



# WILLIAMSBURG OPEN SPACE & RECREATION PLAN

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Committee

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## SECTION 1: SUMMARY

The 2021 update to Williamsburg's 2011 Open Space and Recreation Plan is intended to provide renewed guidance to the residents, boards, and committees of Williamsburg about natural and recreational resources valued by the community. Open space includes places of ecological significance, working farms and forests, scenic vistas, and landscapes from which the character of Williamsburg is derived. Recreational spaces in



Williamsburg are an important part of the abundant natural areas residents enjoy and include facilities such as small parks, playgrounds, ballfields, and numerous woodland trails. Williamsburg residents recognize the importance of these spaces to the health and success of the town and are supportive of smart growth measures that allow for vibrant businesses and public spaces within the two village centers, while protecting important natural areas that, if lost, would change the much-loved character of Williamsburg.

This plan identifies seven goals to work towards in the coming seven years:

- A town master plan that promotes the protection and enhancement of Williamsburg's exemplary natural resources and open spaces and is developed through an inclusive engagement process.
- Legal protection of Williamsburg's exemplary natural resources and open spaces.
- Sustainable management of Williamsburg's exemplary natural resources and open spaces.
- A range of recreational opportunities are offered to all town residents.
- Town residents are informed about and engaged in a range of open space issues, needs, and opportunities in Williamsburg.
- Future investments in open space and recreation combat the sources and effects of climate change.
- Williamsburg collaborates with neighboring towns to protect and manage natural resources and recreational offerings.

This document's Action Plan outlines a series of tasks over the next several years focused on strengthening land protection, developing local regulatory tools to ensure future growth respects the goals identified in this plan, and expanding and supporting existing recreational resources to meet the needs of all town residents. The goals and action plan also focus on collaboration between town groups and with other communities to realize the conservation and recreational aspirations of this plan.



## **SECTION 2: INTRODUCTION**

### **A. Statement of Purpose**

Williamsburg's 2021 Open Space and Recreation Plan updates the Town's 2011 Open Space and Recreation Plan and was developed over a two-year period. In January 2019, the Williamsburg Select Board tasked the Open Space Committee with updating the 2011 Plan in compliance with the Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs Division of Conservation Services (DCS) requirements. The resulting Plan assesses opportunities and provides guidance about open space and recreation issues within a community vision framework. The plan identifies ways to focus growth and development while also protecting ecologically sensitive and scenic resources that are essential to the cherished rural character of Williamsburg.

### **B. Planning Process and Public Participation**

The Open Space Committee included six members with relevant expertise and affiliations including land conservation and mapping expertise and membership on several related town committees.

Sally Loomis, Open Space Committee and Hilltown Land Trust  
Eric Bloomquist, Open Space and Mill River Greenway Committees  
Paul Kennedy, Open Space Committee, Zoning Board and Water and Sewer Commission  
Markelle Smith, Open Space Committee and The Nature Conservancy  
Kenley Clark, Open Space Committee  
Melinda McCall, Open Space Committee (joined in 2020) and staff to Conservation Commission

Technical assistance was provided in 2019 by the Pioneer Valley Planning Commission through a District Local Technical Assistance Grant from the Commonwealth of Massachusetts.

To complete this plan, the Open Space Committee met 10 times between May 2019 and April 2021 to discuss various sections of the plan, coordinate outreach and communication with relevant town committees and plan a public survey and visioning session. Relevant minutes from these meetings are provided in the Appendices.

In July and August 2019, the Committee administered a public survey available online and in hard copy. Surveys were completed mainly by town residents, though some responses were received from people who use Williamsburg's open spaces and recreational areas but live in surrounding towns. The 217 completed surveys informed many aspects of this plan.



Graves Farm Wildlife Sanctuary

The Open Space Committee held a public visioning session on September 12, 2019 at the Williamsburg Town Offices in Haydenville. The twenty-five residents in attendance heard a brief presentation on key plan elements and results of the public survey and then met in small groups to offer input on the topics of land protection, land management, water resources and recreational opportunities. Notes from this public meeting are included in the appendices to this plan.

In October 2019 several Williamsburg Open Space and Recreation Committee members attended two lengthy Municipal Vulnerability Preparedness

planning sessions to discuss vulnerabilities, strengths, and opportunities related to the impacts of climate change on Williamsburg. The Open Space Committee made a clear decision to delay completion of the OSRP update until after the MVP process was completed such that the two plans could build off of each other. The OSC presented key elements of the updated plan at the October MVP meetings as well as a public listening session in February 2020. Public comments and recommendations from the MVP planning process have further informed this plan.

Williamsburg residents were encouraged to complete the survey and attend the public visioning session through emails to town committee chairs and a large email list of the Williamsburg Woodland Trails Committee and the Burgy Bullets Snowmobile Club, flyers posted around town, and a notice on the town website. Surveys were available at the Meekins Library, and the Senior Center and Town Clerk's office located in the Town Offices in Haydenville.

Feedback collected at public meetings and through emails from residents was incorporated into the final plan. A detailed discussion of the results of the community outreach is included in Section 6 Community Vision.

Due to Williamsburg's demographics and predominantly rural development pattern, no Environmental Justice Populations have been identified in town by the state. The state defines environmental justice as the principle that all people have a right to be protected from environmental hazards and to live in and enjoy a clean and healthful environment. As a result, no enhanced outreach to this population was performed, as required by DCS.

## SECTION 3: COMMUNITY SETTING

### A. Regional Context

Williamsburg is a small, historic town of approximately 2,481 inhabitants.<sup>1</sup> The Town is nestled in the foothills of the Berkshires of Western Massachusetts, affectionately termed the Hilltowns, immediately northwest of Northampton. Neighboring towns include Hatfield, Whately, Conway, Goshen, Chesterfield and Westhampton. Regionally, Williamsburg lies between the larger communities and college towns of the Connecticut River valley and the more rural Berkshire Hilltowns. As a result, Williamsburg is attractive to residents for both its proximity to larger communities with associated amenities and its small-town, rural charm and abundant natural resources.

Covering 16,378 acres (25.57 square miles) in an L-shaped configuration, the town's boundaries do not follow any natural features such as watercourses or ridges. The two village centers of Haydenville and Williamsburg Center lie two miles apart along Route 9, with less densely settled land between and surrounding them.

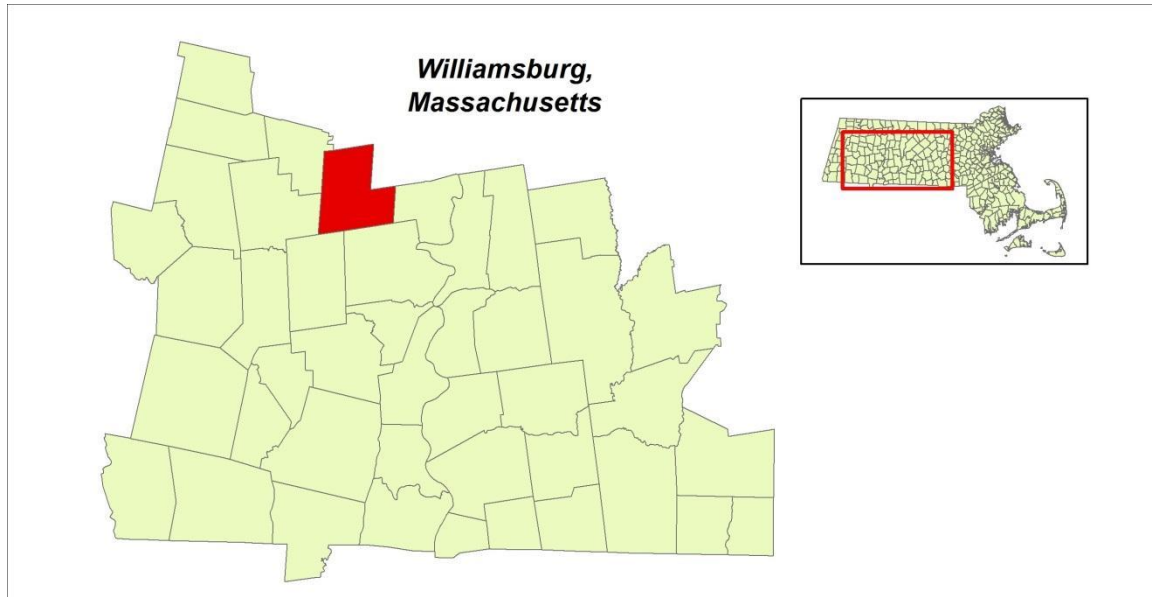
Hiking, cross-country skiing, bicycling, and snowmobiling are relatively popular among many residents. The fall foliage season brings tourist traffic through Williamsburg each year, particularly along Route 9 heading west into the Berkshires. With the exception of the Williamsburg General Store, several restaurants, and a few Bed & Breakfasts, the town is not a major tourist destination.

The entire town lies within the Mill River Watershed with the East and West branches converging in the center of Williamsburg and then flowing along Route 9, uniting the villages of Williamsburg and Haydenville. The river is central to the town's identity and its greatest recreational asset. The river also poses a serious threat to the town in the face of climate change. In 2011, Tropical Storm Irene dropped 10 inches of rain onto an already-saturated landscape. During that storm, the Mill River broke its previous high-water record by nearly five feet, closing Route 9 and causing substantial damage to several homes and businesses.

Large scale, strategic and coordinated conservation efforts are needed to address the impacts of climate change, including threats to infrastructure, wildlife, and human health. Connected and protected landscapes that allow species to move and respond to climate change are particularly important. Williamsburg is beginning to work with neighboring towns to coordinate on conservation and recreation initiatives that offer greater positive impacts for people and wildlife in the region.

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<sup>1</sup> U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.





## **B. History of the Community**

Nearby portions of the central Connecticut River Valley (Hatfield, Whately, Northampton) were ancestral home to the Nipmuc and Pocumtuc people for over 12,000 years. No evidence of long-term or large-scale indigenous habitation has been found in Williamsburg perhaps because land closer to the Connecticut River afforded much better soils for native agriculture, and the plentiful shellfish, shad and salmon in the river were important parts of the indigenous diet. But scattered artifacts, including a large stone axe and a probable stone fishing weight currently in the Historical Society's collections, have turned up in Williamsburg and indicate that valley-based Native and Indigenous people probably hunted in the hilltowns, including Williamsburg, and fished in the Mill River. They may also have gathered and processed other resources (stone, wood, plants, etc. to be used in tools, weapons, shelter, medicine, clothing, ornament and ceremony). People engaged in these pursuits may have made small, temporary encampments in the area known as Williamsburg — probably along the Mill River's banks, where later European settlement, industrialization and flooding are most likely to have obliterated traces of them.

The earliest settlements in town were located on high ground, outside of flood-prone areas. By the mid-nineteenth century, four water-powered industrial villages had grown up on the banks of the Mill River: Haydenville, Skinnerville, Williamsburg and Searsville. The river's steep drop and dependable flow eventually helped make the town a significant manufacturing center. In 1874 a poorly constructed dam along the East Branch of the Mill River suddenly burst and in one of the most significant industrial disasters of the era, a twenty-foot wall of water roared through the three lower villages, devastating dozens of homes and nearly all of Williamsburg's industries. In an hour the economic heart of the Town was wiped out, and 139 people were killed. The direction of the Town's growth was profoundly and permanently changed.

In the first half of the 20th century most of the factories prevalent in Town during the 19th century disappeared. Some of the workers left Town, and Williamsburg became once more dependent on farming, logging, and lumber milling for much of its economic vitality. Many people not fully involved in these land-based occupations began commuting out of town for work. This trend continues today, with Williamsburg becoming more and more attractive to residential development with residents commuting to nearby population centers in the Connecticut River Valley for work.

As with many small New England mill towns, Williamsburg is rich in historic resources. There are two National Register Historic Districts: the Haydenville Historic District with fifty-five (55) properties and the Williamsburg Center Historic District with seventy-three (73). In addition, the Meekins Library at 2 Williams Street is individually listed on the National Register. The town also boasts 72 buildings, burial grounds, objects or structures on its historic resource inventory. The Town of Williamsburg has an active Historical Commission and Historical Society that address various aspects of the history of Williamsburg. In collaboration with the Town, Meekins Library and Williamsburg Historical Society, the Williamsburg Historical Commission identifies, reorganizes, and catalogs Williamsburg's historic resources and then makes an effort to copy, digitize and transcribe this material for web-based dissemination.

## C. Population Characteristics

### Population Growth Indicators

The 2013-2017 American Community Survey 5-Year Estimates identifies Williamsburg as a small town of 2,481 residents. The town's population has remained fairly stable over the past several decades - hovering around 2,500 residents. Despite stable population numbers, there has been a modest increase in residential construction. The Williamsburg Building Department issued 29 building permits for new dwelling units <sup>2</sup> from 2010 through 2019, which amounts to approximately 3.2 new homes per year, a significant decrease from the 9 homes per year constructed during the previous 9-year period.

**Table 1: Williamsburg Population Growth**

Year	1940	1950	1960	1970	1980	1990	2000	2010	2018
Population	1,684	2,056	2,186	2,342	2,237	2,515	2,427	2,482	2,489
Percent Change	22%	6%	7%	-4%	12%	-3%	2%	.2%	

*Source: = Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2018. U.S. Census Bureau Population Division. May 23, 2019 Prepared by Massachusetts State Data Center/Donahue Institute, release date May 23, 2019.*

Over the next decade, the town's population is likely to grow slowly as more people are able to work remotely and new homes are built on former farms and forest land. New home construction is likely to continue to outpace population growth as household sizes shrink. Williamsburg's average household size went from 2.66 household members in 1990 to 2.36 household members in 2000 and 2.23 household members in 2017<sup>3</sup>. U.S. Census American Community Survey figures for the year 2017 identify nearly seventy percent of occupied housing units in Williamsburg were either one or two-person households and thirty-two percent had three to four-person households.

This demographic trend is keenly felt in the Williamsburg public school system as well as in many other school districts on the western side of the Connecticut River. Since 2009, Williamsburg's elementary school has seen an increase in enrollment related to the renovation of the Anne T. Dunphy School in 2014. In addition to the attraction of a new facility, this is also partly due to increases in school-choice enrollment fueled by closure of the Berkshire Trail Elementary School in Cummington.

In 2017, Williamsburg's population density was 94.96 persons per square mile, or 6.6 acres of land per inhabitant. Most Hampshire County towns are more densely populated than

<sup>2</sup> New dwelling units includes permit listings recorded as Accessory Apartment (1), Modular SFH (1), New Single Family House (26), and New Two Family (1)

<sup>3</sup> U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Williamsburg. The county-wide average density in 2017 was 314 persons per square mile—more than three times that of Williamsburg. State population density in 2017 was 879.5 persons per square mile. Densities in the county ranged from 1,441 persons per square mile in Amherst and 1,180 in Easthampton to 22 in Middlefield and 32 in Plainfield.

## Population by Age

The age distribution of a town's population affects the demand for open space and recreation as different age groups have different needs. Table 2 shows population distribution changes for Williamsburg from 1980 through 2030 for comparative purposes. The years 2020 and 2030 are projections based on historic demographic patterns. The median age in 2010 was 47.6 years, more than 6 years higher than in 2000. The percentage of Williamsburg's population under the age of nineteen continues to decline. In 2010, 20 percent of Williamsburg residents were nineteen years or younger compared to the year 2000 when that age group accounted for 23 percent, and to the year 1980 when it was 29 percent. Projections for the year 2020 estimate that this percentage will be even lower at 18 percent. The percentage of residents seventy years and older shows a slight increase from eight percent in 1980 to ten percent in 2010 and a projected sixteen percent in the 2020 census.

**Table 2: Williamsburg Population by Age Group**

Age Group	1980 Census	1990 Census	2000 Census	2010 Census	2020 Projection	2030 Projection
0 to 9	289	347	258	242	194	156
10 to 19	349	311	305	258	238	221
20 to 29	392	323	199	183	147	121
30 to 39	352	532	369	263	237	222
40 to 49	231	375	515	410	334	297
50 to 59	240	210	353	520	401	374
60 to 69	202	193	198	345	539	426
70 to 79	111	147	146	155	273	404
80 to 89 plus	52	62	73	88	125	221
90 plus	19	15	11	18	*	*
<b>Total Population</b>	<b>2,237</b>	<b>2,515</b>	<b>2,427</b>	<b>2,482</b>	<b>2,488</b>	

*Source: U.S. Census Bureau & State Data Center, University of Massachusetts, Released March, 2015*

*Note: Projections for 90+ age groups were eliminated from the latest UMass Donahue Institute (UMDI) Long-term Population Projections for Massachusetts Regions and Municipalities report*

The impacts of climate change that have already begun to influence municipalities in the Pioneer Valley are changing the needs for open space and recreation in ways that disproportionately impact the aging population. As temperatures rise and severe heat events become more frequent, the elderly are at a much higher risk of injury and death from exposure. Ensuring adequate accessibility to recreation and gathering spaces that provide shaded, cool areas for seniors to commune will be critical in future years. Furthermore, protecting natural lands and open space will ensure those areas continue to provide the natural service of passively cooling the ambient temperature and keeping the air clean of pollutants.

## Population by Race, Ethnicity & Ancestry

According to the 2000 U.S. Census, 98 percent of Williamsburg residents are white. The town does not have any environmental justice populations. The state considers environmental justice populations to be predominantly low-income or minority populations that live in denser urban neighborhoods and for reason of location may lack open space and recreational resources and often live side-by-side numerous existing large and small sources of pollution and old abandoned, contaminated sites, which can pose risks to public health and the environment.

**Table 3: Population by Race & Ethnicity, Year 2017**

	Total	Hispanic	Non-Hispanic
White Alone	2,441	17	2,424
Black or African American Alone	7	0	7
American Ind. and Alaska Native Alone	0	0	0
Asian Alone	0	0	0
Native Hawaiian/ other Pacific Islander Alone	14	0	14
Some Other Race Alone	13	13	0
Two or More Races	6	6	0
<b>Total Population</b>	<b>2,481</b>	<b>36</b>	<b>2,445</b>

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

## Household Income & Poverty

Williamsburg's median household income increased from \$64,545 in 2010 to \$75,405 in 2017, at a rate of nearly 17% which far surpassed Hampshire County's 9% increase from \$59,505 to \$64,974 over the same time period. Median household income in both Williamsburg and Hampshire County continue to stay under the Commonwealth's average at \$74,167. Home prices in Williamsburg have grown increasingly expensive with the overall upturn in the housing market in recent years but costs have not increased as quickly as they did in the previous decade. The average assessed value for a single family home in Williamsburg in 2000 was \$145,479 - by the year 2010 the value was \$277,290 and in 2017 the value was \$268,100.<sup>4</sup> Comparatively, Williamsburg had the tenth highest average assessed value for a single family home in 2009 out of the 43 municipalities in the Pioneer Valley. In 2010, as in 2000, almost 75 percent of the population lived in owner-occupied housing while the remaining 25 percent rented.

**Table 4: Median Household Income Comparison**

Geography	Median household income (2017 dollars)
Williamsburg	\$ 75,405
Chesterfield	\$ 74,412

<sup>4</sup> Adjusting for inflation, a home valued at \$145,479 in the year 2000 would translate into \$184,322 in the year 2010 and \$207,084 in 2017. A home valued at \$277,290 in 2010 would translate into \$311,706 in 2017.

Goshen	\$ 79,519
Hatfield	\$ 65,087
Northampton	\$ 62,838
Westhampton	\$ 86,591
Hampshire County	\$ 64,974
Massachusetts	\$ 74,167

Source: U.S. Census Bureau

As Table 4 shows, not all Williamsburg households are affluent despite the generalized trend in property values mentioned above. As of September 2017, Williamsburg had 51 Chapter 40B subsidized housing units, equating to 4.4% of all year-round housing in town<sup>5</sup>. The 2013-2017 American Community Survey 5-Year Estimates suggests that in 2017, 10.8 percent of individuals, 6.8 percent of families, and 18 percent of children in Williamsburg were living below the poverty level. While 2017 poverty rates for families and children have increased since 2000, the poverty rate for seniors (over 65 years) dropped from 10.7 percent in 2000 to 2 percent in 2017. Furthermore, while Williamsburg's individual and 65+ poverty rates stayed below those of Hampshire County and the state, the rate of children and families living in poverty in Williamsburg is higher than the county as a whole<sup>6</sup>. The Williamsburg Public School official 2018 "Accountability Report Card" reported that 25.9% of its students (grades K-6) were economically disadvantaged. The same reporting period for Hampshire Regional High School indicated that 14.7% of its students (grades 9-12) were economically disadvantaged. Both of these metrics fall well below the state average of 31.2%.

Free or low-cost recreational activities are important to struggling and poorer households. Recreational programming and facility planning should consider the many aging adults, as well as the economically disadvantaged younger population.

**Table 5: 2013-2017 Percent below Poverty Level**

Geography	Families	Individuals	Individuals 65 years and over	Children (under 18)
Williamsburg	6.8%	10.8%	2.0%	18.0%
Hampshire County	5.9%	13.8%	7.6%	12.3%
Massachusetts	7.8%	11.1%	9.0%	14.6%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

<sup>5</sup> Massachusetts Department of Housing and Community Development. Chapter 40B Subsidized Housing Inventory (SHI). Percent of total year-round housing is relative to 2010 Census Year-Round Housing Units.

<sup>6</sup> It is important to note that poverty data from the American Community Survey (ACS) comes from a survey mailed to a small percentage of households in each neighborhood. The margin of error (MOE) is an indicator of the reliability of ACS estimates, and MOE's are larger for smaller communities. Therefore, the increases in poverty rate over the periods discussed above may be inflated.

<http://profiles.doe.mass.edu/profiles/student.aspx?orgcode=06830505&orgtypecode=6&leftNavId=305&>



## Economic Character of Williamsburg

The unemployment rate locally and statewide has decreased over the past seven years, with unemployment in Williamsburg dropping from an average of 6.2 percent in 2012 to 3.1 percent in May, 2019<sup>7</sup>. State employment data shows that the goods-production industry and educational services industries employ the most workers in Williamsburg (Table 6). According to 2019 Massachusetts Executive Office of Labor and Workforce Development (EOLWD) reports, at the time of the reports, there were nine companies in Williamsburg with 20-49 employees. They included Anne T. Dunphy School; Brewmaster's Tavern; Chesterfield Products; Lashway Firewood Co, Forest Products, and Lumber<sup>8</sup>; Williamsburg Fire Department; Williamsburg General Store; and Williamsburg Public Schools.

As one of the larger employers in town, the Williamsburg Public Schools also offer an array of recreational opportunities for its students and the community.

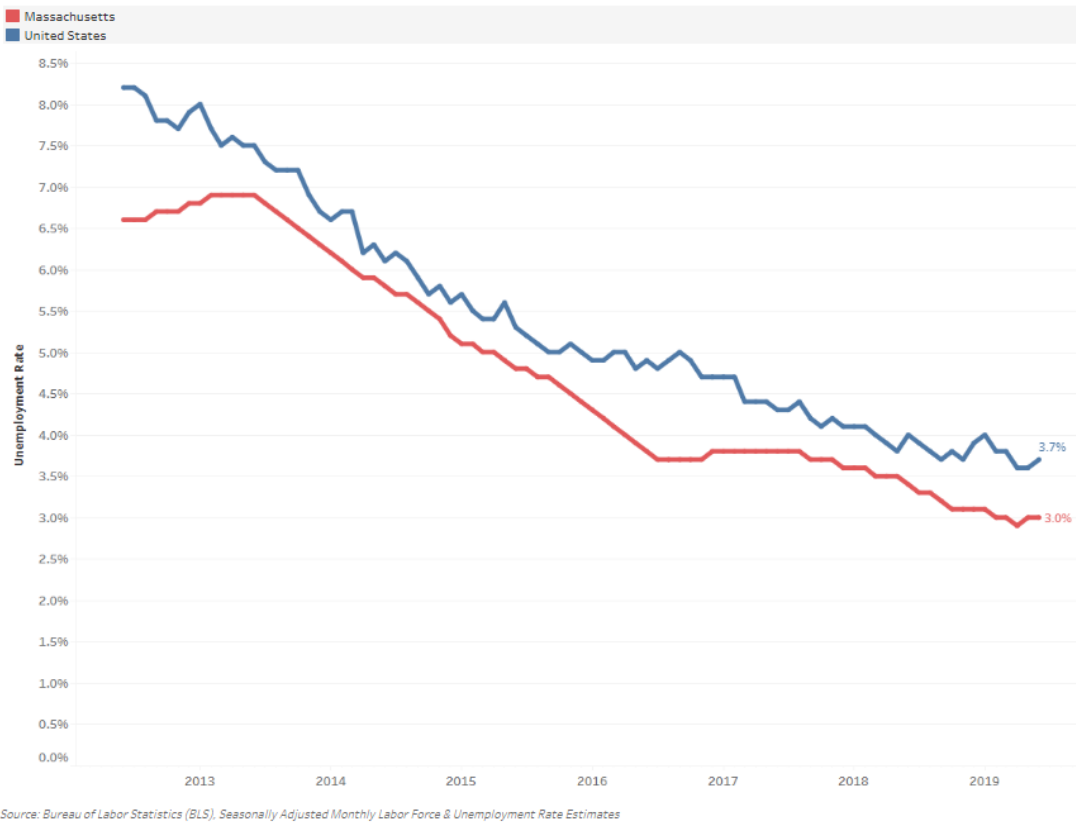


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<sup>7</sup> BLS Local Area Unemployment Statistics (LAUS) compiled by MA DUA

<sup>8</sup> Lashway Firewood CO, Lashway Forest Products, and Lashway Lumber are listed by Executive Office of Labor and Workforce Development (EOLWD) 3 separate entities, each with between 20-49 employees.

**Figure 1. U.S. and State Employment Trends**



Source: Massachusetts Department of Labor & Workforce Development

**Table 6: Williamsburg 2018 Employment by Industry Sector**

Description	Number of Establishments	Average Monthly Employment	Average Weekly Pay
Total, All Industries	87	591	\$659
Goods-Producing	20	167	\$934
Construction	13	104	\$1,100
Manufacturing	5	55	\$623
Service-Providing	67	424	\$550
Retail Trade	8	88	\$539
Professional and Technical Services	6	21	\$715
Administrative and Waste Services	6	20	\$455
Educational Services	4	118	\$538
Health Care and Social Assistance	9	17	\$298
Accommodation and Food Services	8	89	\$328
Other Services, Ex. Public Admin	8	17	\$569

Source: Massachusetts Department of Labor & Workforce Development, Employment & Wages Data (ES-202), accessed July 2019  
[http://lmi2.detma.org/lmi/lmi\\_es\\_b.asp?AT=05&A=000359&Y=2018&P=03&O=00&I=LVL\\_1&lopt=&Dopt=TEXT](http://lmi2.detma.org/lmi/lmi_es_b.asp?AT=05&A=000359&Y=2018&P=03&O=00&I=LVL_1&lopt=&Dopt=TEXT)

## D. Growth and Development Patterns

### Patterns and Trends

Williamsburg's development pattern and landscape were shaped both by its topography and historic land use patterns of the 18th and 19th century. The community of Williamsburg is centered around the two streamside villages of Haydenville and Williamsburg, which have naturally denser development and an attractive mix of residential and commercial architecture. Radiating from these village centers is a network of roads connecting Williamsburg's villages to surrounding neighborhoods. Many of these roads follow stream valleys. A few additional roads such as O'Neill Road and Hemenway Road link rural roads. In between this pattern of residential roads are large blocks of open space, which cover many of the ridge lines and define the landscape. Together, this pattern of development and open space both connects and protects the natural, scenic, community and economic landscape of Williamsburg.

The town's topography, soils, and physiography (rivers, wetlands and watershed areas) typically shapes and constrains current land use patterns. Williamsburg's proximity to Northampton and its scenic setting coupled with an increase in land values has attracted some development interest. The town building department issued 29 building permits from 2010 through 2019. Almost all of these permits were issued for homes on existing roads, through the Approval-Not-Required (ANR) process. There have been no subdivision or multi-unit condominium developments built in the last seven years. In total, the town saw an increase of 104 parcels over a nine-year period (Table 7).

**Table 7: Williamsburg Parcel Counts by Property Class, 2010 through 2019**

Year	Residential	Commercial	Open Space and Chapter	Industrial	Other	Vacant/ Accessory	Exempt	Total
2010	904	111	103	7	33	203	0	1361
2011	908	120	105	7	32	198	0	1370
2012	912	126	107	7	34	194	0	1380
2013	915	125	114	7	34	184	0	1379
2014	921	117	114	7	34	183	0	1376
2015	921	108	119	7	42	181	0	1378
2016	919	103	127	7	44	176	0	1376
2017	920	101	133	6	44	169	93	1466
2018	918	98	136	7	44	170	94	1467
2019	920	91	140	7	42	167	98	1465
Parcel change 2010-19	16	-20	37	0	9	-36	98	104

Source: MA Department of Revenue, Municipal Databank Parcel Count and Valuations by Use. Data current as of 07/19/2019

Note: For the purposes of this table, the following categories were grouped:

- Residential = Single Family 101, Condominiums 102, Miscellaneous Residential 103, 109, Two Family 104, Three Family 105, and Apartment 111-125
- Commercial = Commercial 300-393, Individuals/ Partnerships/ Associations/ Trusts/ LLC 501
- Open Space and Chapter Land = Open Space 200-231, CH 61 LAND Forest, CH 61A LAND Agriculture, CH 61B LAND Recreation

- *Industrial = Industrial 400-442, Industrial Power Plant 450-452, Manufacturing 503*
- *Other = Multi-Use 012-043, Corporations 502, Public Utilities 504, Centrally Valued Telephone 505, Centrally Valued Pipelines 506, Wireless Telephone 508, Electric Generating Plant 550-552*
- *Vacant/ Accessory Land = Vacant/ Accessory Land 130-132, 106*
- *Exempt = Exempt Parcel Count & Value*

Aerial photography of Williamsburg taken in 1971, 1985, 1999, 2005 as part of a state effort to document land use changes showed a loss of undeveloped land to developed land from 1971 to 2005 (Table 9). Some of the most noticeable changes during this period were new lots for residential development on Petticoat Hill and Nash Hill Roads. While the land use change data has not been replicated in the 15 years after the 2005 version, areas experiencing residential development pressure since 2005 include Fort Hill Road (Deer Haven subdivision), Laurel Road (Solar Circle cluster subdivision), and North Farms Road.

**Table 8: Williamsburg Land Use Changes: 1971 through 2005**

Category	1971	% of Total	2005	% of Total	Change in Acres 1971 to 2005
Active Agriculture	884	5%	522	3%	-362
Pasture	431	3%	388	2%	-43
Forest	13,544	82%	13,794	84%	250
Non-Forested Wetland	227	1%	356	2%	129
Participation Recreation	64	0%	59	0%	-5
Water Recreation	0	0%	1	0%	1
Multi-Family housing lots	0	0%	2	0%	2
Residential lots less than 1/4 acre	14	0%	4	0%	-10
Residential lots 1/4 - 1/2 acre	130	1%	117	1%	-13
Residential lots greater than 1/2 acre	572	3%	706	4%	134
Commercial	35	0%	76	0%	41
Industrial	28	0%	40	0%	12
Urban Open, parks, institutional, cemeteries	27	0%	34	0%	7
Waste Disposal	13	0%	6	0%	-7
Water	67	0%	85	1%	18
Woody Perennial, orchards, nurseries	112	1%	37	0%	-75
<b>Total Acres</b>	<b>16,425</b>		<b>16,425</b>		

*Source: MassGIS, 1971 and 2005 Land Use Statistics*

Active agricultural land was the most significant loss from 1971 to 2005, with 362 acres lost. Other significant losses included lands used for woody perennials, orchards, or nurseries (75 acres) and pastureland (43 acres). At the same time, the number of acres of forestland increased by 250 acres. These land use changes have had a significant effect on the landscape. As discussed in Section Four of this plan, some farmers have discontinued tilling their fields for agricultural production and as a result brush has been allowed to develop. In addition, the state changed their methodology for categorizing land use, which may have shown a greater increase in forestland than expected.

## **Infrastructure: Transportation**

There are a total of 50.2 miles of roads in Williamsburg, 41.7 of which are Town roads. Six to seven miles of Town roads are unpaved gravel roads. All Town roads (excluding Route 9 and Route 143 which are classified as state highways) have been designated Scenic Roads under Mass. General Laws, Ch. 40, Sec. 15-c, by vote of Town Meeting.

Williamsburg's principal transportation corridor is Route 9, traveling in a northwest-southeast direction following the Mill River through town, and defining the Town's two village centers. Williamsburg residents and residents from the western Hilltowns travel through Williamsburg Center and Haydenville daily on their way to work or play. Williamsburg is about eight miles west of Interstate 91 along Route 9, which offers residents easy access to the major employment centers in the Connecticut River Valley. Two key transportation routes branch off of Route 9: Route 143 (Chesterfield Road) heads west just north of Williamsburg Center and runs to Chesterfield and Mountain Street heads northeast from Haydenville and runs to Whately. Williamsburg's location will likely continue to attract new residents to town.

The Pioneer Valley Transit Authority (PVTA) R-42 bus line connects Williamsburg Center and Haydenville to downtown Northampton along Route 9. This route offers 15 trips a day Monday through Friday and 12 trips on Saturdays.

Residents of Williamsburg and surrounding communities are increasingly interested in options to commute by bicycle. The Mass Central Rail Trail ("Northampton bike path") currently stops at the Williamsburg – Northampton town line. There is currently an active effort to extend this multi-use trail to the center of Williamsburg, vastly expanding cycling options for commuters and recreational users. Current plans have the completion of this trail in 2026.

Mobility is enhanced by a limited sidewalk network in Williamsburg Center and Haydenville. Sidewalks are primarily located along Route 9 and a few feeder roads in the village centers. Inadequate sidewalks in several areas cause people to walk in the road. This fact was highlighted in the 2019 OSRP survey with over 140 respondents said that walking on roads or sidewalks was their top choice recreational activity in town, and multiple responses to an open-ended question to share ideas on "anything else" focused on improving sidewalks in town.

## **Water Supply & Sewer Systems**

Williamsburg's public water supply system draws very high-quality water from two gravel-packed wells located in the 1,375-acre drainage basin of Unquomunk Brook (Water Resources Map). The town is fortunate in that the whole drainage basin lies within the town's boundaries and its protection is entirely under local control. The public water supply system serves roughly half the dwelling units in town: those along South Street, in and near the village centers, along Route 9 between the villages, and along Fort Hill Road. Residents in outlying areas are served by private wells. In addition, there are three interim well-head protection areas all located at Snow Farm (these are also considered transient non-community wells).



The Board of Health adopted Private Well Regulations, effective May 1, 1990, to protect the public health, safety, and welfare by ensuring housing units with no access to public water supplies the supply of safe drinking water from private wells and to provide for the protection of the town's groundwater resources. Per the Board of Health Private Well Regulation, all private wells must be constructed in accordance with MA DEP's Private Well Guidelines per certification by the well driller.

The upper Unquomunk Reservoir was drained in 2007 to inspect the dam due to safety concerns and conditions. The inspection found the spillway needed to be cleared and reinforced and trees adjacent to the dam be cleared. Those actions were completed and the Unquomunk reservoir was allowed to refill. The reservoir is currently not seen as a potable water source but is upstream of the town's wells so warrants some level of protection. It has been determined that the dam does not generate enough power to consider it as a hydroelectric provider.

In 2011, the Water and Sewer Commission purchased some land on South Street in the Zone II of the aquifer to offer protection for the town's wells. The Commission received a MassDEP grant to partially fund the acquisition and the remaining funding was approved at a 2010 Spring Special Town Meeting. Williamsburg contracts with the City of Northampton for sewer disposal and has a Memorandum of Agreement with the city for Emergency Water Hook-up. Costs of providing water and sewer are constantly rising and will need to be passed on to consumers.

The Town's Water Supply Overlay District also provides protection for watershed areas to Northampton's Mountain Street, Ryan and West Whately Reservoirs.

## **Long-Term Development Patterns**

In addition to other factors, zoning and other land use regulations constitute Williamsburg's "blueprint" for its future. Land use patterns over time will continue to look more and more like the town's zoning map until the town is finally "built out"—that is, there is no more developable land left. Therefore, in looking forward over time, it is critical that the town focus not on the current use and physical build-out today, but on the potential future uses and build-out that are allowed under current zoning. Zoning is the primary land use tool that the town may use to manage development and direct growth to suitable and desired areas while also protecting critical resources and ensuring that development is in keeping with the town's character.

The Williamsburg Zoning Bylaw establishes three base zones, and four overlay zones as identified in the Zoning Map:

- Village Residential (VR) – 454 acres
- Village Mixed (VM) – 285 acres
- Rural (RU) – 15,686 acres
- Two overlay zones:
  - Floodplain – 527 acres

- Water Supply Protection District – 4,000 acres
- The Age Restricted Housing Community Overlay District
- The Solar Photovoltaic Overlay District

Although all appropriate zoning is relevant to protecting the health and safety of the Town residents, three of Williamsburg's districts are specifically relevant to open space and natural hazard mitigation. These are outlined here:

- *Floodplain* - The floodplain overlay applies to those areas within the boundary of the one-hundred-year flood that are considered hazardous according to FEMA. It limits some uses for preventing potential flood damage.
- *Water Supply Protection District* - This purpose of this overlay district is to protect and preserve Williamsburg's groundwater resources from potentially damaging pollution or environmental degradation by regulating certain uses within the district. The regulations state specific prohibited and restricted uses, regulates drainage, details site plan requirements and special permit procedures. This overlay district also provides protection for the watershed areas to Northampton's Mountain Street, Ryan and West Whately Reservoirs.
- *Solar Photovoltaic Overlay District (SPOD)* – The new regulation (adopted 2012 and amended in 2013) allows Solar Photovoltaic installations as of right up to 20 acres in area with Site Plan Review by the Planning Board. The bylaw requires a storm water management plan for all such facilities and that all ground surface areas beneath solar arrays and setback areas be pervious to maximize on-site filtration of groundwater. Furthermore, the plan for a ground-mounted solar photovoltaic installation shall be designed to maximize the preservation of on-site and abutting natural and developed features, and to preserve enough vegetation to minimize soil erosion. A proposed 2021 update of this bylaw would enhance stormwater management requirements for new installations, require at least 1,500 feet between installations to allow wildlife movement, and would prevent forest clearing on more than 10 acres of land to be used for solar installations.

The Zoning Bylaw also establishes a Site Plan/Special Permit Approval procedure for specific uses and structures within Williamsburg. This review allows the Special Permit Granting Authority the ability to review development to ensure that the basic safety and welfare of the people of Williamsburg are protected and includes several specific evaluation criteria that are relevant to natural hazards.

The Town of Williamsburg adopted an age-restricted housing bylaw that allows master-planned residential developments for residents age fifty-five (55) years or older on a minimum of five acres of land and within the designated Age Restricted Housing Community Overlay District, which is defined as the areas of town serviced at a public way by Williamsburg public sewer and Williamsburg public water. The bylaw requires a minimum set aside of fifteen percent of the housing units in the development as affordable housing units restricted to households earning up to 80% of the Median Area Household Income as defined by the United States Department

of Housing and Urban Development (HUD). The bylaw also incorporates the preservation of natural open space areas as an integral element of the development by mandating that at least 50 percent of an ARHC lot shall be maintained as open space.

Currently, existing zoning and other land use regulations encourage development in Williamsburg to seek areas where the environmental conditions and existing public utilities support such development. The community has an active Conservation Commission working to protect wetland areas. The Williamsburg Open Space Committee has provided information to the Town about the process for considering their right of first refusal option for land under Chapter 61 Programs (61 - Forestry, 61 A - Agriculture, 61B - Recreation) that is sold or converted for future protected open space. The town's Mill River Greenway Committee has been working diligently since 2011 to develop a multi-use recreational path along the Mill River from Williamsburg center to the Northampton town line.

## **Climate Change**

The impacts of climate change such as increasing intensity of extreme weather events, sea-level rise, and extreme temperatures are expected to trigger major population movements within and across town, state, and national borders. As climate change adversely impacts the livelihoods, public health, food security, and water availability of people in climate-vulnerable areas, there will likely be a substantial rise in the scale of displacement and migration of these individuals to areas that are more climate-resilient. When compared to some of the most severely impacted areas in the U.S., the Pioneer Valley, and the Hilltowns in particular, will be seen as climate havens. While there are currently no reliable estimates of climate change induced migration in Massachusetts or across the globe, there has been a growing recognition in recent years that this phenomenon is likely to become one of the key challenges of the 21st century.

Williamsburg's 2020 Municipal Vulnerability Preparedness plan articulates several of the town's vulnerabilities in a changing climate and makes recommendations for strategies to address those issues. One of the biggest concerns is potential flooding of the Mill River which would directly impact the town's main transportation corridor, the bulk of the businesses in town, as well as the current emergency services infrastructure (fire, police, emergency shelter). Indeed, the 2011 Tropical Storm Irene saw the Mill River rise to record levels, closed Route 9 and damaged the road and several properties.

## **SECTION 4: ENVIRONMENTAL INVENTORY AND ANALYSIS**

### **A. Geology, Soils and Topography**

Williamsburg has been significantly shaped by its natural resources, originally growing up along the banks of the Mill River, establishing an agricultural base, and more recently, protecting its scenic resources. Covering 16,378 acres (25.57 square miles) in an L-shaped configuration, the town's boundaries do not follow any natural features such as watercourses or ridges. The two village centers of Haydenville and Williamsburg lie two miles apart along Route 9 and the Mill River with less densely settled land between and surrounding them.

#### **Geology & Topography**

Williamsburg lies at the western edge of the Connecticut River Valley's flat central floor in the eastern foothills of the Berkshires. In general, the land rises from east to west with elevations ranging from 400' to nearly 1500'. Most of Williamsburg consists of moderately to very rugged bedrock hills, particularly in the western and northern parts of town. The bedrock of Williamsburg is part of the eroded core of an ancient chain of mountains that is approximately 400-500 million years old and extends from Long Island Sound north through Western Massachusetts and Vermont into Quebec. Like most of New England, Williamsburg was covered by great ice sheets thousands of feet thick in the recent geologic past. The ice sheets melted about 12,000 years ago and left extensive surface deposits that cover most of the land and dominate the New England landscape. Scattered widely over the town are dozens of drumlins, small elongated hills of soil and broken rock bulldozed and shaped by glacial action. There are only two large flat areas: the valley of Unquomunk Brook along South Street and the broad valley of Beaver and Nungee Brooks along Mountain Street. Both of these areas are former lake beds, deep bedrock valleys filled to their present levels with water-borne sediments. The narrow main valley of the Mill River cradles the two present-day villages and Massachusetts Route 9.

Williamsburg is unusual among Pioneer Valley towns in that its foundation consists largely of intrusive granitic rock. Granodiorite, a coarse-to-medium-grained granite, has been quarried from time to time at several sites in town. The quarried stone has been used in bridge abutments, dams and factory foundations, among other structures. Many of these can still be seen, intact or in disrepair, scattered around town. None of the old quarries have been active in recent years.

In Williamsburg's stream valleys and other lowland areas, the surficial material is mostly stratified drift: mineral debris produced by the weathering and glacial grinding of bedrock into smaller chunks and particles and borne to their present resting places by water.

Stratified drift plays an important role in groundwater recharge. Water can infiltrate the sand and gravel and replenish aquifers. By storing water, these deposits also help to maintain base flows in streams during periods of drought. As these areas are typically flat and have good

percolation rates for septic systems, they are often favored for housing development. However, problems can occur when the density of septic systems is high and groundwater is close to the surface. In these situations, effluent can pass through the sands too quickly, causing the contamination of nearby water resources both above and below ground.

Williamsburg's highlands are thinly mantled with glacial till: an unlayered and highly variable jumbled mixture of clay, sand, gravel, silt, pebbles, cobbles and boulders deposited directly by ice. Glacial till covers about 90 percent of Williamsburg. There is much more surface runoff during rainy periods from till areas than from stratified drift areas where the surficial deposits are flatter and more porous. Because till lacks large pore spaces, it is incapable of storing large quantities of groundwater. Therefore, wells in till usually have low production rates, and are often unable to adequately treat septic system effluent, especially if hardpan is present, which may cause the effluent to "sheet off" into the nearest wetland, stream or shallow drinking water well.

## **Soils**

The soils in Williamsburg have an influence on the types of development, and other land use activities. According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) 2007 soils update, there are 1,436 acres of prime farmland soils, 1,934 acres of poorly drained soils, and 6,074 acres of steep soils (different than 'steep slopes'). Williamsburg's soils are entirely the products of glaciation and subsequent weathering processes. The Charlton-Paxton-Woodbridge soil association covers all of Williamsburg according to the Soil Conservation Services (SCS) general soil map of central Hampshire County. This soil association is characterized by the SCS as "deep, nearly level to steep, well drained and moderately well drained loamy soils formed in glacial till on uplands. The soils of this association are suited for trees. The main limitations for most other uses are stones on the surface, slope, slow permeability and wetness." Till is generally unreliable as a structural material for roads, dams, and other earthworks because it is so variable, even within very small areas, and because it tends to heave a lot when exposed to frost. Most soils formed in till are of little use to farmers except for unimproved pasture and sometimes hay, because of poor drainage, low fertility, limited moisture availability, steepness or rockiness that limits plowing and soil improvement techniques. This is an accurate description of the hillsides that make up most of Williamsburg but does not fairly represent either the higher hilltops and ridges or the larger valleys in town.

Most of the Town's hilltops and ridges are covered with soils of the Charlton-rock outcrop-Hollis association. These are well-drained, loamy and typically shallow (2' to 4') to bedrock, often with many prominent outcroppings. Slope, slow percolation and shallowness to bedrock limit the usefulness of these soils for septic disposal systems and most other uses. They are mostly forested.

The larger lowland areas, including the valleys of the major streams, are dominated by soils of the Hinckley- Merrimac-Windsor group. These are "deep, nearly level to steep, excessively



drained and somewhat excessively drained, sandy and loamy soils formed in outwash deposits or on outwash plains". Williamsburg's two village centers and valley farmlands are located on these easily-excavated, highly permeable, often tillable soils. They have also been the town's sources of sand and gravel for two hundred years. Beneath them, in deep deposits of stratified drift, are Williamsburg's major reserves of groundwater.

Because these soils have a fast percolation rate, they have long been regarded as ideal for septic systems. But the reason they percolate fast is that any liquid draining into them drops quickly into the groundwater below, without the fine filtering action provided by a soil with smaller particles. Unfavorable conditions for septic systems, along with physical constraints, have been partially responsible for the limited amount of development on Williamsburg's hillsides and near local wetlands. In recent years, the Department of Environmental Protection (DEP) has approved several new technology designs for wastewater treatment that could enable more development in these areas. The designs are still fairly expensive, both to install and maintain. Massachusetts' Title 5 allows percolation rates of 1 inch in 60 minutes; previously the rate was 1" in 30 minutes. Local boards of health may revise their local regulations to maintain the old state standard of 1" in 30 minutes, but Williamsburg has adopted the newer 1" in 60 minutes rate.

## **B. Landscape Character**

Sixty years ago, Williamsburg boasted dozens of small family farms. High, open overlooks could be found all over town and residents could visualize how their homes, farms and villages were situated in the larger landscape. Most of the town's roads were developed to connect outlying farms, usually by the gentlest routes available. The Mill River and its many tributaries was and remains the single most critical natural feature in defining what Williamsburg was and what it will be.

Williamsburg is a very scenic town, which helps to attract new inhabitants and retain existing residents. However, the economics of farming have deteriorated, and the many acres of once-agricultural land have grown up to first or second growth forest or been developed for new housing (see Table 9). Most of the high pastures and orchards have been abandoned, and open overlooks that still command generous views of the nearby countryside are increasingly rare.

Though less land is actively farmed than during the mid-1900s, agriculture is still practiced in town at many scales. Williamsburg has at least two beef cattle farms, one commercial sheep farm (for fiber only), horse farms, tree farms, several maple syrup operations, an alpaca farm, a vegetable operation, and several other small farms and market gardens. Many farms are used for feed corn, pasture, and hay production.

A goal of open space protection is retention of agricultural lands. Massachusetts was one of the first states in the country to enact farmland protection through the purchase of development rights and property tax relief. There are several mechanisms for protecting farmland, including the state's Agricultural Preservation Restriction Program (APR) which provides a payment to the

landowner in return for a permanent restriction which keeps the land undeveloped and in active agriculture in perpetuity. Since 1995, there have been two properties and a total of 233 acres that currently have land in the state's APR Program.

**Table 9: Williamsburg Properties in APR Program**

Property Owner	Date Entered in Program	Acres
Warner, A.	26-Jun-95	16
Warner, C.	26-Jun-95	217

*Source: Massachusetts Department of Agricultural Resources*

The state's Chapter 61A Program is a 'current use' tax program designed to incentivize landowners to retain agricultural use of their property and encourage the preservation of farmland by offering a reduced property tax rate to participating landowners. Land enrolled in Chapter 61A is not permanently protected, and Chapter status may be lost when the property is converted to another use or sold. However, towns have an assignable "right of first refusal" that allows them, or a land trust or other assignee, the ability to match any offer to purchase Chapter land whenever the owner plans to sell or convert it to a residential, commercial, or industrial use. The town should consider creating an inventory of the Chapter 61A lands of highest priority for protection, based on the amount of "prime or significant" farm soils on the parcel, as well as the possibility of linking to other adjacent protected agricultural lands. A list of Williamsburg lands enrolled in Chapter 61 is included in the Appendices to this plan.

Local resources available to the farming community include: business training and viability grants and programs and marketing materials through the Massachusetts Department of Agricultural Resources (MDAR); new farmer resources through the New England Small Farm Institute in Belchertown; grants and other opportunities via the Hilltown Community Development Corporation (CDC) in Chesterfield; land protection with one of the several local land trusts; and enrollment in Community Involved in Sustainable Agriculture (CISA), which provides marketing support to farmers.

The town has an Agricultural Commission which was formed in the mid-2000s. The Agricultural Commission was instrumental in developing a right-to-farm bylaw that obtained town meeting approval in 2008. The Right-to-Farm bylaw protects and encourages the growth and development of farm-related businesses by protecting farmers and farm operators against nuisance lawsuits. The Williamsburg Open Space Committee collaborates with local land conservation organizations in outreach to landowners interested in their land conservation options.

## **C. Water Resources**

As discussed in the geology section above, stream valleys and other areas of Williamsburg contain stratified drift, layered deposits of mostly sand and gravel that can store a great deal of water and through which water moves relatively freely. These areas, especially in the Unquomunk Brook valley along South Street and the valley of the Beaver and Nungee Brooks along Mountain Street, serve as large unconsolidated aquifers in which water is stored underground, and from which it can be pumped more or less continuously in quantities sufficient to provide public water supply.

The qualities that make these places useful as water supply sources also make the water in them very vulnerable to contamination. Wherever water can easily enter and move through underground pore spaces, most dissolved or waterborne contaminants can do the same.

### **Rivers and Watersheds**

The Mill River and its tributaries are critical water features in the town of Williamsburg. The Mill River is a tributary of the Connecticut River, New England's longest river stretching more than 400 miles and forming the spine of New England, from its headwaters in Quebec to its mouth at the Long Island Sound.

Ninety-five percent of Williamsburg drains into the Mill River within the town borders. The Mill River flows through Goshen, Conway and Ashfield and has a drainage basin, or watershed, area of 29.1 square miles upstream of where it flows out of Williamsburg. Of that area, 16.6 square miles lie in Williamsburg. These figures do not include the sub-basin of Beaver Brook, the only brook that flows out of Williamsburg before it joins the Mill River. Beaver Brook owes some of its flow to a pipeline that carries water from the Northampton water supply reservoirs in West Whately to the Mountain Street Reservoir on the Williamsburg-Whately line. Overflow from that reservoir joins with Grass Hill Brook, Potash Brook (both rising in Whately) and Nungee Brook to become Beaver Brook. The entire Beaver Brook drainage basin or watershed above the Williamsburg-Northampton line covers 5.5 square miles, 3.4 of them in Williamsburg. Of the West Brook drainage basin, from which Northampton's drinking water is piped to Mountain Street Reservoir, 1.25 square miles lie in Williamsburg.

Bradford Brook has its headwaters in Ashfield and flows through Conway before joining the East Branch of the Mill River near the intersection of Judd Lane and Ashfield Road. The East Branch of the Mill River begins in Conway State Forest and flows through the southern part of Conway before entering Williamsburg just north of the site of the gigantic dam collapse that drowned much of the town in 1874, now marked by the historic dam trail. Together these streams form the East Branch of the Mill River which flows along Ashfield Road. Near the former Bullard Bridge (at Village Hill Avenue) the river is joined by a brook that flows south out of a small valley east of Carey Hill.

The West Branch of the Mill River originates in the Highland Lakes in Goshen and is joined by Rogers (or Devil's Den) Brook, several unnamed streams, and Meekins Brook before its confluence with the East Branch in the center of Williamsburg. Joe Wright Brook, flowing south from Whately and northeastern Williamsburg, joins the Mill River at Depot Road, and Unquomunk Brook flows into the mainstem of the Mill River opposite Kellogg Road. One more unnamed stream flows from the highlands of the former Kellogg farm through the village of Haydenville (partly piped underground) and into the river below the old railroad bed, east of Fairfield Avenue. Finally, Beaver Brook joins the Mill River half a mile south of the Northampton town line.



Mill River in Haydenville

## Surface Water

Williamsburg's largest body of open water is Mountain Street Reservoir, approximately 69 acres of open water with 570 acres of land owned by the City of Northampton. The upper Unquomunk Reservoir, at about five or six acres, is a distant second in area. There are some beaver ponds, but few other bodies of water in Williamsburg have significant yield year-round. The state classified 1,459 acres of land in Williamsburg as *Outstanding Resource Waters* under the Massachusetts Surface Water Quality Standards of 2013. This is watershed land that should be designated for protection under 314 CMR 4.06(3) including Public Water Supplies. These waters constitute an outstanding resource as determined by their outstanding socioeconomic, recreational, ecological and/or aesthetic values. It should be noted that NHESP Certified Vernal Pools are designated as Class B *Outstanding Resource Waters* but are not included in this data layer as maintained by MassGIS.



As shown in the Water Resources Map, the *Outstanding Resource Waters* within the Williamsburg Water Supply Protection District are in two areas: the West Whately Reservoir and the Roberts Meadow Reservoir which was drained in 2018. A large portion of the area around Unquomunk Reservoir (located SW of town off South Street and Unquomunk Road) was drained in 2007, and as a result reclassified under 314 CMR 4.06(3) such that the total area of *Outstanding Resource Waters* in Williamsburg dropped roughly 1,358 acres since the last plan. However, that reservoir has since refilled. While much of the land classified as *Outstanding Resource Waters* in the northeastern part of the town is under some level of protection, some of those lands in the southwestern corner of Williamsburg may not be permanently protected.

## **Floodplains**

Williamsburg's Water Resources Map shows the 100-year and 500-year flood zones identified by FEMA flood maps. The 100-year floodplain (1% annual chance of flooding in a given year) and 500-year floodplain (0.2% chance of flooding in a given year) have been mapped based on historic rainfall and flooding data, but do not take climate change into account. With climate change it is likely that these flood zone maps will need to be updated, as a result of more frequent and flashy flood events.

There are several significant floodplain areas in Williamsburg, primarily along the Mill River. There are some smaller 500-year floodplains in several low-lying areas throughout the town.

The major floods recorded in Western Massachusetts during the 20th century have been the result of rainfall alone or rainfall combined with snowmelt. Williamsburg has experienced many flooding events over the last decade. With the exception of the flooding resulting from Hurricane Irene in 2011, these small floods have had minor impacts, temporarily inundating roads and residents' yards. Flooding in the 100-year floodplain particularly impacts the town centers of Haydenville and Williamsburg as the Mill River runs through both village centers. Within the town boundaries there are 527 acres of land in the FEMA mapped 100-year floodplain and 501 acres of land in the 500-year floodplain.

Williamsburg's rugged terrain and narrow, steep stream valleys, together with the channelization of the Mill River through the two villages, make the floodplains of our streams and rivers quite narrow in most places. Most of the exceptions are year-round wetland areas. The only place in town where a large amount of building has occurred in a floodplain (predating floodplain zoning) is along Ashfield Road, where many former summer cottages have been converted to year-round homes. Some of these properties could face heavy damage in the serious flooding events expected with climate change. Existing regulations may not be sufficient to address the increased frequency and magnitude of flood events expected due to climate change.

The regulations contained in the Floodplain Overlay District Bylaw in the Williamsburg Zoning Bylaw limit development in the 100-year Floodplain or Special Flood Hazard Area (SFHA) and



are designed to prevent activities and construction in floodplain areas which would worsen flood damage either upstream (by backing up and deepening floodwaters) or downstream (by increasing floodwater velocity or volume) in the event of a major flood. In the absence of a federal regulatory flood boundary that includes projected changes in precipitation and groundwater levels resulting from climate change, some jurisdictions limit development to the 500-year floodplain to provide greater protection.

Williamsburg's 2020 Municipal Vulnerability Preparedness Plan identified the Mill River corridor between the Williamsburg village center and the Northampton town line as the most vulnerable to the impacts of flooding expected with climate change. This area along Route 9 contains the majority of commercial businesses in Williamsburg and Haydenville, as well as many residential homes and serves as the only major east-west transportation route.

A level floodplain area extending from the fork of the Brassworks Millpond, past the old bridge abutment near the narrow curve on Route 9 is now owned and managed by the Town. This 4.5-acre site was once known as "the ballfield" and was a popular recreation field and picnic ground. Local knowledge recollected from the 1950s notes this area was frequently flooded and used for ice skating in winter. The hope is to turn this site into a public park accessible via a foot bridge along the future Mill River Greenway. Other valuable floodplain areas in town that buffer town roads and infrastructure during major flooding events should be considered by the Town and area land trusts for permanent protection and ongoing restoration and management to promote their essential functions.

## **Wetlands**

Wetlands include rivers, ponds, swamps, wet meadows, beaver ponds, and land within the FEMA-defined 100-year flood area. Wetlands are specialized habitat areas that are always wet or are wet for extended periods of time during the year. They are home to a wide array of species including frogs, fish, freshwater clams and mussels, beaver, muskrats, great blue herons, and waterfowl. Wetlands also serve as temporary storage and filtration areas for floodwaters, allowing the water to percolate slowly into the ground rather than running off into streams and rivers quickly with little filtration of pollutants.

There are 742 acres of wetlands located throughout the town, with the largest occurring in the valley of Beaver, Nungee and Grass Hill Brooks along Mountain Street in the eastern part of town (MassGIS, 2019). This area is mostly wooded swamp, with some scrub-shrub area and a bit of wet meadow that is grazed. Other relatively large wetlands appear near the Town Well east of South Street (shrub swamp, wooded swamp and wet pasture land), along Nash Hill Road near the Whately town line (wooded swamp, the source of Joe Wright Brook), at the Northampton town line west of South Street (shrub swamp, wet meadow and wooded swamp), in the Graves farm woodlot along and near Adams Road and Depot Road (wooded swamp, with a little shrub swamp and wet meadow), along with others.

The Commonwealth of Massachusetts regulates activities in and around wetlands in Williamsburg through the Wetlands Protection Act – a state law enforced by the local

Conservation Commission. Wetlands protected by the Act are primarily those that border the streams, rivers and ponds in the town. These ‘bordering vegetated wetlands’ provide critical wildlife habitat and play an important role in maintaining water quality by serving as natural filters for nutrients, toxins, and sediment that would otherwise move directly into surface and ground waters. Isolated wetlands – at least 1,000 square feet in size – are also protected by the state regulations.

### **Aquifer Recharge Areas**

Williamsburg's public water supply system draws very high-quality water from two gravel-packed wells located in the 1,330-acre drainage basin of Unquomunk Brook (USGS StreamStats, 2019). The town is fortunate in as the entire drainage basin lies within the town's boundaries and its protection is thus entirely under local control. A comparison of the Water Resources Map and Protected Open Space Map shows that slightly more than one third (38.7%) of the land in this drainage basin is permanently protected. The public water supply system serves roughly half the housing units in town, including those along South Street, Village Hill Road, in and near the village centers, along Route 9 between the villages, and along Fort Hill Road. Residents in outlying areas are served by private wells. The Board of Health (BOH) adopted Private Well Regulations, effective May 1, 1990, to protect the public health, safety, and welfare of town residents by ensuring that housing units with no access to public water access a supply of safe drinking water from private wells and to provide for the protection of the town's groundwater resources. According to the BOH Private Well Regulation, all private wells must be constructed in accordance with MA DEP's Private Well Guidelines per certification by the well driller.

The Town received a Drinking Water Supply Protection Grant from the Massachusetts Department of Environmental Protection in FY2010 for \$46,638 to purchase approximately four acres adjacent to the town's wellhead on South Street to protect the area from agricultural and residential development.

### **D. Vegetation**

The most plentiful of Williamsburg's natural resources are its trees. According to NOAA 2016 Land Use Data, there are 13,754 acres of forested land in Williamsburg. Covering roughly 84% of the Town's landscape, the forest helps create the rural, undeveloped character of the area. While critical differences in the methodology used by NOAA to generate the most current and accurate Land Use data restrict our ability to make direct comparisons to the previously available MacConnell 2005 Land Use Data calculations, consistent analyses from prior data sets showed the number of forested acres of land in Williamsburg increased by 250 acres (2%) in the last decades of the 20<sup>th</sup> century due to former agricultural land turning into forest from non-tillage.

Approximately twenty percent of all forested land in town is enrolled in the state's Chapter 61 ‘current use’ tax program, which is a marked increase from the 2011 estimate of only eight percent of forested lands enrolled. The Chapter 61 Forested Lands program requires a state

approved forest management plan in exchange for reduced property taxes. In Williamsburg thirty-two properties totaling 2,789 acres were enrolled in the program, the largest tract 378 acres. A full inventory of Chapter 61 lands can be found in Appendix XX.

As shown in Table 11, ten Williamsburg property owners have placed conservation restrictions on their land, totaling 1,054 acres of land that is permanently protected, but privately managed. The 246-acre property off Unquomunk Road is owned by Kestrel Land Trust and the 26 acres on Depot Road is owned by MA Audubon society. Both of these properties are open for public recreation.

**Table 10: Williamsburg Conservation Restrictions by Grantee, Number of Acres, and Degree of Protection**

Grantee/ CR holder	Location	Acres	Term
Kestrel Land Trust	SW Corner of Williamsburg	200	Perpetuity
Hilltown Land Trust	Briar Hill Road	35	Perpetuity
The Trustees of Reservations & Hilltown Land Trust	Nash Hill Road	68	Perpetuity
Hilltown Land Trust	Off Grass Hill Road	80	Perpetuity
The Trustees of Reservations	Nash Hill road	185	Perpetuity
The Trustees of Reservations	Depot Road	7	Perpetuity
MA Dept Conservation & Recreation	Briar Hill Road	168	Perpetuity
Massachusetts Audubon Society	Adams Road	39	Perpetuity
MA Dept Conservation & Recreation	Depot Road	26	Perpetuity
Williamsburg Consv. Commission	Off Unquomunk Rd	246	Perpetuity

*Source: Division of Conservation Services, MA Executive Office of Energy & Env'tl Affairs*

At the foot of the hilltowns, Williamsburg lies in a transition zone between two hardwood forest types. On the eastern side of town are the central hardwoods: black oak, white oak, red oak, chestnut oak, black birch, white birch, hickory and red maple, mixed with white pine and some hemlock. As the elevation increases toward the western side of town, one finds more northern hardwoods: birch, beech, red maple and sugar maple associated with red oak, ash, cherry, basswood and some hemlock. The transition between these two forest types created by underlying geology, creates a diversity of natural communities. The large area of unbroken forest land found in the northeast corner of town has been designated BioMap2 *Core Habitat*

by the Massachusetts Natural Heritage and Endangered Species program (Natural Heritage) because it supports a range of wildlife species including some that are threatened and endangered (see Fisheries and Wildlife section below). This is one of two areas of Northern Hardwoods-Hemlock-White Pine Forest, considered a Priority Natural Community or Forest Core under the category of *Core Habitat* by Natural Heritage. Forest Cores are the best examples of large, intact forests that are least impacted by roads and development and represent only 10% of the total forested area in the state. Forest Cores support many bird species sensitive to the impacts of roads and development and help maintain ecological processes found only in unfragmented forest patches. The other Forest Core is located in the southwestern corner of town - covering 3,616 acres across four municipalities it is among the largest 20% of Forest Cores in the state and provides important interior forest habitat, though it is largely unprotected.

Williamsburg is entirely within the Western Massachusetts Forest Legacy Area, designate by the Massachusetts Department of Conservation and Recreation in 2016 in cooperation with the US Forest Service. The Forest Legacy Program provides federal grant funding to protect environmentally important forestland from conversion to non-forest uses.

Forests are dynamic. Both natural and humanmade disturbance regimes keep our forests in a constant state of flux. The most common natural disturbances are ice damage, and small yet powerful windstorms known as microbursts. The December 11, 2008 ice storm caused a significant amount of tree damage, particularly in the higher elevations of the town. Town crews and volunteers conducted extensive cleanup of storm damage. Introduced insects and diseases also have a large impact on our forests. One of the most well-known is the chestnut blight, which reduced the once common majestic American chestnut to an understory tree that typically only survives a few years. Of concern today is the uncertain future of the eastern hemlock tree that is threatened by the Hemlock Woolly Adelgid, an introduced insect from Asia. The long-term impact of the insect is not known but it does have the potential to kill hemlock trees and wipe out whole stands. It was first detected in Williamsburg in the 1990's on Petticoat Hill and can now be found on Nash Hill and is prevalent throughout the town and region.

The forests in Williamsburg provide a sustainable resource for our houses, furniture, paper and other building needs; as well as a source of periodic income for private landowners, providing an incentive and sometimes the financial ability to retain our forests as open space. Williamsburg's forests are its most important recreational resource as well, providing opportunities for motorized and non-motorized recreation. Of particular importance are woodlots accessible to the public through old roads or trails that can be followed to vistas, brooks or other points of interest. Large forested tracts add greatly to the quality of life in town by providing habitat for an abundance of wildlife, purifying the air, storing carbon, filtering the waters of our brooks and rivers, and attenuating the noise and pollution produced by an increasingly large and busy population. Forests provide a visual buffer, allowing us to live in close proximity and still feel a sense of isolation. The reforestation of abandoned farmland

eliminates vistas and a sense of spaciousness in exchange for privacy, rich and diverse wildlife habitats, and the recreational possibilities of wooded land.

## **Public Trees**

In 2001, the Selectboard appointed a Williamsburg Tree Committee. The Committee currently serves as Tree Warden for town with the authority for the care and control of public shade trees. In 2001, the Committee completed an inventory of 414 public trees in the village centers of Williamsburg and Haydenville. The inventory found 41 different species along the streets, the most prevalent species being Sugar Maple (23%) and the most common genus being Maple (45%). Most trees (64%) were in good condition. Twelve percent were in poor condition or dead. The inventory also identifies several trees over 40" caliper, e.g. diameter, that contribute to the character of the town.

The Tree Committee/Tree Wardens, with the support of the Highway Department, planted a total of ten linden trees in the summer of 2009: two on South Main Street in Haydenville, three on Village Hill, two on South Street, two on Eastern Avenue, and one on Nash Hill Place. Some of these plantings were at the request of citizens. The Tree Committee welcomes assistance in finding locations for new trees and then watering the trees after planting. In addition, they welcome more people to serve on what is currently a three-person committee.

## **E. Fisheries and Wildlife**

Williamsburg provides excellent habitat for a wide range of plant and animal species. Some species of mammals and birds have grown in numbers over the past twenty years because of an overall increase in forested land cover, including wild turkey, eagles, herons, osprey, turkey vultures, fisher, beaver, coyote, black bear, moose, and bobcat, which prefer the mixed hardwood forest, ledge, and wetlands that exist throughout much of the town. Other species associated with the fields, pastures, open wetlands, and orchards of small farms are becoming less common, such as bobolinks, bluebirds, woodcocks, meadowlarks, and whippoorwills (DeGraaf et al 1992). While the percentages of habitat type may vary over time and with them shifts in wildlife populations, on a much larger scale there is a decline in overall global biodiversity mainly resulting from human activities including land use changes, pollution and climate change. Williamsburg is not isolated from this global trend and our town continues to grapple with the question of how to best protect biodiversity while addressing concerns for human safety and property and the ever present need to accommodate more residential and commercial development.

Wildlife Management Areas (WMAs) are lands owned in fee by the Massachusetts Department of Fish and Wildlife, and are open to all for hunting, fishing, trapping, and other passive recreation. Williamsburg's Brewer Brook WMA is a 292-acre property in a large roadless area in the area where Williamsburg, Chesterfield, Westhampton and Northampton meet. This WMA spans the border between Williamsburg and Chesterfield southwest of Petticoat Hill Road. The Williamsburg WMA, located along Ashfield Road approximately 90 acres and is adjacent to permanently protected private land.

## General Wildlife Inventory

The forested landscape of Williamsburg and Western Massachusetts is a critical link in the Appalachian Range of the eastern United States, connecting the Hudson Highlands of New York to the Green Mountains of Vermont north into Canada. Wildlife need the intact forests of our town and region to migrate and adapt to the changing climate. Sightings of moose that move along these corridors have become more frequent in recent years. The forested areas of Williamsburg are primary habitat for several upland mammal species including white-tailed deer, black bear, bobcat, eastern coyote, red and gray fox, porcupine, skunk, weasels, red and grey squirrel, flying squirrels, fisher, opossum, raccoon, snowshoe hare, eastern cottontail, mice, voles, moles, shrews, woodchuck, chipmunk and bats. Upland birds include ruffed grouse, turkey, turkey vulture, many species of hawks, barred and great horned owls, the occasional saw-whet owl, crows and ravens, and woodpeckers. Interior forest songbirds include ovenbirds, wood thrush, scarlet tanager, veery, and many migrating warbler species.

Lowland wildlife mammals include beaver, muskrat, otter and mink. Lowland bird species include Canada geese, several species of ducks, osprey, woodcock, green and blue herons and kingfishers.

Grasslands and open fields provide essential habitat for grassland birds such as bluebirds, Baltimore orioles, meadowlarks, bobolinks, sparrows, and many small rodents, including voles, mice, and shrews.

Williamsburg is home to many common reptiles and amphibian species, including painted, box and snapping turtles, garter and milk snakes, red-spotted newts, red-backed salamanders, American toads, spring peepers, bullfrogs, green frogs, wood frogs, and gray treefrogs. In its network of wetlands, small ponds, streams and rivers Williamsburg hosts the usual assortment of frogs, toads, newts and salamanders, including one salamander listed with the Massachusetts Natural Heritage program as a *Species of Special Concern*: the Jefferson Salamander, as well as the Marbled Salamander, which is listed as *Threatened* in Massachusetts. Private efforts are being made to protect the places where these salamanders are known to breed.

This listing is far from exhaustive and obviously leaves out the diversity of less well-known or understood species. Under-inventoried species include lichens, mosses, and a rich array of aquatic and terrestrial invertebrate life, from algae to more charismatic species like dragonflies, butterflies, moths, and katydids.

## Rare, Threatened and Endangered Species of Flora & Fauna

According to the Massachusetts Natural Heritage Program listing, the following is a list of rare, threatened, endangered and unique species in Williamsburg. One of these rare species documented for Williamsburg - a vascular plant, Black Cohosh (*Cimicifuga racemosa*, Endangered) - has not been seen for nearly half a century. Researchers searched for Black Cohosh in the 1980s but did not locate the plant. The Walker's Limpet (*Ferrissia walker*) snail



was listed as a *Species of Special Concern* in the 2011 OSRP, but also had not been seen in over 25 years. There is a very old record for the Eastern Veined or Mustard White (*Pieris oleracea*) species of butterfly, but it has not been recorded in town since 1934. Prior to the 2011 OSRP, the Elderberry long-horned beetle (*Desmocerus palliates*) was downgraded to a *Watch-Listed Species* from *Special Concern*, giving it no regulatory protection. Other species removed from the list include the Spotted Turtle and Spring Salamander (listed as *Species of Special Concern* during the 2004 OSRP), and the Walker's Limpet, as noted above. The Wood Turtle was previously listed as a *Threatened* species and is now a *Species of Special Concern*. The ensuing section discusses primary core habitats located in Williamsburg in which endangered and non-endangered species live.

**Table 11: Endangered Species Found in Williamsburg**

Taxonomic Group	Scientific Name	Common Name	Status	Most Recent Observation
Amphibian	Ambystoma jeffersonianum	Jefferson Salamander	Special Concern	2012
Amphibian	Ambystoma opacum	Marbled Salamander	Threatened	2002
Butterfly/Moth	Pieris oleracea	Mustard White	Threatened	Historic
Dragonfly/ Damselfly	Boyeria grafiana	Ocellated Darner	Special Concern	2003
Reptile	Glyptemys insculpta	Wood Turtle	Special Concern	2017
Vascular Plant	Actaea racemosa	Black Cohosh	Endangered	1973

Source: Massachusetts Department of Fish and Wildlife, 2010

## Biodiversity Hotspots

The Massachusetts Natural Heritage and Endangered Species Program maps areas of critical concern for threatened and endangered species and natural communities across the state (see Natural Environment Map). A natural community is an interacting assemblage of plants and animals, their environment, and the processes that affect them. The original BioMap published in 2001 and 2003 identified key habitat for terrestrial species and natural communities and also 'Living Waters' for aquatic species. BioMap2, published in 2012, identifies two complimentary spatial layers: *Core Habitat* and *Critical Natural Landscape*.

**BioMap2 - Core Habitat** identifies key areas that are critical for the long-term persistence of rare species and other Species of Conservation Concern (SOCC), as well as a wide diversity of

natural communities and intact ecosystems. Cores include SOCC, priority natural communities, vernal pools, forests, wetlands, and aquatic areas. Protection of Core Habitats will contribute to the conservation of specific elements of biodiversity. Core Habitat represents a total area of 1,242,000 acres or approximately 24% of the state.

**BioMap2 - Critical Natural Landscape** identifies large natural Landscape Blocks that are minimally impacted by development. If protected, these areas will provide habitat for wide-ranging native species, support intact ecological processes, maintain connectivity among habitats, and enhance ecological resilience to natural and anthropogenic disturbances in a rapidly changing world. Critical Natural Landscape represents a total area of 1,783,000 acres or approximately 34% of the state.

According to the state, “protection and stewardship of BioMap2 Core Habitat and Critical Natural Landscape is essential to safeguard the diversity of species and their habitats, intact ecosystems, and resilient natural landscapes across Massachusetts.” (BioMap2 Executive Summary Report, 2010)

According to the BioMap Town Report, in 2012 Williamsburg had 4,541 acres of Core Habitat, of which 2,465 acres or 54.3% was protected, and 6,741 acres of Critical Natural Landscape of which 3,274 acres or 48.6% was protected. The summaries provided below highlight some of the outstanding characteristics of each Core Habitat and Critical Natural Landscape (see map).

**Core 1918**, one of the largest in Williamsburg, is part of a series of high-quality Circumneutral Rock Outcrops that are free of exotic species and disturbances. Circumneutral Rock Outcrops are open communities of grasses, sedges and herbaceous plants occurring on rocky outcrops with exposed circumneutral (neither acidic nor calcareous) bedrock. Here these Rock Outcrops are embedded within over 2,000 acres of naturally vegetated land. This Core Habitat also comprises mixed forest, shrub swamps, and wet meadows along Roberts Meadow and Brewer Brooks in the southwestern part of town and into Westhampton and Northampton. The connected riparian habitats found here support rare invertebrates such as the Spatterdock Darner dragonfly, and several rare species of salamanders, reptiles, and birds. This Core Habitat is located close enough to other Core Habitats in Westhampton and Northampton to allow occasional dispersal between these areas. While a portion of this Core Habitat is on municipal watershed land, the majority appears to be unprotected. Conservation of the remaining areas of unprotected land within this Core Habitat is desirable to increase the amount of contiguous protected habitat and to help ensure the long-term viability of rare species inhabiting the area. Since the most recent draft of this plan, the conservation community has focused on protecting the land located here in the southwest corner of Williamsburg. Hilltown Land Trust, Kestrel Land Trust, the MA Department of Fish and Game and The Nature Conservancy have all been working in partnership on the conservation of several properties in this area.

**Core 1929** is a 39-acre area of young upland forests, shrublands such as pitch pine/scrub oak communities and rock cliffs on the northeastern slopes of Petticoat Hill. This core features the Northern Black Racer, a SOCC.

**Core 1932** crosses the border between Williamsburg and Hatfield, comprises vernal pools that support a population of Jefferson, Four-toed, and Marbled Salamanders, as well as Spotted Turtles, all of which are SOCC. Although this is a relatively small area bordered by major highways and development, the multiple vernal pools that are present likely serve as breeding habitat for these and other species. In 2017 the towns of Williamsburg and Hatfield worked together with Hilltown and Kestrel Land Trusts to purchase Horse Mountain Conservation Area, which protects a large portion of this core habitat.

**Core 1947** is a 180-acre Wetland Core completely within the town of Williamsburg and is among the largest 20% of wetland cores in this ecoregion. The area includes the Nungee, Grass Hill, and Beaver Brooks which are tributaries to the East Branch of the Mill River. This habitat supports a diversity of aquatic invertebrates, including some of the more ecologically sensitive insects: mayflies, stoneflies, and caddisflies. Forested streambanks help maintain the high-quality habitat by shading the water to keep it cool; providing a natural energy source to the stream ecosystem in the form of leaves and sticks; and by controlling the runoff of sediments, excess nutrients, and water.

**Core 1951** covers 20 acres of Wetland Core habitat on the Chesterfield town line that feeds into Town Lot Brook. This wetland occurs on mid-elevation Slate, one of the least common ecological settings for Wetland Cores in the state.

**Core 1956** is a Y-shaped area in Williamsburg surrounding the west and east branches of the Mill River, their confluence, and then the mainstem of the Mill River as it flows south along Rt. 9 to the Northampton border. The shallow, rocky, swift-flowing streams of this area are prime habitat grounds for Ocellated Darner (dragonflies) nymphs. The adults of this species inhabit nearby uplands, often forests containing coniferous and deciduous trees.

**Cores 1984 and 2012** are small 4-acre areas that contain beautiful, narrow corridors of Circumneutral Rock Cliffs and Talus Forests occurring on the sloping shores of Wright Brook. Circumneutral Rock Cliff communities consist of extremely sparse plants growing on small ledges and in crevices on a circumneutral cliff face. These communities tend to support a greater diversity of species than Acidic Rock Cliff communities. Circumneutral Talus Forest communities develop on boulder strewn slopes below certain cliffs, with scattered trees, shrubs, vines, and ferns. There is often a gradient of vegetation density as the slope changes, with more trees on the lower slope. Here the picturesque rocky forest is free of disturbances and embedded within over 2000 acres of naturally forested land. Both Circumneutral Rock Cliff Communities and Circumneutral Talus Forest/Woodlands are Priority Natural Communities considered by NHESP to be “vulnerable,” typically having 21-100 sites or limited acreage across the state.

**Cores 2014 and 2126** are Aquatic Cores that delineate integrated and functional ecosystems for fish species and other aquatic SOCC. Core 2014 is a 41-acre intact river corridor along Grass Hill Brook, flowing to the east of Grass Hill in Whately to Adams Rd. in Williamsburg. Core 2126 is 185 acres following Roger’s Brook in Goshen to the West Branch of the Mill River in

Williamsburg. The clean, cold, high-gradient brooks and headwater seeps in forest habitat of this core are home to Spring Salamander adults, a SOCC.

**Core 2943E** contains contiguous hilly hardwood and mixed forests with scattered vernal pools and is one of the state's best sites to support populations of Jefferson Salamanders. Covering an area of 6,502 acres, 2943E is part of the extensive Connecticut River Core Habitat with a large Forest Core in Conway, Williamsburg, and Whately. It extends south from the southern portions of Conway State Forest in Williamsburg and Whately, and includes High Ridge, Dry Hill, Walnut Hill, and Carey Hill. It also includes over seven miles of brooks that likely support populations of Spring Salamanders. This is a largely roadless area, with a lot of acreage owned and managed by Northampton Water Supply that is protected under Article 97 and has very limited public access. The water supply land connects with Conway State Forest to the north. The Williamsburg WMA is also located in this forest core.

Core Habitat 2943E also includes Joe Wright Brook and several other nearby streams along which meadows and wetlands with Elderberry provide habitat for the Elderberry Longhorned Beetle. This Core Habitat is located in a relatively undeveloped and unfragmented landscape, and within close enough proximity to Core Habitats in Whately and Westhampton to allow for occasional dispersal of Elderberry Longhorned Beetles between these areas, which may be important for long-term persistence of populations of this species. The majority of this Core Habitat is within the Graves Farm Sanctuary owned and managed by Massachusetts Audubon Society; conservation of remaining areas of unprotected land within this Core Habitat is desirable to increase the amount of contiguous protected habitat and to help ensure the long-term viability of rare species inhabiting the area.

The East Branch of the Mill River (Core Habitat 2943E) supports a community of the more ecologically sensitive aquatic insects: mayflies, stoneflies, and caddisflies. The presence of this invertebrate community indicates the stream habitats here are high quality and relatively free of the impacts of development. Vegetated streambanks along the Core Habitat and upstream help maintain the habitat quality, shading the water to keep it cool and filtering runoff containing sediments and excess nutrients from nearby development and roads.

### **Conservation Assessment and Prioritization System (CAPS)**

In 2005, Williamsburg participated in a project implemented by the Highlands Communities Initiative and the Department of Natural Resources Conservation at UMASS Amherst to prioritize lands for conservation. The project, entitled Conservation Assessment and Prioritization System (CAPS), is a computer modeling approach to prioritizing land for conservation based on the assessment of ecological integrity for various natural communities within an area. Beginning with a GIS basemap depicting various classes of developed and undeveloped land, a variety of landscape-based metrics (or indices) were evaluated to calculate ecological integrity for every point in the landscape. A detailed description of the CAPS modeling approach can be viewed at [www.umass.edu/landeco](http://www.umass.edu/landeco).

The CAPS project resulted in a series of maps identifying the top 35 parcels for protection depending on a specific conservation and/or restoration focus such as water supplies and water quality. Generally, the southwest and northeast corners of Williamsburg were found to have high ecological value, consistent with the BioMap2 analyses above. The CAPS data has proven a useful tool to guide landowner outreach in vulnerable areas and has been incorporated into the priority areas for conservation noted in the Action Plan and Action Plan Map.

## **Vernal Pools**

Vernal pools are small bodies of water that hold water during the fall, winter and spring but dry out during the summer. The lack of water means fish can't survive and, over time, many species of salamanders and frogs have evolved to breed exclusively in these fish-free environments. Many other animals including fairy shrimp, fingernail clams, various beetles and other invertebrate species also depend on vernal pools, either throughout their life cycle or during their breeding phase. Vernal pools are also used transitionally by many larger animals (wood ducks, raccoons, etc.), but they are especially important for the state's rarest reptiles and amphibians. Because of their small size, their importance as wildlife habitat has historically been overlooked. Only during the last 20 years have biologists recognized their ecological significance. Aside from biological values, vernal pools help prevent flooding by storing water and play a role in recharging groundwater.

To help safeguard vernal pools, Natural Heritage has developed a process for certifying them. The pools must meet strict criteria to qualify for certification. At present, there are six certified vernal pools in Williamsburg, which represents an increase of three since the last OSRP was written in 2011.

State Natural Heritage staff identified potential vernal pools statewide from 1:12,000 scale, color infrared, leaf-off aerial photographs taken between late March and early May 2000. The state has not updated this inventory since 2000, when they identified 34 potential vernal pools.

## **F. Scenic Resources and Unique Environments**

Williamsburg abounds in natural resources that yield not only commercial products such as lumber and maple syrup, but also provide recreational, aesthetic, psychological, and spiritual benefits. Difficult to measure, but nevertheless compelling and real, especially during a pandemic, is the importance of the natural environment to the town in providing residents and visitors with scenic pleasures as well as opportunities for engaging with nature. Residents value the overall beauty and tranquility of the town's natural environment, as demonstrated in the 2019 OSRP town survey results.

The landscape is also home to many places that contribute to the overall integrity and scenic value of the Town. These special places, as listed below, have been noted by townspeople in

surveys and community meetings and by the Open Space Committee.<sup>9</sup> They include places of historic and cultural interest, as well as scenic value, most overlapping between categories and thus not considered one or the other. They are scattered throughout the town, on land owned by the town, by conservation organizations and by private landowners. It's especially important to direct conservation efforts to those species identified on private lands.

**Table 12: Williamsburg Scenic & Unique Environments, according to Residents**

Historic Dam Site and Trail	Walnut Hill
Nash Hill Old School Site	Lands between Rte 143 and Hyde Hill Rd
Brassworks Dam Area	Graham Pond Site
Unquomunk Mountain	West Branch Mill River Trail
Devil's Den	Davis Hill/Shingle Hill
Williamsburg Country Club	Graves Farm
High Ridge	Grass Hill
Balance Rock	Unquomunk Reservoir lands
Existing Farms	Petticoat Hill
Battlecock Hill	Cable Line Trail and Other Existing Trails
Ames Field	Angel Park
Mill River	All trails and scenic walks

## Climate Resilience

Climate change is altering species and habitat distributions in unpredictable ways, challenging those in the land use planning and conservation fields to prioritize strategic land conservation that will conserve the maximum amount of biological diversity despite inevitable and changing distribution patterns. The Nature Conservancy's Resilient and Connected Landscapes project identifies those areas estimated to be the most climate-resilient for each of 62 characteristic environments throughout eastern North America. The project maps species-relevant microclimates and highly connected lands in order to identify landscapes where species are most likely to persist, identifying key areas for conservation based on land characteristics that increase diversity and resilience. (<http://maps.tnc.org/resilientland/>)

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<sup>9</sup> The town was selected for participation in the state's Heritage Landscape Inventory Program, and supporters were disappointed when the state discontinued the program due to State budget tightening.



According to The Nature Conservancy's analyses, resilient sites are defined by areas with high *Landscape Diversity* and high *Local Connectedness*. Four data inputs are used to derive the Resilient Sites:

- a. *Landscape Diversity* – Measures the number of *Landforms* around each point in the landscape. The more landforms, the more microclimates, which provide options for plants and animals to adapt to the changing climate.
  - i. *Landforms* provide microhabitats available for plants and animals. (e.g. side slope, hilltop, wet flats).
- b. *Local Connectedness* - Refers to how well the landscape around each point on the ground supports movement of plants and animals. The more local connectedness, the easier for plants and animals to access available microclimates.
- c. *Geophysical Settings* - Broadly defined landscape types with similar geologic environments (e.g. bedrock, soils and elevation) that contain a variety of plants and animals best suited to each setting. Resilience for each setting was calculated separately to ensure that the
- d. *Resilient Sites* - Contain habitat for a full range of plants and animals.

Overall, Williamsburg's total land area scores 'slightly above average' in terrestrial resilience and landscape diversity, but numerous individual sites are identified as 'far above average' or most resilient. Priority should be given to protecting these sites and connecting them to one another. The map below shows areas of Williamsburg that have been identified as resilient sites based on these metrics, and should therefore be considered priorities for conservation. Those areas of town that have high value for biodiversity, e.g. contain BioMap2 Core Habitat, also rank highly for climate resilience: specifically the northeast and southwest corners of Williamsburg.

## G. Environmental Challenges

In addition to the commercial and residential development of open lands, and often as a result of it, Williamsburg faces several challenges to the health of its environment. These challenges, some of which have already been mentioned include erosion, flooding, road salt damage, pollution of groundwater and wells, pollution of streams and wetlands, pollution of air, spread of invasive species, and the reduction of valuable wildlife habitat. Each of these is occurring now in various degrees and will, unless addressed, continue to impact plants and animals over time, as well as the health of people and our overall community. The sections below describe these environmental challenges.

### Hazardous Waste Sites and Landfills

Williamsburg relies on Holyoke's HazMat team for responding to incidents involving hazardous materials through a mutual aid agreement. The Verizon building at 18 Main Street is considered a Tier II Hazardous Materials storage facility and is included on the Past & Potential Hazards/Critical Facilities Map (Appendix). Hazardous materials are transported regularly over our highways and incidents can occur at any time without warning. Williamsburg is particularly

at risk because so many of our waterways are located close to major roads, especially the Mill River flowing along Route 9.

The Town of Williamsburg monitors a closed landfill at 29B Mountain Road in Williamsburg (DEP BWM file number 173097). The landfill was built in 1929 and closed in 2000. The landfill is unlined and received household waste, as well as construction and demolition waste, until 1996 when operations ceased. Since 1978, a small transfer station has operated out of the site. The transfer station is currently operated by Hilltown Resources Management Cooperative. The closed landfill is monitored via on-site wells. There are no current plans for redevelopment of this site for alternative uses.

### **Erosion and Sedimentation**

Nearly all soil erosion in Williamsburg is caused by people clearing vegetation that formerly slowed the movement of air and water across the ground. Erosion caused by water is of greater concern as it is much more prevalent than wind erosion. In this wet climate, the increasingly common building of new homes on steep, wooded hillsides exposes highly erosion-prone soils to fast-flowing water runoff. The impact on roads, waterways and otherwise undisturbed vegetation downhill from the clearing and excavation can be considerable and long-lasting if not caught in time. Soil and water washed onto roadways can damage the roads themselves; siltation in streams changes flow patterns and harms aquatic plants, animals, and the insects, amphibians, fish and birds that feed on them. Mud washed over the roots of healthy plants can suffocate and kill them.

There are 53 culverts in Williamsburg that are inspected and maintained as needed and/or when road improvements are considered. The 2016 Williamsburg Hazard Mitigation Plan (HMP) identified the following two problem culverts or other localized flooding areas in town:

**Depot Road:** An undersized culvert that floods once or twice each year. The water flows over the road and has blocked access for up to eight hours. One house experiences flooding in its basement and a private bridge is threatened. There is also potential for the road to be damaged.

**Route 9 (Goshen Road) west towards Goshen:** Water comes off road and washes away driveways and floods basements affecting five homes. There is also potential for the road to be damaged.

The 2016 HMP also notes that erosion of private driveways has been noted at homes along Goshen Road. Furthermore, the upper end of Depot Road at the intersection with Nash Hill Road (near Potash Brook) is susceptible to landslides.

Most of the erosion hazard areas listed here were identified due to known past occurrence in the respective area. There are many areas with no record of previous incidents that could be affected in the future by heavier rain and runoff precipitated by climate change.

## **Development Impact & Invasive Species**

New development often results in the destruction of native plant communities. This is seldom intentional. All of us would do well to remember that we are surrounded by a diverse and subtly beautiful native flora that is perfectly adapted to the places where it grows. It would make good practical and financial sense to avoid disturbing those native plants wherever possible, rather than replacing them with expensive and maintenance-intensive exotic species. When building, people often unwittingly destroy trees they attempt to save. As a rule of thumb, a healthy tree's roots are apt to extend as far from its trunk as its branches do, and any regrading within that circle reduces the tree's chances of survival. Even where no regrading has occurred, compaction by heavy machinery can damage roots as surely as if they had been cut.

Conversion of open natural spaces to development means wildlife suffer not only the loss of places to live but also the loss of the complex and diverse habitat which supports them. The brushy 'edge' habitat between field and forestland, one of the richest of New England wildlife habitats, is absorbed into the yards of new homes. Paths of wildlife movement are disrupted. Construction work and subsequent "improvements" can alter the natural vegetation, drainage, soil structure and other delicately balanced systems and relationships on which wildlife depends. Developers and sub-dividers should be cognizant of the effects of their projects on wildlife and should be held responsible for preserving unique and important wildlife areas. Conservation for wildlife is most effective when protecting large parcels and other connected tracts of intact land, which still exist in Williamsburg. We still have opportunities to protect much of this land.

Landscaping favors a small group of plants, often non-native or exotic, that are easy and cheap to produce and sell, and that we are taught to consider beautiful. This commercial re-engineering of the outdoors by the yard care industry urges homeowners to control their yard: control insects, weeds, fertility, moisture, and the public image the yard projects. Hardly anything else illustrates so perfectly how much our culture has to learn about maintaining a healthy relationship with our environment. Fortunately, a counter movement has sprung up in reaction to this scenario that favors native plants, natural growth, natural diversity, and habitat creation for birds and animals. People are increasingly aware of the degradation caused by non-native plants, such as multiflora rose, bittersweet, Japanese barberry and honeysuckle, and are taking measures to remove them.

The use of pesticides and herbicides has become so prevalent that we need to limit their use and their deleterious effects. Roadside spraying, lawn chemicals, garden and farm insecticides all seem part of the landscape. Efforts to reduce their use involve regulation, education and generation of alternatives. There is now, for example, a local business that leases herds of sheep to graze rights-of-way, conservation lands, and parks rather than resorting to herbicides or mowing.

### Invasion of the Invasives

The species native in our town have co-evolved with other native species to maintain a balance of population sizes and competition for available resources. Invasive species are those plants and animals that have been introduced to an area and have no natural curbs to their growth or spread.

When non-native species are introduced into an ecosystem in which they did not evolve, their populations can increase dramatically. In a natural or native community, species evolve together into an ecosystem with many checks and balances -- such as predators and diseases -- that limit the eventual dominance of any one species. However, when an organism is introduced into an ecosystem in which it did not evolve naturally, it no longer has those limits and its population often dramatically increases, disrupting natural communities and ecological processes.

Invasive species can cause harm to the native species in an ecosystem through outcompeting for resources with native plants and animals. Over time, this can change the makeup of a habitat. Non-native invasive species can actually lead to extinctions; for example, the American chestnut blight was caused by a fungus native to Asia. Even if native species are not completely eliminated by invasives, the ecosystem often becomes much less diverse. In natural systems, species diversity is key to success and survival.

Invasive species can degrade, change, or displace native

habitats and native wildlife, and the Williamsburg Conservation Commission is very concerned about the impacts of non-native invasive species on our town's lands and waters. Some invasive non-native plant species occurring in Williamsburg are Asian bittersweet, autumn olive, Japanese barberry, garlic mustard, glossy buckthorn, Japanese knotweed, multiflora rose, and purple loosestrife. There are many books and online resources that can assist you in identifying our most common invasive species.

If you find invasive species on your property, it is up to you to decide if you want to try to eradicate or control them. There are three main methods used for control of invasive species -- biological, mechanical, and chemical. Biological control is the intentional introduction of natural enemies, such as *Gallerucella* beetles for purple loosestrife. Mechanical control includes mowing, hoeing, cultivation, and hand pulling, such as mowing multiflora rose in a pasture. Chemical control is the use of herbicides, such as spraying Japanese knotweed with glyphosate. You can also use a combination of these three methods in an integrated weed management approach, such as cutting bittersweet vines close to the ground and painting the stumps with herbicide.

If you intend to use any method to treat or remove invasive plants within 200 feet of a stream or 100 feet of a wetland, please contact the Conservation Commission at [conservation@burgv.org](mailto:conservation@burgv.org) for guidance to stay in compliance with the Massachusetts Wetlands Protection Act.

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**Figure 2 This public service announcement about invasive species appeared on the outside mailing page of the 2018 Town of Williamsburg Spring Newsletter.**

## Flooding

There are approximately 511 acres of land within the FEMA mapped 100-year floodplain and 501 acres of land within the 500-year floodplain within the Town of Williamsburg. According to the Community Information System (CIS) of FEMA, there were 76 residential structures located within the Special Flood Hazard Area (SFHA) in Williamsburg as of 2006.

The Floodplain Map for the Town of Williamsburg shows the 100-year and 500-year flood zones identified by FEMA flood maps. In Williamsburg, there are several floodplain areas -- primarily along the Mill River. There are some smaller 500-year floodplains mapped as well, in several low-lying areas throughout Williamsburg. The 100-year flood zone is the area that will be covered by water due to a flood that has a one percent chance of occurring in any given year. Flooding in the 100-year floodplain particularly impacts the Town Center as the Mill River runs through it. Likewise, the 500-year flood has a 0.2 percent chance of occurring in any given year. The major floods recorded in Western Massachusetts during the 20th century have been the result of rainfall alone or rainfall combined with snowmelt. Williamsburg has experienced many flooding events over the last decade. Generally, these small floods have had minor impacts, temporarily impacting roads and residents' yards. However, climate scientists predict that

climate change will increase the frequency and intensity of all storms that can cause flooding in the next few decades. In fact, these trends are already being observed. If trends continue, the 500-year floodplain could become the 100-year floodplain. FEMA mapping has yet to capture anticipated changes. Currently, floods are the most costly natural hazard in the United States, and climate change will only increase this damage.

The Town of Williamsburg identified and assessed flood and other environmental issues in the Williamsburg Local Natural Hazards Mitigation Plan (HMP) which is updated every five years. The most recent version of the plan was created in 2016 and includes six implementation priorities touching on issues relating to flooding, primarily from the Mill River. The HMP also included a medium priority action to implement top recommendations of the Open Space and Recreation (OSRP) related to Hazard Mitigation.

**Table 13: Prioritized Mitigation Actions**

Action	Description	Responsible Department/ Board	Proposed Completion Date
5.4.1	Replace problem culvert on Depot Rd. Town previously applied for hazard mitigation grant that was not awarded; will do so again	Highway Dept	18 months from funding award
5.4.3	Identify sources of and secure funding for dam safety inspections. Support needed for Highway Dept and other municipal staff to address dam safety, coordinate with MA Office of Dam Safety	Emergency Management Director (EMD)	Anticipated Start-July 2018-Jan 2019
5.4.6	Educate owners of properties in floodplain about NFIP. Encourage enrollment in NFIP; distribute brochures at Town Hall, events; publicize <a href="http://www.floodsmart.gov">www.floodsmart.gov</a> ; participate in flood awareness campaigns.	EMD, Town Clerk, Conservation Commission	Anticipated Start-July 2018-Jan 2019
5.4.7	Stay abreast of and adopt as needed new floodplain management regulations, including limits on new and substantially improved construction in Special Flood Hazard Areas. Prevent property loss from flooding by limiting new construction and significant improvements in flood zones	Conservation Commission, Planning Board, Building Inspector	Anticipate 9-12 months to adopt a new regulation after new regs are promulgated
5.4.8	Conduct floodplain identification and mapping, including local requests for map updates. FEMA FIRM maps have not been updated since late 1980s; PVPC requested an update from MEMA in 2015; new flood zone info is needed	MEMA, FEMA, PVPC	Anticipate 3-6 months to complete mapping request after request is placed
5.4.13	Culvert Inspections. Highway Dept inspections of culverts; Coordination with MassDOT for Route 9 culvert improvements as needed	Highway Dept	Start work on top priority culvert inspection in January 2017- March 2017, then move to #2, etc

Source: Williamsburg Hazard Mitigation Plan, 2016

## Dams

According to DCR sources, as well as local knowledge, there are currently eight (8) dams in Williamsburg, and Table 15 classifies these dams by their hazard risk: low, significant, or high



hazard.<sup>10</sup> Williamsburg has a history of one historic dam failure: the collapse of a dam on one of the tributaries to the Mill River in 1874 caused one of the most disastrous floods in New England, destroying the Town's industrial section and killing 145 people. Williamsburg residents can obtain emergency and evacuation information at the Western Massachusetts Regional Homeland Security Advisory Council website ([www.wrhsac.org](http://www.wrhsac.org)). The WRHSAC in collaboration with the Pioneer Valley Planning Commission is in the process of creating a new website where all of this information will be stored called [WesternMassREADY.org](http://WesternMassREADY.org). In addition, evacuation routes will be mapped and available for download on the Town of Williamsburg websites and at [WesternMassREADY.org](http://WesternMassREADY.org).

As discussed in Section 3D of this plan, the upper Unquomunk Reservoir was drained in 2007 to allow a full inspection of the dam and safety concerns. Trees and heavy brush were cleared from the dam and the spillway was cleared and reinforced. The dam was then re-inspected and confirmed to be a low-hazard risk. The reservoir was then refilled. The dam was subsequently reinspected and approved in accordance with state requirements in 2019.

**Table 14: Dams Located in Williamsburg**

Dam name	Owner	Purpose	Hazard Risk
Mountain Street Reservoir Dam	City of Northampton	Water Supply	High
Brass Mill Pond Dam	The Brassworks Associates	None provided	Low
Mountain Street Reservoir Dikes	City of Northampton	Water Supply	Low
Unquomunk Upper Reservoir Dam	Town of Williamsburg	Water Supply	Low
Graham Pond Dam	Thomas Hodgkins	Recreation	Low
Unquomunk Lower Reservoir Dam	Town of Williamsburg	Water Supply	Non-jurisdictional
Fuller Pond Dam	Roland M. Emerick	None provided	Non-jurisdictional
John P. Webster Dam	Mark Corner & Sarah McMullen	None provided	Non-jurisdictional
Source: Williamsburg Hazard Mitigation Plan, 2016			

<sup>10</sup> It is difficult to track down accurate records of dams, as ownership and exact location is not clear. Furthermore, many very old dams listed in DCR records are not in existence anymore, according to local knowledge. This list is compiled from a combination of sources, and then verified by the Hazard Mitigation Committee.

The Office of Dam Safety characterizes the potential failure of the Mountain Street Reservoir as a “High” hazard because flooding from a failure will likely cause loss of life and serious damage to home(s), industrial or commercial facilities, important public utilities, main highway(s) or railroad(s). In addition to the Mountain Road Reservoir Dam (rated as High Hazard), the Lower Highland Lake Dam in Goshen had also been a concern for hazard mitigation in Williamsburg, as it is upstream on the West Branch of the Mill River. The Lower Highland Lake Dam in Goshen is owned by the Massachusetts Department of Conservation and Recreation (DCR) is also rated a High Hazard dam and had previously been considered in ‘poor condition.’ The impoundment area measures 88 acres. Failure of this dam could send large volumes of water down the Mill River along Goshen Road to Williamsburg Center, where it would pick up the path of the 1874 flood. Dam repairs were completed by the DCR Office of Dam Safety in 2016.

### **Ground and Surface Water Pollution**

Based on the hydrogeologic conditions surrounding the town’s drinking water recharge area, the aquifer is considered to be highly vulnerable to contamination. The Williamsburg Water Department owns the entire 400-foot, Zone I protective radius around the town’s 2 wells and several acres of land within Zone II and Zone III of the wells. As discussed in Section 3D of this plan, the Water and Sewer Commission leveraged grant funding with monies approved at a Special Town Meeting to help purchase a block of land on South Street in 2011 to increase protection of the town’s wells. Part of the land is within the aquifer Zone II recharge area.

Williamsburg discharges its sewage to the neighboring City of Northampton. The town is charged for every gallon of sewer discharge and is subject to surcharges if the discharge exceeds standards for total suspended solids (TSS) and/or organic compounds (e.g. biochemical oxygen demand or BOD). A 2019 newsletter from the Water and Sewer Commission indicated that discharge flows increased, and those discharges had high spikes of TSS and BOD, resulting in additional surcharges. These and other costs of providing water and sewer are constantly rising and are unfortunately passed on to the Williamsburg residents who utilize the system. To help address rising costs, the Commission has taken or is planning aggressive steps to reduce the quantity and improve the quality of the sewage discharge to reduce, and hopefully eliminate, future fees and surcharges from Northampton. In 2019 these steps included:

- The use of grant money in 2018 to do an engineering assessment of the sewer lines and stormwater manholes to locate where groundwater is infiltrating the system.
- Approval of new sewer regulations in February 2019 which mirror those in use by Northampton and that allow the Commission to address problem areas.
- Repair of stormwater manholes and pipes to decrease the amount of runoff that can enter the sewer system.
- Requiring residents to stop surface runoff from entering the sewer system (sump pumps, roof downspouts, exterior foundation drains, etc.).
- Conducting inspections of residences and businesses to ensure compliance with the surface runoff and sewer disposal regulations.
- Remote camera inspection of sewer lines that have been identified by past flow monitoring as major sources of groundwater infiltration, which increases our flow to

Northampton, with follow-up plans to patch, reline, or replace these problem sewer lines.

- The purchase and use of 24-hour monitoring equipment to pinpoint sources of excessive TSS and BOD discharge and working with these customers to bring their discharge into compliance with set standards.

The town also has an Inter-municipal Agreement with the City of Northampton to activate an emergency water connection under extreme conditions, as detailed in the town's Emergency Response Plan. The Water and Sewer Commission have also discussed using Unquomunk Reservoir as a last resort non-potable water supply.

### **Severe Winter Weather (Ice Storm)**

Severe winter weather occurs regionally and therefore would impact the entire town. Any area over 600 feet in elevation could be severely damaged by severe snow and ice as evidenced by the effects of the ice storm of 2008. This ice storm caused significant damage in the higher elevations of Williamsburg and resulted in a major expenditure of public and private funding to clean up the damage. Extreme weather events are linked to climate change and expected to increase in frequency.

### **Air, noise and light pollution**

Air quality is beginning to be a concern in Williamsburg. The Mill River Valley tends to trap wood smoke and vehicle exhaust gases in dense layers overlying the two villages at various times. It may eventually become necessary to regulate wood-burning. Air pollution by auto exhaust can be addressed by bus use, bike trails, carpooling and hybrid and electric cars. Pollution by lawn mowers has recently been proven to be surprisingly considerable though it can be remedied with the use of electric mowers and by altering landscape practices.

The Town of Williamsburg has a Town Energy Committee that seeks to increase the energy efficiency of town buildings and operations per the guidelines in the regional Clean Energy Plan. In addition, they assist residents in becoming more energy efficient through public outreach.

Light pollution is a growing threat in the nighttime environment. Components of light pollution include glare, causing temporary loss of visibility; light trespass from neighboring properties; and urban sky glow, obscuring the view of the night sky. Solutions include quality lighting, community control over excess lighting and shielding of light sources. The expansion of Cumberland Farms on Route 9 and the construction of Dunkin Doughnuts in Haydenville have created light pollution in their respective neighborhoods.

Noise pollution is not easily defined. Broadly speaking, any form of unwelcome sound is noise pollution, whether it is the roar of a jet plane overhead or the sound of a barking dog a block away. One measure of pollution is the danger it poses to health. Noise can be considered pollution if it causes annoyance, sleeplessness, fright, or any other stress reactions. The actual loudness of a sound is only one component of the effect it has on human beings. Other factors

that have to be considered are the time and place, the duration, the source of the sound, and whether the listener has any control over it. Most people would not be bothered by the sound of a 21-gun salute on a special occasion. On the other hand, the thump-thump of a neighbor's music at 2 a.m., even if barely audible, could be a major source of stress. Williamsburg does have noise restrictions in its bylaws, however, enforcement of noise bylaws in general is difficult. Noise from trucks traveling on Route 9, mostly related to recent road construction in Northampton, is contributing to noise pollution.





## **SECTION 5:**

### **INVENTORY OF LANDS OF CONSERVATION & RECREATION INTEREST**

This section discusses permanently protected, temporarily protected, and unprotected lands of conservation or recreation interest in Williamsburg. Permanently protected lands include public or semi-public properties which are forever committed for conservation purposes, as well as privately owned lands with a deeded Conservation Restriction or Agricultural Preservation Restriction. Temporarily protected lands are mainly properties enrolled in MA General Law Chapter 61, 61A and 61B programs. These properties are classified as working lands that are protected for as long as the landowner chooses to enroll their land in this program.

Unprotected land discussed in this section includes town owned land not committed for conservation purposes and some private land noted for its conservation or recreational value.



**Big View Trail**

Much of the permanently protected land in Williamsburg is owned by the towns of Williamsburg or Northampton, state conservation agencies, or nonprofit land trusts. Most of this land is open to the public for recreational activities, but there are restrictions on the type and timing of activities allowed. Additional private conservation land in Williamsburg is open to the public at the discretion of the landowner. This section also discusses valuable natural resource areas, historic and culturally important districts and landscapes, agricultural lands, and recreational areas. Such parcels are considered of interest, either individually or in aggregate,

because they conserve valuable natural and recreational resources and help define the character of Williamsburg. Their loss would undermine the visual character, quality of life, ecological integrity, and sense of place for Williamsburg's residents and the region.

There has been a dramatic increase in the recreational use of Williamsburg's protected and undeveloped lands, particularly in 2020 and 2021 with pandemic restrictions on indoor activities. Hikers, bikers, cross country skiers and snowmobilers have benefitted from the town's extensive woodland trails, scenic roads, and land open for public recreation. People have an increased appreciation for the importance of these spaces to their physical and mental health as well as their value for wildlife habitat and climate change resilience. As a result, support for land protection and involvement in protected land management has risen.

Almost 85 percent of Williamsburg is forest land according to MassGIS MacConnell Land Use data. While forested land is found in all areas of town, the northeast and southwest corners of Williamsburg contain large expanses of undeveloped forest, much of which is noted as ecologically important for wildlife, water quality and forest resources. Much of Williamsburg's permanently protected land is also found in these parts of town.

**Table 15: Ownership of existing protected land in Williamsburg**

<b>Williamsburg Protected Land</b>	<b>Acres</b>
Permanently protected private land	1,068
Non-profit conservation land	935
Municipal conservation and recreation land	2,530
State conservation land	432
<b>TOTAL Acres Protected Land</b>	<b>4,965</b>

Williamsburg has abundant land available for both passive and active recreation making open space equity of little concern. Active recreation facilities are located in the two village centers, the area where housing is most concentrated. These facilities include the town ball fields and tennis courts near the center of Haydenville and the school playground, basketball court, and a small park in the center of Williamsburg. Areas more distant from the town centers in all directions contain multiple public and privately-owned lands with trails used year-round by residents.

## **A. Private Conservation Land**

### **Permanently Protected Private Lands**

Some property owners in Williamsburg have taken steps to permanently protect their land from development through Conservation Restrictions or Agricultural Preservation Restrictions.



### **Conservation Restrictions**

Conservation Restrictions (CRs) are legal easements registered with the State and held and monitored by third party conservation organizations that protect land in perpetuity. A CR allows landowners to own and manage their land as productive open space while protecting the land from future development.

There are 1,068 acres of private land in Williamsburg that are permanently protected by Conservation Restrictions. These protected properties are located in the Potash Brook area off of Nash Hill Road, on Grass Hill and Adams Road at the Williamsburg- Whately line, off of Briar Hill Road adjacent to the DAR State Forest, adjacent to Petticoat Hill Reservation, and in the southwest corner of Williamsburg.

### **APR Land**

There are two parcels in Williamsburg totaling 240 acres that are permanently preserved for agriculture under the state's Agriculture Preservation Restriction Program (APR). This land is located in the area near Joe Wright Brook and Nungee Swamp on Adams and Depot Roads. The state's APR program permanently protects farmland from development and compensates the farmer for development rights to the land. Land enrolled in the APR program must remain in agricultural use.

### **Unprotected Recreational Land**

#### **Devil's Den, Old Goshen Road (17 acres)**

An affiliate of the local Boy Scouts own approximately 17 acres of land along the West Branch of the Mill River at the Williamsburg-Goshen town line known as "Devils Den". This property contains a rugged gorge with an attractive brook flowing through it. The site is a valued swimming hole and recreational area visited by many town residents. This section of the Mill River is classified as BioMap2 Core Habitat for Species of Conservation Concern meaning rare or endangered wildlife species are likely found in the vicinity.

#### **Williamsburg Rod and Gun Club (53 acres)**

The Williamsburg Rod and Gun Club land sits on the Williamsburg – Chesterfield town line and is part of an extensive block of undeveloped and protected land in southwest Williamsburg. This area is used by club members as a private shooting range and has many trails that are part of an extensive trail network enjoyed by snowmobilers and others.

#### **Williamsburg Country Club (227 acres)**

Formerly called the "Beaver Brook Country Club", this 227-acre property on Main Street (Route 9) in Haydenville includes a privately managed 18-hole golf course with adjacent forest and wetlands. The extensive wetlands provide temporary storage of floodwaters, thus reducing water volume and velocity in rivers and streams during flood events.

## **Chapter 61 Temporary Protection Program**

The Chapter 61 programs (61, 61A, and 61B) are current use programs which offer a property tax break to landowners who agree to keep their land undeveloped for specific periods of time. The program recognizes the important public benefits of open space such as clean water, wildlife habitat, rural character, wood products, food production, and outdoor recreation and the reduced burden that this land has on town amenities such as schools and emergency services. There are three different Chapter 61 programs: Chapter 61–Forestry, Chapter 61A–Agriculture, and Chapter 61B–Open Space and Recreation.

Land enrolled in the Chapter 61 program is not permanently protected. Landowners may take their land out of this program by paying rollback taxes or conveyance taxes if transferred to another landowner who plans to change its use.

In 2008, Williamsburg’s Open Space Committee developed a procedure for informing town boards and committees when land protected under the Chapter 61 provision is proposed for development or conversion to another use. Under Chapter 61 regulations, the town has a right of first refusal when land enrolled in the Chapter 61 program is converted to another use. The town can either purchase the land or transfer this right to purchase to a conservation organization in order to permanently protect the land for conservation or open space purposes. Under this right of first refusal, the town or conservation organization is obligated to purchase the land at fair market value. Williamsburg has used this Chapter 61 protocol several times over the past decade to review properties proposed to be converted to other uses, though neither the town nor a conservation organization has ultimately purchased any land for conversion purposes through this mechanism. Lack of any clear funding sources and the limited notification time of the program have been contributing factors.

### **Chapter 61 Lands (Forestry)**

Williamsburg has thirty-three properties totaling 2,744 acres enrolled in the state’s Chapter 61 Forestry program. These lands are actively managed and represent nearly 20% of all forest land in town. Additional forest land is enrolled in other Chapter 61 programs, but may not be actively managed. See Appendix XX for a list of properties enrolled in Chapter 61.

### **Chapter 61B land**

The state’s Chapter 61B program offers preferential tax treatment to those landowners who maintain their property as open space for the purposes of recreation. There are more than 1,200 acres of Chapter 61B land in Williamsburg. See Appendix for a list of Chapter 61B properties.

### **Chapter 61A**

There are more than 3,200 acres of land enrolled in the state’s Chapter 61A Agricultural Land Tax Program. Parcels enrolled in this program are scattered throughout town but are generally located near town roads. Many of these properties have extensive forest land as well as agricultural land. See Appendix for a list of Chapter 61A properties.

There are an additional 22 acres temporarily protected under an agricultural covenant owned by Paul Zononi Sr. held by the Massachusetts Department of Agricultural Resources through the Farm Viability Enhancement Program. This short-term covenant will expire 3/13/2023. This is the only current agricultural covenant held by MDAR in Williamsburg

## **B. Public and Nonprofit Conservation Land**

There are approximately 3,900 acres of land in Williamsburg protected by local or state government or nonprofit organizations. Some of this land is for water quality protection or public recreation. Several of these properties offer public trails. Additional open space areas are maintained by the town, but not permanently protected.

### **Town of Williamsburg Properties**

The following properties are owned by the town of Williamsburg and have some associated conservation or recreation use. Refer to the ADA assessment and inventory included in the Appendices for information about the accessibility of these facilities.

#### **Unquomok Watershed (606 acres)**

The town watershed lands between South Street, Petticoat Hill Road and Chesterfield Road represent the largest area of town-owned land located within the largest undeveloped area in Williamsburg. Most of this land has been in town ownership since the 1930s. The area rises nearly 1,000 feet from the lower areas of South Street and includes the summits of Unquomok Hill, Petticoat Hill, and broad top of Old Wolf Hill. These lands encompass various brooks and wetlands, including the upper Unquomok reservoir, which is currently a back-up water supply for Williamsburg. This region is rich in wildlife, provides a large area of connected habitat of various types and has also been identified by the State Natural Heritage Program as a special habitat area. Many miles of trails connect and link this region to South Street, Petticoat Hill Road, and Chesterfield Road. The watershed lands are under active forest management and the town Water and Sewer Department is in the process of developing a management plan for this property. These town-owned lands are also bordered by permanently-protected state and nonprofit lands and private lands under Conservation Restriction forming an 1,800 acre block of permanently protected land in the area where Williamsburg, Chesterfield and Westhampton meet.

#### **Gere Hill Conservation Area/ Town Woodlot (130 acres)**

This 130-acre property off of old Gere Hill Road is managed forest under the jurisdiction of the Select Board. The land is located within the interior of the forested block between Hyde Hill Road and Route 143. This land is characterized by steep wooded hillsides and ledges. Town Lot Brook runs through the property. The land does not border any other public lands, but it is connected to a network of woodland trails.

#### **Briar Hill Conservation Area (50 acres)**

This 50-acre Conservation area is managed by the Williamsburg Conservation Commission, is located in the northwest corner of town on the northeast side of Briar Hill Road. This land

contains mixed hardwood and evergreen woodlands, and a hilltop overlooking farm fields, the East Branch of the Mill River Valley, and Conway State Forest. In the 1970's trails, picnic areas, and a play area were developed on this property. Since then volunteers have continued to maintain these trails at various periods of time, including, most recently, the Williamsburg Woodland Trails Committee.

Hall Conservation Area on O'Neil Road (17 acres)

This property south of O'Neil Road is managed by the Conservation Commission as conservation lands. The Woodland Trails Committee has reopened a network of trails with help from local boy scouts and girl scouts. Trails from the Hall Conservation Area cross private lands and connect to the O'Neil Hill section of the Graves Farm Wildlife Sanctuary. A trailhead and kiosk provide access to this property off of O'Neil Road with less formal trail access from private land at the end of Valley View Road.

Horse Mountain (34 acres in Williamsburg, additional adjacent land in Hatfield)

The Williamsburg Conservation Commission purchased this land in 2017 with funding from a state LAND grant, the Open Space Institute, and the help of Kestrel Land Trust. Additional conservation land was purchased in Hatfield. In 2020, The Williamsburg Woodland Trails Committee established trails on the Williamsburg land that connect to a network of Hatfield trails including the trail to "White Rock" with a lovely view over the Connecticut River Valley.

Mill River land in Skinnerville (4.5 acres)

This land along the south side of the Mill River was purchased in 2018 with private funds with plans to transform the land into a public park along the future Mill River Greenway.

Ellen Ames Field (5.9 acres)

The 5.9-acre town-owned Ellen Ames Field on Fairfield and Myrtle Streets in Haydenville offers a baseball diamond, a Little League diamond, two soccer fields, and two tennis courts. It is the largest and most heavily used public recreation facility in town and is managed by the Recreation Commission. During the spring, summer, and fall these fields are used for T-ball, baseball and soccer games, some of which are organized by the Williamsburg Recreation Commission. The fields are also currently used for adult soccer, ultimate frisbee and softball.

Angel Park Quiet Reflections Garden

Angel Park Quiet Reflections Garden was created in 2007 as a public park dedicated to the memory of children who have passed away. It was built on public land adjacent to the Anne T. Dunphy Elementary School and features accessible seating for music events and presentations. The heavily planted setting has been used recently for a summer concert series.

Meekins Public River Park

The Meekins Public River Park was created in 2010 as a result of the installation of a restored iron fence atop the Mill River Wall, thus forming an enclosed safe environment for children and park users. It is one of the few Public places in Williamsburg that allows access to the Mill River edge and is away from auto traffic and commercial activity. The Park hosted a local Farmer's

Market from 2011 - 2013. The Park features benches adjacent to the river edge, with pedestrian access directly from the accessible public walkway on North Street. Public parking is available in the Meekins lot and adjacent off-street spaces.

Veteran's Memorial Park

A very small parcel located in the center of Williamsburg, this park contains a monument with the names of the Town's Veterans and a flag pole.

Anne T. Dunphy School grounds (7.6 acres)

The Anne T. Dunphy School, located off Petticoat Hill Road in Williamsburg, sits on a 7.6-acre site and offers a baseball diamond, soccer field, open field space, and scattered playground equipment. The baseball diamond and soccer field are used regularly for school classes and occasional casual softball and soccer games. The west side of the school is the site of a robust school garden and greenhouse including several fruit trees, edible native perennials and annual vegetables planted and eaten by students. This educational garden is part of the school curriculum. It is maintained by students during the school year and their families during the summer.

Helen E. James School grounds (2.9 acres)

As of the writing of this plan, the Helen E. James School is scheduled to be torn down so that the site can be used for Williamsburg's new Public Safety Complex. This 2.9-acre lot, located off Main Street in Williamsburg, is one of the few, large open spaces in the center of town and has been used for community gatherings in recent years including town picnics and a "fire and ice" bonfire/ skating party in the winter. This is also the likely end of the future Mill River Greenway. Town residents value this community open space in the center of Williamsburg and are hoping the grounds of the Public Safety Complex can become a small public park.

Town Well & Watershed, South Street (145 acres)

The Williamsburg Water and Sewer Commission owns four parcels off of South Street for protection of the town well and some of its watershed. Most of these parcels were purchased with state drinking water supply protection funds and are thus permanently protected under Article 97. This is where the main water supply for Williamsburg is drawn. The property has gently rolling topography and several wet areas, ponds and streams. These lands are managed by the Water and Sewer Commission. Although a road does go to the well and tanks and there are trails that traverse this parcel, public access and trail use are not encouraged and areas around the well are posted "no trespassing."

Village Hill Cemetery (15.70 acres)

This cemetery is located on Village Hill Road. A network of paved roads exists at the cemetery.

Old Village Hill Cemetery (2 acres)

This is located on Village Hill Road. Access to this unused cemetery is by either parking on private property or walking up a very steep hill.

**Mountain Street Cemetery (0.3 acres)**

Located on Mountain Street, this small cemetery is surrounded by a fence with a wide gate. There is a long straight level driveway leading to it.

**High Street Cemetery (2.40 acres)**

This small cemetery is located on High Street.

**Haydenville Playground**

The playground located behind the Town Offices parking lot was revived by a group of neighbors and members of the Haydenville Congregational Church in 2010. A small garden was established and is now used by the Williamsburg Senior Center.

**Williamsburg Village Center**

The “Williamsburg Parks and Gardens Beautification Fund” receives funds from local businesses in exchange for annual upkeep of the Route 9 flower gardens, and from the redemption of bottles and cans collected at the Transfer Station. This money supports ongoing seasonal lawn care activities, irrigation winterization, new and replacement plant purchases, and partial payment of irrigation water usage associated with the Walk of Flowers, Market Square, Veterans' Park, and Angel Park Quiet Reflections Garden.

**Other Municipal Conservation Land**

**Northampton Water Department Lands (1,533 acres)**

The City of Northampton is the largest landowner in Williamsburg, owning and managing over 1,500 acres of land in Williamsburg’s northeast and northern quadrants. These parcels include land around the Mountain Street Reservoir, both sides of the Henhawk Trail north of Nash Hill Road, and north of Judd Lane where the old Williamsburg dam site is. These lands, under the control of the Northampton Water Department represent 10% of the land in Williamsburg. They are posted “no trespassing” at several points and managed for the current and future water needs of the City of Northampton.

The same Water Supply Protection Overlay District zoning applies here as with the Unquomunk Reservoir. The Town of Williamsburg also owns a parcel in this area abutting the Conway State Forest.

This area is characterized by evergreen forests, steep wooded slopes, several streams (including the feeder streams to the East Branch of the Mill River), and a number of woodland trails connecting to various parts of town and surrounding towns. However, permission for trail use should be requested from the Northampton Water Department.

**State Lands**

**Conway State Forest (49 acres)**



In the northeast section of Williamsburg, off of the Henhawk Trail, is a parcel of land that is part of the much larger Conway State Forest owned and managed by the Massachusetts Department of Conservation and Recreation. This parcel encompasses parts of High Ridge and is characterized by mixed evergreen and hardwood forest and steep slopes on both the eastern and western portions of the ridge.

Williamsburg Wildlife Management Area (90 acres)

This Wildlife Management Area is owned by MassWildlife (also known as the Department of Fisheries and Wildlife or the Department of Fish and Game). This land is permanently protected as wildlife habitat. The property is located within the forested block between Nash Hill Road and Ashfield Road and has a small piece of frontage on Ashfield Road. The land is adjacent to the extensive protected lands of the Northampton Water Department.

Brewer Brook Wildlife Management Area (292 acres)

The Brewer Brook Wildlife Management Area (WMA) includes the headwaters of Brewer Brook and covers 292 acres in Williamsburg at the Chesterfield town line. This WMA includes additional land in Chesterfield and is also adjacent to the permanently protected lands of multiple Conservation Restrictions in private ownership, Kestrel Land Trust's Old Wolf Hill Property and the Town of Williamsburg's Unquomunk Reservoir land.

## **Non-Profit Conservation Lands**

Petticoat Hill Reservation (51 acres)

Petticoat Hill reservation is a publicly accessible conservation property near the center of Williamsburg off of Petticoat Hill Road. The reservation has parking, one loop trail and some signage. It is managed by The Trustees of Reservations.

Graves Farm (550 acres)

The Graves Farm is owned and managed by the Massachusetts Audubon Society (MAS) as a wildlife sanctuary and conservation area. MAS has developed a parking area and one trail on the property. The property is located both to the north and south of Adams Road and includes several nice natural features including open meadows, large trees and a ravine. This conservation includes additional and adjacent land in Whately.

Bradley Property (41 acres) Breckenridge Property (67.0 acres)

These two conservation properties were donated by their former owners to Hilltown Land Trust. Both parcels are off of Old Goshen Road and include parking and woodland trails open to the public.

Old Wolf Hill Conservation Area (226 acres in Williamsburg)

This property and an adjacent 102 acres in Westhampton were purchased in 2018 by Kestrel Land Trust as part of a 1,000-acre land conservation effort spanning 4 towns. This land is part of a 2,500-acre block of protected land noted for its importance to wildlife and climate resilience. The property has several unmaintained trails used by hikers and cross-country skiers.

**Table 16: Inventory of Williamsburg Conservation Lands**

Property name	Owner/ Manager	Acres	Public access	Level of protection	Use
<b>Private Conservation Restriction Lands</b>					
Graves CR -HLT	Graves family	80	Limited	Permanent	Forest
High Ridge Farm CRs - Trustees	Thomson family	184	No	Permanent	Forest
Potash Brook CR -HLT & Trustees	Several abutters	64	No	Permanent	Forest
Hull Forest CR - DCR	Hull Forest Products	165	No	Permanent	Forest
Loud CR - HLT	Loud family	35	No	Permanent	Forest
Graves Farm CR* - Audubon	Alcroft family	40	No	Permanent	Forest
Warren CR - HLT	Warren family	56	Yes	Permanent	Public trail, forest
Melnick CR* - Kestrel	Melnick family	204	Limited	Permanent	Forest, trails
<b>Municipal Conservation Land</b>					
Town Well	Water and Sewer Dept	145	Limited	Permanent	Water supply protection
Unquomunk Watershed Lands	Water and Sewer Department	606	Yes	Unclear	Trails, forest, reservoir
Town Woodlot	Select Board	130	Yes	Unclear	Trails, forest
Briar Hill Consv Area	Conservation Commission	50	Yes	Unclear	Public trail
Horse Mountain*	Conservation Commission	34	Yes	Permanent	Public trail
Hall Consv. Area	Conservation Comm.	17	Yes	Unclear	Public trail
Northampton Water Dept*	Northampton Water Dept.	1533	Limited	Permanent	Public trail
<b>Other Town Lands</b>					
Dunphy school yard	Wburg Elem. School	7.6	Yes	Unprotected	School
Ames Field	Recreation Comm.	5.9	Yes	Unclear	Athletic fields
Mill River Park	Select Board/ town	4.5	Yes	Unprotected	Future park
James school yard	Select Board/ town	2.9	Yes	Unprotected	Town open space
Meekins riverside park	Select Board/ town	tiny	Yes	Unprotected	Town parklet
Veterans Mem. Park	Town Beautification Committee	tiny	Yes	Unclear	Town parklet
Angel Park	Town Beautification Committee	tiny	Yes	Unprotected	Town parklet
Village Hill Cemetery	Cemetery Comm.	15.7	Yes	Unclear	Cemetery
Old Village Hill Cemetery	Cemetery Commission	2	Yes	Unclear	Cemetery

Property name	Owner/ Manager	Acres	Public access	Level of protection	Use
High St. Cemetery	Cemetery Comm.	2.4	Yes	Unclear	Cemetery
Mountain St. Cemetery	Cemetery Commission	0.3	Yes	Unclear	Cemetery
Haydenville playground	Volunteers	tiny	Yes	Unprotected	Playground
<b>State Conservation Lands</b>					
Conway State Forest*	MA Dept. Conserv. & Recreation	49	Yes	Permanent	Forest, trails
Williamsburg Wildlife Management Area	MA Dept Fish & Game (MassWildlife)	90	Yes	Permanent	Forest, hunting
Brewer Brook Wildlife Management Area*	MA Dept Fish & Game (MassWildlife)	292	Yes	Permanent	Forest, hunting
<b>Nonprofit Conservation Land</b>					
Petticoat Hill Reservation	Trustees of Reservations	51	Yes	Permanent	Public trails, forest
Graves Farm	MA Audubon	550	Yes	Permanent	Public trails, forest
Bradley Sanctuary	Hilltown Land Trust	41	Yes	Permanent	Public trails, forest
Breckenridge Sanctuary	Hilltown Land Trust	67	Yes	Permanent	Public trails, forest
Old Wolf Hill Conservation Area*	Kestrel Land Trust	226	Yes	Permanent	Forest

\*These properties have additional, adjacent protected land in a neighboring town

## Williamsburg Trails

In addition to the land noted above, Williamsburg boasts an extensive network of woodland trails on public and private lands that wind through our forests, climb ridges, follow streams and connect the special and beautiful places in town. These trails, old roads and farm lanes have become paths used by hikers, joggers, skiers, snowshoers, hunters, horseback riders, birders, cyclists, motorized bike and ATV riders, and snowmobilers. Some of these trails are on conservation land owned by area land trusts or the Williamsburg Conservation Commission, while others are on private land. Some trails on private land have formal public use easements while others have less-formal agreements for public use. Some trails are restricted to certain types of uses.

The Williamsburg Woodland Trails Committee, an official town committee, works with interested public and private property owners to enhance woodland trail opportunities in town. The Trails Committee also regularly sponsors hikes and assists with maintenance projects on public or private trails. A listing of publicly accessible trails is available at [www.williamsburgwoodlandtrails.org](http://www.williamsburgwoodlandtrails.org).

**Table 17: Trails maintained by Williamsburg Woodland Trails and partner landowners**

Trail Name	Location	Trail length	Conservation Status	Landowner
Briar Hill Conservation Area	Briar Hill Road	1.4-mile loop	Permanently protected	Williamsburg Conservation Commission
Hall/ O'Neil Conservation Area	O'Neil Hill Road	3 miles of trails	Permanently protected and private with no protection	Wburg Conservation Commission, MA Audubon, private landowners
Big View	Unquomunk Road	1.5-mile loop	Ten-year trail easement until 2028	Private ownership with Hilltown Land Trust Trail easement
Historic Dam Trail	Ashfield Road	1.5 miles of trails	Ten-year trail easement until 2029	Private ownership with Hilltown Land Trust Trail easement
Bradley Sanctuary	Old Goshen Road	1.8 miles of trails	Permanently protected	Hilltown Land Trust
Breckenridge Sanctuary	Old Goshen Road and Route 9	1-mile trail loop	Permanently protected	Hilltown Land Trust
Petticoat Hill and Locke's Loop	Petticoat Hill Road	1.5-mile loop	Permanently protected	The Trustees of Reservations, Private Land (Locke's Loop)
Graves Farm Wildlife Sanctuary	Adams Road	2-mile loop	Permanently protected	MA Audubon Society
Henhawk Trail	Nash Hill Road	2 miles	Permanently protected	City of Northampton
Horse Mountain Conservation Area	The Lope	1 mile in Williamsbg	Permanently protected	Williamsburg Conservation Commission

## Regional recreational facilities and attractions

Williamsburg residents benefit from the proximity of Look Park in Northampton, the DAR State Forest in Goshen, and the Connecticut River with its growing number of marinas, landings and camping spots. These outstanding and varied public amenities provide most kinds of outdoor recreational opportunities and facilities that Williamsburg lacks, all within a ten-mile radius. Skinner State Park, Mount Tom and Mount Sugarloaf offer breathtaking views of the valley (including some of Williamsburg) to hikers and motorists alike. Anywhere in the central or northern Berkshires is within an hour's drive.

## SECTION 6: COMMUNITY VISION

### A. Description of Process

The Williamsburg Open Space Committee conducted a community survey and hosted a public visioning session to obtain community input to update the Williamsburg Open Space and Recreation Plan. Public meetings for the Municipal Vulnerability Preparedness plan being developed concurrently provided additional public feedback for the Open Space and Recreation Plan.

The community survey was available on-line and in paper form at several public locations around town from mid-July through early September 2019. Nearly 230 completed surveys were submitted in response to five questions designed to solicit basic information about community interests and needs relative to open space and recreation in Williamsburg. The survey also offered a mechanism for community input for people unable to attend the public visioning session and generated awareness about open space and recreation planning within the community.

The Pioneer Valley Planning Commission (PVPC) requested input on the plan update from the Massachusetts Division of Fisheries & Wildlife Natural Heritage & Endangered Species Program (NHESP). This state agency provided the town's BioMap2 report along with a statement about the species listed under the Massachusetts Endangered Species Act and information on Priority Natural Communities, Certified and Potential Vernal Pools, Coldwater Fishery Resource streams, and other aspects of biodiversity that are important in Williamsburg.

The PVPC and the Open Space Committee issued a press release to local news outlets on July 24<sup>th</sup>, 2019 announcing the beginning of the Williamsburg OSRP update process, requesting participation in the Open Space and Recreation Survey and attendance at the September 12<sup>th</sup> Public Visioning Session.

The online survey was live from mid-July 2019 through September 15, 2019, and elicited 229 responses. The committee encouraged public participation in the survey via the following outlets:

- Email to Town Board/Committee chairs encouraging members of their committees to take the survey and generally spread the word to town residents
- Facebook posts on All Things Williamsburg and What's up in the Hilltowns groups
- Email sent to the Williamsburg Woodland Trails list
- Hard copies available at library and town offices

When the first wave of responses seemed to be most reflective of non-motorized outdoor enthusiasts, the Committee made an additional effort to reach a more diverse audience by:

- Extending the survey deadline
- Re-posting on All Things Williamsburg

- Re-emailing the town boards and committees
- Emailing Council on Aging director to see if she could send to any Council on Aging distribution lists and encourage submissions from Senior Center members
- Sharing the survey link with the School PTO's facebook group
- Sharing the link with the chair of a local snowmobile club with a request to share with members.

Survey respondents enjoy a range of outdoor activities with non-motorized trail use, walking along roads or sidewalks, wildlife viewing and swimming being some of the most popular. Rivers, streams and hiking trails were recognized as the types of spaces used most often in Williamsburg, though small parks and playgrounds were noted as important by many. Of the nineteen choices offered in response to the question “please rate the importance to you of the following” the top six responses related to the protection of Williamsburg’s water quality, forests, wildlife habitat, farmland, rural character and scenic views (in that order). Of note, values to respondents, followed by preserving Williamsburg’s rural character, maintaining/expanding non-motorized trails, and protecting scenic vistas. Potential impacts of climate change, invasive species management and wildlife habitat management were the topics survey respondents were most interested in learning more about. More than a third of survey respondents answered an open-ended survey question in which clear themes emerged. People in Williamsburg are very appreciative of the extensive woodland trails in town and excited about the Mill River Greenway offering a safe way to bike or walk between the two village centers. There is a strong desire for improved public access to rivers and streams and interest in maintaining open spaces in the town center.

Thirty-one people attended a public visioning session on Thursday, September 12, 2019 at the Williamsburg Town Offices in Haydenville. Participants placed dots on maps to identify where they live, the places in the town where they recreate or that they otherwise appreciate, and areas that are vulnerable or of concern. Open space and recreation successes and goals were included in a brief presentation, before attendees chose one of four small groups for more in-depth discussion: Land Conservation, Recreational Facilities, Stewardship of Williamsburg’s Natural Resources, and Protection of Water Resources. Through a structured series of questions about each topic, community members provided feedback on open space and recreation assets, needs, challenges, and future funding priorities.

Most of the results of the questionnaire were reflected in the discussion at the visioning session. Protecting the Mill River as an important wildlife corridor and recreational resource was clearly identified as a priority. Additionally, there were a number of comments about increasing trail connections and wayfinding signage associated with the town’s impressive trail network, and improving accessibility of existing recreational resources to accommodate people of all abilities.

Williamsburg’s historic development pattern of industrial mills clustered along the Mill River has resulted in a series of village centers along the river, somewhat disconnected from each other but for the highly traveled Route 9. The Mill River Greenway, a multi-use trail for non-



motorized uses, is poised to connect the village centers of Haydenville and Williamsburg. Development of this greenway was a major recommendation of Williamsburg's 2011 Open Space and Recreation Plan and is in the process of becoming a reality thanks to the dedication of many talented volunteers and enthusiastic support from the community. This path is intended to offer an accessible recreational resource, a safe, non-motorized transportation option, and a connection between the village centers.

## **B. Statement of Open Space and Recreation Goals**

Williamsburg's residents seek to support and encourage a range of outdoor recreational activities for residents and visitors. The Mill River and the town's mill town heritage and historic architecture are central features of the town as are the growing network of woodland trails. There is strong interest in expanding public spaces for recreational opportunities and community gatherings, particularly in village centers and along the Mill River corridor. Residents are eagerly anticipating extension of the Mill River Greenway to the center of Williamsburg which will provide a safe, accessible alternative to driving between the two villages as well as public recreational opportunities along the river. This plan supports the concentration of development and growth in the village centers while prioritizing natural resource protection in other parts of town to maintain important watershed functions, wildlife habitat and the rural character that defines the town. Protection and sustainable management of working farms and forests are important to the town's economy, rural heritage, and offer local food and wood products. Protection of forest land helps combat both the sources and effects of climate change by reducing flooding, mitigating temperature extremes, and sequestering carbon from the atmosphere. The town's growing network of well-maintained woodland trails offers outdoor recreational opportunities for residents and visitors and showcases the natural beauty and ecological health of the town.

## SECTION 7: ANALYSIS OF NEEDS

### A. Summary of Resource Protection Needs

As stated in the goals of this plan and the previous sections, there is a need to safeguard Williamsburg's forested landscape, remaining farms and fields, water resources, and wildlife corridors. Forest products, agricultural goods, and water have long been Williamsburg's most important products. As open spaces are developed, demand for Williamsburg's drinking water resources increases from within Williamsburg and from Northampton which has extensive water supply lands in Williamsburg. In addition, wildlife habitat and outdoor recreation are important services that our open spaces provide, enriching our lives and supporting our local residential and tourism economy.

Williamsburg is fortunate to have extensive undeveloped land in the regions of town demonstrating the greatest ecological value. However, only a portion of this land is permanently protected. While much of this ecologically valuable and undeveloped land is in Chapter 61, that is a temporary designation with limited protection against future development. Chapter 61 programs give the town a right of first refusal to purchase any enrolled land before it is converted to another use, a right they can assign to a land conservation organization, but it is challenging for either the town or local land trusts to act quickly enough to protect a property this way. In addition, a landowner has the ability to remove their land from this temporary protection status if they can anticipate a desire to develop their land.

Another area of opportunity is improving the management of Williamsburg's vast forested areas. Many forested properties have no management plan or a plan that is rarely acted upon. Selective and sustainable harvesting of timber products on some properties could improve wildlife habitat and provide additional income to the landowner and the town. Other forested properties would be appropriate as wildland reserves with no intended harvesting. Future forest management practices such as thinning treatments or invasive species control should be tailored to address new threats associated with climate change. Other examples of climate-resilient land management practices include protecting and maintaining cold water stream habitat, managing herbivory to improve tree regeneration, and preventing the introduction of invasive plants.

Increased interest in and incentives for renewable energy generation has yielded multiple efforts to convert forested land in Williamsburg to large scale solar installations. Town committees including the Conservation Commission, Open Space Committee, Planning Board and Zoning Board have few tools to regulate the siting of these large solar arrays. An ecologically devastating solar installation in the northwest corner of town has raised concerns about where these developments should be allowed and how their installation should be monitored.

The growing market for local foods offers an opportunity to help slow the loss of remaining farmland with continued support to town farms. In 2011, 2012, and 2013 the “Burgy Thursday” Farmer’s Market was stationed on the lawn of the Meekins Library. This was a fantastic community resource and focal social gathering spot, but ultimately folded due to lack of customer base to sustain the participating farms. Since then, a pop-up farmer’s market has travelled to various hilltown locations with greater success.

There continues to be a significant need to work with interested landowners to expand areas for protection, link these protected parcels, and to do so in ways that most effectively protects the town’s forest, farm, water and wildlife resources, specifically those that are most vulnerable to climate change. There is also a need to work closely with private landowners to enhance their abilities to care for their land in ways that effectively safeguard our open space resources. A focus on protecting climate resilient lands, as depicted in Section 4, above, should be central to future land protection decisions.

It’s notable that the several highest responses to the survey question about open space and recreation priorities were about preserving and protecting Williamsburg’s resources -- farmland, forest, water quality, wildlife habitat, and rural character. Town residents appreciate what we have and don’t want to lose it.

## **B. Summary of Community’s Needs**

### Connectivity and accessibility:

There is a limited sidewalk network in town and a need for new or extended sidewalks on roads connecting to Williamsburg and Haydenville centers. This is especially needed to ensure safe walking routes to the Williamsburg Elementary School for students and for easier routes around the village for elderly and disabled residents. The town has made recent improvements to sidewalks and cross-walks in the center of Williamsburg and Haydenville including a user-activated flashing beacon at Route 9 by the Williamsburg Market, improved sidewalks, and clearer cross-walk marking. Physical constraints of limited roadside space, poor sight lines, and hills make other needed improvements challenging.

The Mill River Greenway, when completed, will be a fully accessible shared use path from Haydenville to Williamsburg, that meets Massachusetts Department of Transportation accessibility standards. In addition, the town hopes to make the new Mill River Greenway park in Skinnerville accessible.

Going forward, attention should be paid to ways in which current and future community recreational facilities and resources could be made physically accessible to more residents and visitors.

### Recreational Resources:

Recreational resources throughout town continue to be valued by residents. The tennis courts at Ellen Ames Field in Haydenville see considerable activity and fields are used for pickup soccer and ultimate frisbee as well as youth T-ball in the spring. However, increasing intensity rainfall events in recent years has led to drainage issues at the field which should be resolved to ensure the continued safety and suitability of the space for a variety of public activities. Visioning session participants also noted the scenic and woodland trail network, A.T. Dunphy School grounds and playground, public gardens, Angel Park, and the Mill River dam disaster site as some of the towns other greatest recreational assets.

The Williamsburg Recreation Commission continues to support youth and adult recreational activities in Williamsburg. As in years past, the limited number of Williamsburg youth participating in athletics means that those who are interested in organized sports often join teams and leagues in other parts of the region. Williamsburg youth participate in soccer in the Northampton Youth Soccer Association as well as Hampshire United in the Pioneer Valley Junior Soccer League. Parent volunteers have helped run basketball and T-Ball teams for Williamsburg elementary school-age youth. There is a regular need for more parent volunteers to be able to offer youth sports programs.

Survey responses and the visioning discussions noted interest in ice skating and recreational river access, especially swimming. Public input through the update process also revealed an interest by residents in Haydenville in upgrading the town owned area behind the Town Offices with improved playground equipment.

#### Adult Programming:

Demographic trends suggest that additional adult programs would help satisfy the recreation demands of an aging population (see Section 3-C, Table 2). The Williamsburg Council on Aging offers adult classes in yoga, healthy bones and balance, modern dance and Tai Chi, at the Haydenville Town Offices. There is very little space to practice these forms of exercise outdoors. Seniors who do not drive are unable to walk from Haydenville to the center of Williamsburg to shop at the market, visit the library or school gym; or from the center of Williamsburg to Haydenville in order to participate in programs at the COA. Many seniors could take the PVTa bus between Haydenville and Williamsburg, but it has limited service. Having more easily accessed outdoor spaces for recreation as well as expanded sidewalks and multi-use pedestrian connections for use by foot, bicycle or motorized chairs around and between the village centers would allow citizens with limited mobility to be more involved in community events, recreational programs and regular exercise regimes.

#### Trails:

The Williamsburg Woodland Trails Committee has made substantial improvements to the town's network of trails, which figured strongly in both the survey and the visioning session. The town now boasts ten public woodland trails including the newly opened Horse Mountain trail which connects to a network of public trails in Hatfield. However, Williamsburg's hilly terrain is particularly challenging for people with restricted mobility and none of the woodland trails are accessible. The Mill River Greenway will offer an accessible trail option and there is considerable interest within the Woodlands Trail Committee in doing an accessible trail project should the opportunity arise and resources become available.

#### Access to information:

Residents continue to note a need for more public information about the locations of and access to trails, as well as information about community recreation facilities and activities. However, the need may be getting the word out about existing information resources rather than a lack of information. The town website, [burgy.org](http://burgy.org), offers some basic trail information and directs people to the woodland trails committee website, though that connection could be clearer and strengthened. The Williamsburg Woodland Trails website has information and maps for each trail in Williamsburg. All of the trails in town that are under the umbrella of the Woodland Trails Committee have trailhead kiosks with the exception of Big View. The owners of this private property are interested in a trailhead kiosk to better inform visitors.

In addition, there are plans to place an informational kiosk at the Williamsburg end of the Mill River Greenway, presently assumed to be at the old James School location. The kiosk could provide residents and visitors with information about the Greenway, woodland trails, historical sites, town parks and gardens and more.

#### 2017 State Comprehensive Outdoor Recreation Plan (SCORP)

Some of the regional recreation needs identified in the 2017 State Comprehensive Outdoor Recreation Plan (SCORP) play out in Williamsburg. Statewide participants in a recreation user survey indicated a preference for walking or jogging (on trails and greenways), hiking, and walking or jogging (on streets and sidewalks) among all other forms of recreation. Nearly 85% of respondents said that providing more programming for senior citizens was either a somewhat or very important priority. Even more requested is programming for teens, with 91% saying that it was either a somewhat or very important priority. Improvements in recreational trail accessibility, park safety and maintenance, and public waterway access for swimming and small boat launching (canoe and kayak) were noted.

The 2017 SCORP state-wide survey also asked respondents what types of projects they would like to see funded in the future, and responses mirrored the activities users are currently undertaking. The top responses fell into three categories: 1. trails (hiking, biking, paved walkways, trails with access for people with disabilities, and mountain biking), 2. playgrounds (for ages 2-5, designed for people with disabilities, for ages 6-12, and for ages 6 months to 2 years), and 3. water (swimming pool, canoe/kayak access, and fishing areas). Many of these needs were echoed at Williamsburg's 2019 OSRP public visioning session, where participants of multiple breakout groups called for improving trail signage and connections, increased accessibility of trails and sidewalks, and formalizing public access points for swimming.

The previous version of the SCORP, published in 2012, provided a snapshot of recreation needs for each region across the state. The highest levels of dissatisfaction for the Connecticut River Valley region were reported for golf courses and parks, then for lakes and ponds, followed by rivers and streams, and finally for bikeways. Residents report being most satisfied with historic and cultural sites, mountains, and trails and greenways resources.

Respondents to the 2012 SCORP survey placed the highest priority for new facilities on road biking (14.5%), walking (13.9%), swimming (13.8%), playground (11.3%), hiking (10.0%), and mountain biking (10.3%). A middle tier of priorities includes golfing (8.2%), tennis, picnicking and fishing (5.5%), and camping (5.3%). These facilities needs are converted into "Inferred" resource area needs, i.e. those natural or developed areas that can supply, and are conducive to, the desired recreation activities. Highest among these for the Connecticut Valley Region are rivers and streams, then parks and golf courses, then agricultural lands, followed by trails and greenways, and finally lakes and ponds. Note also that the regional needs for hiking, mountain biking (10.3%), and cross-country skiing (4.1%) rank higher than in any other region.

### **C. Management Needs, Potential Change of Use**

With continued subdivision and residential development along roads in town, there exists the potential for losing existing trails and trail access points. Several of Williamsburg's well-used trails have no formal protection status. One possible solution for maintaining the network of

trails in town is the sale or donation of trail easements (rights-of-way) that would allow public use of trails subject to specified conditions. Funding these easements could be public or private or a combination of the two. In 2018, the Williamsburg Woodland Trails Committee and Hilltown Land Trust worked with two private landowners to place 10-year trail easements on two of Williamsburg's most popular trails, both of which were on private land with tenuous agreements. The Big View and the Historic Dam trail are both protected until 2028 with the hope that a more formal protection status can be achieved before the easements expire.

An outgrowth of Williamsburg's 2011 Open Space and Recreation Plan was the formation of a town committee to explore a future multi-use path extending from the Northampton town line to the center of Williamsburg and connecting the village centers of Williamsburg and Haydenville. This committee has made tremendous progress towards achieving this goal in the past nine years including construction of the first section of the path from the Northampton town line to South Street in Haydenville and work with the Massachusetts Department of Transportation to include development of the greenway in the 2025 redesign of Route 9. The Mill River Greenway is on schedule to be completed in 2026 with virtually all of the funding coming from federal, state and private sources and not draining limited town funds.

In preparation for the future Mill River Greenway, in 2018, the Town of Williamsburg purchased a 4-acre property in Skinnerville along the opposite side of the Mill River from the greenway. This property will be connected to the future greenway by a foot-bridge and should provide 4 acres riverside open space to be developed into a community park.

While the future greenway and Mill River Greenway Park enhance public access to the Mill River, it will be centered along the Route 9 corridor which can be noisy. There is additional demand for public access to water resources for swimming, wading, fishing and general enjoyment in less developed parts of town.

This Open Space and Recreation Plan will help Williamsburg qualify for state and federal funding that can be used to buy land and easements, develop new trails or improve existing ones, and improve playgrounds and/or other recreational facilities.



## SECTION 8: GOALS AND OBJECTIVES

**Goal 1:** Legal protection of Williamsburg’s exemplary natural resources and open spaces.

Objectives:

1. By 2050, permanently protect 50% of the land in Williamsburg with at least 10% of that land managed as wildland reserves.
2. Identify and protect critical wildlife habitat.
3. Protect land adjacent to surface waters from development.
4. Engage Williamsburg’s Historical Commission and Historic Society in planning to provide appropriate public access and/or protection of important historic resources.
5. Provide information and technical assistance to property owners interested in land protection to assist them with their conservation goals.
6. Use the protection of open space as a tool to reduce community costs associated with stormwater infrastructure, flooding, road maintenance, schools, social services, etc.
7. Use state, federal and non-profit funding to support land conservation goals.
8. Collaborate with Mill River Greenway Committee, Conservation Commission, Woodland Trails Committee and other town boards and committees to prioritize land to protect for maximum impact.
9. Promote permanent conservation of riparian corridors to protect water quality and wildlife habitat and provide recreational access to riverfront areas.

**Goal 2:** Sustainable management of Williamsburg’s exemplary natural resources and open spaces.

Objectives:

1. Inventory and maintain street trees in Williamsburg and replant trees that have died due to disease and/or age.
2. Promote and support working farms and forests.
3. Ensure land identified as critically important for wildlife habitat is well-managed to lessen the impacts of invasive species and withstand the impacts of climate change.
4. Establish programs for the management and eradication of invasive species.
5. Establish a network of volunteers to help manage, monitor, and where appropriate, facilitate public use and enjoyment of natural areas.
6. Implement activities to restore and enhance ecological function of town-owned open space land including the new town park along the future Mill River Greenway.
7. Create a comprehensive forest management plan for town-owned forest land owned by the water and sewer department and conservation commission.

**Goal 3:** A range of recreational opportunities are offered to all town residents.

Objectives:

1. Make efforts to ensure that town recreational facilities are well maintained and accessible to people with disabilities.

2. Support the completion of the Mill River Greenway
3. Maintain existing woodland trails such that they are safe, sustainable, and well-marked
4. Provide easily accessible information to town residents about location and permitted uses of Williamsburg recreational facilities and public trails.

**Goal 4:** A town master plan that promotes the protection and enhancement of Williamsburg's exemplary natural resources and open spaces and is developed through an inclusive process.

Objectives:

1. Develop a comprehensive plan for the town that supports open space goals and is linked with the town's Municipal Vulnerability Preparedness (MVP) Plan.
2. Ensure Williamsburg's Zoning Bylaws, policies and regulations are supportive of open space and recreation goals and support the Town's climate change resiliency, particularly minimizing the conversion of high quality farm and forest lands to other uses.
3. Maintain vibrant village centers that value surrounding natural resources.
4. Work with town leaders to pursue adoption of the Community Preservation Act in Williamsburg.

**Goal 5:** Future investments in open space and recreation combat the sources and effects of climate change.

Objectives:

1. When considering land for protection, evaluate its resilience to climate change and role in connecting large blocks of protected land that are regionally important for wildlife movement.
2. Manage Williamsburg's forests and public trees to enhance and promote carbon storage and sequestration.
3. Ensure open space and recreational facilities are accessible to residents by foot, bicycle, and public transportation to encourage alternatives to single occupancy vehicle trips.
4. Prioritize protection of floodplains and floodplain buffers to benefit water quality and wildlife habitat and reduce impacts of more frequent and severe flooding events.

**Goal 6:** Town residents are informed about and engaged in a range of open space issues, needs, and opportunities in Williamsburg

Objectives:

1. Provide and promote educational opportunities for residents and town officials on land management options including invasive species, forest management, and sustainable agriculture.
2. Inform residents and officials from all town committees about the OSRP and engage interested community members in activities outlined in the Action Plan.

3. Provide technical assistance on land conservation options and strategies to landowners interested in protecting high priority areas.
4. Support the production and promotion of local farm and forest products through available networks and regulations
5. Support and engage residents in efforts to initiate community enhancement projects associated with use of public open spaces (e.g. ice rink, community gardens).

**Goal 7:** Williamsburg collaborates with neighboring towns to protect and manage natural resources and recreational offerings.

Objectives:

1. Establish a Mill River Watershed Council to increase collaboration among all towns in the watershed regarding land management practices, regulations, funding, public education and other influencers of the watershed's climate resilience.
2. Pursue opportunities to connect Williamsburg's trail network to trails in neighboring towns.
3. Prioritize land protection that enhances wildlife corridors and connects large blocks of protected land



**Photo by Jenn Drumm**

## Section 9: Seven-year action plan

Action items noted in **bold** were discussed at one or more public meetings and are high priorities.

ACTION	RESPONSIBLE PARTY	Timing	Potential Funding
<b>Planning and Zoning</b>			
<b>Contribute to the development of a town master plan that builds on the work of this plan and Williamsburg's Municipal Vulnerability Preparedness (MVP) plan.</b>	Open Space Committee	2022-2023	MVP, other state funding sources
Update Williamsburg's protocol for removal of land from Chapter 61 and ensure the protocol remains relevant as regulations change.	Open Space Committee, Select Board	2021	No outside funding needed
Review town's zoning to determine consistency with open space goals. Make recommendations for revision and/or new bylaws to encourage protection of natural resources and vibrant town centers with mixed-use growth.	Planning Board, Zoning Board, Board of Select Board, Open Space Committee	2021-2023	District Local Technical Assistance Grant
<b>Develop bylaws or siting guidelines for renewable energy, cell towers, and related infrastructure that prioritize and ensure protection of the town's open spaces and natural resources.</b>	Open Space Committee, Conservation Commission, Planning Board, ZBA	2021-2022	District Local Technical Assistance Grant
Encourage reuse of vacant buildings in village centers; promote and develop community events in village centers.	Planning Board, local businesses	2021-2027	MA Historic Comm, DLTA, Hilltown CDC
<b>Pursue adoption of the Community Preservation Act.</b>	Select Board, Finance Cmte, OSC, Hist Commission, Rec Commission, others	2022-2024	
Evaluate accomplishments, current needs, and revise action plan accordingly.	Open Space Committee	annually	
<b>Land Conservation</b>			
<b>Protect important wildlife habitat, areas that preserve or expand wildlife corridors, and areas noted for climate change resilience.</b>	Land trusts, state conservation agencies, Conservation Commission	2021-2027	State, federal, private grants, CPA, pvt funding

## 2021 Williamsburg Open Space & Recreation Plan

ACTION	RESPONSIBLE PARTY	Timing	Potential Funding
<b>Protect land of important recreational or historic value, particularly areas suitable for trails and providing access to water resources.</b>	Area land trusts, state conservation agencies, Conserv Commission	2021-2027	State, Federal and foundation grants, private funding
Develop a network of residents to monitor land use changes and opportunities for land conservation.	OSC, Conservation Commission, Land Trusts	2021-2027	N/A
Adjust Williamsburg's land protection targets (for sustainably managed forest, farmland, and wildland reserves) as new conservation data emerges.	OSC with support from Harvard Forest, TNC and other conservation groups	2022-2028	N/A
<b>Management of Natural Areas</b>			
<b>Turn new town land along Mill River into a town park connected to the Mill River Greenway that is accessible to people with physical disabilities.</b>	Open Space Committee	2021-2027	PARC/ state grants, CPA, habitat mgmt funding
<b>Develop management plans for town-owned forests, conservation land, and watershed lands that identify multiple resource objectives and increase community resilience to climate change.</b>	Water & Sewer Commission, Conserv Commission, OSC, Working Forests Initiative	2021-2024	Timber harvest revenues, DCR Forest Stew. Program
Help forest landowners access information on forest management options including Forest Management or Stewardship Plans.	OSC, DCR Working Forests Initiative	2021-2027	DCR Forest Stew. Prog, Working Forests Initiative
Support organizations, agencies, and volunteers working to raise awareness of and action to eliminate invasive species.	Open Space Committee, Conservation Commission	2021-2027	N/A
Maintain street trees and replant as needed with native species	Town beautification volunteers	2021-2027	
Support organizations and agencies involved in water quality monitoring, improvement, and pollution source tracking efforts in Williamsburg.	Riverways Program, PVPC, CT River Conservancy	2021-2027	DEP 604b Grant
<b>Management of Recreational Areas and Facilities</b>			
Evaluate flooding issues at Ames Fields and implement green infrastructure and/or traditional measures to improve.	Recreation Commission	2021-2023	MVP, PARC grants

## 2021 Williamsburg Open Space & Recreation Plan

ACTION	RESPONSIBLE PARTY	Timing	Potential Funding
Determine future use of public ice-skating rink at James School and identify parties interested in maintaining this or alternative skating location.	Recreation Commission	2021-2023	PARC Grant
Explore options for development of a frisbee golf course in Williamsburg	Recreation Commission	2021-2024	Private funding, PARC grant
Identify site(s) for community garden(s) and create if there are sufficient gardeners and volunteers to sustain.	Volunteers	2024-2026	Private or foundation funding if needed
<b>Assess public access to rivers and streams and expand access where possible including Mill River Greenway Park.</b>	OSC, MRGI, Conservation Commission	2021-2024	PARC or other state grant
Explore options for an accessible trail at the Graves Farm.	Woodland Trails Cmte, MA Audubon	2025-2027	MassTrails Grant
<b>Improve accessibility of Ames Field facilities including bathrooms.</b>	Recreation Commission	2024-2027	PARC grant
Add new Woodland trails to Williamsburg's network where the benefit is high and ongoing burden is low.	Woodland Trails Committee	2021-2027	Funding depends on site specifics
Support the extension of sidewalks near village centers to enhance walking options.	Planning Board, Highway Department, Select Board	2021-2027	Safe Routes to Schools, MA DOT funding sources
<b>Education and Outreach</b>			
Raise awareness among landowners, residents and town officials about land conservation and management options through informal gatherings and organized events.	Open Space Committee working with area conservation organizations	2021-2027	Local land trusts
Support and promote efforts to assist local farm and forest operations, such as farm and forest tours, business workshops, grant program outreach, farmers markets, etc.	CISA, MA Dept. of Agricultural Resources, Meekins Library,	2021-2027	N/A
Encourage farm land owners to take advantage of grant programs through MA Dept. Agricultural Resources.	Agricultural commission	2021-2027	MA Dept. of Ag Resources
Make OSRP available at Town offices, libraries and town website.	Open Space Committee	2021	N/A



## 2021 Williamsburg Open Space & Recreation Plan

ACTION	RESPONSIBLE PARTY	Timing	Potential Funding
Continue to improve trail way-finding maps, kiosks, and other strategies for people to learn about public trails.	Woodland Trails Committee	2021-2027	Town and private resources
Organize and promote guided walks for awareness of ecology, land management issues, and recreational opportunities on public trails.	Trails Committee, local hiking & conservation groups	2021-2027	N/A
Continue regular Open Space Committee meetings, coordinating with town committees, residents and conservation organizations.	Board of Selectmen; Open Space Committee	2021-2027	N/A
Reduce runoff from roads/ parking lots and adopt road maintenance practices that are ecologically responsible and economical.	Conservation Commission, Planning Board, Highway Department, PVPC	2021-2027	MassDOT
Protect, nurture, and plant community trees on public property, selecting native species when possible	Shade Tree Committee, volunteers	2021-2027	
<b>Ensure landowners have current information on impacts of land management practices on climate resilience, carbon sequestration, and incentives for climate resilient management practices.</b>	OSC, DCR, conservation organizations	2021-2027	
<b>Regional Collaboration</b>			
Pursue opportunities to connect Williamsburg's trails to trail networks in neighboring communities.	Woodland Trails Committee	2021-2027	State grants and private funding
Participate in regional conservation efforts and collaborate with other towns to protect places of ecological, cultural, and recreational significance.	Open Space Committee, regional conservation organizations	2021-2027	State, federal, foundation grants, private funds
Support and participate in Mill River Watershed initiatives to address land conservation, land management, and public education issues on a watershed scale.	Mill River Greenway Initiative, OSC, local conservation organizations	2021-2017	

## SECTION 10: PUBLIC COMMENTS

See also open-ended responses to survey questions in Appendix 2.

### Comments from Public Visioning Session (9/12/19)

#### Land protection sub-group

##### Williamsburg Assets

- Healthy forests
- Clean, swimmable, fishable rivers and streams
- Substantial protected land
- Substantial unprotected (or temporarily protected) but undeveloped land

##### Williamsburg Needs

- Better management of open lands (town lands and private lands) for wildlife habitat, water quality protection, etc.
- Education/ information for landowners (including town) on appropriate land management practices for wildlife habitat management, healthy forests, maintaining water quality, etc.
- Realignment of habitat management decisions.
- Connecting wildlife corridors regionally including getting across Route 9
- Permanent protection of the ecologically valuable and unprotected land. Help people who own these lands understand the conservation options for their land and know that they own a community asset important for wildlife habitat connectivity or climate resilience or flood mitigation, etc. Help private landowners understand the value of their asset and ecological and potential benefits to protecting it.

##### How needs can be met

- Community education/ landowner education about their assets and land management practices
- Flood mitigation through land conservation or management – native plantings, bank erosion solutions, invasive species management

##### Challenges, threat, improvements

- Invasive species
- Small parcel sizes for protection
- Healing the river and making it as resilient and ecologically vibrant as possible
- River infrastructure such as bottlenecks at library bridges, narrow roadway along river
- Funding priorities of town are not land conservation/ the town does not have funds available for land conservation and many state and federal funders require matching funds

##### Priorities

- Public safety complex will be top funding priority for town in coming years
- Pass CPA to offer a source of town funding – there is more interest in this now from the Select Board and other town leaders
- Protect land along the Mill River corridor

## 2021 Williamsburg Open Space & Recreation Plan

- Protect land in important wildlife corridors/ connectors. Habitat connections can also provide recreational connections for trails and other forms of passive recreation.
- Trail connections particularly longer trails (like snowmobile trails)
- Improve work/ relationships with snowmobile clubs to share trails
- Consider restrictions or seasonal restrictions on some wildlife rich lands to benefit wildlife (if local wildlife experts feel this would be beneficial).

### Additional Comments

- We might want to use the terms wildlife or wildlife habitat more when describing the purposes of land conservation and not the term “open space” which is vague and can be viewed as “unused land” and an easy opportunity for future development.
- The strong, vocal interest in keeping Helen James School yard as public open space is a bit puzzling as it is such an underused open space (with a few exceptions when someone makes a big effort to organize something). HOWEVER, it is one of the few spaces where enterprising residents CAN hold community events.

## **Water Resources Breakout Group**

- Mill River watershed is primary asset
- Threats are Rt 9 traffic & treatment, abutters, and public

### Comments and Questions

- What are the “salt” rules for town and state roads?
- Are town by-law’s and zoning restrictions adequate to protect and provide public access?
- Do allowed uses provide adequate protection for riverbanks and erosion?
- What “incentives” to property owners are available (or necessary) to formally allow public access, like at the hardware store?
- Are tributaries monitored and protected?
- Are septic systems monitored for seepage or overflow?
- Are the town wells adequately protected?

### Needs:

- Raise public awareness of the importance and value of the rivers and streams in town.
- Use the elementary school as a way to educate children and parents
- Locations for allowed public access for swimming

## **Recreation Break-out Group**

### *What are the town's greatest assets?*

- Angel Park, including the summer music series there
- Dunphy School, and playground
- Ames Field – pickleball, tennis, etc. People are always using that space
- Trails and scenic walks, so many small loops
- Petticoat Hill
- New trails (dedicated by trails committee), some of which are multi-purpose and also good for birding
- Gardens – these are an example of an all-volunteer recreational asset. They raise about \$4,000/year from bottles and cans
- Mill River
  - Historic aspect of the river, including the Dam disaster site off Ashfield Rd.
  - swimming, fishing, wading locations

### *What are its greatest needs? How and where can these needs be met?*

- Hiking trails:
  - Kiosks – needed at trail heads, and at trail forks. Is there one at Unquomunk?
  - Parking needed at trail heads
- Brochure about all the recreational places in town
- More accessibility for people with mobility challenges. This is difficult because of the hilly terrain, but we could try to implement accessibility wherever it is appropriate. Greenway committee is looking at an accessible fishing area
- Survey existing facilities and determine which ones are amenable to retrofitting as accessible
- Trails for snowmobiles, linking to other trails in the region
- Resolve drainage issue at Ames Field. 2 areas of the field have flooded recently, potentially because of higher intensity rainfall events
- New pavilion in town, potentially at Ames Field, could include accessible bathrooms
- Action statement to include accessibility when planning new recreation facilities

### *What are the challenges?*

- Need more volunteers
- Not enough people to use existing recreational spaces and facilities
- Rapidly changing climate
- Expansion of FEMA Special Flood Hazard Area (SFHA, which includes the “100-year floodplain”)
- Planning for a future that is actually in flux
- Aging population, and this contributing to fewer volunteers

### *What improvements to access, public education, signage, etc. are needed?*

- Non-profit entity needed to manage assets
- Get more volunteers including courting more young people to volunteer

### *What should be the funding priorities?*

## 2021 Williamsburg Open Space & Recreation Plan

- Accessibility – building for the future of aging residents and changing climate. Expanding opportunity and the potential usability of existing facilities for users of all abilities and interests
- Maintaining existing assets and facilities
- Better marketing and advertising of facilities – rename all “fields” as “parks”
- Connecting Haydenville and Williamsburg

## Public comments submitted about the draft plan posting

OSRP committee members,

Excellent work on the OSRP!! Thank you so much for the extensive time and effort you put in to meeting the requirements of this documents and most importantly, understanding what town residents value and developing actionable goals and objectives that reflect those priorities.

In Section 5 - Add under parcels under temporary protection through the state: 22 acres protected under an agricultural covenant owned by Paul Zononi Sr. held by MDAR through the Farm Viability Enhancement Program. This short-term covenant will expire 3/13/2023. (This is the only current agricultural covenant held by MDAR.

Chapter 61 - I would clarify that this is not temporary *protection* but a tax rebate program

Thank you for including Goal 2 Obj 2 and Goal 6 Obj 4 related to the support and promotion of farms in town. The Agricultural Commission produced a brochure of farms in town several years ago. Wondering if this has been updated? If so, it could mention or, if not, updating it could be an objective (and distributed at library, to new residents, etc) in order to help build residents' awareness of existing farms and potentially help increase sales/visits for those farms selling their products through direct retail. You could check with Meg Taylor about the status of this brochure.

I particularly appreciate the following action and will personally be more proactive in sharing available MDAR grant opportunities with the Ag Commission to share with town farmers. "Encourage farm land owners to take advantage of grant programs through MA Dept. Agricultural Resources."

Thanks again! You should all feel great about this important contribution to the future of our town!!

Gratefully,  
Melissa Adams

From Barbara Bricker [chestnutcabin@gmail.com](mailto:chestnutcabin@gmail.com)  
Sat, May 8, 2021

Hi Sally,  
What a massive amount of interesting information. I confess I read lots of the material but did not read every word. I found many answers to questions which were in the back of my mind about the qualities and characteristics of town.



## 2021 Williamsburg Open Space & Recreation Plan

The plan is well thought out and touches on the breadth of Town needs and ambitions. Good luck in getting each and every goal accomplished.

Regards,  
Barbara

**From:** Meekins General Account <[meekins@cwmars.org](mailto:meekins@cwmars.org)>  
**Sent:** Tuesday, May 4, 2021 3:30 PM  
**To:** Sally Loomis <[sloomis@thetrustees.org](mailto:sloomis@thetrustees.org)>  
**Cc:** Beverly Bullock <[bbullock@cwmars.org](mailto:bbullock@cwmars.org)>  
**Subject:** Open Space draft: address correction needed re. Meekins Library (p.10)

Hi Sally-

Since the library addition in 2002/2003, the official address of the Meekins Library is 2 Williams St. This address change accommodates handicap accessibility and access to the parking area.

Bobbin

Bobbin Young - Technical Services  
She/Her/Hers  
Williamsburg Libraries - Meekins and Haydenville  
2 Williams St. PO Box 772  
Williamsburg, MA 01096  
413-268-7472  
[byoung@cwmars.org](mailto:byoung@cwmars.org)

## SECTION 11: REFERENCES

*A Plan for Open Space and Recreation* for Williamsburg, Massachusetts. 2004 and 2011.

*BioMap2: Conserving the Biodiversity of Massachusetts in a Changing World.* Massachusetts Department of Fish and Game, Division of Fisheries and Wildlife. The Nature Conservancy. 2010

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*Town of Williamsburg Local Natural Hazards Mitigation Plan Update.* Pioneer Valley Planning Commission. 2016

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*Town of Williamsburg Municipal Vulnerability Plan,* Prepared by Dodson and Flinker Landscape Architects and Planners, February, 2020