features Map
Map 8 - Scenic Features Map
Map 9 - Open Space Inventory Map
Map 10 - Action Plan Map

Appendix B Charlton Survey Results

Appendix C ADA Grievance Procedure, Access Self Evaluation, Transition Plan and Employment Practices