

OPEN SPACE AND
RECREATION PLAN
2021

Town of Uxbridge



TOWN OF UXBRIDGE OPEN SPACE AND RECREATION PLAN, 2021

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Uxbridge, MA 01569

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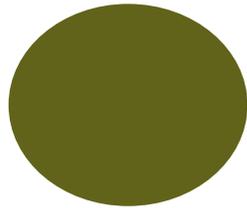
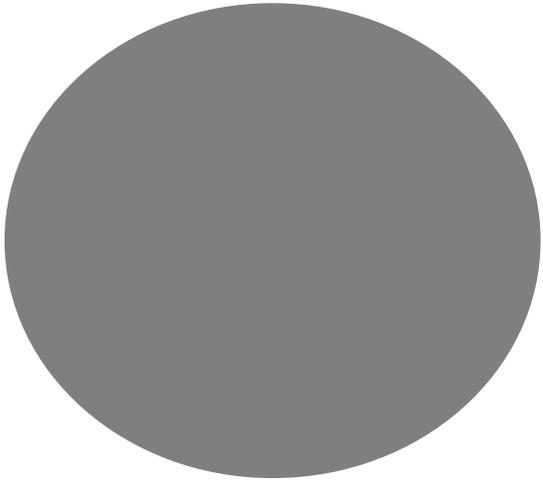


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SECTION 1: PLAN SUMMARY

Town of Uxbridge



SECTION ONE: PLAN SUMMARY

The goal of the 2021 Open Space and Recreation Plan is to lay the groundwork for action and participation. For the Town of Uxbridge to set a course for the future, this plan must be used and useful for years to come. Given Uxbridge's location at the center of the southcentral network of transportation, change will occur; how the changes are managed will help shape the face of the community.

This plan will serve as the first Open Space and Recreation Plan to be passed and implemented for the Town of Uxbridge. It builds upon a draft document completed in 2008 prepared by written by PGC Associates, LLC, a land use planning firm, and the Town's Conservation Commission. The Uxbridge Open Space and Recreation Plan follows Massachusetts requirements and guidelines, provides an inventory of open space and recreation resources, assesses community needs, establishes goals and objectives, and outlines a multi-year action plan.

Uxbridge's early days as a agricultural community established a small town feeling. Even though the Town changed from many years ago from rural to a suburban existence, there remains a strong desire, even among newer residents, to preserve and protect certain elements.

In summary, this plan

- Looks at Uxbridge through a bigger picture of regional issues, historical perspective and development patterns to see how, when and why change occurs;
- Reviews environmental and natural issues to better understand how we are affected by, and how we impact the natural world;
- Outlines existing conservation and recreation holdings, facilities and opportunities;
- Identifies community needs to better prepare for future change;
- Presents a specific set of goals and objectives to implement change.

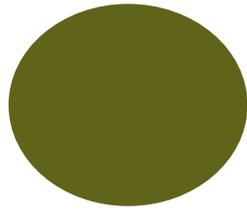
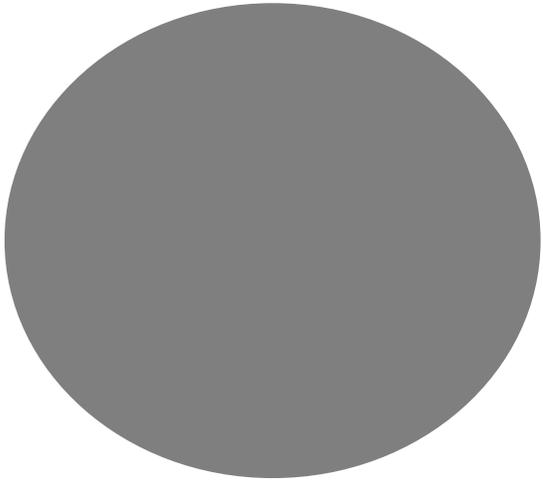
These goals and objectives will require that land use decisions to preserve land are made and that financial issues are debated. A strong message that has been clear in the last few months is that it the time is now to shape the future. It is hoped that this plan can play a role in the changes that will come.

Uxbridge's Open Space and Recreation Plan attempts to balance the conservation and development of land within the Town. The overall goals for this plan are as follows:

1. Preserve Water Resources, Wildlife Habitats, Forests, and Farmlands
2. Provide and Enhance Well-Balanced Recreation and Conservation Opportunities
3. Preserve the Rural Character of the Town
4. Improve Climate Resilience Town-Wide



These goals were developed based on input received through the community survey and through a two-day virtual public forum. Specific objectives were identified to help Uxbridge achieve these goals, and a Seven-Year Action Plan found at the end of this plan help to guide community activities that can advance these goals and objectives.



SECTION 2: INTRODUCTION

Town of Uxbridge



SECTION TWO: INTRODUCTION

A. STATEMENT OF PURPOSE

The purpose of this plan is to help ensure that the open space and recreation resources of Uxbridge are protected as the Town continues to face rapid development pressures as well as the impacts of sprawl. A previous open space plan was completed in 1984, and an updated plan was completed in 2008, although it was never passed or fully implemented by the Town. Though some recommendations from the 1984 plan were accomplished, those that were not implemented have been added to this updated Five-Year Action Plan. Actions and suggestions provided by participants at the virtual public forum have also been added to this Plan. While Uxbridge has experienced substantial development since the 1984 “Conservation, Recreation and Open Space Plan” was completed, significant areas of open space, rural character, relatively compact development and Town Centers that are either vital or have much potential for enhancement still exist. Without thoughtful planning and a vision to guide development, these important features could be lost, as they have been in many other towns.

The levels of growth in the Town of Uxbridge have given rise to new concerns about a broad range of planning issues. The most recent buildout analysis for the Town of Uxbridge was completed by the Central Massachusetts Regional Planning Commission in 2000 for the Massachusetts Executive Office of Environmental Affairs. This buildout analysis indicated that there were 11,147 developable acres in Uxbridge. Development of this land could increase the capacity to support a population of 23,390 and it would add 5.5 million square feet of commercial and industrial space. As the Town faces rapid growth, residents intend to reduce sprawl in order to maintain its rural character.

This plan intends to be a product of collective decision making that represents a common vision for the development and preservation of the Town’s land resources. It should also be noted that while this plan addresses the needs of Uxbridge, natural and recreational resources do not end at Town boundaries. Efforts to coordinate open space and recreation planning with other towns in the region are also strongly encouraged. Coordination and cooperation in planning may lead to improved resource management and enhancement of recreational opportunities across the region.

B. PLANNING PROCESS AND PUBLIC PARTICIPATION

In 2018, the Town of Uxbridge applied for and received a Planning Grant for the Municipal Vulnerability Preparedness (MVP) Program. This grant aided the Town in beginning the process of planning for climate change resiliency through identifying strengths, vulnerabilities, and priority projects. Once certified as an MVP community, the Town of Uxbridge applied for an MVP



Action Grant which assessed the community's water infrastructure. As part of a deliverable of their 2019 Action Grant, the Town decided to pursue completing an Open Space and Recreation Plan. The Town was awarded FY20 MVP Action Grant funds for the Open Space and Recreation Plan as part of their overall "Integrated Vector-borne Disease Management Plan" project.

Holly Jones, the Town of Uxbridge's former Conservation Agent, initiated the Open Space and Recreation planning process by starting a discussion with the Central Massachusetts Regional Planning Commission (CMRPC) about updating the Open Space and Recreation Plan in late January 2020. On March 4, 2020, Trish Settles, Deputy Director of CMRPC, and Danielle Marini, Assistant Environmental Planner for CMRPC, were invited to meet with Holly Jones and a small group of representatives to have a preliminary planning meeting for the OSRP. Trish Settles and Danielle Marini explained the requirements of an OSRP, described responsibilities of the Open Space Committee and of CMRPC, and listed the next steps in the planning process. In April, after funds were secured and contracts were signed, the Town of Uxbridge officially retained CMRPC to facilitate the development of the 2020 Open Space and Recreation Plan.

Danielle Marini of CMRPC worked closely with Uxbridge's Open Space Committee to complete the development of this Plan. Prior to the start of the planning process, the coronavirus pandemic began, affecting communities worldwide. Coronavirus (COVID-19) is a respiratory illness caused by a virus that can spread from person to person and could result in mild to severe symptoms. In Massachusetts, Governor Charlie Baker ordered all non-essential businesses and organizations statewide to shut down or work from home on March 23, 2020. This order was extended on March 31st, April 28th, and May 15th. As a result of this order, Uxbridge's Town Hall was closed, and public meetings were not allowed to be held in-person. In lieu of meeting in-person, the Uxbridge Open Space Committee held a series of public meetings virtually over Zoom. The Uxbridge Open Space Committee held its official kickoff meeting on May 8, 2020, and subsequent virtual public meetings were held on June 10th, July 8th, July 22nd, August 5th, August 19th, and September 3rd.

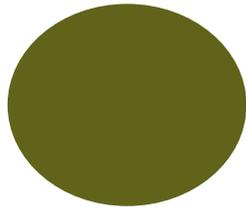
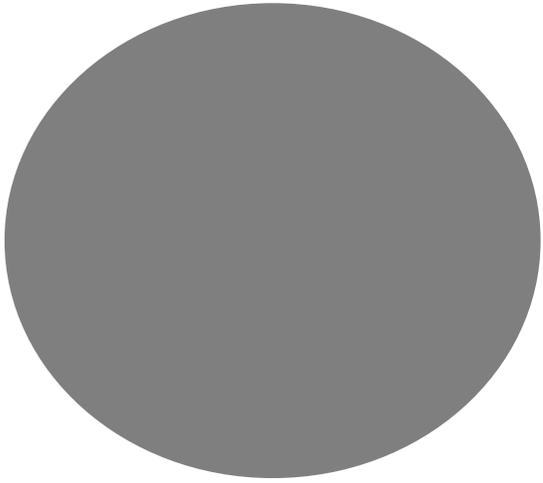
In addition to holding various public meetings, the Open Space Committee conducted two surveys, a long and short version of the same survey, to obtain residents' views concerning the preservation of open space in Uxbridge. Social distancing measures brought on by the COVID-19 pandemic created an obstacle in obtaining public input resulting in a largely virtual engagement effort. Both surveys were developed on Survey Monkey and links to access these surveys were emailed to residents, were posted on the Town's website, and were posted on various social media pages. Flyers and sign boards were also placed in parks and common areas around Town. These flyers and sign boards detailed information about the short survey and included both a link to the survey and a QR code which allowed residents to scan the code with their phone to pull up the short survey on their device. The surveys were open to collect responses from July 15th to August 15th. A total of 219 participants answered the short survey and another 133 participants responded to the long survey. Community survey findings are provided in Appendix A and will be further detailed throughout this plan.



C. ENHANCED OUTREACH AND PUBLIC PARTICIPATION

As mentioned above, the threat of the COVID-19 pandemic created obstacles for meeting in-person. Due to the significant challenges to holding in-person meetings, the Uxbridge Open Space Committee to host a public forum virtually in order to collect more community input. The Committee held a Virtual Public Forum over a period of two days, with a total of 20 participants. Day One of the public forum was held from 6:30 – 8:00 pm on September 15th. This day introduced the planning process, gave an overview of the draft plan, and discussed the community survey results. Day Two of the public forum was held from 6:30 – 8:00 pm on September 17th. On this day, participants discussed the issues and challenges of open space and recreation opportunities in Uxbridge and provided insights and suggestions that the Town should work towards. Specifically, the group focused on 1) Recreation, 2) Open Space, 3) Resource Protection, Management, and Policy, and 4) Climate Resilience. Day 1 and Day 2 of the Virtual Public Forum were both recorded and uploaded to Dropbox so that other residents could view the forum if they were unable to participate. A follow-up survey accompanied the forum recording giving additional residents a chance to share their thoughts, concerns, and suggestions regarding the future of open space and recreation in Uxbridge. The Forum Follow-Up survey was open from October 2nd through October 20th to allow for additional input.

Following the Virtual Public Forum, the Open Space Committee incorporated the public input gathered during the forum and the follow-up survey into the Plan. On September 30th, the final draft Plan was sent to the Town to be posted on the Town's website for public comment. The Plan was open for public comment from September 30th through October 20th. And on October 13th, the Open Space Committee gave a presentation to the Board of Selectmen on the draft Open Space and Recreation Plan, the results of the community survey, and the outcome of the public forum. At the Board of Selectmen meeting on October 13th, the BOS voted unanimously to approve the 2020 Open Space and Recreation Plan.



SECTION 3: COMMUNITY SETTING

Town of Uxbridge



SECTION THREE: COMMUNITY SETTING

A. REGIONAL CONTEXT

The Town of Uxbridge is situated in the Blackstone River Valley. The Blackstone River binds together a string of communities from Worcester to Providence and has significantly impacted the history of the region. During the Industrial Revolution, the Blackstone River provided waterpower for mills of the era. The Blackstone Canal facilitated transportation within the corridor followed by railroads and then highways (especially Route 146). The significance of the region has been recognized by creation of the John H. Chaffee Blackstone Valley National Heritage Corridor in 1986.

The regional factor of most recent significance is the upgrading of Route 146 to a limited access highway. Route 146 may be in the process of becoming a “third belt” (after Routes 128 and 495) for the metropolitan Boston region and serve as a catalyst for substantially increased development in the region.

Uxbridge is a member of the Central Massachusetts Regional Planning Commission (CMRPC). As such it is included in the CMRPC’s “Development Framework: 2020 Growth Strategy for Central Massachusetts,” the first Regional Policy Plan in nearly 30 years. The CMRPC began the effort in 1995 by preparing “status reports” or “Profiles” on population, environment, land use, economic development, infrastructure and a development suitability model. These formed the foundation for the Regional Policy Plan.

Among the many issues addressed in the Regional Policy Plan, it considered two development scenarios to accommodate projected future growth. Under a “standard” development scenario, it projected that 53,731 acres of land would be needed to accommodate that growth. Under a “compact” scenario, the growth could be accommodated on only 17,548 acres. This indicates that development policies and patterns can be a significant component of an open space and recreation plan.

Uxbridge is fortunate to have two significant future trail/bike path lines through the Town. One is the Blackstone River Bikeway, which provides another transportation link between Worcester and Providence. The other is the Southern New England Trunkline Trail (SNETT), which connects the Franklin State Forest to the Douglas State Forest.



B. HISTORY

The area that became the Town of Uxbridge was once known as “Waentug,” a Native American word meaning place near the waters. This evolved into Waucantuck or Waucantaug. The land containing what is now Uxbridge, Mendon and Milford was purchased from Native American Great John in 1662 for 24 pounds. In 1727, the Town of Uxbridge was incorporated as a separate town (it had been part of Mendon), and was probably named after Uxbridge, England (Uxbridge Historical Society, 1997).

Uxbridge's bountiful waterpower provided the basis for large-scale industrial development beginning as early as 1775. Quakers from Rhode Island established a colony in the town and built the earliest meetinghouse in Uxbridge in 1770, a building that still survives.

Residents established the Uxbridge Social and Instructive Library in 1775 and a grammar school in 1788. Good quality iron ore, which had been mined since the 1730's, supported a forge and a triphammer. In that era the town was primarily a prosperous agricultural settlement with dispersed farms, but it was also the site of saw and grist mills and a gin distillery.

By 1810, textile manufacturing had been introduced when Daniel Day erected a small carding and spinning mill, which was the second textile mill on the Blackstone River and the third one in the state. Capron Mills in 1820 introduced power loom weaving of woolen cloth in their factory on the Mumford River, the first such looms ever constructed. In 1827, major industrial complexes such as the massive granite Crown and Eagle Mills assumed great economic importance. The Crown and Eagle boasted a large-scale waterpower system and clusters of worker's duplexes.

Agriculture remained a basic component of the town's economy and residents also grew grain and potatoes, managed apple orchards, dairy farms, and cattle herds. Settlers traded their agricultural produce and manufactured and forest products for foreign goods in Providence and their commercial ties with that city were strong.

The Blackstone Canal, completed in 1828, facilitated the transport of agricultural goods, raw materials and finished products to all points between Worcester and Providence. Since Uxbridge was halfway between the two, it became an overnight stopping place for canal boats.

Immigration accelerated, primarily due to an influx of people from Ireland, to work the mills and make shoes and boots and by 1855, 560 people produced 2.5 million yards of cotton and woolen cloth in Uxbridge mills. The town's stone quarries produced the stone to rebuild Boston after the Great fire, and during the Civil War several of the town's mills ran on 24-hour shifts to fill government orders.



In the First World War the town's economy boomed again as the mills worked to produce khaki overcoat cloth for America, France, and Italy. As late as 1983, Calumet Mill was still making fancy woolens in Uxbridge. The town retains over 60 handsome Federalist houses as a legacy of its history.

C. POPULATION CHARACTERISTICS

Population

According to the United States Census Bureau, the estimated population for the Town of Uxbridge is 14,195. This reflects a 5.5% population change from the 13,457 residents reported in the 2010 US Census. Uxbridge's population has seen a steady increase over the past decade. US Census Bureau estimates show that Uxbridge's population grew to 13,505 in 2011, to 13,522 in 2012, and to 13,646 in 2013. From there, estimates show that the population grew to 13,729 in 2014, to 13,817 in 2015, to 13,873 in 2016, to 13,993 in 2017, to 14,062 in 2018, and to 14,195 in 2019.

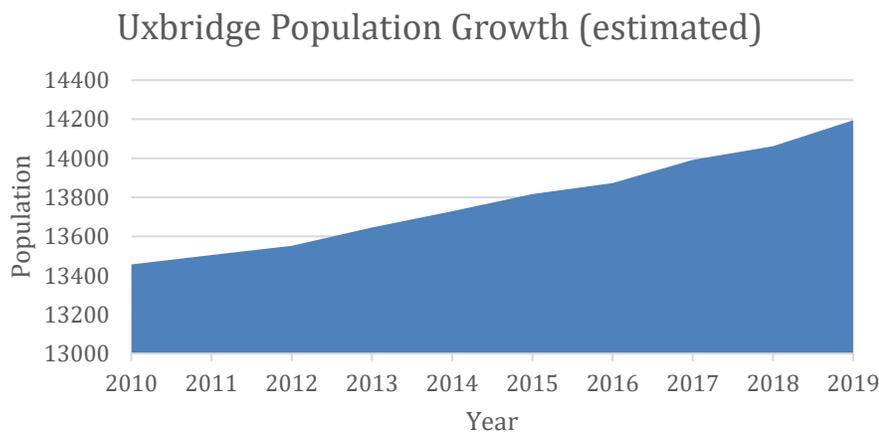


Figure 1. Estimated Population Growth of Uxbridge, U.S. Census Bureau

Age

Based on 2018 American Community Survey data, the median age in Uxbridge is 41.3 years old. There are 3,583 children aged 19 years or younger, approximately 26.0% of the population. There are 8,531 adults aged 20 to 64 years old, about 61.3% of the population. And there are 1,789 senior residents aged 64 years or older, approximately 12.8% of the population.



Table 1 below shows that Uxbridge had a lower percentage of its population age 65 years and older than the state. Factoring in the number of residents under the age of 19, Uxbridge’s community is significantly younger than the state as a whole. A further breakdown of the age distribution in Uxbridge can be viewed in Figure 2.

Table 1. Age Distribution 1990 – 2018 by percentage

Age	1990		2000		2010		2018 (estimate)	
	<i>Uxbridge</i>	<i>MA</i>	<i>Uxbridge</i>	<i>MA</i>	<i>Uxbridge</i>	<i>MA</i>	<i>Uxbridge</i>	<i>MA</i>
0 - 19	28.68%	25.95%	29.46%	26.95%	26.50%	24.80%	26.00%	22.90%
20 - 64	58.80%	60.50%	59.43%	60.39%	61.10%	61.60%	61.30%	60.60%
65 +	12.52%	13.54%	11.11%	12.66%	12.40%	13.80%	12.80%	16.50%

Sources: 1990, 2000, 2010 U. S. Census, 2018 ACS 1-Year and 5-Year

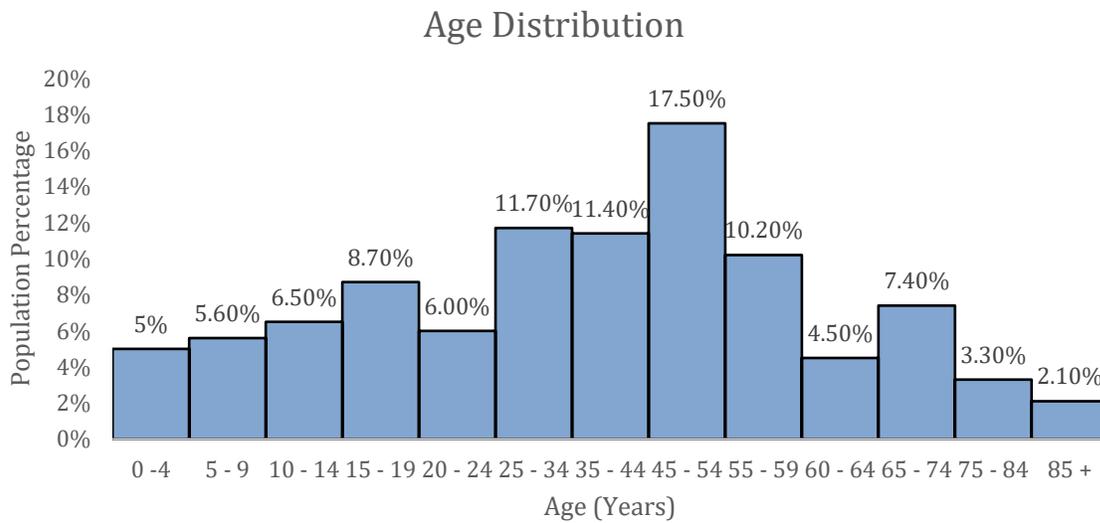


Figure 2. Distribution of age in Uxbridge, 2018 ACS

Race and Vulnerable Groups

Data from the 2018 ACS 5-Year Estimates indicates that the population by race in Uxbridge can be broken down as follows:

The predominant race of residents in Uxbridge is white, at 12,954 residents, making up about 93.2% of the population. Other races of residents represent a clear minority. According to the MassGIS Environmental Justice Population Map in Appendix A, there are no significant Environmental Justice populations within Uxbridge. Even though there are no significant Environmental Justice populations in Uxbridge, the Town should still take these communities into consideration when seeking new open space and recreation opportunities to make sure that these are accessible to all.

Table 2. Race in Uxbridge, 2018

Race	Number	Percentage
White	12,954	93.20%
Black/African American	296	2.10%
American Indian/Alaska Native	0	0%
Asian	311	2.20%
Native Hawaiian	0	0%
Hispanic/Latino	215	1.50%

Sources: 2018 ACS 5-Year Estimates

In addition, the 2018 ACS 5-Year Estimates states that 10.9% of the population in Uxbridge is disabled. Types of disabilities in Uxbridge can be broken down as follows:

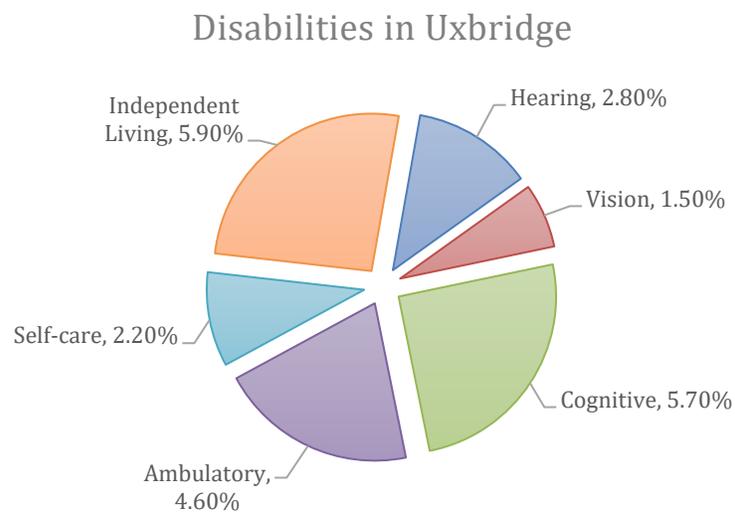


Figure 3. Distribution of disabilities in Uxbridge, 2018 ACS 5-Year Estimates

The Town should consider those with mobility and cognitive difficulties when planning for future open space improvements, especially with an aging population.

Income and Employment

According to the 2018 American Community Survey (ACS), the median household income in the Town of Uxbridge is \$101,859. This number is higher than the Massachusetts median household income (\$77,385) as well as Worcester county’s (\$71,895). The 2018 ACE 5-Year narrative also found that 8.2% of residents in Uxbridge were in poverty. The approximate distribution of income can be viewed in the figure below:

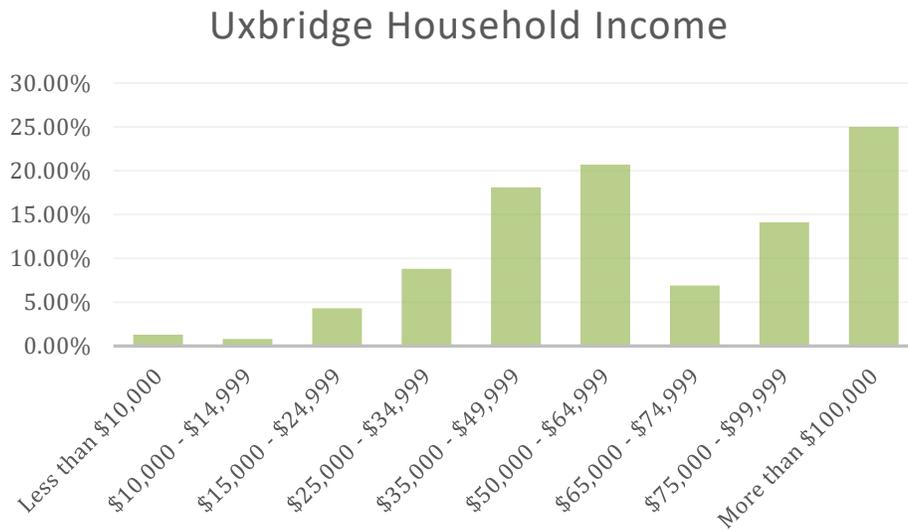


Figure 4. Distribution of household income in Uxbridge, 2018 ACS 5-Year Estimates

Data from the 2018 ACS 5-Year Estimates indicates that approximately 73% of the population 16 years and over is in the labor force. Of that group, 67.6% are employed in the labor force, 0.2% are employed in the Armed Forces, and 5.3% are unemployed. The remaining 27% of Uxbridge’s population over 16 years old is not in the labor force, meaning they are not actively seeking a job or are unable to work. The US Census Bureau found that of those who are employed, 44% are in the Management, Business, Science, and Arts occupations, 15.6% are in Service occupations, 9.4% are in Natural Resources, Construction, and Maintenance occupations, 16.7% are in Sales and Office occupations, and 14.3% are in Production, Transportation, and Material Moving occupations. A distribution of employment by industry in Uxbridge can be viewed on the following page.

Distribution of Employment by Industry

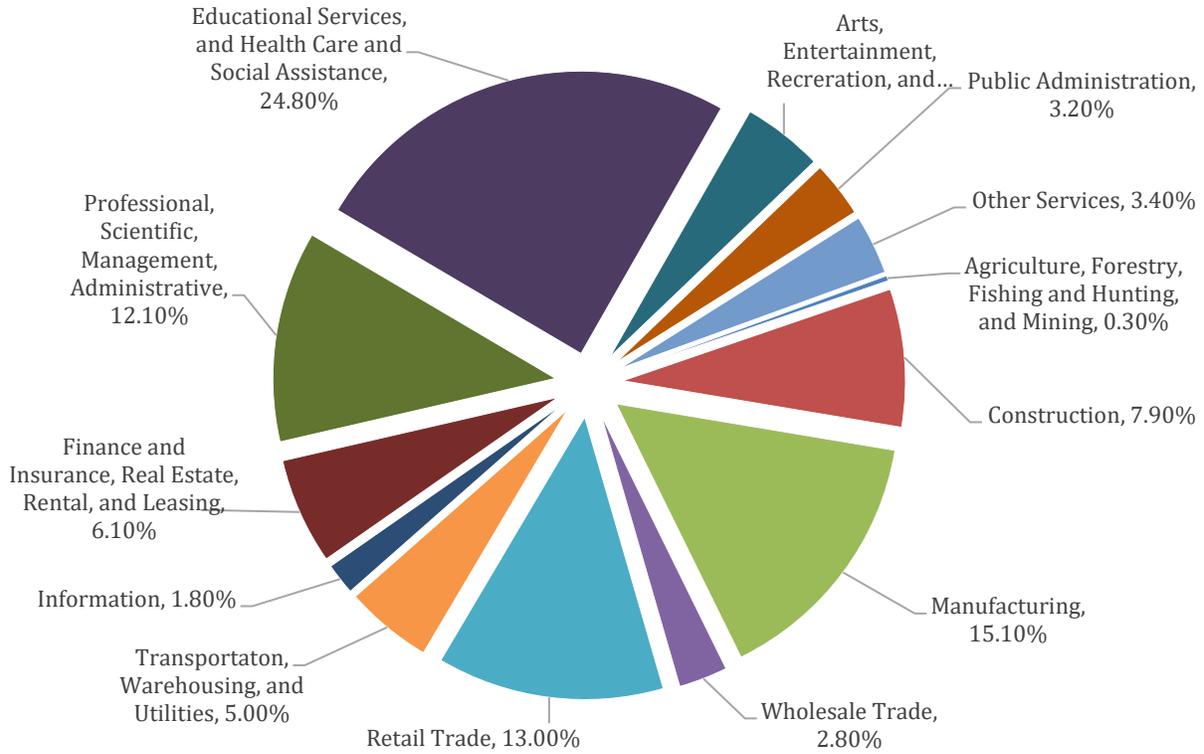


Figure 5. Distribution of Employment in Uxbridge by Industry, 2018 ACS 5-Year Estimates

Population Growth

According to the most recent estimate, the population of the Town of Uxbridge is 13,997. The population Uxbridge has increased by about 72% between 1970 and 2019. The bulk of this growth occurred between 1980 and 1990 and between 2000 and 2010, according to the Population Estimates Program administered by the U.S. Census Bureau.

Table 3. Uxbridge Population Growth, 1970 - 2019

Year	Population	Absolute Change	Percentage Change
1970	8,253	N/A	N/A
1980	8,374	121	1.50%
1990	10,415	2,041	24.40%
2000	11,156	741	7.10%
2010	13,457	2,301	20.60%
2019	14,195	738	5.50%

Source: 1970, 1980, 1990, 2000, 2010 US Censuses, 2018 ACS 5-Year Estimates



Population Density

The table below indicated that the average density in Uxbridge increased from 284 persons per square mile in 1980 to 378 per square mile in 2000. In the last twenty years, the town's density has increased from 378 to 454. This is still far lower than the average statewide density of 864 persons per square mile in 2010 and 839 in 2019.

Table 4. Population Density 1980 - 2019 (persons per square mile)

Year	Uxbridge	Massachusetts
1980	284	732
1990	353	737
2000	378	810
2010	442	864
2019	454	839

Source: 1970, 1980, 1990, 2000, 2010 US Censuses, 2018 ACS 5-Year Estimates

It is important to note that average density is not necessarily an indicator of either the existence or quality of open space. Two towns with the same average density can have vastly different development patterns. One town could be developed into concentrated centers or villages surrounded by vast areas of open space, while the other could be characterized by low-density sprawl spread throughout its land area.

This concept of sprawl can be seen in the population reduction of Boston from 1950 to 2000, during a period where the city's suburbs grew substantially. The City of Boston reached its highest population in 1950 at 801,444. This population was accommodated on about 46 square miles (only about 50% greater than the land area of Uxbridge). In 2000, Boston's population was 26% less at 589,141. If the 212,303 people who left Boston were resettled in the suburbs at a density of 1000 per square mile (almost three times the current density of Uxbridge), it would take 212 square miles, an area about six and half times larger than the size of Uxbridge, to accommodate them. Clearly, concentrating development in city, town and village centers is a key component of protecting and preserving open space.

D. GROWTH AND DEVELOPMENT PATTERNS

Patterns and Trends

As discussed in the history section above, Uxbridge began as an agrarian community. Its waterpower led to the development of mills during the industrial revolution. Three major villages developed in the northern part of Town. These are North Uxbridge, Uxbridge Center, and Wheelockville. An industrial and business area is also located in the southern part of Town along Route 146. A significant portion of the Town is zoned Agricultural.



Uxbridge's downtown has free parking, friendly restaurants, a lovely fudge shop, gift shops, art gallery and other stores, banks, the Council on Aging, the Town Hall and Fire Department and abundant pedestrian traffic. Long scenic roads in Uxbridge both in North and South Uxbridge afford bike riders through scenic areas with the quiet streets, and roads that pass many ponds and wetlands areas in Uxbridge.

Uxbridge Center and Wheelockville supported more woolen mill and industrial activity, while North Uxbridge developed as a more residential neighborhood providing housing for mill workers. Uxbridge Center also serves, as the municipal center of the Town as Town Hall, the Police Station, Public Library, schools, and Taft Memorial Park are located in Uxbridge Center.

Historical land use trends are illustrated in the table below. The table indicates the acreage devoted to various land use categories as interrelated from aerial photographs by the Resource Mapping Project at the University of Massachusetts. The land use data is presented for 1971, 1985, and 1999. The table includes the absolute and percentage change between 1971 and 1985, 1985 and 1999 and the entire period of 1971 and 1999.

In 1971, the "developed" land in Uxbridge (including recreation, residential, commercial, industrial, mining, urban open land, transportation, and waste disposal) totaled 2,148 acres or 11.1% of the total land area in Uxbridge. The "undeveloped" area (including crop land, pasture, forestland, wetland, open land, water, and woody perennial) totaled 17,042 acres, or 88.9% of the total. By 1985, the developed land had increased to 3,018 acres, a change of 870 acres. And by 1999, the developed land totaled 5,057 acres – more than 26% of the Town's land area. Thus, developed land more than doubled (an increase of 235%) from 1971 to 1999. Meanwhile, population increased by only 35% (from 8,252 to 11,156) between 1970 and 2000.

Acreage devoted to commercial and industrial uses only increased by 162 acres during this period. Residential land area, however, increased by 1,923 acres, accounting for two-thirds of the increased developed land. Almost all of this increase in residential land (1,815 of the 1,923 acres) was in the category of low density residential (lots larger than 1/2 acre).

Thus, the 1970 population of 8,253 occupied a total of 1646 acres in 1971, or about .20 acres per person. The 2000 population of 11,156 occupied 3570 acres in 1999. This is .32 acres per person. Another way of looking at it is that Uxbridge was able to accommodate 8,253 people in 1971 on 1646 residential acres. In order to add 2,903 people by 2000, it required an additional 1,923 acres of residential land! This is .66 acres per person, more than 3 times the amount of land per person used in 1971!



Table 5. Historical Land Use Changes, 1971 - 1999

LAND USE CHANGES, 1971-1999

LAND USE TYPE	1971	1985	CHANGE 1971-1985		1999	CHANGE 1985-1999		CHANGE 1971-1999	
	ACRES	ACRES	ACRES	PERCENT	ACRES	ACRES	PERCENT	ACRES	PERCENT
CROP LAND (AC)	1439.59	1396.02	-43.57	-3.03%	1210.10	-185.92	-13.32%	-229.49	-15.94%
PASTURE(AP)	672.50	640.46	-32.05	-4.77%	246.99	-393.47	-61.44%	-425.52	-63.27%
FORESTLAND(F)	13058.70	12291.70	-767.00	-5.87%	10909.00	-1382.70	-11.25%	-2149.70	-16.46%
INLAND WETLAND(FW)	686.41	679.39	-7.02	-1.02%	642.19	-37.20	-5.47%	-44.22	-6.44%
MINING(M)	166.48	215.69	49.21	29.56%	167.16	-48.54	-22.50%	0.67	0.41%
OPEN LAND(O)	792.12	771.52	-20.60	-2.60%	687.17	084.35	-10.93%	-104.95	-13.25%
PARTICIPATION RECREATION(RP)	27.26	29.51	2.24	8.23%	156.48	126.97	430.33%	129.22	473.96%
SPECTATOR RECREATION(RS)	32.07	32.07	0.00	0.00%	9.22	-22.85	-71.24%	-22.85	-71.24%
WATER BASED RECREATION(RW)	3.58	7.40	3.82	106.88%	7.30	-0.09	-1.28%	3.73	104.22%
MULTI-FAMILY RESIDENTIAL(RO)	0.00	5.89	5.89	NA	28.71	22.82	387.35%	28.71	NA
HIGH DENSITY RESIDENTIAL(R1)	147.99	143.36	-4.63	-3.13%	137.89	-5.47	-3.82%	-10.10	-6.82%
MED. DENSITY RESIDENTIAL(R2)	612.40	652.78	40.38	6.59%	630.95	78.17	11.98%	118.55	19.36%
LOW DENSITY RESIDENTIAL(R3)	885.92	1249.96	364.03	41.09%	2701.25	1451.29	116.11%	1915.33	204.91%
COMMERCIAL(UC)	68.64	92.24	24.24	35.31%	197.68	104.79	112.82%	129.03	187.97%
INDUSTRIAL(UI)	56.86	56.86	0.00	0.00%	89.91	33.06	58.14%	33.06	58.14%
URBAN OPEN -OR- PUBLIC(UO)	77.84	105.88	28.04	36.02	293.84	187.96	177.52%	216.00	277.50
TRANSPORTATION (UT)	59.64	344.96	285.31	478.37%	445.00	100.04	29.00%	385.35	646.10%
WASTE DISPOSAL (UW)	9.35	80.92	71.58	765.94%	91.93	11.01	13.06%	82.59	883.75%
WATER(W)	379.68	379.80	0.11	0.03%	400.96	21.17	5.57%	21.28	5.61%
WOODY PERENNIAL – ORCHARD (WP)	13.05	13.05	0.00	0.00%	36.03	22.98	176.17%	22.98	176.17%
	19190.07	19190.07			19189.75				

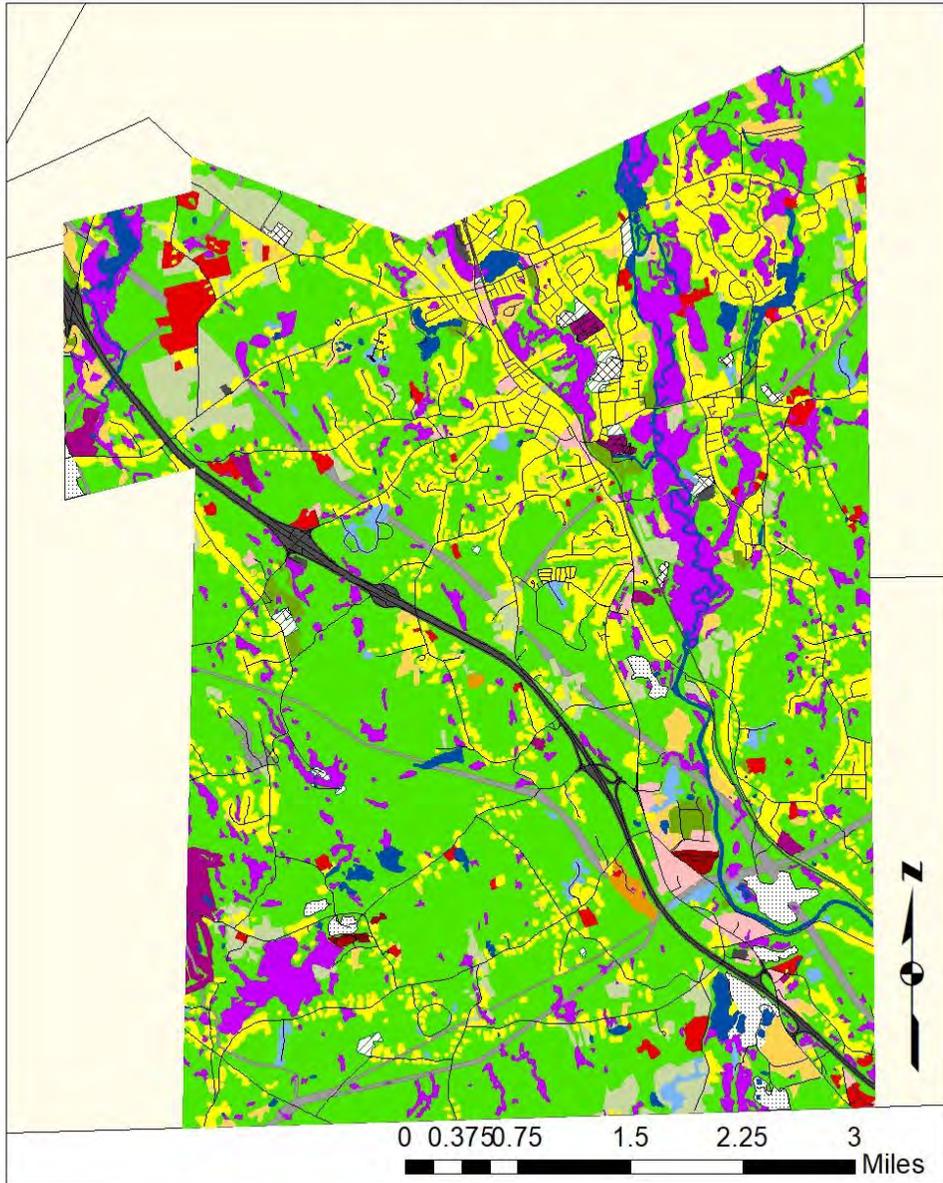
Source: University of Massachusetts Resource Mapping Project (from Central Massachusetts Regional Planning Commission)

The biggest loss of undeveloped land was in the category of forestland, which decreased by 2,159 acres between 1971 and 1999. Pastureland was more than halved in area during this period (from 672 acres to 247) and crop land was reduced by 229 acres.

Uxbridge Land Use

Created By: Kaila Sauer
February 2019

Source: MassGIS (Land Use 2005)



 Forest	 Industrial	 Powerline/Utility
 Other	 Mining	 Transitional
 Commercial	 Orchard/Nursery	 Transportation
 Cropland	 Open Land	 Urban Public/Institutional
 Wetlands	 Participation Recreation	 Waste Disposal
 Residential	 Pasture	 Water



Infrastructure

The three most significant infrastructure elements in Uxbridge are its road network, water service and sewer service. Each of these is discussed briefly below.

As mentioned earlier, Route 146 is a major highway between Worcester and Providence that has been upgraded into a limited access highway. Acting as a “third belt” around the metropolitan Boston area, this highway is stimulating significant growth pressures on Uxbridge. In addition to Route 146, two other state highways, Route 16, and Route 122 traverse Uxbridge.

Route 16 is an east-west highway that connects Uxbridge to Milford in the east and Douglas and Webster and I-395 to the west. Route 122 is a north-south highway that provides a link through Millville and Blackstone to Woonsocket to the south and to Northbridge and Grafton to the north. The two highways intersect in Uxbridge Center.

Water and Sewer

Uxbridge’s water system is concentrated primarily around the three villages of North Uxbridge, Uxbridge Center and Wheelockville. Uxbridge is fortunate to have significant aquifer resources capable of providing more than enough water for the projected demand at buildout. The Town has the Blackstone Street and Bernat well fields operating and is pursuing additional wells in the Rosenfeld area.

Uxbridge also has sewer service. Again, the sewer lines are concentrated around the three village areas. The capacity of the plant is about 2.5 million gallons per day while current use is about 935,000 gallons per day.

Another infrastructure element in Uxbridge is the freight rail line of the Providence and Worcester Railroad. This line could help support additional industrial activity in town.

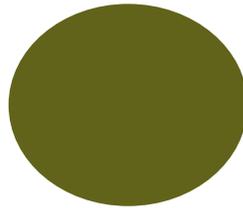
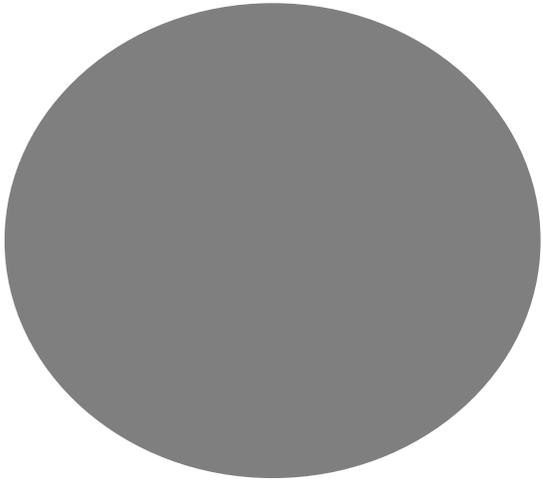
Long-term Development

The primary land use control in Uxbridge is the Zoning Bylaw. The Zoning Map in Appendix A illustrates the current zoning in Town. Other important regulatory tools include the subdivision control law, site plan approval, groundwater protection bylaw, the Wetlands Protection Act, and the Rivers Protection Act.

The buildout analysis completed in 2000 by the CMRPC projected that there are an additional 11,147 developable acres in Uxbridge. This translates into 4,589 additional lots, 12,069 additional residents (for a total buildout population of 23,390), more than 5.5



million square feet of commercial and industrial space, about 2065 additional school children (for a buildout total of 4103), an additional demand for water of 2.4 million gallons per day (for a buildout total of 3.2 million gallons per day), and an additional 143.2 miles of roadway.



SECTION 4: ENVIRONMENTAL INVENTORY & ANALYSIS

Town of Uxbridge



SECTION FOUR: ENVIRONMENTAL INVENTORY & ANALYSIS

A. GEOLOGY, SOILS, AND TOPOGRAPHY

Uxbridge is located on a series of rolling hills and gently sloping terrains, characterized by the location. With elevations ranging from a low of about 200 feet to a high of 572 feet above sea level, the western half of the town is characterized by a series of knobby, rolling hills, while the eastern and central portions have gently sloping terrain associated with riverine floodplains. With a summit of 572 feet above sea level, Castle Hill is the highest point of the community, located on the Millville-Uxbridge town line.

Uxbridge's geology was impacted by glacial activity, most recently about 20,000 years ago. Granite and schist bedrock outcroppings occur throughout Town, but especially in the western and northern sections. The retreat of the glaciers left several drumlins, such as Goat Hill in north central Uxbridge, in many parts of town.

Existing landforms were modified first by glacial erosion and then by the deposition of glacial till as ground moraine and scattered drumlins. Later, as the ice melted, debris swept from the ice by meltwater formed a variety of ice-contact landforms, such as kames, kame terraces, kame plains, and ice-channel fillings. With further melting and the disappearance of the ice from the immediate area, melt-water streams spread outwash across the bottoms of the valleys. Thus, the pre-glacial bedrock valleys became partly or completely filled, and the relief of the area was decreased somewhat. A further effect of glaciation was the partial alteration of the pre-glacial drainage pattern. The postglacial streams were established on the valley fill, and therefore coincide only roughly or not at all with the positions of the preglacial channels. In places, streams were diverted from one pre-glacial valley to another by dams of ice or glacial drift. The course of the Blackstone River has long been recognized as an example of such a change in drainage.

Glaciation is responsible for the landforms that are seen throughout town. Uxbridge is situated on glacial outwash plain, deltas, and related landforms left behind by the last Ice Age. To the north and west, are upland hills consisting of drumlins and ground moraine. The Town's ponds are kettle lakes, and the soil is sandy or gravelly in many areas, all due to the retreat of the glacier around 10,000 years ago.

Geology

According to the United States Geological Survey (USGS), the Town of Uxbridge consists of the following Rock classification types: sand and gravel, and till or bedrock. Till is a homogenous,



unsorted mixture of particles ranging in size from clay to boulders (known as erratics) deposited directly by the ice. Outwash is sediment that is transported and deposited by the direct action of glacial meltwater and consists of sorted and stratified sand and gravel. Some sediments were deposited in glacial lakes and ponds, while others were transported by wind.

Soils

The Soils and Geologic Features Map in Appendix A illustrates the soil composition of the Town. A majority of the soils in Uxbridge are of the Canton-Montauk-Scituate category. These soils are nearly level to steep, very deep, well drained and located on glaciated uplands. They are generally covered with and are well suited to trees. And they are suited to cultivated crops and to hay and pasture. Erosion on slopes is a hazard.

These soils are also well suited to most nonfarm uses, though the slopes can limit their use. The northern part of Uxbridge has a large area of the Paxton-Woodbridge-Ridgebury group of soils. These soils are similar to the Canton-Montauk-Scituate group, though they can be a little less well drained and have a high groundwater table.

Four bands of the Merrimac-Hinckley-Windsor group run through town. These are generally on broad, flat plains and in rolling to steep areas. They were formed in water-sorted deposits of glacial outwash. They typically have 2 feet of loamy material underlain by sand and gravel. Because of its high permeability, there is a high mortality rate for tree seedlings, and there is a danger of septic tank effluent polluting groundwater. Finally, there is one band of the Freetown-Swansea-Windsor group along the Blackstone River. These are poorly drained soils that are nearly level, very deep and located on uplands, outwash plains, and floodplains. The water table tends to be at or near the surface most of the year. Organic material is generally 16-51 inches thick. Flooding and wetness and the organic material limit the use of this soil for most uses.

B. LANDSCAPE CHARACTER

Uxbridge offers a diverse landscape character that includes urban, suburban, small town and rural/agricultural character. The town includes farm fields, hills, forests, fields, stone walls, lakes, rivers, streams, marshes, and swamps. These elements provide a pleasant and productive environment in which to live and work. The three villages offer historic flavor and an atmosphere of community that is highly desired. The farms and fields reflect its agrarian heritage as well as a multitude of scenic views.

Characterized as an agrarian town, Uxbridge has both multiple active farms and former farms within the town borders. In addition, Uxbridge was known heavily as a “mill” town due to its history a part of the Blackstone River. Many of the former mills are still found within the town.



Uxbridge is located in the southeastern section of Worcester County, approximately 15 miles south of Worcester and 36 miles southwest of Boston. The Blackstone River played a large role in defining the Town's landscape and character. As indicated in earlier sections, Uxbridge relied mainly on hydropower from the Blackstone River to fuel its industry. With that industry gone, the Blackstone provides an ecological and social benefit to the Town more than it does a financial benefit.

C. WATER RESOURCES

Surface Water

The town of Uxbridge's surface water resource system is complex, despite being located within one watershed: the Blackstone River Watershed. All surface water in Uxbridge drains into the Blackstone River, with some intermittent into local ponds and lakes. Customers of the water supply receive their water from three groundwater sources, containing a total of seven gravel-packed wells. The Blackstone Wellfield is located at the Water Division Office on Blackstone Street. The second source is the Bernat Wellfield, located on town-owned property on the east side of South Main Street. The Rosenfeld Well is located on Quaker Highway. All wellfields are replenished from various underground sources, including aquifers. The water is treated and purified before being pumped into the High Street underground reservoir and to the water tank of Richardson Street.

Open water, wetlands, and streams cover a large portion of the community and play a major role in the town's development patterns. Water quality is influenced by ecology, hydrology, geomorphology, and human activities within the watershed basin. The town's surface water resources can potentially be used for swimming, fishing, boating, bird watching, nature study, and plant and wildlife conservation. Adjacent to all of the ponds, lakes, streams, rivers, and brooks in town are bordering wetlands. Work activities within 100 feet of wetlands and 200 feet of perennial rivers and streams are under the jurisdiction of the Conservation Commission and the Massachusetts Department of Environmental Protection (DEP). The value of wetlands is well documented and further discussed.

The Water Resources 1 Map in Appendix A illustrates the surface waters of Uxbridge. As discussed above, the Blackstone River has had a major impact on the Town's development and history. Other rivers include the Mumford, Branch, Clear, and West Rivers.

Wetlands

Despite wetlands being well spread throughout the land area in Uxbridge, wetlands cover only 3.56 square miles of the town. But, when compared to the total square mileage of 30.4 square miles, wetlands comprise about 11% of total cover of Uxbridge. Wetlands are widely scattered



throughout the Town, with heavier concentrations along the major waterways. About 6 1/2 percent of the wetlands in Uxbridge were lost between 1971 and 1999, perhaps indicating a need for greater protection. Based on the shapefile data from MassGIS, the wetlands are comprised of seven different types of wetlands: bogs, deep marshes, open water, shallow marsh meadow or fen, shrub swamp, wooded swamp coniferous, wooded swamp deciduous, and wooded swamp mixed trees.

Wooded swamp deciduous wetlands comprise the largest amount--a total of 1.29 square miles. In order from largest square area to smallest square area, the order is wooded swamp deciduous, open water, deep marshes, wooded swamp mixed trees, shrub swamps, shallow marshes or fens, wooded swamp coniferous, and finally bogs.

Scientific studies have shown that wetlands protect our health, safety, and property, and provide habitat for a wide variety of wildlife. Wetlands store 20-30% of global soil carbon and help fight climate change. They provide many essential ecological functions including:

- serve as natural drainage ways and minimizing flood damage;
- recharge groundwater;
- serve as siltation basins and purifying the air and water of pollutants;
- provide important habitat for many different flora and fauna, including rare and endangered species; and
- offer open space, natural beauty, and passive recreation opportunities.

The Wetlands Protection Act 310 CMR 10:00 (Massachusetts General Laws Chapter 131, § 40) is a state law that prohibits the removal, dredging, filling, or altering of wetlands without a permit. Additionally, under Section 401 of the federal Clean Water Act, any discharge of dredged or fill material into waters or wetlands requires a state Water Quality Certificate. MassDEP must certify that projects requiring federal permits do not violate the state's water quality standards, which include protection for wetlands. Currently, Uxbridge does not have any wetlands bylaws. There is a wetlands setback policy which indicates that work within a 25-foot buffer of a wetland is not allowed, except within particular circumstances.

Flood Hazard Areas

There are four square miles of floodplain in Uxbridge, according to the FEMA FIRM maps. Flood zones are geographic areas that the FEMA has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area. In these times of a changing climate, Uxbridge is watching for other potential flood risk areas.



Aquifers

In addition to surface water resources, there are volumes of water underground which saturate and flow slowly through soil and porous rock. These underground water areas are called aquifers. The aquifers of the town are illustrated in the Water Resources 2 Map in Appendix A.

The land areas over and near groundwater are called aquifer recharge areas, since rainwater seeps through the soil in these places and replenishes, or “recharges,” the groundwater supply. It is important to protect recharge areas from being inappropriately developed, in order to avoid groundwater contamination and to ensure enough rainwater penetrates the ground, thereby keeping the water level from dropping. Uxbridge’s aquifers represent a significant resource of potential regional significance since they apparently have a capacity that is substantially greater than the projected need for its buildout population and industry. This will be critical especially with the projected increase in occurrence and length of drought in the coming years.



D. VEGETATION

Uxbridge’s vegetation is dominated by a mix of hardwood and softwood forests. Open fields and agricultural plots, including orchards, are also a prominent feature.

Within Uxbridge, the Natural Heritage and Endangered Species Program Inventory lists seven plant species as threatened, endangered, or of special concern, as shown in Table 6 below. Many listed species are difficult to detect even when they are present. The Natural Heritage and Endangered Species Program does not conduct species surveys in each town on a regular basis. Though the “Most Recent Observation” recorded for a particular species may be several years old, that should not be interpreted to mean that the species no longer occurs in town. Habitat destruction or development are the major causes of species rarity.

The Habitat Features map on page 38 includes priority habitat areas of rare species listed in the *BioMap2 report*. *These areas should be under scrutiny to ensure protection for survival of rare species. Below is table of plant species found in Uxbridge that are considered threatened (T), endangered (E), or of special concern (SC).*

Table 6. Plant Species considered Threatened, Endangered, or of Special Concern in Uxbridge

Common Name	Scientific Name	Taxonomic Group	MESA Status	Most Recent Observation
Lake Quillwort	Isoetes lacustris	Vascular Plant	E	1922
Climbing Fern	Lygodium palmatum	Vascular Plant	SC	Historic
Algae-like Pondweed	Potamogeton confervoides	Vascular Plant	T	1800s
Papillose Nut Sedge	Scleria pauciflora	Vascular Plant	E	2011
Tall Nut-sedge	Scleria triglomerata	Vascular Plant	E	1989
Small Bur-reed	Sparganium natans	Vascular Plant	E	1865
Grass-leaved Ladies'-tresses	Spiranthes vernalis	Vascular Plant	T	2014

Source: Natural Heritage and Endangered Species Program

Public shades trees can be found down town streets, the town forest that is located at the end of Marywood Street and throughout North and South Uxbridge along many streets. The Conservation Commission makes a strong effort to ask developers to leave the most trees they can on proposed development properties. With the amount of transmission lines in town, National Grid does the majority of tree clearing through the current Conservation Agent has asked them to only top the trees, especially along river banks to provide valuable woodpecker and other bird species a food source, as many insects live in tree bark.



E. FISHERIES AND WILDLIFE

The wooded areas provide habitat for grey squirrels, raccoon, fox, and white tail deer. The fields and orchards, especially in the northwest corner of Town, provide suitable habitat for the ringneck pheasant, cottontail rabbit, woodchuck, and woodcock. The areas of the West Hill Dam and Cedar Swamp provide unique wildlife habitats in the northeast and northwest corners of Town (CMRPC, 1984).

The Blackstone River is designated as a Class B River. As a result, catch and release fishing is considered an appropriate recreational activity. The Blackstone River provides habitat for a number of warm water fish species. These species include yellow perch, large-mouth bass, and pickerel.

The surface waters around town also provide habitat for aquatic species including largemouth bass, blue gills, pickerel, sunfish, and yellow perch. Several streams (Emerson Brook and West River) are stocked with cold-water trout (CMRPC, 1984). Several streams also support naturally occurring cold-water fisheries.

Since wildlife thrive in large, interconnected natural areas, open space linkages connecting the natural areas would benefit locally occurring wildlife that would utilize such corridors for migration and feeding territory. Wildlife habitat protection is very compatible with the maintenance of the Town's scenic character, passive recreation opportunities, flood protection, and protection of aquifer recharge areas.

The table on the following page depicts wildlife species found in Uxbridge that are considered threatened, endangered, or of special concern. The Habitat Features map in Appendix A displays the priority habitat area for these rare wildlife species.



Table 7. Wildlife Species considered Threatened, Endangered, or of Special Concern in Uxbridge

Common Name	Scientific Name	Taxonomic Group	MESA Status	Most Recent Observation
Marbled Salamander	Ambystoma opacum	Amphibian	T	2015
Eastern Whip-poor-will	Caprimulgus vociferus	Bird	SC	2009
Hessel's Hairstreak	Callophrys hesseli	Butterfly/Moth	SC	1997
Mocha Emerald	Somatochlora linearis	Dragonfly/Damselfly	SC	2001
Brook Floater (Swollen Wedgemussel)	Alasmidonta varicosa	Mussel	E	1944
Creeper	Strophitus undulatus	Mussel	SC	1944
Wood Turtle	Glyptemys insculpta	Reptile	SC	2017
Eastern Box Turtle	Terrapene carolina	Reptile	SC	2015
Smooth Branched Sponge	Spongilla aspinosa	Sponge	SC	1989

Source: Natural Heritage and Endangered Species Program

Wildlife corridors exist in Uxbridge especially for mammals, and reptiles. There several Ponds and large acres of land privately and publicly owed lands. There are many vernal pools in Uxbridge, and the several salamander and frog species lay their eggs in vernal pools and then spend their lives in the upland areas fending for habitat and food. Turtles have been tracked 4 miles from their vernal pool. Deer and coyote travel greater distances. It is known that coyotes travel in 40 +/- mile circles.



Vernal Pools

Vernal pools are seasonal depressional wetlands that occur under the Mediterranean climate conditions of the West Coast and in glaciated areas of northeastern and midwestern states. They are covered by shallow water for variable periods from winter to spring but may be completely dry for most of the summer and fall. These wetlands range in size from small puddles to shallow lakes and are usually found in a gently sloping plain of grassland. Western vernal pools are sometimes connected to each other by small drainages known as vernal swales, forming complexes. Beneath vernal pools lies either bedrock or a hard clay layer in the soil that helps keep water in the pool.

There are eight certified vernal pools located within the town of Uxbridge. These can be seen in the Habitat Features map in Appendix A, and in the Uxbridge Vernal Pools map on the following page. Potential vernal pools are also included in the maps on the following two pages. A potential vernal pool has the characteristics of a certified vernal pool but has not gone through the certification process yet, and thus has less protections under the Wetlands Protection Act. In Uxbridge, there are a total of 159 potential vernal pools.

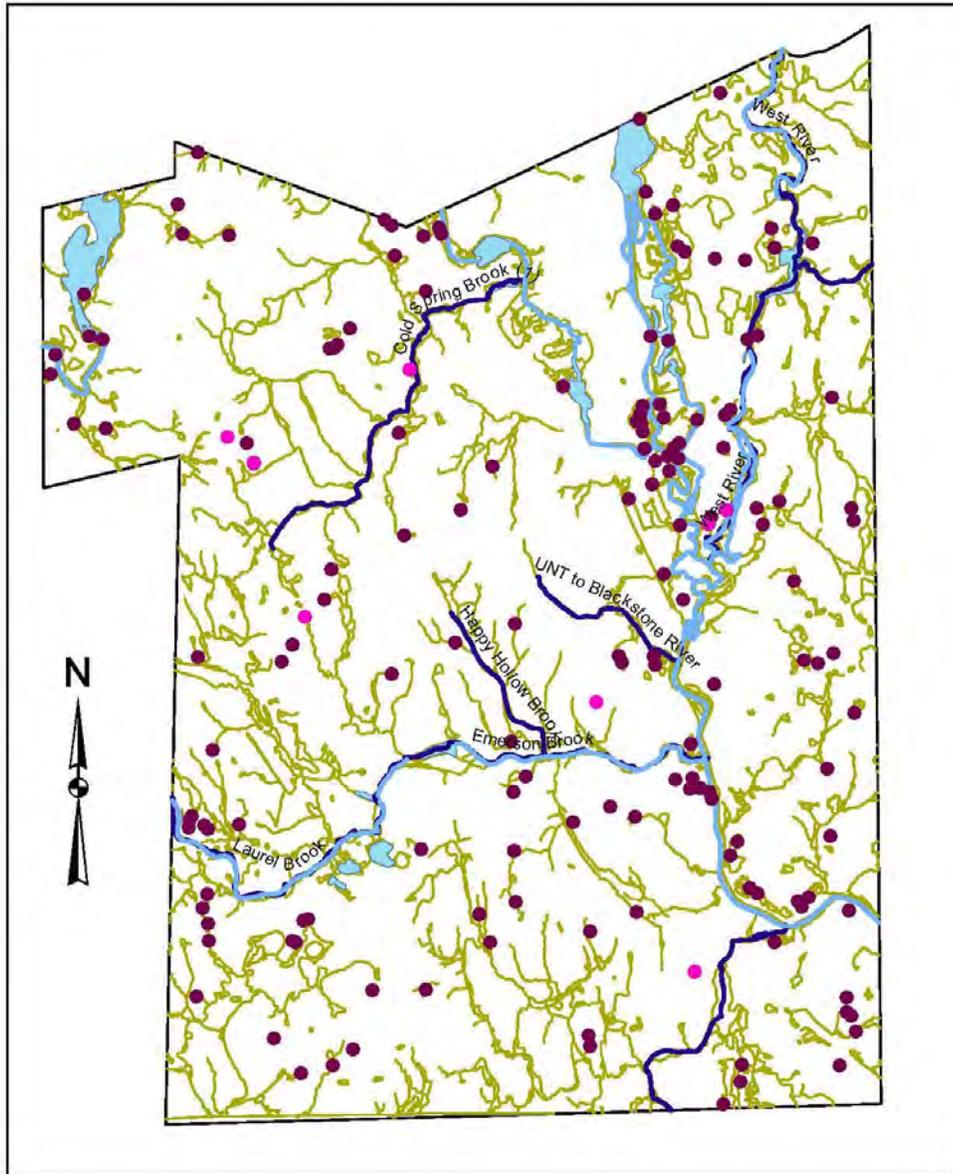
Table 8. Certified Vernal Pools in Uxbridge

FID	Criteria	Date Certified
1	2182 Obligate Species	8/4/2000
2	7981 Obligate Species	5/9/2018
3	7983 Obligate Species	5/9/2018
4	7789 Obligate Species	4/10/2017
5	3543 Facultative Species	10/28/2004
6	7841 Obligate Species	8/9/2017
7	7790 Obligate Species	4/10/2017
8	7982 Obligate Species	5/9/2018

Source: Town of Uxbridge

Vernal pools are extremely vulnerable to development. They are often overlooked when wetlands are identified on development sites because in many months these areas are dry and resemble the surrounding woodland. Even if a vernal pool itself is saved from destruction, changes in the surrounding upland may disrupt the habitat and life cycles of the resident species. The removal of the surrounding forest during the construction of houses, driveways, and lawns, for example, may degrade a nearby vernal pool to such an extent that the amphibian population is eliminated.

UXBRIDGE VERNAL POOLS

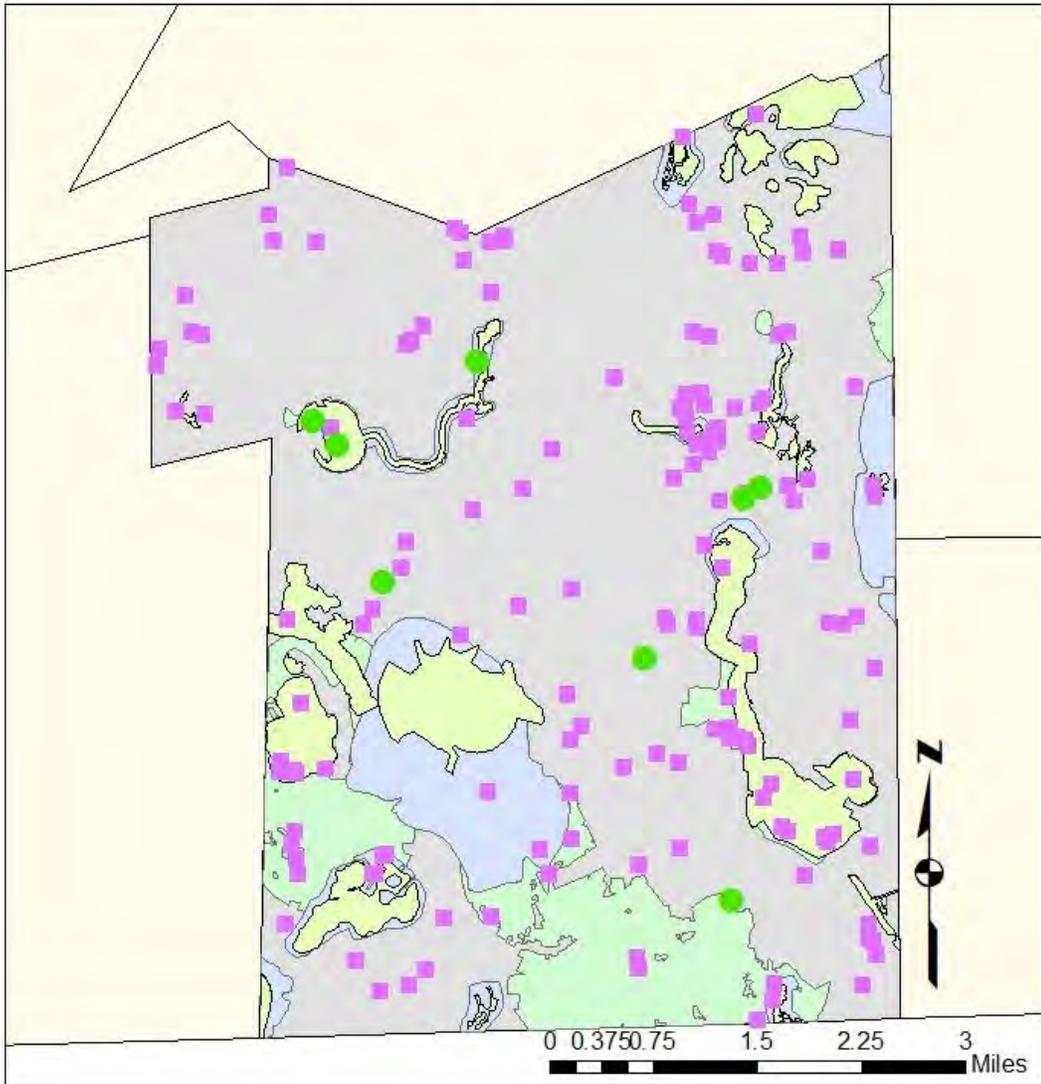


Uxbridge Biohabitat Map

Created By: Kaila Sauer
February 2019

Source:
NHESP (Rare Species)
BioMap2 (Core Habitat, Natural Landscape)
MassGIS (Vernal Pools)

- Certified Vernal Pools
- Potential Vernal Pools
- BioMap2 Core Habitat
- BioMap2 Critical Natural Landscape
- NHESP Priority Habitats of Rare Species
- Uxbridge





F. SCENIC RESOURCES AND UNIQUE ENVIRONMENTS

The Town of Uxbridge is fortunate to have many unique and scenic features that set the Town apart from neighboring communities. The Massachusetts Cultural Resource Information System (MACRIS) database lists 375 sites of historical or cultural importance in Uxbridge, MA. The table below gives a breakdown of the various resource types. The Unique Features Map, located in Appendix A, shows these sites, and a more detailed MACRIS report can be viewed in the Appendix.

Table 9. Uxbridge Cultural Sites

Resource Type	Amount
Area	18
Building	284
Burial Ground	35
Object	5
Structure	33

Source: 2020 MACRIS Database

Areas of Critical Concern

Uxbridge does not currently have any areas designated as Areas of Critical Environmental Concern (ACEC) by the ACEC Program. An ACEC designation recognizes the critical environmental importance of areas with significant natural resource systems. The designation notifies regulatory agencies and the public that most development activities under state jurisdiction within ACEC's must meet high environmental quality standards. Along with habitat value, recreation, scenic, historic, and archaeological qualities of an area are assessed in the designation process.

G. ENVIRONMENTAL CHALLENGES

Hazardous Releases

MassDEP lists 92 sites in town that have had reportable hazardous releases. Additional information regarding these locations can be found in the table below:

Table 10. Hazardous Release Sites in Uxbridge, MA

RTN	Release Address	Site Name Location Aid	Reporting Category	Notification Date	Compliance Status	Date	Phase	RAO Class	Chemical Type
2-0021290	218 NORTH MAIN STREET	PUBLIC ROAD ADJ KENS AUTPOMOTIVE REPAIR	120 DY	07/22/2020	URAM	08/03/2020			
2-0020501	44 MENDON STREET	JOHN FARNUM HOUSE	120 DY	04/10/2018	PSNC	04/02/2019	PHASE II	PN	
2-0020486	215 HARTFORD ROAD EAST	ROADWAY RELEASE	TWO HR	03/28/2018	PSNC	05/25/2018		PN	
2-0020339	119 MAIN STREET	HYDRAULIC OIL RELEASE	TWO HR	10/17/2017	PSNC	11/15/2017		PN	
2-0019690	RTE 146 S @ EXIT 2	TT ACCIDENT	TWO HR	11/10/2015	PSNC	12/29/2015		PN	
2-0019677	2 WEST HARTFORD AVE	FORMER GETTY STATION	120 DY	10/20/2015	PSNC	06/28/2016			



2-0019549	2 WEST HARTFORD AVE	GAS STATION	72 HR	06/25/2015	PSNC	06/28/2016		PN	
2-0019482	775 MILLVILLE ROAD	HYDRAULIC OIL RELEASE	TWO HR	04/17/2015	PSNC	06/12/2015		PN	Oil
2-0019264	30 VETERANS WAY	ROADWAY SPILL	TWO HR	07/23/2014	PSNC	09/16/2014		PN	Oil
2-0019180	336 N MAIN ST	VILLAGE CLEANERS PROPERTY	TWO HR	04/28/2014	RTN CLOSED	04/27/2016			Hazardous Material
2-0019093	298 SUTTON ST	RESIDENTIAL FUEL OIL RELEASE	TWO HR	01/12/2014	PSNC	11/20/2015		PN	Oil
2-0019042	COMMERCE DRIVE	ROADWAY RELEASE	TWO HR	11/14/2013	RAO	01/13/2014		A1	Oil
2-0019037	10 C ST	RESIDENCE	72 HR	11/07/2013	RAO	02/18/2014		A2	Oil
2-0018679	58 N. MAIN ST	ROADWAY SPILL	TWO HR	08/31/2012	RAO	10/22/2012		A1	Oil
2-0018640	RTE146 S BTWEN MILL AND CHOCK	DIESEL FUEL RELEASE	TWO HR	08/01/2012	RAO	10/05/2012		A2	Oil
2-0018636	26 DOUGLAS RD	CUMBERLAND FARMS STATION	TWO HR	07/26/2012	RAO	09/18/2012		A2	Oil
2-0018158	538 MENDON ST.	ROADWAY ACCIDENT	TWO HR	04/19/2011	RAO	06/22/2011		A2	Oil



2-0017689	5 PATRICK HENRY ST	RESIDENTIAL	TWO HR	10/28/2009	RAO	12/10/2009		A2	Oil
2-0017210	246 PROVIDENCE ST	POLE 25-2	TWO HR	08/15/2008	RAO	08/17/2009		A2	
2-0016998	HOMeward AVE	PARCEL 3	TWO HR	03/07/2008	RAO	04/11/2008		A1	Oil
2-0016967	RTE 146 NORTHBOUND	BETWEEN EXIT 3 + 4	TWO HR	02/12/2008	RAO	12/30/2008		A2	Oil
2-0016866	2 WEST RIVER RD	FORMER MILL BUILDING	120 DY	10/25/2007	TIER 2	06/01/2015	PHASE II		Oil and Hazardous Material
2-0016767	19 DEPOT ST	BERNAT MILL COMPLEX	TWO HR	07/21/2007	RAO	07/12/2010	PHASE II	A2	Hazardous Material
2-0016733	146 MENDON ST	LTI UXBRIDGE STANLEY LTD PARTNERSHIP	72 HR	06/22/2007	RTN CLOSED	10/20/2008			Oil
2-0016356	ROUTE 146 N LACKEY DAMN BRG	VONHEIN CONSTRUCTION ROADWAY REL	TWO HR	08/16/2006	RAO	06/04/2012		A1	Oil
2-0016269	7 HIGHLAND PARK	ROTHROCK RESIDENCE	TWO HR	06/08/2006	RAO	02/16/2007		A2	



2-0016183	EAST HARTFORD AVENUE AT OAK ST	PETROLEUM HEAT & POWER ROADWAY REL	TWO HR	04/04/2006	RAO	06/02/2006		A2	Oil
2-0016157	145 HECLA ST	UXBRIDGE DPW YARD	TWO HR	03/16/2006	RAO	05/22/2006		A1	Oil
2-0016043	136 NORTH MAIN ST	FORMER RAMELLI AUTO	72 HR	12/22/2005	RTN CLOSED	10/10/2006			Oil
2-0015964	30 LACKEY DAM RD	MOTIVA STATION	TWO HR	10/25/2005	RAO	10/27/2008	PHASE II	A2	Oil
2-0015933	492 QUAKER HWY	BERTS BREAKFAST & LUNCH	TWO HR	10/11/2005	RAO	02/08/2013		A2	
2-0015821	72 IRONSTONE RD	BFI	TWO HR	07/14/2005	RAO	08/19/2005		A1	Oil
2-0015803	869 QUAKER HWY	HOOD COMPANIES-HOOD SAND AND GRAVEL	120 DY	07/18/2005	RAO	07/18/2005			Hazardous Material
2-0015732	674 QUAKER HWY	QUAKER DIAMOND	TWO HR	05/03/2005	RTN CLOSED	07/07/2005			
2-0015723	869 QUAKER HWY	ESTATE OF WILLIAM H. HOOD	72 HR	04/29/2005	RAO	08/18/2005			Hazardous Material



2-0015577	336 NORTH MAIN ST	MR ROBERT AND MS NANCY BAGLEY	TWO HR	01/25/2005	RTN CLOSED	03/26/2007			
2-0015561	869 QUAKER HWY	ESTATE OF WILLIAM H. HOOD	72 HR	01/14/2005	RAO	08/18/2005			Oil and Hazardous Material
2-0015541	336 NORTH MAIN ST	VILLAGE CLEANERS	72 HR	12/23/2004	RTN CLOSED	03/26/2007			Hazardous Material
2-0015509	146 MENDON ST	FMR STANLEY WOOLEN	TWO HR	12/03/2004	RAO	04/10/2007		A1	Oil and Hazardous Material
2-0015334	44 DEPOT ST	UTILITY POLE NO 9-1	TWO HR	07/16/2004	RAO	09/14/2004		A2	
2-0015327	RTE 146 N	NEAR LACKEY DAM ROAD EXIT	TWO HR	07/11/2004	RAO	09/17/2004		A1	Oil
2-0015276	869 QUAKER HWY	THE HOOD CAMPANIES	120 DY	06/03/2004	RAO	07/22/2004		A2	Oil
2-0015274	WEST ST	WHP TRUCKING	TWO HR	06/04/2004	RAO	03/21/2005		A1	Oil
2-0015273	145 HECLA ST	TOWN OF UXBRIDGE HWY DEPT GARAGE	120 DY	06/03/2004	RAO	04/06/2006	PHASE III	A2	Oil and Hazardous Material
2-0015100	674 QUAKER HWY	XTRA MART	TWO HR	01/27/2004	RAO	03/30/2004		A1	



2-0015071	589 MILLVILLE RD (SOUTH OF)	G LOPES CONSTRUCTION CO	TWO HR	01/08/2004	RAO	02/19/2004		A1	Oil
2-0014992	DEPOT ST	NEWELL ROAD ASSOCIATION	120 DY	11/06/2003	RAO	11/12/2004		A2	Hazardous Material
2-0014966	674 QUAKER HWY	46 IRON STONE RD (SMITH RESIDENCE)	TWO HR	10/20/2003	RTN CLOSED	07/09/2004			Hazardous Material
2-0014893	325 MENDON ST	WAUCANTUCK MILLS	72 HR	08/28/2003	RTN CLOSED	02/11/2008			Oil
2-0014708	30 LACKEY DAM RD	SHELL STATION	72 HR	03/20/2003	RAO	11/30/2005			Hazardous Material
2-0014704	674 QUAKER HWY (RT 146A)	X-TRA MART STATION	72 HR	03/18/2003	RAO	12/29/2006	PHASE IV	A2	Oil
2-0014575	30 LACKEY DAM RD	SHELL STATION 117459	72 HR	12/05/2002	RAO	11/30/2005	PHASE II	A2	Hazardous Material
2-0014486	HARTFORD AVE W	MASS ELECTRIC CO TRANSFORMER RELEASE	TWO HR	09/25/2002	RAO	11/25/2002		A2	
2-0014250	250 PROVIDENCE ST	FMR RONS TEXECO	72 HR	03/29/2002	RTN CLOSED	12/24/2002			Oil



2-0014137	BLACKSTONE ST	INTERSECTION OF RT 122	TWO HR	12/22/2001	RAO	02/19/2002		A2	
2-0014134	250 PROVIDENCE ST	QUAKER HIGHWAY REALTY TRUST PROPERTY	72 HR	12/17/2001	TIERI	12/24/2002	PHASE IV		Oil and Hazardous Material
2-0014132	RTE 16 AT SEAGRAVE ST	BELLINGHAM LUMBER CO	TWO HR	12/19/2001	RAO	02/19/2002		A1	
2-0013997	277 NORTH MAIN ST	HOLLISTON SERVICE STATION	72 HR	09/19/2001	RTN CLOSED	07/03/2002			Oil
2-0013858	DOUGLAS ST AT RTE 146	LOVEYS GARAGE	TWO HR	06/15/2001	RAO	08/16/2001		A2	Oil
2-0013495	QUAKER HWY	MA HWY DEPT	TWO HR	09/26/2000	RAO	02/01/2001		A2	Oil
2-0013414	6 FOREST LN	BFI	TWO HR	08/07/2000	RAO	06/20/2001		A1	Oil
2-0013340	140 MENDON ST	FMR STANLEY WOOLEN MILLS	120 DY	08/10/2000	RAO	06/19/2002	PHASE II	B1	Oil and Hazardous Material
2-0013284	366 EAST HARTFORD ST	BLACKSTONE HERITAGE STATE PARK	120 DY	05/10/2000	RAO	05/31/2002	PHASE II	A2	Oil
2-0013215	CASSIE LN	LOT 5	TWO HR	03/29/2000	RAO	07/18/2000		A2	
2-0013123	19 DEPOT ST	DEPOT AND MENDON ST	120 DY	01/04/2000	RAO	01/03/2001		A2	Oil and Hazardous Material



2-0013096	JOHNSON RD	CHOCKALOG RD	TWO HR	12/27/1999	RAO	05/03/2000		A2	Oil
2-0012952	QUAKER HWY	JOSEPH COVE PROPERTY	120 DY	11/24/1999	DPS	06/01/2000			Oil and Hazardous Material
2-0012631	230 MENDON ST	ECK PROPERTY	72 HR	01/26/1999	RAO	03/24/1999		A2	Oil
2-0012493	278 MAIN ST	POST OFFICE	72 HR	11/13/1998	RAO	04/30/2008	PHASE III	A2	
2-0012454	79 RIVER RD	INDUSTRIAL DR CROSS STREET	120 DY	09/14/1998	DPS	11/06/1998			Oil and Hazardous Material
2-0012407	535 QUAKER HWY RT 146A	RICKS AUTOBODY	72 HR	09/16/1998	REMOPS	10/05/2005	PHASE V		Hazardous Material
2-0012079	111 POND ST	LOT 1	TWO HR	01/28/1998	RAO	03/30/1998		A2	Oil
2-0011855	22 DOUGLAS ST	CUMBERLAND FARMS	72 HR	08/26/1997	RTN CLOSED	02/23/1998			Oil
2-0011834	22 DOUGLAS ST	CUMBERLAND FARMS	TWO HR	08/14/1997	RTN CLOSED	02/23/1998			Oil
2-0011616	22 DOUGLAS ST	CUMBERLAND FARMS	TWO HR	02/14/1997	RAO	02/28/2000	PHASE III	A2	Oil
2-0011283	277 NORTH MAIN ST	HELLEN SERVICE CO INC	120 DY	06/18/1996	RTN CLOSED	07/31/1996			Hazardous Material
2-0011149	596 DOUGLAS ST	MHD FACILITY 48	120 DY	03/01/1996	RAO	01/09/1997		B1	Hazardous Material
2-0010871	277 NORTH MAIN ST	HELLEN SERVICE CO INC	72 HR	07/31/1995	RAO	10/10/2012	PHASE V	A3	Oil



2-0010784	325 MENDON ST	FORMER WAUCONTUCK MILL	72 HR	05/22/1995	RTN CLOSED	03/04/1998			Oil
2-0010701	WEST HARTFORD AVE	RIVER ST POND	TWO HR	03/13/1995	RAO	01/08/1997		A1	Oil
2-0010291	WORCESTER PROVIDENCE TPKE	100 YDS N OF MI MARKER 40	TWO HR	04/29/1994	RAO	04/18/1995		A1	Oil
2-0010287	130 DOUGLAS ST	RTE 116	72 HR	04/27/1994	RAO	08/29/1994		A1	Oil
2-0010203	QUAKER HWY RTE 146A	SOUTH OF UXBRIDGE DISTRICT COURT HOUSE	TWO HR	02/22/1994	RAO	08/26/1994		A2	Oil
2-0010192	582 QUAKER HWY	BY LOADING DOCK UNITED SUPPLY PARKNG LOT	TWO HR	02/14/1994	RAO	06/09/1994		A1	Oil
2-0001109	2 HARTFORD AVE W	GETTY STATION	NONE	09/29/1993	RAO	03/04/1999		A2	
2-0001002	REAR DEPOT ST	UXBRIDGE SUBSTA 321	NONE	07/15/1993	RAO	03/31/2000	PHASE IV	A2	Oil
2-0000901	325 AND 370 MENDON ST	WAUCANTUCK MILL FMR	NONE	10/15/1992	TIERI	03/03/1998	PHASE V		Oil



2-0000788	124-136 NORTH MAIN ST	RAMELLI FORD	NONE	04/15/1991	REMOPS	01/29/2007	PHASE V		
2-0000522	336 NORTH MAIN ST	PURITAN CLEANERS	NONE	04/13/2010	TIERI	03/26/2007	PHASE II		
2-0000374	1 NORTH MAIN ST	ROYS MOBIL STATION 01 PG6	NONE	03/27/1989	RAO	06/22/1995	PHASE III	A2	
2-0000139	152 HARTFORD ST	STRATHMORE SHIRE REALTY	NONE	08/27/1985	DEPNFA	09/02/1993			Oil
2-0000138	146 MENDON ST	STANLEY WOOLEN MILLS FMR	NONE	10/15/1988	TMPS	06/08/2020	PHASE V	TF	

Source: Massachusetts Department of Environmental Protection, MassDEP Waste Site Cleanup

Landfills

According to the Massachusetts Department of Environmental Protection Bureau of Waste Prevention, there are no operating landfills in Uxbridge at the present time. There is one [1] inactive/closed landfill, as listed in the table below:

Table 11. Inactive Landfills in Uxbridge, MA

ID	Current Status/Years of Operation	Site/Location	Owner Type	Landfill Type
SL0304.001	Inactive/1988	558 Hazel St	Municipal	MSW Landfill

Source: Massachusetts Department of Environmental Protection, Bureau of Waste Prevention

Ground and Surface Water Pollution

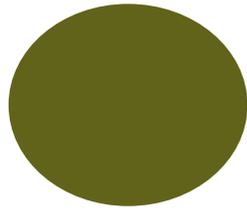
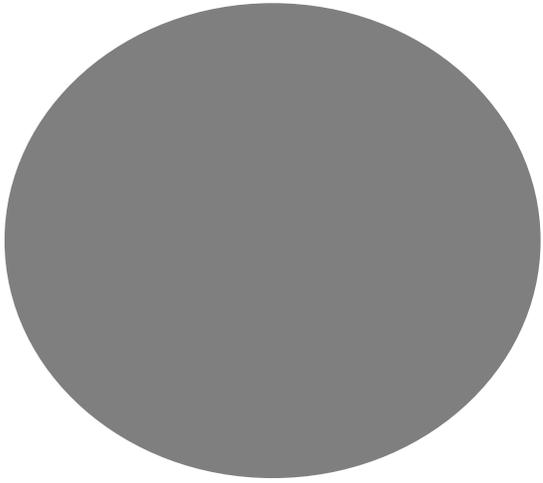
Nonpoint source pollution (NPS) and point source pollution has the ability to threaten public health, natural resources, and the environment. Polluted runoff is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and man-made pollutants, finally depositing them into lakes, rivers, wetlands, and ground water. Such pollution comes mainly from human activity and sometimes from the natural landscape. Common human activities that impact the environment include land clearing, fertilizing, salting and sanding roads, improper motor oil disposal, pet waste, and failing septic systems. In addition, surface water resources and wetlands are vulnerable to runoff from roadways and from inadequate erosion control measures.

Each individual watershed, throughout the world, has its own distinct set of challenges. This is true for the Blackstone River watershed. Industrial contaminants, excess nutrients, invasive aquatic plants, thermal pollution, turbidity, and dumping are all environmental challenges seen in the Blackstone River, and are seen more localized at the areas of the Blackstone River specifically in Uxbridge.

Noted in Uxbridge and the surrounding towns, there is risk of ongoing issues related to water contamination stemming from dumping in Uxbridge - the cause is a well-known dumping site located on Kempton Road and River Street.

Development Regulations

As required by the state, the Conservation Commission has adopted the Department of Environmental Protection Stormwater Management Standards in issuing Orders of Conditions for work within areas protected under the state Wetlands Protection Act (M.G.L. c.131, Sec. 40) and its applicable Regulations (310 CMR 10.00). The Stormwater Management and Erosion Control Bylaw was adopted under authority granted by the Home Rule Amendment, and pursuant to the regulations of the federal Clean Water Act (40 CFR 122.34). The Planning Board administers and regulates activities under this bylaw. Any project on 1 acre or more that does not require a permit from any other board must file an Uxbridge Stormwater application. These applications receive periodic review from consultant engineers and the Conservation Commission. The Planning Board has adopted and may periodically amend the Stormwater Regulations in order to mitigate potential future land hazards. The Wetlands Protection Bylaw is enforced and administered by the Conservation Commission.



SECTION 5:
INVENTORY OF LANDS OF
CONSERVATION AND
RECREATION INTEREST

Town of Uxbridge



SECTION FIVE: INVENTORY OF LANDS OF CONSERVATION AND RECREATION INTEREST

Open space in Uxbridge includes undeveloped natural landscapes such as woodlands, fields, and waterways, as well as historic landscapes such as farmland. Uxbridge’s open spaces also provide passive recreation opportunities. Since most of the town is zoned for single-family residential development, as housing growth continues there will continue to be a need for active recreation, as well as passive recreation. Community gardens, farmers markets, and picnic areas, and farm-to-table restaurants could provide future recreation opportunity in Uxbridge. Maintaining the balance between protecting open space and providing for recreational opportunities, while providing land for other future municipal uses, will be an issue that will need to be addressed going forward.

Open space helps protect the Town’s water supply, manage flood waters, provide wildlife habitat, and offer opportunities for various recreational activities. Our forests filter our air, absorb carbon emissions that would otherwise contribute to climate change, provide wildlife habitat, and provide places for residents to explore and relax. Our wetlands prevent pollutants from entering our waterways and help absorb floodwater before it can reach nearby communities. And our urban green spaces help cool downtowns and offer local places to grow our own food.

Table 12. Open Space and Recreation Land in Uxbridge, MA

Owner Type	Acres	%
(N) Private Non-profit	89.08	3.52%
(P) Private for profit	790.90	31.21%
(S) State	652.29	25.74%
(M) Municipal	618.73	24.41%
(F) Federal	242.25	9.56%
(L) Land Trust	141.00	5.56%
Grand Total	2,534.25	

Source: Central Massachusetts Regional Planning Commission



Table 13. Open Space and Recreation Lands in Uxbridge by Protection Level

Owner Type	Acres	%
(L) Limited Protection	181.23	7.15%
(N) No Protection	583.36	23.02%
(P) Protected	1,769.66	69.83%
Grand Total	2,534.25	

Source: Central Massachusetts Regional Planning Commission

Permanently Protected Lands

These lands are legally protected in perpetuity and recorded as such in a deed or other official document. Land is considered protected in perpetuity if it is owned by the Town’s Conservation Commission or, sometimes, by the Water Department; if a town has a conservation restriction on the property in perpetuity; if it is owned by one of the state’s conservation agencies (thereby covered by article 97); if it is owned by a non-profit land trust; or if the Town received federal or state assistance for the purchase or improvement of the property. Private land is considered protected if it has a deed restriction in perpetuity, if an Agriculture Preservation Restriction has been placed on it, or a Conservation Restriction has been placed on it. Many permanently protected lands are protected by Article 97 of the State Constitution, which provides permanent protection for certain lands acquired for natural resources purposes. Parkland is protected under Article 97 as well. Removing the permanent protection status of such lands is extremely difficult, as is evidenced by the following steps:

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

Please find a table of the Open Space owned by the Town of Uxbridge on the following page. In total, it comes to 988.06 acres. This totals to 5.1% of all available area in Uxbridge. Public recreation areas account for 88.1 acres in Uxbridge, which is 0.5% of all available land in Uxbridge. Keeping these areas available for recreation purposes, along with general conservation reasons in perpetuity is critical for preserving the land for generations to come.

Table 14. Town-owned Open Space and Recreation Lands in Uxbridge

Site Name	Acres	Managing Agency	Existing Uses	Condition	Recreation Potential	Grant Funding
Blackstone River and Canal Heritage State Park	43.39					
DPW Pumping Station	26.07					
Hale Swamp Conservation Area	74.61					
Helca Street Playground	5.82		Basketball area, tennis court, softball and soccer fields, playground equipment			
Henry Street Playground	0.45		Playground equipment			
Duck Pond Conservation Area	1.71					
Taft Memorial Park	34.20		Basketball courts, picnic facilities, playground equipment, skating pond			
Blackstone River Conservation Area	27.08					
Sutton Street Field Project	153.75					
Pout Pond Recreational Area	63.75					
Aldrich Brook Estates Conservation Area	18.32					
Uxbridge Town Common	0.44		Walks, benches			
Uxbridge Water Supply Land	40.37					

Source: Town of Uxbridge

In addition to lands owned by Uxbridge, the Commonwealth of Massachusetts and the United States also own land in Uxbridge that are considered open space. This accounts for, in total, 1,003 acres, which accounts for 5% of all land available in Uxbridge.

Table 15. State-owned Open Space Land in Uxbridge

Site Number	Location	Assessor Map/ Lot Number	Area (Acres)	Existing Uses
22	Blackstone River State Park	6-4055, 7-4313, 4336, 4338	263.81	Conservation
23	Lackey Dam Pond	9-1576	125.48	Conservation
24	Blackstone Canal	13-0377, 1059, 1836, 1894, 1962, 4422,	149.24	Conservation
		19-2739, 2985		
25	Scotts Lane	30-875, 2457	29.3	Conservation
26	Douglas State Forest	32-2548, 33-4353, 38-542, 1443, 45-985, 3525, 50-462, 537, 51-955, 1121	144.25	Conservation
27	Dept. of Fisheries and Game	Feb-95	6.7	Wildlife
28	Dept. of Fisheries and Game	48-1085	52.5	Wildlife
	SUB-TOTAL		771.28	

Source: Town of Uxbridge

Table 16. Federal-owned Open Space Land in Uxbridge

Site Number	Location	Assessor Map/ Lot Number	Area (Acres)	Existing Uses
29	West Hill Dam	1-4074, 4635, 4754,	232.12	Flood Control
		2-2785, 2436		

Source: Town of Uxbridge



Lands with Limited or Temporary Protection

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

Land in active and passive use is eligible for a reduced tax rate under Chapters 61, 61A, and 61B of the Massachusetts General Laws (M.G.L.), which are designations for lands that are used for forestry, agriculture, and conservation or recreation, respectively. These lands include those legally protected for less than perpetuity (e.g. short-term conservation restriction or Chapter 61 lands), or temporarily protected through an existing functional use. For example, some chapter lands may only be temporarily protected through their forestry use, while residential is their primary use. These lands could be developed for other uses at the end of their temporary protection or when their functional use is no longer necessary. These lands might be protected by a requirement of a majority municipal vote for any change in status. This designation also includes lands that are likely to remain open space for other reasons (e.g. cemeteries and municipal golf courses). The following describes the different Chapter Lands programs:

M.G.L. Chapter 61 is designed to keep forested land under productive forest management. Owners with more than 10 acres of forest are eligible for enrollment. They must submit a DCR-approved forest management plan and a management certificate to the Town assessor before a new tax classification can begin. The assessed value of land classified under Chapter 61 is reduced by 95%. Chapter 61 classifications run for ten-year periods.

M.G.L. Chapter 61A is most commonly applied to agricultural or horticultural land but can be used for the forested portions of a farm, provided a forest management plan is approved by DCR. To qualify for Chapter 61A, a farm owner must have five or more contiguous acres being used for agricultural or horticultural purposes. Property under Chapter 61A is assessed at rates that vary for different agricultural uses. Generally, classification will result in an 80% reduction in assessed value.

M.G.L. Chapter 61B is similar to 61A but applies to lands designated for recreational use and containing at least five contiguous acres. The land must be retained in a natural state to preserve wildlife and natural resources, must be devoted primarily to recreational use, and must provide a public benefit. Recreational uses may include golfing, hiking, camping, nature study, shooting/target practice, hunting, and skiing. The assessed valuation of Chapter 61B land is reduced by approximately 75%.



Landowners who enroll their land in the program receive property tax reductions in exchange for a lien on their property. The terms of the lien require that enrolled land remain in an undeveloped state and be managed for forest production, agricultural production, or recreation. Furthermore, the lien provides the municipal government of the city/town in which the enrolled property is located a right of first refusal should the landowner put the land up for sale while it is enrolled in the program. The Town has the “right of first refusal” for purchase of the land within 120 days of notification by the property owners of the pending sale. Towns may assign their right of first refusal to a state agency or a nonprofit conservation organization. Towns often have trouble taking advantage of the right of first refusal because of the rapid timeframe within which the Town must find the money and approve the purchase. Landowners who develop their land while enrolled in the program, or for a period of time after withdrawing from the program, may be required to pay penalties. These lands are considered to have limited or temporary protection because the owner can sell the property or choose to unenroll the property in the special taxation program and thus the open space public benefit goes away.

Private Recreation areas located in Uxbridge are considered lands with limited protection because these lands remain open space for reasons other than conservation, and at times may be sold for other purposes. In Uxbridge, 583.36 acres of land are private recreation areas.

Table 17. Private Recreation Areas in Uxbridge

Owner Type	Acres	%
(N) Private Non-profit	42.89	7.35%
Fairwoods Christian Rec Soc	42.89	7.35%
(P) Private for profit	540.47	92.65%
Edgewood Golf Course	24.71	4.24%
Uxbridge Rod and Gun Club	33.89	5.81%
Laurel Brook Rod and Gun Club	388.18	66.54%
Blissful Meadows Golf Course	76.69	13.15%
Whitins Fish and Game Club	16.99	2.91%
Grand Total	583.36	100.00%

Source: Central Massachusetts Regional Planning Commission

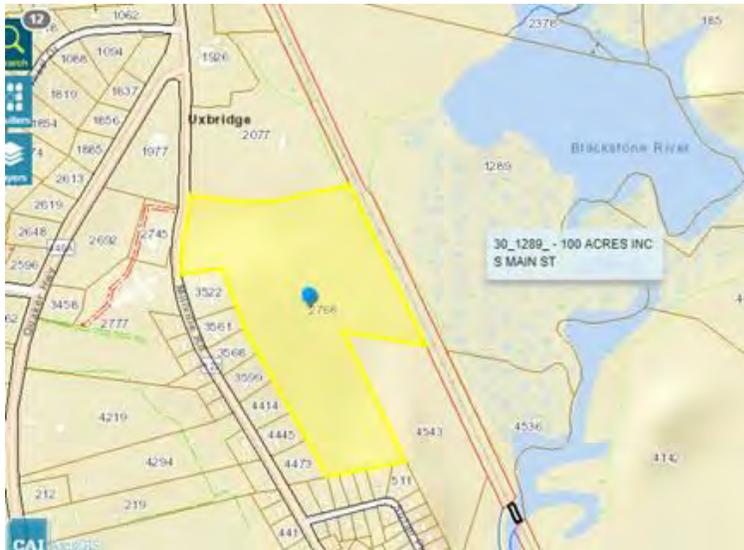
None or Unknown Protection

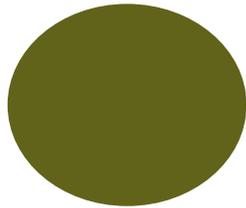
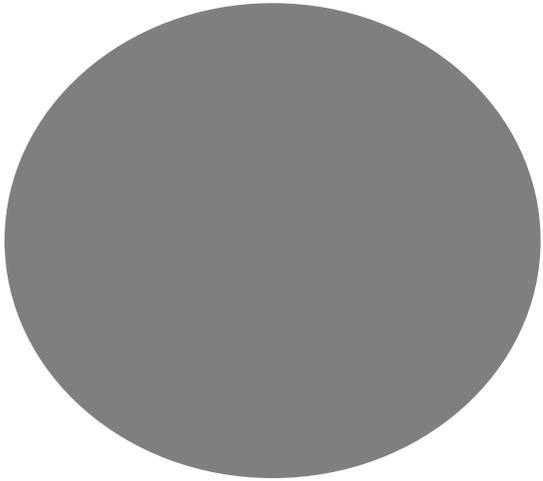
Lands that are privately-owned and lands that could be sold without legal restriction at any time for another use (e.g. scout camps, private golf course, and private woodland) are considered to be totally unprotected. Parcels with unknown protections include those with unclear conservation values according to MassGIS records and require further investigation into property deeds.

Uxbridge has a variety of land that is either unprotected or under protected with significant agricultural, natural resources, or open space value. These lands account for at least 500 acres of land in Uxbridge, accounting for 2.5% of land in Uxbridge. Multiple parcels are threatened by development exist along three major river corridors: Mumford, Blackstone, and West River. Of these, Undisturbed parcels along the Blackstone River take priority as many large parcels have already been protected from future development. Opportunity exists to increase the size of a Blackstone greenway corridor in Uxbridge. Uxbridge continues to experience rapid development resulting in loss of acres of forested and agricultural lands. The remaining historic agricultural fields in Uxbridge appear to be severely threatened as many have already been purchased by Realty interests. Other areas are jeopardized by the potential for future sand and gravel mining.

Parcels of Interest

The town of Uxbridge has a potential property that they hope to acquire for conservation and recreation. The town stands to possibly acquire 290 Millville Road, which would include gains of riverfront areas, wetlands, vernal pools, and includes NHESP state-listed species habitat.





SECTION 6: COMMUNITY VISION

Town of Uxbridge



SECTION SIX: COMMUNITY VISION

A. DESCRIPTION OF PROCESS

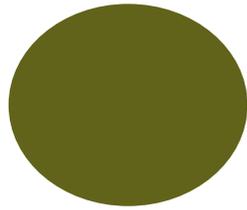
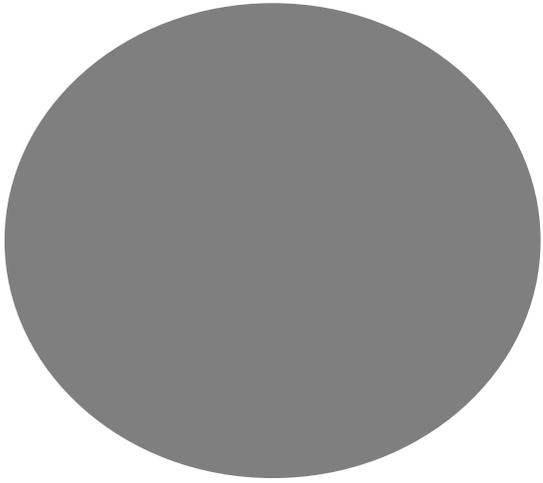
The Uxbridge Open Space and Recreation Plan update has been developed by the Uxbridge Open Space Committee with assistance from the Central Massachusetts Regional Planning Commission. Additional input was provided by the *1984 Conservation, Recreation, and Open Space Plan*, the *2008 Open Space and Recreation Draft Plan*, the *2019 Town Owned Property Inventory, Current Uses, and Recommendations*, the *2007 Uxbridge Reconnaissance Report*, the *1992 Master Plan Update*, the *2000 Regional Transportation Plan* prepared by CMRPC, and the *BioMap2* for Uxbridge produced in 2012.

To develop the community vision, the Uxbridge Open Space Committee held a ten (10) virtual public meetings, conducted two community surveys, hosted a two-day virtual public forum, and distributed a follow-up survey for any remaining input. From these initiatives came an overall vision for the Town and the development of Uxbridge's Open Space and Recreation Goals. It also addressed goals, issues, and challenges in the areas of housing, economic development, and transportation as well as natural resources.

B. STATEMENT OF OPEN SPACE AND RECREATION GOALS

1. Preserve Water Resources, Wildlife Habitats, Forests, and Farmlands
2. Provide and Enhance Well-Balanced Recreation and Conservation Opportunities
3. Preserve the Rural Character of the Town
4. Improve Climate Resilience Town-Wide

These goals are expanded with a set of objectives and actions for each in the following sections of this report.



SECTION 7: ANALYSIS OF NEEDS

Town of Uxbridge



SECTION SEVEN: ANALYSIS OF NEEDS

This needs analysis section is a compilation of needs derived from several sources. It includes input from the virtual public forum held on September 15, 2020 and September 17, 2020, as well as from the community survey, previous Town studies, and the data assembled in the Community Setting, Environmental Inventory and Analysis, and Inventory of Lands of Conservation and Recreation sections of this report.

A. SUMMARY OF RESOURCE PROTECTION NEEDS

As the Community Setting section made clear, growth is proceeding rapidly in Uxbridge. In addition to negative impacts on natural resources (wildlife habitat, water recharge areas, etc.), this development has impacted the character of the town by eliminating scenic views and transforming rural roadways into suburban collector roads. The need to conserve natural resources (especially water resources) and to preserve community character creates a need to acquire additional open space and to develop policies and regulatory measures that protect natural resources.

Uxbridge has 19 active gravel mining operations. These need to be monitored carefully to ensure that aquifers are not damaged, and that sufficient gravel remains to protect the groundwater in the future.

One method of conserving natural resources is to encourage compact development. Compact development results in more efficient use of land such that growth is accommodated while still preserving natural resources. Major impediments to compact development in suburban regions are the necessity to accommodate automobiles and the separation of uses mandated by zoning. A vicious circle is in effect. Since there is virtually no transit service available in the region, all facilities must be designed to be accessed by automobiles. Similarly, separation of uses requires that all trips be made by automobile since the resulting distances between uses precludes the possibility of walking. This results in ever-wider roads and massive parking lots (not to mention high levels of traffic), which in turn renders any kind of transit or pedestrian-oriented development nearly impossible. Parking generally becomes the limiting factor for developing a particular parcel rather than the density allowed by zoning. Transit as well as mixed-use development would help facilitate compact development and allow land to be used more efficiently.



B. SUMMARY OF COMMUNITY'S NEEDS

One of the issues identified in the community survey and the public forum was the need to provide trail networks. Links among current and/or future open space and recreation facilities are needed both within town and between the town and surrounding region. Such links promote wildlife migration (thus allowing greater biodiversity) as well as provide opportunities for passive recreation for humans. The SNETT trail provides a backbone for a trail system that could include spurs through several areas of Town.

The demand for active recreation facilities has exploded. There is an extreme need for additional recreation facilities for youths, in particular, but for all ages generally. There is a need to acquire additional land for fields and other active recreation opportunities. In concert with compact development, such facilities are best located in close proximity to residential areas.

Uxbridge also recognizes the need to serve diverse recreational interests. These include a wide range of activities including hunting, off-road vehicle use, dog walking, bird and nature watching, etc. Different open space areas may be appropriate for different uses. Management plans for each open space area are needed to determine the most appropriate uses for each, as well as how they are regulated.

C. MANAGEMENT NEEDS

As discussed above under Resource Protection Needs, compact development is a means of more efficiently using land to accommodate growth while protecting natural resources. Important steps to amend zoning bylaws and other measures have been taken in the town. However, additional measures to encourage compact, sustainable development remain an important management need.

As growth continues, water resources are being strained. Growth results in more water use while also increasing the amount of impervious surface. Recent policy changes at the state level to encourage more recharge of stormwater into the ground and more decentralized (rather than centralized) wastewater treatment facilities will help improve the situation to some degree.

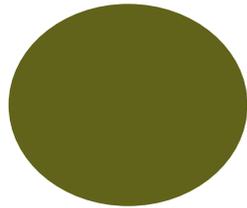
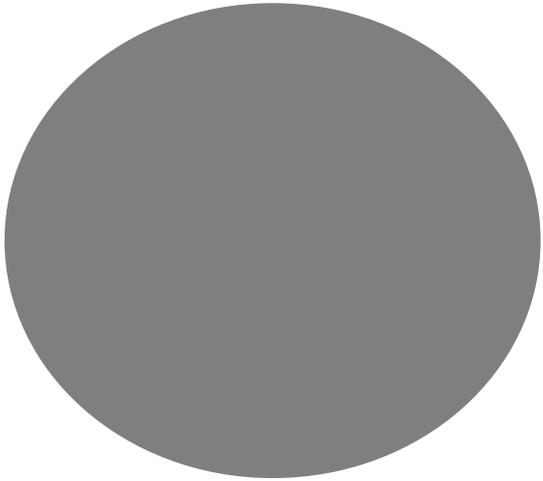
While the need to protect aquifer and recharge areas is important, educational, and regulatory measures to encourage conservation and recharge of stormwater and wastewater are also major components. A public education campaign could include a web site, slide show, cable TV video, presentations to civic groups, etc. Information on existing open space and its functions as well as desired expansions of the system could be included.

Another need is public access to already-protected open space. Facilities such as parking, signs,



and trails coupled with improved public awareness would result in greater use and appreciation of our natural resources. There is a need for awareness among the citizens of Uxbridge where existing protected open space is located and what recreational opportunities are offered there. Second, there is a need for improved facilities (including features that permit usage by elderly and handicapped persons in compliance with the Americans with Disabilities Act (ADA) requirements) to allow for increased usage by the public.

As mentioned above, management plans for each open space area are needed to determine the most appropriate uses for each and how such uses will be regulated at each area.



SECTION 8: GOALS & OBJECTIVES

Town of Uxbridge



SECTION EIGHT: GOALS AND OBJECTIVES

The goals and objectives listed below represent an expansion of the goals listed in the Community Vision section. Some of the objectives may appear under more than one goal. They represent more specific, generally measurable, steps that can be taken to advance then goals.

GOAL 1: PRESERVE WATER RESOURCES, WILDLIFE HABITATS, FORESTS, AND FARMLANDS

Objective 1.1 – Protect Surface and Groundwater Resources from Adverse Impacts

Objective 1.2 – Maintain Wetlands, Vernal Pools, and Rare Wildlife Habitats

Objective 1.3 – Preserve Agricultural and Forested Lands

GOAL 2: PROVIDE AND ENHANCE WELL-BALANCED RECREATION AND CONSERVATION OPPORTUNITIES

Objective 2.1 – Provide Diverse Recreation Opportunities Serving a Wide Range of Interests

Objective 2.2 – Enhance Community Involvement

Objective 2.3 – Increase Visibility and Knowledge of Open Space and Recreation Resources

GOAL 3: PRESERVE THE RURAL CHARACTER OF THE TOWN

Objective 3.1 – Maintain the Historical Character and Scenic Features of the Town

Objective 3.2 – Promote Compact Development

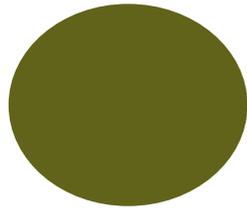
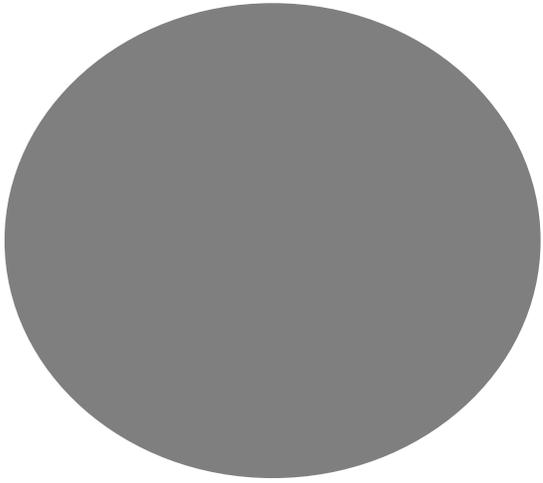
Objective 3.3 – Establish Policies that Promote Resource Protection

GOAL 4: IMPROVE CLIMATE RESILIENCE TOWN-WIDE

Objective 4.1 – Reduce Adverse Flooding Town-Wide

Objective 4.2 – Lessen Impacts of Winter Storms/Severe Storms

Objective 4.3 – Enhance Drought and Wildfire Awareness



SECTION 9:
SEVEN-YEAR ACTION
PLAN

Town of Uxbridge



SECTION NINE: SEVEN-YEAR ACTION PLAN

This section contains the recommendations for action to improve and enhance the open space and recreation resources in Uxbridge. The Seven-Year Action Map displays the recommendations of the plan. Following the narrative below is a chart which lists each of the recommended actions, identifies the lead agency or organization most appropriate for implementing the action, lists other agencies/organizations that should be involved, identifies appropriate implementation mechanisms, and provides a general schedule for implementation. A brief discussion of potential implementation mechanisms follows the chart.

Protect and Enhance Regional Resources

Blackstone River - The Blackstone River Valley is now recognized as a national resource as evidenced by the Blackstone River Valley National Heritage Corridor Commission (BRVNHCC). However, its focus is on the Valley as an historic and cultural resource. The Town of Uxbridge should initiate efforts to develop a procedure of formal notification among its neighbors for any activity that affects the Blackstone River.

Douglas State Forest - The forest represents an exciting recreational resource that can be enjoyed to a much larger degree by improving access. The Town should support improvements to the SNETT as well as to the Forest itself, which acts a major node at the terminus of what has the potential to be an important recreation and transportation corridor.

SNETT - As mentioned above, this important resource has not even begun to reach its potential. Developed as a bikeway as well as a pedestrian trail, this corridor could potentially link the Douglas and Franklin State Forests and serve as a link between the Blackstone River Valley and Providence-Worcester Bikeway with the Bay Circuit. Again, the Town should support State efforts to invest in this corridor with almost unlimited potential.

Develop Regional Linkage Plan

Using the SNETT as the backbone, the Town should work with other Towns to develop a system that links the open spaces, recreation areas, waterways, scenic roads, and other areas of interest with each other as well as with such features in adjacent Towns. The links could consist of bikeways, trails, utility rights-of-way, scenic roads, existing cart paths, paper streets, abandoned rail lines, etc. The dual objectives of the plan would be to preserve migration routes for wildlife and to develop trails for human recreation.

A trail system developed under this proposal could link the Blackstone River Valley National Heritage Corridor with the Bay Circuit and Warner Trail. Some portions of the trails (particularly



bikeways) could be financed through transportation enhancement funding if they can serve as alternative transportation to employment centers or retail/service centers.

Increase Public Awareness

Many of the residents of the Town are not fully aware of the open space and recreation opportunities in their town. Nor is there sufficient information available on the knowledge about these resources that the residents do have, their use levels, their opinions of the facilities available, additional facilities that should be provided, etc. Therefore, it is recommended that a public awareness effort be undertaken to increase knowledge about these resources.

Such an effort could include three major components. First, a survey should be done to determine existing levels of awareness and opinions. Second, a website should be established that includes results of the survey, an inventory of open space and recreation lands, maps and scenes of existing and proposed open space areas and recreation facilities, facts about growth and facility usage, and information about the benefits of the existing and proposed open space and recreation systems. The web site could be supplemented by a slide show or video that could be presented to meetings of civic, social, fraternal, business groups, at public hearings and meetings, and on public access cable TV, with references to the web site for additional information. At a minimum, a brochure or map would help increase awareness of open space and recreation opportunities.

Strongly Consider Adoption of Community Preservation Act

Adoption of the Community Preservation Act (CPA) is one of the most effective measures available for implementing many of the recommendations of this Plan. The Community Preservation Act was passed by the Massachusetts Legislature in 2000. It provides for Towns to assess a property tax surcharge of up to 3%. The State then provides matching funds raised by a document recording fee at the Registries of Deeds. The matching funds can range from 5% to 100% depending on the number of Towns participating and the amount of money they raise. It is anticipated that the match will be at or close to 100% for a few more years and then decline as more cities and towns adopt the Act and become eligible for the funds.

The funds raised can be used for four purposes: open space, recreation, historic preservation, and affordable housing. A minimum of 10% each must be spent on open space, historic preservation, and affordable housing. A Community Preservation Committee is established that recommends projects to Town Meeting, which must still approve expenditures from the Community Preservation Fund.

While the CPA has obvious direct benefits for open space and recreation acquisitions or projects, the historic preservation and affordable housing elements also have indirect benefits that advance the goals of this Open Space and Recreation Plan.



First of all, historic preservation projects can result in an existing abandoned site being used for a particular purpose rather than developing a new greenfield site. Also, the land associated with an historic building could become a link or access to nearby open space parcels. Similarly, the affordable housing component can be used to develop housing on a portion of a site while leaving the remainder as open space. In some cases, it could allow the Town to break even on the acquisition of a parcel by developing housing on a small portion of it rather than require an expensive expenditure.

It should be noted that while adoption of the CPA requires a property tax surcharge, it can sometimes result in lower property taxes in the long run. If there are projects in a CPA-eligible category for which the Town will likely approve a debt exclusion or even existing property tax revenues anyway (e.g. new playing fields, renovation of an existing Town-owned historic building, acquisition of an open space parcel or development of affordable housing) the total cost to the Town for such projects can be reduced by up to half due to the matching funds from the CPA Trust Fund. While a town must remain in the CPA program for a minimum of five years, the rate of the surcharge can be adjusted annually so the rate can be reduced to a minimal amount after generating the substantial matching funds with a higher surcharge for the first 2 or 3 years.

Support and Encourage Compact Development

Compact development is an effective means of accommodating growth while preserving community character. Current zoning bylaws and other regulatory measures generally preclude the possibility of compact development. Lack of public transit also inhibits its development. Franklin's Senior Village Overlay District provides a model of the type of regulatory changes that can encourage compact development by providing density bonuses for certain activities, including preserving open space off site.

Table 18. Seven-Year Action Plan

Seven-Year Action Plan						
#	Objective	Action	Responsible Parties	Collaborators	Priority/ Timing	Resources
GOAL 1: Preserve Water Resources, Wildlife Habitats, Forests, and Farmlands						
1.1	Protect Surface and Groundwater Resources from Adverse Impacts	Identify watershed areas and establish critical zones deserving protections	Conservation Commission	Open Space Committee	High/Ongoing	Town Staff
		Identify surface and subsurface water bodies and strengthen protective measures	Conservation Commission	Open Space Committee, DCR	Medium/Long	Town Staff
		Monitor and evaluate on-site sewage disposal systems and recommend appropriate actions	Board of Health	Conservation Commission	Low/ Ongoing	Town Staff
		Acquire additional water resources for recreation and preservation	Conservation Commission	Open Space Committee, Recreation Commission	High/Ongoing	LAND Grant, Town Staff



		Formulate appropriate protective measures for water resources	Planning Board	Conservation Commission, DPW	Medium/Long	Town Staff
1.2	Maintain Wetlands, Vernal Pools, and Rare Wildlife Habitats	Increase public awareness of important habitat areas	Conservation Commission	Planning Board, Zoning, Mass Audubon	Low/ Ongoing	Town Staff
		Identify wildlife corridors where conservation is of high priority	Conservation Commission	Open Space Committee, Planning Board, Selectmen, Trustees, DCR	High/Long	Town Staff
		Identify wetlands and floodplains and strengthen protective measures	Conservation Commission	Zoning, Planning Board	High/Ongoing	Town Staff
		Identify unprotected lands/landowners within designated Estimated and Priority Habitat Areas of Rare and	Conservation Commission	DCR, Private Landowners	High/Long	Town Staff, State/Federal Grants, Donations



		Endangered Species and Bio Map				
		Identify, acquire, and preserve additional conservation and open space lands	Open Space Committee, Conservation Commission	Selectmen, Town Planner	Medium/Ongoing	LAND Grant, Donations, Land Swaps
		Prepare management plans for each open space parcel in town to determine appropriate uses for each	Conservation Commission	Open Space Committee, DCR,	Low/Ongoing	Town Staff, State/Federal Grants
1.3	Preserve Agricultural and Forested Lands	Evaluate use of Chapter 61, 61A, and 61B, and prioritize parcels for acquisition	Open Space Committee	Conservation Commission	Medium/Ongoing	Town Staff, LAND Grant
		Establish Farmers Coalition to represent agricultural interests	Open Space Committee	Selectmen, Conservation Commission	Low/Short	Town Staff



		Identify, acquire, and preserve agricultural lands	Open Space Committee	Conservation Commission, DAR	Medium/Ongoing	Town Staff, LAND Grant
		Prepare management plans for forested lands in town	Conservation Commission	DCR, DPW (Tree Warden), Pout Pond Recreation Committee	Low/Long	Town Staff
GOAL 2: Provide and Enhance Well-Balanced Recreation and Conservation Opportunities						
2.1	Provide Diverse Recreation Opportunities Serving a Wide Range of Interests	Preserve and utilize the land between McCloskey Middle School and Taft Elementary School for recreation opportunities	Recreation Commission	Planning Board, School Committee, Historical Committee	Medium/Long	Town Staff, PARC Grant, Historical Grant
		Inventory and evaluate available conservation and recreation programs	Recreation Commission	Open Space Committee	Low/Short	Town Staff



		Provide all neighborhoods with appropriate recreation, park, and/or playground facilities	Planning Board	Open Space Committee, Conservation Commission, Recreation Committee, Selectmen	Low/Ongoing	LAND Grant, PARC Grant, Town Staff, Donations
		Establish a cost-effective maintenance schedule for municipal recreation and conservation facilities	Recreation Commission	Open Space Committee, Selectmen	Low/Ongoing	Town Staff
		Use reliable and durable equipment when developing or redeveloping parks and playgrounds	DPW	Arthur Taft Memorial Committee, Dog Park Committee, Pout Pond Recreational Committee, Community Gardens Committee, Public Safety	Low/Ongoing	Town Staff, PARC Grant



				Committee, School Committee		
		Provide diverse recreational opportunities serving a wide range of interests, including hunting, off-road vehicle use, dog walking, bird and nature watching, etc.	Open Space Committee	Recreation Commission, Conservation Commission	Medium/Ongoing	Town Staff
		1.23E-15	Selectmen	Army Corps of Engineers, Open Space Committee, Conservation Commission	Medium/Long	Town Staff



		Identify potential trail networks	Open Space Committee	Conservation Commission, Recreation Commission	Low/Ongoing	Town Staff, MassTrails Grant
2.2	Enhance Community Involvement	Use media, such as websites and cable access TV, to increase public awareness of open space and recreation facilities, issues, and potential actions	Cable Advisory Committee	Open Space Committee, Conservation Commission	Low/Ongoing	Town Staff
		Use surveys, public meetings, and other means to encourage input from residents	Town-wide	Town-wide	Low/Ongoing	Town Staff
		Establish a dedicated Trails Committee and an environmental steward volunteer group	Conservation Commission	Selectmen, Open Space Committee	Medium/Short	Town Staff



		Establish an Open Space and Recreation Plan Implementation Committee to coordinate among Town Boards and Commissions	Open Space Committee	Selectmen	High/Short	Town Staff
2.3	Increase Visibility and Knowledge of Open Space and Recreation Resources	Increase public awareness regarding the use of pesticides, fertilizers, and other chemicals	Board of Health	Conservation Commission, Open Space Committee, Stormwater Committee	High/Ongoing	Town Staff
		Improve signage to increase visibility of open space and recreation resources	Open Space Committee	DCR, Mass Audubon, Selectmen, Trustees	Medium/Short	Town Staff
		Increase public awareness of the value of open space, and encourage citizen input	Open Space Committee	Conservation Commission, Selectmen	High/Ongoing	Town Staff

GOAL 3: Preserve the Rural Character of the Town



3.1	Maintain the Historical Character and Scenic Features of the Town	Continue to inventory, evaluate, and define the Town's historical features	Historical Commission(s)	Trustees of Soldiers Memorials, Selectmen	Medium/Ongoing	Town Staff
		Increase awareness of and monitor the Historic District Bylaw and adjust as necessary	Historic District Commission	Bylaw Review Committee	Low/Ongoing	Town Staff
		Identify and protect scenic routes	Open Space Committee	Planning Board, Highway Department, Historical Commission, Zoning	Low/Ongoing	Town Staff
3.2	Promote Compact Development to Reduce Urban Sprawl	Review the Zoning Bylaw and Subdivision Rules and Regulations; Update as necessary	Planning Board	Conservation Commission, Open Space Committee, Zoning, Selectmen	Medium/Ongoing	Town Staff



		Encourage/Promote the incorporation of open space into new development plans	Planning Board	Open Space Committee, Zoning	High/Ongoing	Town Staff
		Collaborate with developers and engineers to promote compact development	Planning Board, Conservation Commission	Open Space Committee	High/Ongoing	Town Staff
3.3	Establish Policies that Promote Resource Protection	Adopt the Community Preservation Act	Open Space Committee	Housing Authority, Historical Commission, Planning Board, Recreation Commission, Selectmen	Medium/Long	Town Staff
		Implement an education campaign to inform Uxbridge residents on the benefits of a Community Preservation Act	Open Space Committee	Housing Authority, Historical Commission, Planning Board, Recreation	Medium/Ongoing	Town Staff



				Commission, Selectmen		
		Enact a Wetlands Protection Bylaw	Conservation Commission	Zoning, Planning Board	High/Long	Town Staff
		Implement an education campaign to inform Uxbridge residents on the benefits of a Wetlands Protection Bylaw	Conservation Commission	Zoning, Planning Board	High/Ongoing	Town Staff
GOAL 4: Improve Climate Resilience						
4.1	Reduce Adverse Flooding Town-wide	Encourage nature-based solutions for stormwater management	Stormwater Committee	Open Space Committee, DPW, Conservation Commission, Planning Board	High/Ongoing	Town Staff



		Promote rain barrels and rain gardens	Community Gardens Committee	Planning Board, Open Space Committee, Conservation Commission	Low/Ongoing	Town Staff
		Research the feasibility of a stormwater utility	Stormwater Committee	Selectmen, Conservation Commission	Medium/Long	Town Staff, MVP Action Grant
		Educate homeowners on proper maintenance techniques for septic and well systems	Board of Health	DPW	High/Ongoing	Town Staff
		Assess flooding risks of Town wells and water treatment plant	DPW	Board of Health	High/Short	Town Staff, MVP Action Grant
		Research incorporating Low Impact Development into the bylaws	Bylaw Review Committee	Planning Board, Zoning	Low/Long	Town Staff



4.2	Lessen Impacts of Winter Storms/Severe Storms	Perform an inventory/health assessment, and prepare management plans for street trees throughout Town	DPW (Tree Warden)	Conservation Commission	Medium/Long	Town Staff, MVP Action Grant
		Establish a tree removal/replacement program	DPW (Tree Warden)	Conservation Commission	Low/Ongoing	Town Staff, State Grants
		Create an education campaign to inform residents on how to prepare for winter and severe storms	Emergency Management Department	Police Department, Fire Department, Senior Center, Council on Aging	Medium/Ongoing	Town Staff
		Establish a monitoring program for pests/diseases on street trees	Conservation Commission	DPW (Tree Warden)	Medium/Ongoing	Town Staff, MVP Action Grant
4.3	Enhance Drought and Wildfire Awareness	Prepare management plans for forested areas in Town; Establish mitigation	Fire Department	Open Space Committee	High/Long	Town Staff, MVP Action Grant



		measures as appropriate				
		Construct a mixed-use cistern with educational signage, trails, benches, etc., that can also be used for firefighting	Fire Department	Open Space	High/Long	Town Staff, LAND Grant, PARC Grant, MVP Action Grant
		Create a public education campaign for drought awareness and wildfire risks	Emergency Management Department	Fire Department	Medium/Ongoing	Town Staff
		Create a public education campaign on the importance of water conservation	Board of Health	Conservation Commission	High/Ongoing	Town Staff

The ability to implement recommendations is the key to any plan. A combination of financial and regulatory measures is needed. Some of these potential measures are discussed on the following pages.

Financial Implementation Mechanisms

Land is very expensive to acquire. It is very difficult for municipalities to raise the funds needed for fee simple purchase. However, to the extent that such purchases avert residential development, they may be very cost effective. Various studies have indicated that residentially developed land requires \$1.11 to \$1.36 worth of services for every \$1 of tax revenue that it generates. Another study in Boulder, Colorado, found that the average public cost per acre of maintaining public open space was \$328 (including debt service to finance the purchase), versus \$2,524 per acre for developed and developable land (Thomas, 1991). Thus, in the long run, municipal purchase of land may actually be less costly than allowing the land to be developed.

Of course, the fiscal impact of land purchase is only one consideration. Such an action could be construed as exclusionary since it will reduce available land and increase housing costs in the community. Also, if a landowner were unwilling to sell, it would be an abuse of power to exercise eminent domain unless a clear municipal purpose can be demonstrated. A land acquisition effort must be based on the need to provide for future municipal services or to protect environmentally sensitive land. Such needs should be demonstrated in a master plan and/or a long-term capital improvements plan.

Some financial mechanisms that can be used to finance land acquisitions include:

Community Preservation Act – As discussed above, the Community Preservation Act allows cities and towns to adopt a property tax surcharge of up to 3% for the purposes of open space, recreation, historic preservation, and affordable housing. A minimum of 10% of the funds raised must be spent on each the areas of open space, historic preservation, and affordable housing. The remaining 70% is available for any of the three as well as recreation. A document recording fee is being collected at the Registries of Deeds and the funds collected will be used to provide matching grants ranging from 5% to 100% (depending on extent of participation) of the funds raised in each community. This is the single most effective tool available to implement the recommendations of this Plan. It should be noted that the CPA Trust Fund has generated matching funds far in excess of expectations and is expected to continue to provide 100% for at least the next several years.

Bonding Capacity – As bonds for previously funded capital improvements (schools, police stations, libraries, water/sewer projects, etc.) are paid off, some or all of that bonding capacity could be dedicated to land acquisition. For example, if \$100,000 per year of bonding capacity were to become available, it could finance (at 7% interest) a \$700,000 land purchase over 10 years or a \$1.06 million purchase over 20 years. Of course, the land purchase would have to compete against other pressing capital needs. The Town must determine its priorities.

Debt Exclusion – Similarly, without waiting for other bonds to be paid off, the Town could seek voter approval to create new bonding capacity by excluding a specified amount from the limits of Proposition 2 ½. For example, if the voters approved a debt exclusion of \$1,000,000 for the



purchase of land, the specific amount needed to finance the purchase (including principal and interest) would be raised by increasing property taxes beyond the limit imposed by Proposition 2 ½. When the purchase was fully paid for, the authority to increase taxes would automatically expire and the property tax rate would revert to what it would have been had there not been a debt exclusion.

Annual Appropriation – The Town could adopt a policy of annually appropriating an amount to a reserve fund dedicated to land purchases. The advantage of this option is that it could put the Town in a position to move quickly if a parcel (e.g. a Chapter 61, 61A or 61B parcel) becomes available and requires fast action. Also, while it would take a few years for such a fund to grow large, the fund could be used as a match for a grant or as a down payment in combination with bonding. However, with Proposition 2 ½ limits and pressing operational needs, it is difficult to set aside even small amounts for use at a later Time.

Special Tax – A special tax could be enacted whose revenues would be dedicated to land purchases. However, authority for such special taxes is limited. Local governments can impose hotel/motel taxes and airport fuels taxes.

State/Federal Grants – State and federal grants are available for open space purchases and other purposes. Among the programs available is the Self-help Program of EOEAs' Division of Conservation Services. It will reimburse communities for up to 90% of the cost of acquiring conservation land. The federal Land and Water Conservation Fund (administered by the Division of Conservation Services) will fund up to 50% of the cost of acquiring or developing recreation land. While this program has not been fully funded in recent years, there is renewed interest in this it and more funds should be available in the future. The Department of Food and Agriculture administers the Agricultural Preservation Restriction Program, which purchases the development rights of farmland. The Department of Fisheries, Wildlife and Environmental Law Enforcement administers the Non-Game Tax Fund, which uses voluntary contributions from a state income tax form checkoff to purchase the habitats of endangered species.

Community Development Block Grant – The federal Community Development Block Grant (CDBG) program administered by the Massachusetts Executive Office of Communities and Development (EOCD) is a potential funding source. While not available for open space purchases, it can be used for infrastructure improvements that can facilitate park development.

Transportation Efficiency Act for the 21st Century – The federal Transportation Efficiency Act for the 21st Century (TEA-21) encourages the development of alternative modes of transportation, especially bicycle paths through old railroad rights-of-way and other corridors. This potential funding can be an important component of facilitating access to open space and recreation areas.



Regulatory Implementation Mechanisms

Regulatory measures can complement financial mechanisms to enhance a Town's ability to acquire land and protect community character. Some regulatory measures with potential to aid implementation of this Open Space and Recreation Plan include the following:

Flexible Zoning – This tool is essentially an overlay zoning district which, while maintaining the same density as the underlying zoning district, allows variations from the dimensional requirements (lot sizes, setbacks, frontages) in order to design a new development so that it minimizes environmental impact and/or results in protected open or recreation space for the general public. When combined with transferable development rights, it can be a powerful tool for protecting open space.

The “community character” that people want to preserve is based on development patterns that are presently no longer allowed according to current zoning bylaws. A flexible zoning bylaw has the potential to preserve open space and natural resources, provide recreation lands, preserve and enhance community character, and reduce infrastructure and service maintenance costs in all three towns. Furthermore, in a time of limited public resources, it utilizes private resources to achieve a public benefit.

A flexible zoning bylaw would work in a manner similar to an open space development bylaw but in an expanded capacity. Just as the open space development bylaw allows higher density on one portion of a parcel in order to preserve open space on another portion of the parcel (but without changing the overall density allowed for that parcel by the underlying zoning district), a flexible zoning bylaw would allow higher density on some parcels in return for the purchase of development rights from another (not necessarily adjacent) parcel.

Criteria would be established to determine whether a particular parcel qualifies to relinquish and receive development rights to and from another parcel. Potential criteria for a “donor” parcel would include current use in agriculture or silviculture, proximity to existing open space, environmental sensitivity (containing or adjacent to important habitat, wetlands, waterways, floodplains, water resource district, etc.), serving as a scenic resource or located on a scenic roadway, lacking sewer service, etc.

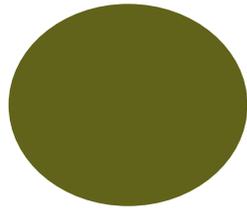
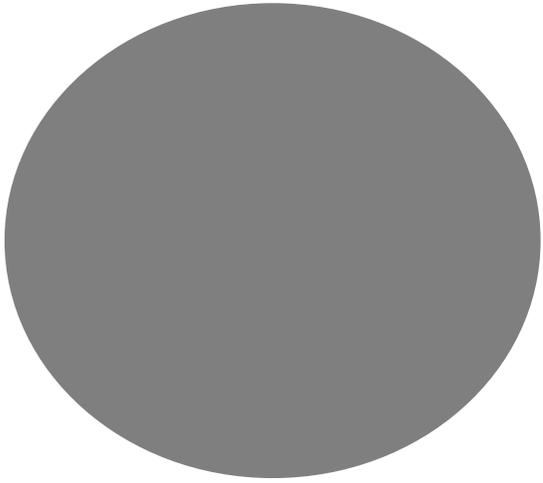
Criteria for “recipient” parcels would include easy access to sewer and water service, proximity to roadways capable of handling the additional traffic, location outside a water resource district, location that allows a vehicular and pedestrian link between already developed areas, proximity to a “village center” or other area of commercial or institutional use, and a location that allows a development plan with a minimum environmental impact.

Village Center Zoning/Compact Development – Village center zoning is a broad term that has different implications for different people. As used here, it means encouraging development to concentrate around a few commercial, industrial, institutional centers and corridors rather than



spreading throughout the town. It also means requiring all uses in the village center to relate to one another in terms of scale, design, setbacks, heights, etc., and to include pedestrian amenities to encourage walking and bicycling to and from as well as within the village center.

This tool addresses community character as well as open space issues. While this tool can stand alone as an effective regulatory measure, its efficacy can be improved if it is used in combination with a flexible zoning bylaw as proposed above, with proximity to such a center or corridor qualifying a parcel as an eligible “recipient” of development rights. Infrastructure improvements should also be targeted to enhance the village center concept.



SECTION 10: PUBLIC COMMENTS

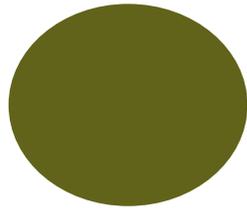
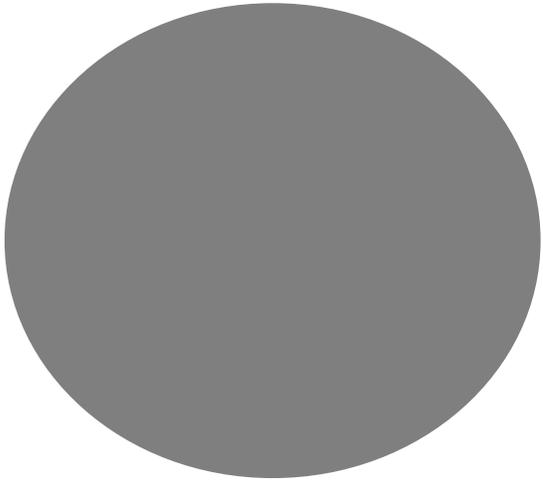
Town of Uxbridge



SECTION TEN: PUBLIC COMMENTS

Town Manager Letter of Review
Planning Board Letter of Review
CMRPC Letter of Review





SECTION 11: REFERENCES

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SECTION ELEVEN: REFERENCES

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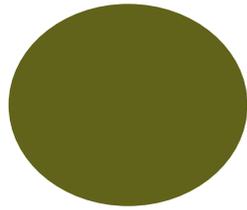
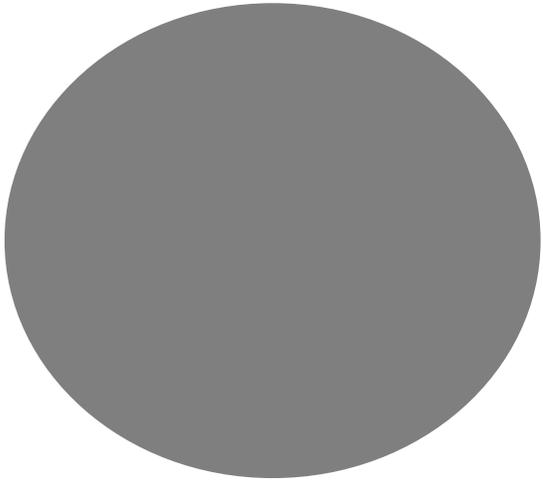
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APPENDIX

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