

June 2020

TOWN OF UPTON

OPEN SPACE AND RECREATION PLAN



Prepared by:

Upton Open Space Committee
(A Subcommittee of the Upton Conservation Commission)



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Conservation Services and expires October, 2026.

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Section 1

Plan Summary

Section 1

Plan Summary

The town of Upton offers a remarkably diverse landscape, a landscape shaped by the forces of nature and human culture over thousands of years. Its basic form is rooted in the geology of the region, shaped by the glaciers of the last ice age, and molded since by the action of wind, water, and communities of plants and animals. From the wooded hills in the north end of town, Warren and Center Brooks drain a series of narrow valleys, and merge to form the West River as it flows south to the Blackstone. Overlaid with this natural landscape is a cultural landscape that evolved in an intimate relationship with the land in three centuries since European settlement and previous millennia of use by Native Americans. Large areas of forest remain, some of it protected as part of the Upton State Forest or conservation lands, but most is available for future development.

Open spaces provide scenic vistas, habitat for wildlife, active and passive recreational opportunities, protection from flooding, recharge groundwater resources essential for town water supplies, improve air quality, sequester carbon in biomass and soils, economic benefits, resilience to climate change, and other ecosystem services. Community action and vigilance is essential to protect these functions, values, and benefits.

This Plan is an update of the town's 2011 Open Space and Recreation Plan. It includes a summary of land conservation and stewardship activities, and recreational facility improvements and program development since May of 2011. The plan presents the results of a 2019 public opinion survey, the most comprehensive survey of Upton residents conducted since a 2003 survey conducted for the Upton Master Plan. It also incorporates the vision of the 2019 Recreation Master Plan prepared by the Recreation Commission. The plan also considers new statewide and northeastern United States studies, including the 2020 Massachusetts Audubon Losing Ground Report, the Nature Conservancy's Resilient Sites for Terrestrial Conservation Project, the 2017 Wildlands and Woodlands vision for forest conservation in New England, the 2015 Massachusetts statewide action plan, and 2017 Massachusetts Comprehensive Outdoor Recreation Plan, the 2012 Division of Conservation and Recreation Landscape Designation for Upton State Forest, a 2019 cost of community services study by UMass Amherst, and water quality monitoring conducted by the Blackstone River Watershed Association.

Section 2 of the Plan documents the process involved in preparation of this plan. Public participation is summarized in Section 2.3

Section 3 provides information about our community setting and infrastructure.

Section 4 provides an inventory of Upton's environmental resources.

Section 5 provides an inventory of protected lands and lands of conservation interest. Approximately 29 percent of the town's land area is protected to some extent from future development. This land includes Upton State Forest, town conservation areas, land owned by non-profit land trusts, federal land, town parks, recreational fields, wellfields, and privately owned land protected by conservation restrictions or deed restrictions.

In Section 6, the Town's Open Space Committee and Recreation Commission use the results of the various public opinion surveys and visioning sessions to formulate the goals, objectives, and actions described in Sections 7 – 9.

Section 7 provides an analysis of needs.

Finally, the Plan presents objectives (Section 8) and a 7-year action plan (Section 9) that will guide efforts to achieve these goals through 2026.

While many of Upton's natural and cultural resources are protected, there is still much highly valued open space with limited or no protection from growth. While the rate of growth has slowed in recent years, Upton's location near the I 495 and Mass Pike corridors assures that vigorous growth will return as the economy improves.

Over nearly the last 100 years the Commonwealth of Massachusetts, Upton citizens, town government, and regional land trusts have done much to preserve Upton's open spaces. However, the first half of the 21st century is a decisive time in the town's history and much valuable open space remains at risk. Without a continued and dedicated commitment to preservation efforts Upton will likely lose much that town residents, old and new, so highly value.

Section 2

Introduction

SECTION 2

INTRODUCTION

A. Statement of Purpose

The purpose of this document is to serve as a guide for the preservation, management and development of Upton’s recreation and open space assets. Upton is a community in transition. It has a remarkable legacy of open space preservation, including more than 3000 acres of state forest and other protected open space. Enormous areas of unprotected open space remain. Over the next several decades the town will likely face continued development pressure. The decisions by town boards and residents regarding open space preservation during this unique period in the town’s history will define Upton’s character for centuries to come. The challenge is to intelligently plan for the coming storm – to identify critical resources and special places that must be preserved and to bring all available tools to bear on the preservation effort. These include private conservation efforts, possible expansion of Upton State Forest, judicious application of Upton’s Open Space Bylaw, and acquisition of key parcels by the town using Community Preservation Act funds and other resources. At the same time, the town must wisely manage already preserved conservation lands and recreational resources.

B. Planning Process and Public Participation

1. Upton Open Space Committee

The OSRP was prepared by the Upton Open Space Committee (OSC), a subcommittee of the Upton Conservation Commission. The OSC was formed in May 1993 and has met monthly for most of the last 27 years. The Mission Statement of the Committee (developed in ca. 2000) is as follows:

“Upton's Open Space Committee is dedicated to protecting our town's quality of life by preserving its open spaces, its natural resources, its historic treasures and its small town character.”

The Open Space Committee's goals are:

- To increase awareness and enjoyment of Upton's protected lands and natural resources and to educate the public on open space issues.
- To work with public officials and private landowners to identify opportunities for open space management, protection, or acquisition.
- To help the town develop bylaws, regulations, and planning strategies to preserve open space, enhance natural habitats and to ensure that rapid development doesn't overburden town services or town taxpayers.

2. Planning Process

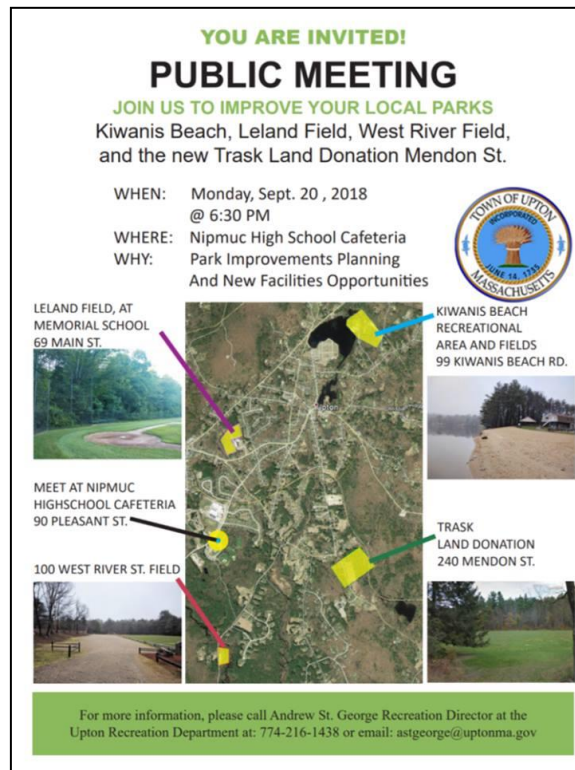
Upton's first Open Space and Recreation Plan (OSRP) was prepared in 1985. The plan was updated in 1996. The 1996 plan was updated and submitted in draft to the state in 2000 but was not finalized. In 2005 Upton revised its Master Plan and in 2006 a Recreation Master Plan was completed by the Recreation Commission. In 2007 a professional inventory and analysis of Upton's open space resources and preservation needs was completed by Dodson Associates under the direction of the OSC. The last Upton OSRP update was finalized and approved by the DCS in 2011.

This Open Space and Recreation Plan was prepared following the March 2008 guidelines established by Executive Office of Environmental Affairs Division of Conservation Services (DCS) for the preparation of state-approved open space and recreation master plans. Background information was gathered, and an inventory of resources completed to provide a basis from which to analyze the town's open space and recreation needs. The

formation of goals, objectives, and appropriate actions followed. These goals, objectives, and actions form the substance of a seven-year plan for implementation.

3. Public Participation

During planning for an update of the Recreation Master Plan, the Recreation Commission held a public meeting on September 20, 2018.



Public participation during the Recreation Master Plan Study

The Conservation Commission mailed a cover letter and four-page survey to approximately 2,900 households in January 2019 (see Appendix C). Eight hundred and ninety-four (894) replies were received (31 percent return rate).

A public meeting was held on June 13 at the Nipmuc High School Professional Development Center to:

- Review Open Space and Recreation Plan content and process
- Present and discuss survey results
- Discuss how survey results could be integrated into the updated OSRP

A draft of the 2019 OSRP was provided to the DCS in July 2019 along with a LAND Grant application to acquire a Conservation Restriction on the Robinson property. Comments on July draft were provided by the DCS on October 3, 2019 (see Section 10).

The survey results and draft plan was presented during a December 4, 2019 Upton Community Preservation Committee meeting. The May, 2020 draft plan was discussed during the May 12, 2020 Planning Board meeting, the May 19, 2020 Board of Selectmen meeting, and the June 3, 2020 Community Preservation Committee meeting.

A revised draft of the OSRP was made available to the public on May 8, 2020. Copies of the draft were provided to the Board of Selectmen, Planning Board, Central Massachusetts Regional Planning (CMRP), and the DCS. The draft OSRP was also published on the town's website with the following message:

“Please provide any written comments on the OSRP by email to openspacemember@uptonma.gov or mail to Town Hall Room 202, 1 Main Street, Box 9 , Upton MA 01568 by June 10, 2020. The Open Space Committee will also present the plan and accept comments from the public during its May 28 meeting. Information on how to join the May 28 meeting from your computer, tablet or smartphone or dial in by phone will be posted on the town website.”

Notice of availability was also posted on local social media, including “the “Sustainable Upton” Facebook page. An article about the OSRP update was published in the June 19, 2020 issue of the Upton, Mendon Town Crier.

The virtual public meeting to present the plan and solicit comments was held on May 28, 2020. Minutes from the meeting and other comments received are provided in Section 10.

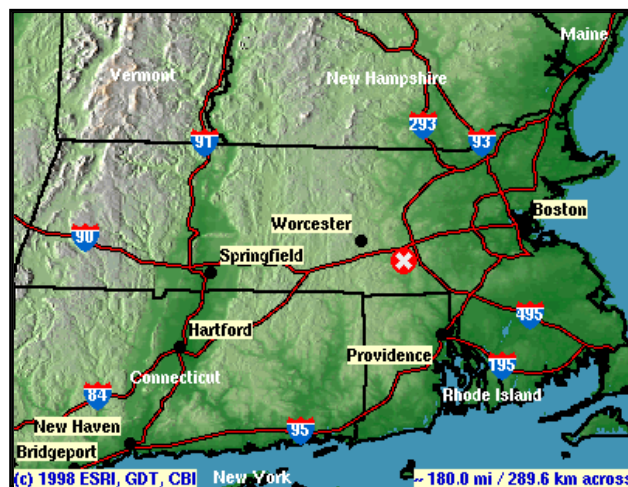
Section 3

Community Setting

Section 3 Community Setting

A. Regional Context

The town of Upton, incorporated in 1735, is in the southeastern part of Worcester County in central Massachusetts. It is bordered by the towns of Grafton and Northbridge to the west, Mendon to the south, Hopedale, Milford, and Hopkinton to the east, and Westborough to the north. It is thirty-six miles west of Boston and fifteen miles southeast of Worcester.



The town is 21.81 square miles or approximately 13,853 acres. Most of the town is in the Blackstone River watershed. A small area of northern Upton is within the Sudbury River watershed. The town is within the Blackstone River Valley National Heritage Corridor. Approximately 5,230 acres of the 8,700 acre Miscoe, Warren, and Whitehall Watersheds Area of Critical Environmental Concern (ACEC) is located within Upton. The remainder of the ACEC is located in the towns of Grafton (3,010 acres) and Hopkinton (460 acres).



Upton is primarily a residential community. Unlike the nearby towns of Grafton, Westboro and Milford, there is little industrial or commercial development. Upton, like all communities along the Route 495 corridor, is experiencing very rapid growth. Recent development in Upton has been almost exclusively single-family residences, with numerous single house lots and several large subdivisions approved in recent years.

In a regional context, Upton has an unusually large amount of protected open space; approximately 29 percent of the land in Upton is protected in some way. This includes Upton State Forest, town conservation areas, and land trust properties. Overall, a significant portion of the town is protected from development as compared to nearby communities. Upton also abuts large blocks of protected land or open space in other towns. These areas include Whitehall State Park in Hopkinton, the West Hill Dam in Uxbridge and Northbridge, the Blackstone River and Canal Heritage State Park in Northbridge and the Pell Farm and Great Meadows Natural Area in Grafton. The proximity of these areas offers opportunities to create greenways linking large blocks of protected open space and regional trail systems.

Since most of Upton's water drains south and west into the Blackstone River, protection of our water resources is important to Northbridge, Uxbridge and many other towns bordering the Blackstone River in Massachusetts and Rhode Island. The West River, which originates in Upton and Grafton, and the Mill River, which originates in Upton and Hopkinton, are two of the most pristine major tributaries of the Blackstone River within Massachusetts.

Upton and Mendon share a regional school district, the Mendon-Upton Regional School District. In Upton, Memorial School operates as a grade school and Nipmuc Regional High School provides education for grades 7-12. Two other district schools are located in Mendon. Also in Upton is the Blackstone Valley Regional Vocational Technical High School which provides vocational education for the towns of Upton, Bellingham, Blackstone, Douglas, Grafton, Hopedale, Mendon, Milford, Millbury, Millville, Northbridge, Sutton and Uxbridge.

Upton is within the service area of two regional land trusts, the Metacomet Land Trust and the Sudbury Valley Trustees. The Narragansett Indian Tribal Historic Trust is also active in Upton, as is The Friends of Upton State Forest.

B. History of the Community

Upton was originally partitioned off from Mendon, Sutton, Uxbridge, and Hopkinton so that early settlers in the area could go to more accessible church services (Johnson, 1984). The town was incorporated in 1735.

The following description of town history is from the 2005 Master Plan:

When Upton was incorporated in 1735, it was a farming community, early families in Upton were self-sufficient farmers, weavers, sawmill operators, grist millers, and tanners.

Upton's original meeting hall was located on the south end of town, but was moved to Upton Center in 1771, making it more accessible to major transportation routes and residents on the north end. This relocation set the foundation for growth in Upton, as development remained primarily in the Town Center area until the late 20th century. Small industries grew, stimulated by the water supplied by the Mill River. By the 1800's, shoes were the most important manufactured products, later being replaced by the Knowlton Hat Factory erected in 1840. The Knowlton factory, on the west side of town, became the primary industrial employer in Upton. The Knowlton family in turn helped build many public buildings in town and attracted new residents with manufacturing work. The Knowlton Hat Factory has been converted to a residential complex as have many of the structures contributed by William Knowlton and his family. They include the "Lodge" across the street from the former hat factory and the Unitarian Church, which still stands in the center of West Upton.

This industrial expansion was significant in terms of Upton's land use and development patterns. Agriculture was in a slow growth period with respect to land consumption as the farming economy began to shift from the cultivation of vegetables to dairy production. More land became available for residential and industrial development or was returned to a wooded state, although most new buildings, both residential and commercial, were located in the town center near rail lines and major roads. The Knowlton factory in West Upton created another viable secondary center, with higher density residential areas close to the plant. Settlement patterns remained compact and centralized as growth occurred in and around the town center and villages.

Today the Knowlton Hat Factory is no longer in production and little industry or commercial development has moved into Upton. With Upton's close proximity to Worcester, Boston, and major commuter routes, it has become a bedroom community experiencing a significant growth in population and residential development. This development has moved beyond the town centers to outlying sections of the town.

Recent developments that have influenced Upton’s development in the last 100 years include the purchase of over 2,000 acres by the Commonwealth for Upton State Forest, the purchase of flowage easements lands by the U.S. Army Corps of Engineers for the West Hill Dam Flood Control Project, the construction of the MA Turnpike which passes through the northern end of town, the construction of Highway 495 and improvements to Highway Route 140 which contribute to residential development, the construction of a modern municipal water system and sewage treatment plant, the establishment of a regional school district (with Mendon), and the recent reestablishment of commercial freight operations of the Upton-Grafton Railroad.

Some of Upton’s historical sites:

Boot Shop (1790).....	Mendon and Chestnut Streets
Site of John Sadler House (1715).....	Grove Street
Knowlton Hat Factory (1834).....	Main Street, West Upton
United Parish Church (1848).....	Upton Center
Holy Angels Church (1848).....	Upton Center
First Burying Ground (1730) *.....	Mendon and Grove Streets
Stone Chamber (unknown. date)....	Elm St.
Stone Features (unknown date).....	Pratt Hill
CCC Camps (1935-1938).....	Westborough Road (Upton State Forest)
Whitney House (ca. 1755).....	North Street (Sweetwilliam Farm)
Town Hall (1881).....	Milford Street

* Note the First Burying Ground is also the site of Upton’s first meeting house.

There are dozens of residences spread throughout the town that were built prior to 1800. Figure 1, produced by the Dodson Open Space study, shows the location of many early homes and other significant culture resource sites.

C. Population Characteristics

1. Population

Table 3-1 presents Upton’s growth in population over the years, as well as the Town’s projected population for 2020.

Town census data placed the population at 7,728 in 2018. With a total landmass that consists of 21.81 square miles, Upton has a population density (based on the 2018 town census) of 354 people per square mile.

Table 3-1 shows that Upton has experienced substantial population growth over the past two decades, adding 2,483 new residents between 1980 and 2000 and modest growth since 2010. With an abundance of developable land and access to Route 495, Upton's population is expected to grow significantly in the next decade. New developments that are under construction in 2020 or likely to be approved will add more than 200 housing units.

**Table 3-1
Upton Population Growth**

Year	# of People	Numerical Change	% Change
1800	854	---	---
1850	2018	1164	136
1900	1937	-81	-0.04
1930	2,026	89	0.05
1940	2,249	223	11.0
1950	2,656	407	18.1
1960	3,127	471	17.7
1970	3,488	361	11.5
1980	3,886	398	11.4
1990	4,677	791	20.4
2000*	6,369	1,692	36.2
2010 (town) *	7,366	997	15.7
2010 (federal)	7542	-	-
2019 (town) *	7,828	362	4.9
2020 Projection**	8,700	-	-

Source: Upton Annual Report; US Census (1930 – 1990).

* = 2000, 2010, and 2018 town population counts provided by the Upton Town Clerk's annual census.

**Projections for 2020 provided by CMRPC Transportation Department.

Table 3-2 displays change in age groups within the Town's population from 1990 to 2010. The number of school age children (5 – 19) more than doubled during the period.

The data suggests Upton’s senior population (> 65) may increase substantially in coming decades.

In 2010, 95.3 percent of Upton respondents identified themselves as white, compared to 80.4 percent for Massachusetts overall.

**Table 3-2
Population by Age Group**

Year	Under 5	5 – 19	20 – 44	45 – 64	65 – 74	75 +
1990	333	854	2,016	905	329	240
2000	558	1,170	2,126	1,253	275	260
2010	407	1,864	2,044	2455	442	320

Source: 1990, 2000, and 2010 U.S. Census

Table 3-3 shows how the housing stock has grown over the last forty years and allows for a comparison against the growth in population. Please note that Table 3-3 refers only to year-round occupied housing units. Taken together, Tables 3-1 & 3-2 indicate that new home construction in Upton is growing at a faster rate than the growth in population.

The number of housing units more than doubled since 1980. The rate of growth is lower after 2000 than between 1980 and 2000. The percentage of rental units as a percentage of the total housing stock has dropped from 26.1 percent in 1990 to 16.2 percent in 2010. Numerically, Upton has lost few rental units over the period, going from 473 rental units in 1990 to 444 rental units in 2010. In 2010, average household size was 2.94 in owner occupied units and 1.81 in rental units.

**Table 3-3
Housing Unit Growth in Upton**

Year	# of Occupied Housing Units	Percent Change
1980	1,369	-
1990	1,810	32.2
2000	2,351	29.9
2010	2753	17.1
2018*	2,971	7.9

* estimate provided by the Upton Town Clerk.

Table 3-4 indicates that more than three quarters of Upton’s households consist of families with children. This represents a slight increase from the 1990 Census when family with children households accounted for 72.2 percent of all Upton households. The number of senior households increased from 156 in 2000 to 209 in 2010.

Table 3-4
Upton Households by Type (2010)

Household Type	Number of Households	Percentage
Family Household	2,082	76.2%
Non-Family Household	651	23.8%

Source: 2010 US Census

2. Income

Upton’s median household income is substantially higher than both the State and County median figures (Table 3-5). This is indicative of an affluent and prosperous community. Twenty-one percent of Upton households have an income greater than \$200,000. The percentage of Upton residents whose income is below the poverty line is 4.8%, compared to 11.1% for Worcester County.

Table 3-5
Median Household Income (\$)

Geographic Location	Income (\$)
Upton	119,392
State	74,167
Worcester County	69,313

Source: 2010 US Census

3. Employment

Statistics from the Massachusetts Executive Office of Labor and Workforce Development as of May 2019 Upton had a labor force of 4,443 (Upton residents with jobs) and 120

Upton workers were unemployed. Upton's unemployment rate was 2.7 percent, slightly lower than the Massachusetts unemployment rate (3.1 percent).

According to the most recent statistics of the Massachusetts Division of Unemployment Assistance, there were 167 business establishments in Upton as of 2005, employing a monthly average of 998 workers. Of the 167 businesses in Upton, 117 were of the service-provider variety while 46 were construction-related and only four were manufacturing establishments. The number of business establishments and associated jobs are relatively low when compared to neighboring communities, indicating that Upton residents drive elsewhere to shop and work.

4. Taxation and Property Valuation

Upton's tax rate in FY 2020 was \$17.22/1000 and ranked 99th out of 344 Massachusetts cities and towns. The FY 2020 assessed value of the real and personal property in Upton is \$1,235,810,306. The assessed value of real and personal property consists of 94.71% residential, 1.88% commercial, 0.86.% industrial real property, and 2.55% personal property.

Upton adopted the Community Preservation Act (CPA) in 2003, by a Town Meeting vote, followed by the approval of voters at the following annual Town Election. The approved surcharge rate is 3% and to date, Upton has raised \$5,021,885 from the local surcharge and received \$3,098,847 in matching funds.

D. Land Use

The University of Massachusetts-Amherst has been tracking statewide land use data for the better part of the last century. The University uses aerial photographs and interprets them (now using GIS) based on land use categories. Table 3-6 outlines Upton's land use totals for the last three UMass-Amherst statewide mapping efforts and the 2005 Massachusetts Audubon Losing Ground study.

Table 3-6
Upton Land Use Changes 1971 – 2005

Category	Acres				Percent Change (1971 – 2005)
	1971	1985	1999	2005	
Undeveloped Land	11,748	11,217	10,406	10,366	-11.8
Forestland	10,992	10,500	9,841	9,147	-16.8
Farmland	756	717	565	387	-48.8
Developed	1,110	1,748	2,642	2,734	246
Residential	1,016	1,614	2,459	2,588	255
Commercial/Industrial	94	134	155	145	54.3

According to this analysis Upton’s residential sector has added the most acreage (over 1,343 acres between 1971 & 2005), while adding a modest 51 acres of new commercial and industrial land. Nearly one in five Upton homes was built since 1999. Mining operations (sand and gravel) account for more than half of the industrial land category for each of the three time periods. The biggest land use losses between 1971 and 2005 were forestland (a loss of 1,845 acres) and farmland (loss of 369 acres).

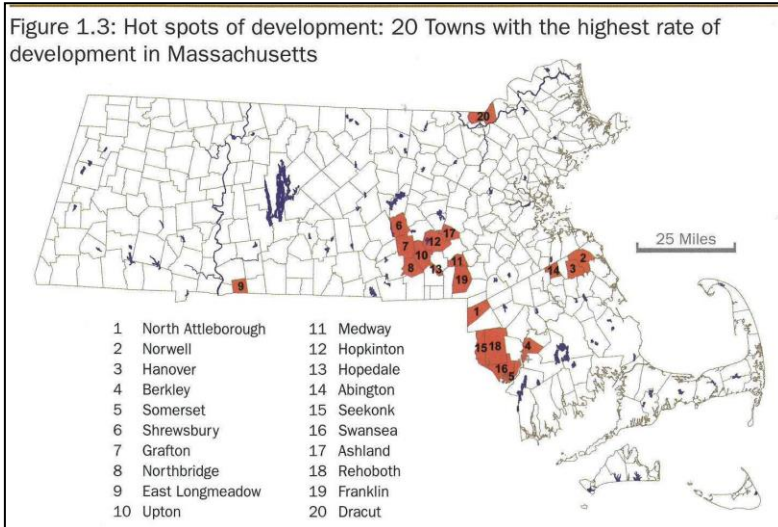
Table 3-7
Losing Ground (2020) Land Use Summary

Category	Value	State Rank
Developed Land (acres)	1,621	228
Developed Land (%)	12	238
Natural Land (acres)	11,284	126
Natural Land (%)	80	78
Protected Land (acres)	2,936	170
Protected Land (%)	21	187
Natural Land Developed, 2012-2017 (acres)	84	110
Total Area (acres)	13,973	164

MA Audubon released updates of the 2005 losing ground report in 2014 and 2020. The data in those reports is not comparable to previous reports because different imagery and analysis methods were used. Data for Upton from the 2020 report is summarized in Table 3-7.

In the 2009 edition of “Losing Ground” a statewide analysis of land use and development by the Massachusetts Audubon Society, Upton was ranked 26 out of 351 Massachusetts Towns in terms of land lost to development between 1999 and 2005 and 10th in land lost to new housing development. Statewide,

Upton is within an area of high development Massachusetts Audubon terms the “sprawl frontier”. Upton was ranked 77th in the 2014 report and 110th in the 2020 report.



E. Infrastructure

1. Transportation Systems

As of 2013, there were 70.2 miles of town roads, 9.47 miles of state roads, and 1.49 miles of private roads in Upton. The most heavily traveled roads link to other towns and include Route 140, Hopkinton Road/Hartford Avenue/High Street, Mendon Road, Westborough Road, and East Street.

Upton’s primary link to the interstate highway system is via Hopkinton Road/Hartford Avenue/High Street, which has become a major thoroughway to Route 495 for both Upton and other towns in the Blackstone River Valley. Driving northeast on Hopkinton Road provides a link to Route 495, which then provides a link to the Mass Pike to the north. A section of the Mass Pike does extend across north Upton, but there is no direct link to the Mass Pike in Upton. Route 140 extends in a west-to-east direction through the center of Town.

A Transportation Improvement Program (TIP) project is being planned along the Hopkinton Road/Hartford Avenue/High Street corridor. The project will include road

improvements, new or improved sidewalks, wider shoulders (but not a bike Lane), and a traffic light at the Westborough Road intersection near Pratt Pond.

The Upton Center Visioning Study recently proposed changes to the 140/Warren Street/Grove St/ North Main St. intersection and improved connectivity of the town center to Heritage Park and the Kiwanis recreation area.

Access to public transportation is limited. Access to commuter rail is available in Westborough and North Grafton. There is no bus service and no designated park and ride locations. Private taxi/shuttle bus service is available to Logan and TF Green Airports. There are no paved bike trails.

The Grafton-Upton Railroad (which runs between Grafton and Hopedale) has recently been reactivated and is being used to haul bulk materials such as wood pellets to a storage/processing facility on Maple Ave.

2. Public and Private Water Supply Systems

2..1 Private

A majority of Upton residents rely on private single residence groundwater supply wells. Residents of the recently competed Rockwood Meadows subdivision have a privately run community well system.

2..2 Public

The Town of Upton draws potable water from three (3) separate municipal well fields. The Upton water system includes a total of seven (7) wells, three (3) pump stations, and two water storage tanks. The Glen Avenue Wellfield is adjacent to the West River, and now includes energy efficient variable frequency drive (VFD) pumps and three (3) wells installed to a maximum depth of 56-feet. The West River Pump Station was built in 1976; it includes a pump and one (1) gravel-packed well installed to a depth of 90-feet. Municipal Wellfield No. 3, also along the West River, was constructed in 2013; it includes energy efficient VFD pumps and three (3) wells installed to a maximum depth of 30-feet. Approximately 37 miles of main distribute water throughout the system. Two water storage tanks are used in the system including: the 500,000-gallon Pratt Hill tank and the 1,000,000-gallon Pearl Street tank. Treatment of water is performed at all three pump stations.

In order to maintain compliance with Federal and State Drinking water standards, Upton well water must be treated before it reaches consumers' taps. Upton's ground water is naturally corrosive and can dissolve copper from pipes in the plumbing of customers' homes and/or businesses. In an effort to reduce corrosivity, the pH of the water is raised

to a level of approximately pH 7.0 to pH 7.5 by adding potassium hydroxide at our pumping stations. Chlorine, a highly efficient disinfectant, is added to kill disease-causing bacteria that water or its transport pipes might contain. Chlorine levels are continuously monitored and controlled to ensure that disinfection residuals are maintained at each of well facilities and throughout the distribution system. All components of the water distribution and treatment systems are closely monitored by State certified operators through a computerized Supervisory Control and Data Acquisition.

2.3 Water Quality and Wellhead Protection

Aside from rare instances of bacterial contamination water quality is excellent. Wellhead protection zones in the vicinity of the West River Pump Station and Wellfield No. 3 is largely undeveloped. Land near the Glen Avenue wellfield is near more heavily developed area. The town recently required nearby homes to upgrade subsurface disposal systems to enhance protection of the Glen Avenue wellfield.

To ensure the highest quality of drinking water for residents, the Town has adopted by-laws and health regulations designed to preserve and protect existing and potential sources of drinking water supplies and conserve natural resources. The Department of Environmental Protection (DEP) approved the Town's water source protection strategy based on land use and operational restrictions in areas of influence to the Town's drinking water wells. The information collected was incorporated into the Source Water Assessment Protection (SWAP) report. The report is a planning tool to support local and state efforts to improve water supply protection. The assessment helps focus protection efforts on appropriate best management practices and drinking water source protection measures.

3. Wastewater Systems

Upton's wastewater collection infrastructure contains approximately 44,000 linear feet of gravity sewers, three pumping stations and force mains; it serves the West Upton and Upton Center areas of town. Upton Ridge, a 139-unit subdivision, near Hartford Ave North and a 44-unit apartment complex off Main St. are under construction and will tie into the town system.

The treatment facility currently in operation was constructed in 1971 and upgraded in 1999. The current permit for this facility has been in effect since March 1, 2006. The facility uses seasonal sand filtration processes, as well as secondary sedimentation, chlorination, and dechlorination. The plant's general operations are efficient, with the

only reported problems occurring during daily peak flow and wet weather peak flow periods when the solids will carry over from the secondary settling tanks. In recent years the facility has met all permit discharge standards. With a current average annual flow of 0.27 mgd and a permitted capacity of 0.40 mgd, this facility is operating at 67.5 percent of its permitted capacity. The majority of the flows consisted of domestic sewage, with the remaining composed of institutional and commercial wastewater as well as groundwater infiltration and inflow.

4. Dams

The town of Upton owns and manages 5 dams: Wildwood Lake Dam, Old Mill Pond Dam, Pratt Pond Dam, Taft Pond Dam, and the Old Box Shop Pond Dam. Based on the most recent inspection reports, the condition of the Taft Pond Dam is rated as poor and the Old Box Shop Pond Dam is rated as unsafe. The other dams are rated to be in “fair” condition. The Box Shop dam does not maintain an impoundment.

There are several other dams in town, including Dean Pond Dam within Upton State Forest, two unnamed berms which maintain water levels at the Southborough Road Bogs, and a dam on Brooks Pond.

F. Long-Term Development

Zoning

Most of Upton is currently zoned as agricultural – residential (Figure 2). Upton’s zoning plan allows for commercial and industrial development at several locations along Route 140. There are two general business districts at either end of the town center, as well as a business district located on the southern side of Route 140 upon entering the town and another one on the southern side of Route 140 as one leaves the downtown area. There is an industrial district located on the western side of Maple Avenue that has access to the Grafton & Upton railroad line. There is also a large industrial district located on either side of Route 140 on the border with Hopedale. Although this industrial district also has access to the Grafton & Upton railroad line, the district is largely undeveloped due to the presence of ledge and the absence of municipal water and sewer. Zoning changes were approved in 2019 to facilitate redevelopment of Upton Town Center.

Buildout Analysis

In 1999 the Executive Office of Environmental Affairs (EOEA) initiated an effort to prepare a buildout analysis for each community in the State. A buildout analysis attempts to determine what the town would look like at full buildout, that is, if the town were completely developed under the standards of current zoning. Existing



developed lands, protected lands and land with environmental constraints were taken out of the equation, and the remaining developable land was divided by the standards of the local zoning bylaw.

A buildout analysis does not attempt to determine *when or if* a community will reach full buildout; rather, it is simply an attempt to determine what a community would look like if its remaining vacant land were developed according to the town's current zoning standards. The town could alter its buildout results by making changes to dimensional requirements for new lots (lot size, frontage) or by permanently protecting more land in town. Thus, a buildout analysis is fluid and represents but a snapshot in time.

The regional planning commissions were contracted to perform buildout studies for each community in their respective regions. In Upton's case, the Central Massachusetts Regional Planning Commission (CMRPC) completed a buildout analysis for the Town in July 2000. Although now quite dated, the study's analysis of development constraints and long-term buildout analysis is still informative (see Figure 3 and Table 3-8).

Table 3-8
Upton Buildout Analysis

Total Housing Units at Full Buildout	5,147
Total Population at Full Buildout	13,070
Total School-Age Children at Full Buildout	2,931

The buildout analysis and current population indicates that Upton is roughly 60 percent towards full buildout based on the current standards of the Town's Zoning Bylaw. Looking towards the future, Upton will most likely retain its present land use pattern of

suburban residential development with Route 140 supporting most of the Town's commercial and industrial uses.

Measures to Limit the Adverse Impact of Development

Upton supported the designation of much of the Warren Brook watershed as part of the Miscoe, Warren, and Whitehall Watersheds Area of Critical Environmental Concern (ACEC). The July 2000 ACEC designation fosters more stringent review of development proposals requiring state permits and approval.

The Town adopted the Massachusetts Community Preservation Act (CPA) in 2003 and has used a portion of the funds raised for open space planning and preservation projects.

The Town updated its Master Plan in 2005. Many recommendations in the plan, if implemented, will limit the adverse affects of development.

The Zoning Bylaw, adopted in 2007, includes a provision allowing Open Space Residential Developments by special permit. The primary objectives of the bylaw are: to permit greater flexibility and more creative and imaginative design for residential development than is possible under conventional zoning; to encourage the permanent preservation and protection of open space and other natural resources, to encourage a less sprawling and more efficient form of development that consumes less open space land and better conforms to existing topography and natural features, to minimize the total amount of disturbance on the site, to facilitate the construction of subdivisions in a more economical and efficient manner; and to encourage preservation of stone walls and other historic structures and historic landscapes.

The Zoning Bylaw also contains a provision for Planned Village Developments that promote a dense mixture of commercial and residential land uses in the town center area where the infrastructure exists to serve it (thus not utilizing large parcels of undeveloped land in the rural portions of Upton). The Zoning Bylaw also contains a Floodplain District that regulates development in the 100-year floodplain.

The Public Works Department is implementing a Phase II Stormwater Management Plan. The Conservation Commission administers a local Wetland Protection Bylaw and a Stormwater Management Bylaw. The Board of Health has prepared a set of Wellhead Protection Regulations that regulate land uses taking place within the Zone II contribution areas for Upton's municipal water wells.

Other potential resource protection strategies under consideration include enacting a Scenic Roads Bylaw, a Low Impact Development (LID) Bylaw, and a Right-To-Farm Bylaw.

E. Open Space Protection and Stewardship (2011 – 2019)

Upton has a long history of open space preservation. These include four main periods: 1) the establishment and expansion of Upton State Forest in the 1920's and 1930's,

2) The purchase of floodwater storage easements for the West Hill Dam by the U.S. Army Corps of Engineers in the late 1950's and early 1960's, 3) the purchase of major open space or recreation parcels by the town from 1985 to 2000 (Kiwanis Beach, Peppercorn Hill, Warren Brook, and the Former Stefans Farm) and 4), from 2001 to present, efforts to preserve additional open space using Community Preservation Act funds (Heritage Park, Sweetwilliam Farm, and the Robertson property), donations, land trust acquisitions, and the use of development bylaws (e.g. Glen Echo Open Space Subdivision and Rockwood Meadows).



Since completion of the last OSRP in May of 2011 the following open space and recreation related actions have occurred:

Bylaws, Regulations, and Policies:

- 2012 - Stormwater Management Bylaw.
- 2013 - Conservation Commission Forest Management Policy.
- 2019 - Changes to zoning regulations for redevelopment of Upton Town Center.

Planning:

- 2018 - Upton Center Visioning Report.
- 2019 - Recreation Master Plan (“Four Parks Plan”).
- 2020 - Town prepares application for an MVP Planning Grant.

Land Protection:

- 2011 – Town of Upton acquires 63.1 acres of land (now known as the Whitney Conservation Area) and a conservation restriction on 33.7 acres from Gail Harrington (the former Sweetwilliam Farm.) Funded by a LAND Grant, Community Preservation Fund, other grants, and private donations.
- 2012 - The Department of Conservation and Recreation (DCR) acquires 12.3 acres on Fowler Street from the Davidson family. Provides access to Upton State Forest from Fowler Street.
- 2012 – Narragansett Indian Tribal Historic Preservation Trust acquires 32.6 acres on Pratt Hill.
- 2012 – Declaration of restriction is placed on 24.5 acres off West River Street as part of the JR Estates open space subdivision.
- 2012 - The DCR acquires 28.0 acres off Westborough Road from the Kent family.
- 2012 - The DCR acquires a conservation restriction on 3.8 acres off Westborough Road owned by the Kent family.
- 2014 – Board of Selectmen vote to allow Land Stewardship Committee to manage two town-owned parcels off North Street (Map 004/Lot 012 and Map 005/Lot 005) totaling 29.4 acres.
- 2015 – The Ryan family donates Pixie’s Park, a 1.1-acre parcel on Meadow Drive, to the Conservation Commission.
- 2015 – The Town of Upton and the Hopkinton Area Land Trust acquire conservation restrictions and a trail easement for the Rockwood Meadows development off East Street. 58.7 acres of open space are preserved in Upton (32.8) and Hopkinton (25.9).
- 2015 – Declaration of restriction is placed on land at the Crosswinds subdivision to protect riverfront habitat.
- 2016 – Amato property (46 acres) on East Street is withdrawn from Chapter 61 for development.
- 2016 – Ruguleiski family donates 26 acres off North Street to the Metacomet Land Trust.
- 2016 - Narragansett Indian Tribal Historic Preservation Trust acquires 69.5 acres on Glenview Street from the Hebb Family.
- 2016 – The Conservation Commission funds an appraisal of the 107-acre Forest Heights property off North Street. Property identified as having high conservation value.
- 2017 - The DCR acquires 20 acres off North Street adjacent to Upton State Forest from the Young family.
- 2017 – 14.2 acres of prime agricultural land on Christian Hill Road is withdrawn from Chapter 61 for development.

- 2017 – Town Meeting transfers care, custody, and control of a 12-acre town-owned parcel on Westborough Road that abuts a land-locked Upton State Forest parcel from Town Treasurer to Board of Selectmen with requirement that any disposition include a trail easement to reach the Upton State Forest parcel.
- 2017 - HJT Trust (Harvey J. Trask) bequests 29.6 acres of land on Mendon Road to the Town of Upton for use as a park, recreation, and athletic facility and 85 acres on Milford Street, Chestnut Street, and Walker Drive to the Trustees of Reservations for use as parkland or for disposal by the Trustees in its sole discretion
- 2017 – The Town of Upton completes a tax-taking for a .11-acre parcel on Oak Knoll Lane that provides access to the Warren Brook Watershed Conservation Area.
- 2018 – Blackstone Valley Tech abandons plans to create a recreational facility on its Chestnut Street property and auctions the 23.2-acre parcel to a developer.
- 2018 – The Conservation Commission signs a Memorandum of Understanding with the Hopkinton Area Land Trust to maintain a trail leading from School Street in Hopkinton to the Peppercorn Hill Conservation Area.
- 2018 – Jodi Naze and William O’Neil donate the Blue Conservation Area (2.8 acres in Upton) on Crockett Road to the Metacomet Land Trust, which grants a conservation restriction to the Town of Upton.
- 2018 – Crosswinds subdivision developer deeds 25.0 acres of open space along Center Brook to the Town of Upton as part of the subdivision plan. The area is now known as the Center Brook Conservation Area.
- 2019 - Town of Upton grants a conservation restriction on Heritage Park to the Metacomet Land Trust.
- 2019 - The town acquires the Forest Heights property off North Street through a tax taking.
- 2019 – Bonner Natural Area is donated to the Metacomet Land Trust, which grants a conservation restriction to the Sudbury Valley Trustees. The 70.1-acre parcel off North Street abuts the Whitney Conservation Area.
- 2019 – The Town of Upton is awarded a LAND grant to acquire a conservation restriction on 48 acres of the Robertson property on Mechanic, Fowler and Warren streets. The conservation restriction will be co-held with the DCR. The acquisition is approved by the November, 2019 Upton Special Town meeting and CR is recorded on June 30, 2020.
- 2020 – Town is granted a trail easement off Chestnut Street to the Town of Upton. The easement provides access to a land-locked Upton State Forest parcel.
- 2020 -Town acquires a small parcel near town center and removes a dilapidated structure.
- 2020 – Preserve at Dean Pond open space subdivision approved.

Stewardship:

- Stewardship Plans – North Open Space Stewardship Plan (2018), MA DFW wildlife habitat recommendations for Stefans Farm, and a turtle habitat plan for Stefans Farm.
- Installed parking area and pasture fence at Whitney Conservation Area
- Trails – maintained 16 miles of trails including several miles of new trails that were established at the Whitney Conservation Area, Howarth and Howarth Glen Conservation Areas, and Stefans Farm, Rockwood Meadows, and Goss Pond Open Space.
- Boardwalks – constructed boardwalks to cross wetlands or streams in the Goss Pond Open Space (1), Howarth Glen Conservation Area (1), Rockwood Meadows Open Space (3), Peppercorn Hill Conservation Area (3), Stefans Farm Open Space (3), Whitney Conservation Area (4); Warren Brook Watershed Conservation Area (1), and in one of the town-owned parcels off North Street (004-012) managed by the Land Stewardship Committee (1).
- Kiosks – constructed and installed trailhead kiosks at the Goss Pond Open Space, Howarth Conservation Area, Howarth Glen Conservation Area, Kiwanis Beach, Rockwood Meadows Open Space, Peppercorn Hill Conservation Area (2), Whitney Conservation Area (3), and Warren Brook Watershed Conservation Area (2).
- Installed signs at Stefans Farm Open Space and at the Peppercorn Hill and Whitney Conservation Areas.
- Created wetland replacement area (vernal pool) at Stefans Farm to mitigate for new trail construction.
- Mowing of meadows at Stefans and Howarth Glen.
- Community Garden: constructed additional raised bed plots and compost bins.
- Warren Brook wood turtle study.
- Stream temperature monitoring at Warren Brook and Peppercorn Hill.
- NUOS forest cutting plan approved by DCR in May, 2020.

Recreation:

- Constructed storage shed at Leland Field (Eagle Scout project).
- Constructed fire pit and benches at Kiwanis Beach (Eagle Scout project).
- Refurbished tennis and basketball courts at Kiwanis Beach, CPA funded. One tennis court lined for Pickle Ball.
- Renovations to Ramsey Building at Kiwanis Beach.
- Constructed a pavilion at Kiwanis Beach, CPA funded (Eagle Scout project).
- Prepared ADA compliance plan for Kiwanis Beach.
- Constructed new parking lot at Kiwanis Beach, CPA funded.

- Established summer concert series at Kiwanis Beach.
- Failed town meeting vote to acquire land for a new athletic field complex off South Street.
- Replaced Kiwanis Beach gatehouse.

Environmental Education and Events:

- Sponsored or co-sponsored approximately 50 walks, talks and other events.
- Maintained conservation-related pages on town website.
- Established Conservation Commission Facebook page.

Coordination:

- Prepared comment letters for several proposed developments before the Planning Board, for the town center redevelopment initiative, and for the Moon Hill Estates development in Northbridge. Assisted with effort to preserve Pond Street property in Hopkinton (ultimately developed as an open space subdivision).

Other Notable Events and Observations

- Debris from June, 2011 F3 central Massachusetts tornado deposited in Upton.
- 2018 F1 tornado heavily damages Upton State Forest near Warren St. and causes light damage to trees at the Pleasant Woods Conservation Area.
- Loss of numerous trees (mostly oaks) throughout town due to 2017-2019 gypsy moth outbreak.
- Beaver activity floods numerous locations, including sections of Warren Brook, Upton State Forest near Southborough Rd. and Dean Pond, and Hopkinton Road upstream of Pratt Pond. In 2020, great blue heron are noted nesting in trees killed by beaver activity at Upton State Forest and along Warren Brook.
- Tufts University Baltimore checkerspot studies at Howarth Glen.
- Occasional reports of bear activity.
- Tree canopy thinning and *Phragmites* becoming more common along West River upstream of Pleasant Street.
- Great laurel population discovered at the Peppercorn Hill Conservation Area.
- Recent sighting (photograph) of *Arethusa* orchid at known location.
- Comet Panstars viewed from Peppercorn Hill in 2013.
- Fall chimney swift migration viewed from Peppercorn Hill.
- Upton stone chamber repairs and dating study sponsored by the Historical Commission.

Section 4

Environmental Inventory and Analysis

Section 4

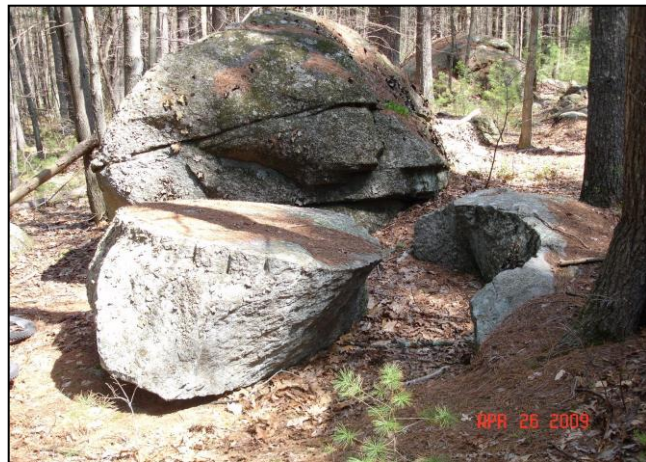
Environmental Inventory and Analysis

A. Geology, Soils, and Topography

The town of Upton consists primarily of low hills and valleys, with elevations ranging between 250 and about 645 feet. The highest elevations in town are unnamed hills located east and west of North Street and north of the Massachusetts Turnpike near the Westborough Town Line. The highest named hills are George Hill, Pratt Hill, and Peppercorn Hill. Most of the town is within the Blackstone River watershed and streams and rivers generally flow to the south. Broad floodplains are found along sections of the West River and Center Brook south of Upton Center and West Upton.

The town is underlain by Rhode Island (or Milford) Batholiths (Hatch et al, 1991; Skehan, 2001). These rocks are primarily granites and gneiss dating to the Proterozoic Age. Milford granite is 610 million years old.

Upton's surficial geology is strongly influenced by the most recent (Wisconsinan) glaciation which covered central Massachusetts with ice between about 23,000 and 14,000 years before present. The glaciers exposed underlying bed rock in some areas and deposited deep layers of sand, gravel, and glacial till in others. Blocks of ice left by retreating glaciers formed depressions which developed into lakes and ponds as the ice melted. Boulders, including some very large glacial erratics, dot the landscape in many locations.



Glacial boulder at "Pilkington's Quarry" (Upton State Forest)

A surficial geology map prepared by the USGS (2005) indicates much of the town is underlain by glacial till, with scattered bedrock outcrops, and stratified deposits in stream channels (Figure 4). Glacial sands and gravels have been mined in several locations, including South Street, West River Road, Main Street, Lower Hartford Avenue, and Fowler Street. There is a recent wall stone quarry and reportedly a long-abandoned mica quarry off North Street.

Upton's soils are composed largely of soils formed from glacial deposits. The soils can be grouped into five categories, or soil associations, according to the properties that most affect broad land-use planning decisions (Table 4-1). Figure 5 shows the distribution and extent of each soil association. High quality agricultural soils are uncommon.

Table 4-1
Primary Soil Associations in Upton

Association	% of Town	Characteristics	Best Uses
Gloucester – Hollis - Acton	36	Stony / Hilly well to moderately drained (hardpan)	Woodland Wildlife / Recreation / Low Density Residence
Merrimac – Hinckley	19	Sandy / Drouthy / Gravelly	Residential / Commerce / Industry
Hollis – Gloucester – Acton	17	80% shallow to bedrock / 10% well drained stone / 10% high water table	Woodland Wildlife / Scattered tracts for houses / Recreation
Essex - Scituate	14	Bedrock outcrops / some water saturation / stony moderately drained	Agriculture / Recreation / Woodland
Muck – Scarboro – Ridgebury	14	Poorly drained / hardpan / water saturation	Wildlife / recreation

B. Landscape Character

Upton's landscape is characterized by rolling hilltops and river valleys. Broad areas of relatively level land are most prominent along the West River. The town has several large natural ponds including Old Zachary and Pratt Pond and many locations which were suitable for construction of small mill pond dams. The landscape played a significant role in defining the character of the town. The center of the town developed near streams that provided sites for mill ponds which supplied hydropower. Early home sites were concentrated in valleys and avoided wet areas and hilltops. Today hilltops are

valued for scenic vistas and lowlands along the West River valley provide flood control storage for the Army Corps of Engineers West Hill Dam in Uxbridge.

Pratt Hill is the most prominent hill in town and is visible from many locations. One of the best long-range views is provided from Peppercorn Hill, where it is possible to see Mt. Wachusett, 29 miles to the northwest. Other notable long-distance views are provided from George Hill (Former Stefans Farm) [at



right] and the power lines near Peppercorn Hill. Park Road, near the Whistling Cave Trail, in Upton State Forest once had an outstanding view towards Hopkinton called the “Painted Valley” but vegetation now obscures this vista. Although portions of Peppercorn Hill are conserved, land at or near the hill is in private ownership. Most of Pratt Hill is state forest or owned by the Narragansett Indian Tribe. A municipal water tank and communications tower are on the hill and visible from some locations.

Open fields are uncommon due to loss to development and overgrowth of historic pastures by vegetation. Areas with prominent remaining fields include Sweetwilliam Farm on North Street, Stefans Farm, Mendon Road, Williams Street, Gable St., and Christian Hill Road. Very few of the remaining open fields and agricultural land in Upton are permanently protected.



Aerial View of the Former Stefans Farm

C. Water Resources

1. Watersheds

Almost all of Upton is within the Blackstone River Watershed. Two small sub-watersheds, one located near Westborough and the other Hopkinton, are within the Sudbury watershed. The Blackstone River Watershed is located in south central Massachusetts and includes portions of the northeastern corner of Rhode Island (Figure 6). The watershed encompasses approximately 540 square miles draining all or part of 29 communities in Massachusetts. The Blackstone River, named for the first European resident of the Valley, Reverend William Blaxton, originates in the hills of Worcester and flows 48 miles south into Rhode Island, emptying into the Narragansett Bay near Providence, Rhode Island. There are six major tributaries: the Quinsigamond, Mumford, West, Branch, Mill, and Peters Rivers. The West River and Mill River both originate in Upton.



The West River has three sub-watersheds in Upton: Miscoe Brook, Warren Brook, and Center Brook. The upper reaches of Miscoe Brook are located in Grafton and Westborough, north of the Massachusetts Turnpike. Miscoe Brook flows southerly through Lake Wildwood until it joins Warren Brook where the two brooks combine to form the West River. Warren Brook originates in northern Upton with several unnamed tributaries. These include tributaries which originate within or near the Warren Brook Watershed Conservation Area and Upton State Forest near Westborough Road.

The upper reaches of the Center Brook watershed are in Upton State Forest. The major headwater stream is Anderson Brook which flows from Dean Pond to Pratt Pond. Center Brook originates at Pratt Pond and joins the West River near Mendon Street.

The Mill River begins at the outflow of North Pond and is quickly joined by tributaries from Peppercorn Hill. The river flows through the towns of Milford, Hopedale, Mendon, and Blackstone, before joining the Blackstone River in Woonsocket, Rhode Island.

In the two Sudbury River sub-watersheds, unnamed tributary streams in Upton flow north to Sandra Pond in Westborough, and northeast to the Whitehall Reservoir in Hopkinton.

2. Surface Water

About 150 acres, or 1.6 percent, of Upton is surface water (Figure 7). Most of the largest ponds were created or enlarged by dams. The largest impoundments are North Pond (239 acres [mostly in Hopkinton]) and Lake Wildwood (38 acres). Other impoundments include Pratt Pond (at right), Fiske Mill, Mill, Taft, Brooks, and Dean Ponds. The largest natural ponds are Old Zachary and Goss Ponds. Most of the ponds



are moderately to severely eutrophic (nutrient rich) and support dense growth of aquatic weeds. Herbicides are used to control weed growth in Pratt, Wildwood, and Taft Ponds.

Principle streams include Center Brook, West River, Mill River, Warren Brook, Miscoe Brook, and Taft Pond Brook. All of these are classified as coldwater streams. There are also numerous small tributary streams, many of which flow intermittently. Several small unnamed streams are classified as coldwater streams by the MA DFW. The Conservation Commission is currently using HOBO temperature data loggers to monitor water temperature in Warren Brook, the Mill River, and its tributaries at Peppercorn Hill. Beaver activity may be affecting water temperature, as well as physical habitat, in Warren Brook.

3. Aquifer Recharge Areas

Stratified glacial deposits along Warren Brook, Center Brook, and the West River are productive aquifers (Figure 8) and are critical to the Towns' water supply.

Upton's public water supply currently comes from the Glen Avenue and two West River Road well fields near the West River. The Glen Avenue field is primarily recharged by the surface water and subsurface flow of Warren Brook and Miscoe Brook. The existing West River Road well field is recharged by water from the upper West River and Center Brook with its headwaters through Mill Pond and Pratt Pond in east Upton and the State Forest areas. The third well site is located on the West River downstream of the West River well site. The MA DEP Zone 2 zone of contribution to the well fields is shown on Figure 8.

4. Flood Hazard Areas

There are several flood hazard areas in the town of Upton. The most significant is the West Hill Dam Flood Control Project, which is managed by the U.S. Army Corps of Engineers. The area is a dry bed flood control reservoir that includes over 600 acres of flowage easements in Upton along the West River and Center Brook. The land in Upton is subject to flooding when West Hill Dam in Uxbridge stores water to protect downstream communities from flooding. Other flood hazard areas are along the Mill River and Warren Brook. The Federal Emergency Management Agency (FEMA) last updated Massachusetts food zone maps in 2017.

5. Wetlands

Approximately 12.7 percent of the town of Upton is mapped as wetland by the Massachusetts DEP (Figure 7). Forested wetland dominated by red maple is the most common community type. One of largest wetland systems in Upton is located along the West River between Lower Hartford Avenue and Pleasant Street. This area encompasses Old Zachary Pond and includes approximately 80 acres of emergent, scrub-shrub, and forested wetland. Another large wetland system is present off Southborough Road near Westborough Road. Beaver activity is increasing wetland habitat in many locations.



6. Vernal Pools

The town has approximately 32 vernal pools certified by the Massachusetts Natural Heritage Program and dozens of other potential vernal pools (Figure 7). These areas provide critical habitat for amphibians, including several rare salamander species.

D. Vegetation

1. General Inventory

Plant communities within the town are dictated by the climate, historical land uses, and varying topography and soils found within Upton. Approximately two-thirds of the town is forested. Other major cover types include non-forested wetlands, early succession habitats (fields and upland shrubland), and agricultural land. Electrical transmission line and natural gas pipeline right-of-ways (ROWs) provide approximately 140 acres of early successional habitat dominated by grasses or shrubs. Tree growth in these areas is suppressed by periodic mowing or application of herbicide.

Right: Utility ROW near Westborough Road.



Very little grassland habitat or agricultural land is permanently protected. Town owned grassland or pasture is limited to about 13 acres of mostly pasture at the Former Stefans Farm and a three-acre meadow at the Howarth Glen Conservation Area. The LSC is maintaining these fields by late fall/early winter mowing and measures to control woody invasive plants such as autumn olive and multiflora rose.



Howarth Glen Open Space off North Street.

2. Forest Land

Approximately 9,100 acres of forest land is present within Upton (Figure 9). There are several areas with large blocks of forest greater than 300 acres in size. These include the main (Westborough Road) unit of Upton State Forest, Upton State Forest and tribal land owned land in the vicinity of Pratt Hill, the Warren Brook Conservation Area, Howarth and Howarth Glen Conservations Area, Whitney Conservation Area, the Peppercorn Hill Conservation Area and adjacent private forest land, the West River floodplain corridor, Stefans Farm and adjacent private forest land, and the southern tip of town from Mendon Road south into Uxbridge and Northbridge, including private land on Miscoe Hill and the West Hill Wildlife Management Area.

Predominant upland forest cover types within the town are generally dominated by oaks and/or eastern white pine. Red maple is the dominant tree in forested wetlands. Other common tree species include hickory, black cherry, grey, white, and yellow birch, American elm, American beech, white ash, aspen, sugar maple, sassafras, and red cedar. American chestnut is common in the understory. Uncommon tree species include pitch pine, Eastern hemlock, white cedar, larch, and black spruce.

A map digitized by Harvard University shows forested areas in Upton in the 1830's (Figure 10). 1938 aerial photos and more recent aerial imagery provide additional information on the history of Upton's forests. Forests can be classified as Primary Forest (i.e. forested in 1830 and in 1938), 19th Century Secondary Forest (i.e. open land in 1830, but forested by 1938), or 20th Century Secondary Forest (i.e. forest on land open or in early successional vegetation in 1938).

The 1830's forest map and aerial photographs suggest that there may be areas in Upton that have been woodlots or forested pastures for nearly two centuries. There is, however, no known "Old Growth" forest in Upton – areas that were never cut. All of the forest is previously cleared or logged and most trees in Upton are probably less than 100 - 150 years old.



Logging at Peppercorn Hill in the 1930's.

Examples of possible primary forest in Upton include portions of the Former Stefans Farm, the Peppercorn Hill Conservation Area, the Warren Brook Conservation Area, and the Bonner Natural Area (Figure 10). Although these areas may have been wooded pasture, they may never have been tilled. Surveys of the soil structure in the individual sites are necessary to determine whether those sites are Primary Forest. The importance of primary forest is that such sites retain more native biodiversity than sites that have been tilled: soil fauna and flora, microorganisms and plants that reproduce primarily vegetatively contribute to the higher biodiversity. In addition, a variety of species of wildflowers are more common in untilled forests than previously tilled lands (MA NHESP, 2009).

3. Public Shade Trees

Public shade trees include street trees, cemetery trees, and trees in parks or other prominent locations. Upton does not have an inventory of these trees and one is needed. Noteworthy trees include some very large Northern white cedar trees planted in the 1930's by enrollees near the headquarters building at the former Upton Civilian Conservation Corps camp (now Upton State Forest), a sugar maple growing near the entrance of the Upton Stone Chamber, large oaks on James Road and at the end of Taft Street, large pines near Nipmuc Regional school, a large sugar maple on Mechanic Street, a sycamore on South Street, and shade trees at the Maple Avenue and Lake View Cemeteries. The Former Stefan Farm also has a number of large “wolf” trees growing in former pasture or hedge rows. A 56” diameter ca. 175-year-old white oak growing along Main Street died about 10 years ago. Wood from the tree was donated to repair the decking of the USS Constitution. Mr. Rufin van Bossuyt, an Upton citizen and forester, has made recommendations to the selectmen and Cemetery Commission for tree plantings at the Lake View Cemetery. Many, possibly hundreds, of large street trees, mostly oaks, were killed by a three-year (2016-2018) gypsy moth infestation.



Maple Avenue Cemetery

The town does not have a scenic roads bylaw. A bylaw could help protect significant trees growing on designated scenic roads.

4. Agricultural Land

Agriculture is no longer a major industry within the town, and Upton sadly has little remaining crop land and pasture. Noteworthy examples include the Kelly Farm on Gabel St and Route 140, the Town Line Dairy on Williams Street, and crop land at Five Forks Farm (formerly Sweetwilliam Farm) on North Street. Five Forks Farm specializes in cut flowers and has been in operation since 2012. There is also a small Community Supported Farm (CSA) on the former Amato Farm on East Street.

In recent years, the town has lost approximately 30 acres of agricultural land to development on East Street, Christian Hill Road, Taft Street, and Orchard Street. In a rare exception, 8 acres of forestland has been converted to horse pasture off North Street.



Field on Christian Hill road lost to development (2019 photo).

5. Wetland Vegetation

As discussed previously about 12.7 percent of Upton (ca. 1750 acres) is wetland. The majority of wetlands are deciduous forested wetlands (red maple swamps) or wetlands vegetated with shrubs such as willows, Northern arrow-wood, dogwoods, alder, and highbush blueberry. Wetland dominated by herbaceous vegetation such as cattail and sedges are uncommon. Recently beaver activity is converting some forested wetland to earlier successional wetland communities.



Herbaceous wetland vegetation growing among red maple drowned by beaver dam near Hopkinton Road.

6. Rare, Threatened and Endangered Plant Species

Three rare plant species have been reported to occur within the town of Upton. Philadelphia panic-grass (*Panicum philadelphicum*) was found near Pratt Pond in 1944. This grass species is listed as a species of Special Concern by the Massachusetts Natural Heritage and Endangered Species Program (MNHESP). It requires open, sunny habitat, usually on sandy soil associated with river or pond borders with seasonal flooding. It is an opportunistic species that grows best in low water years when the pond or river level is low and the shorelines expand to provide more of its preferred habitat. Being a species that is difficult to identify that grows with other members of the genus, it might still be in Upton, having robust populations only occasionally when conditions are ideal.

Large Whorled Pogonia (*Isotria verticillata*), a MA NHESP Watch List species, (WL) grows in acid soils in oak woods and near acidic fens. It is at the northern edge of its range in Massachusetts, it has been extirpated from Maine, and is considered very rare in New Hampshire and Vermont.

Arethusa (*Arethusa bulbosa*), an orchid that was rediscovered in Upton in May of 2001 (the last prior report was in 1934). Arethusa is listed as a Threatened species by the MA NHESP. As of 2015, it was known to occur at only 11 sites in Massachusetts.

The great laurel (*Rhododendron maximum*) was discovered in Upton several years ago. It is listed as a Threatened species by the MA NHESP and known to occur in less than 20 towns in Massachusetts.

7. Unique Plant Communities

Over the years, several types of acidic peatland natural communities have been identified in Upton (Figure 10; MA NHESP, 2009). These types of natural communities have limited acreage throughout the state, being more typical of cooler areas. One such peatland is on town conservation land on Peppercorn Hill. This site is dominated by grasses and sedges and is called a graminoid fen. A 30-acre New England acidic shrub fen is present along Southborough Road (photograph). Most of the wetland is in private ownership but acquisition of the site by the state of Massachusetts is underway and much of its watershed is within Upton State Forest. Recent beaver activity poses a risk to the site. A small acidic shrub bog is present in Upton State Forest near the gas pipeline and west of Westborough Road. The bog is maintained by compacted earthen berms on the north and south sides of Southborough Road which may date from the late 1800's. A stone outlet structure on the southern berm is entirely buried by beaver activity.



The most threatened peatlands in Upton are an Acidic Shrub Fen (recently reclassified from Level Bog since bog openings are not dominant) around Goss Pond and a nearby Spruce-Tamarack Bog Forest just east of the West River and north of the South Street gravel pits. Since there is very little buffering on two sides, they are at risk of nutrient input and changes in water quantity and quality. To retain these communities, it is important to maintain the current narrow wooded buffers between the houses and the shrub fen and between the spruce tamarack area and the gravel pits.

Finally, there is a small isolated wetland on the Forest Heights property off North Street which needs further investigation. Black spruce is reported to occur in the wetland.

8. Invasive Plant Species.

Like elsewhere in central Massachusetts, Upton supports populations of many non-native plant species listed as invasive by the Massachusetts Invasive Plant Advisory Group. Although a comprehensive survey of the town for invasive plant species has not been conducted, notes concerning the occurrence of several species are provided below (the list is not exhaustive).

Common reed (*Phragmites australis*): A seven acre stand is present at Old Zachary Pond and in West River floodplains upstream of Pleasant Street. *Phragmites* is known from several other locations in Upton, including stands off Fiske Mill Road, behind the VFW off Route 140, on the gas line ROW near Chestnut Street, in a ditch along Ephraim's Way, and a pond at the Rockwood Meadow property (formerly Amato Farm). The Rockwood Meadow stand was treated with herbicide to reduce risk of infestation to the Peppercorn graminoid fen, located ¼ mile away, but the stand was not eradicated. All *Phragmites* identified in Upton to date, is an invasive variety native to Eurasia. Control efforts should focus on small stands. Eradication of large stands is impractical. Several species of European moths are under evaluation for possible release as biological control agents.



Phragmites along the West River downstream of Old Zachary.

Autumn Olive (*Elaeagnus umbellata*): Common invader of old fields. Abundant at the Former Stefans Farm. Present at Howarth Glen and focus of a cut stump herbicide control effort in 2018.

Multiflora rose (*Rosa multiflora*): Common invader of old fields. Abundant at the Former Stefans Farm.

Oriental knotweed (*Polygonum cuspidatum*): Present along some roads (e.g. North Street) and Warren Street and found at Heritage Park. Also found along Warren Brook near Route 140.

Garlic mustard (*Alliaria petiolata*): Potential invader of forested areas. Not currently abundant but known to occur along Westborough Road, at the Chamber Park on Elm Street, and along roadways near agricultural fields in the eastern portion of town.

Winged euonymus (*Euonymus alatus*): Common in wooded areas at Former Stefans Farm. Large population along Ridge Road in Upton State Forest.

Barberry (*Berberis thunbergii*): Probably widely disturbed. Common at the Former Stefans Farm.

Oriental bittersweet (*Celastrus orbiculata*): Widely distributed climbing vine.

Fanwort (*Cabomba caroliniana*): Abundant in Lake Wildwood.

Water chestnut (*Trapa natans*): noted in Lake Wildwood

Purple Loosestrife (*Lythrum salicaria*): Common in wetlands. A large stand occurs within the former Box Mill dam impoundment near Williams Street. Recent introductions of beetles that feed on purple loosestrife in Grafton, Northbridge, and Uxbridge may eventually become established, migrate to Upton and provide some biological control. Potential opportunities to release beetles into Upton need to be explored.

E. Fisheries and Wildlife

1. General Inventory

Wildlife depends on habitat to provide the food, cover, water, and space necessary for survival and reproduction. The composition and biological diversity of a town's fish and wildlife community is directly related to the amount and diversity of habitats present within the town. Upton is primarily comprised of forest land and therefore, the wildlife community of Upton is dominated by species adapted to forested habitat. Other habitat

types including shrub and herbaceous wetlands, pastures, old fields dominated by shrubs, streams, ponds, and vernal pools all add to the rich biodiversity of the town.

Amphibians and Reptiles: Approximately 9 species of frogs, 8 species of salamanders, 10 species of snakes, and 6 species of turtles are known or likely to occur in Upton. Many frogs and salamanders live and breed in wetlands. Some species such as wood frogs, gray tree frog, spring peeper and mole salamanders live in forests most of the year, but require vernal pools for breeding. Snakes include species which occur primarily in uplands such as milk snakes and those such as black racers which occur mostly in wetlands. Some turtles such as snapping turtle are primarily aquatic while others such as the eastern box turtle use primarily upland habitats. All turtles require upland nest sites. Rare or uncommon species known to occur in town include the marbled, four-toed, and blue spotted salamander, and the eastern box, wood, and spotted turtle.

Birds: A wide variety of breeding birds (about 100 species) are likely to occur in Upton due to the diversity of habitats found within the town. Appendix G includes a summary of the MA breeding bird survey for habitat blocks in Upton. Notably, in 2019, great blue heron are nesting on white pine killed by beaver activity at Upton State Forest.

The town currently has large areas of unfragmented forest that provide suitable habitat for forest interior nesting birds such as scarlet tanager and wood thrush. Shrub habitat such as power line ROWs provide breeding habitat for many species of warblers and sparrows. Grassland nesting birds which occur elsewhere in central Massachusetts such as bobolink



and meadow lark are absent or rare because large areas of grassland habitat are lacking. The overall diversity and distribution of birds within Upton will likely change as development results in habitat loss and fragmentation. Climate change may result in loss of some familiar species such as the Black capped chickadee and immigration of more southerly species into the area.

The main game bird species is wild turkey. The Massachusetts Division of Fisheries and Wildlife stocked a small number of ring-necked pheasant in Upton for sportsmen in the past. However, a 2020 MassWildlife map shows no stocking will occur in Upton, likely due to the decline of suitable habitat (primarily agricultural/field areas) in town.

Mammals: Approximately 40 species of mammals may inhabit the town of Upton. These include white-tailed deer, opossum, raccoon, fox (gray and red), eastern coyote, rabbit, beaver, squirrels, mice, bats, and various mustelids (weasels, fisher, mink,

otter). White-tailed deer is the principle game species. Hunting is allowed on Upton State Forest, all town owned land, and private property with the owner's permission.

Coyote are common and subject to hunting year-round. Bear occur in the town as occasional transients; one was seen near Pratt Pond in 2019. Moose occur in the town rarely as transients.

Beaver are becoming common and sometimes threaten roads, septic systems, other development, cold water fisheries habitat, and rare species (wood turtle) habitat. Beaver ponds, however, add to habitat diversity and beaver activity should be tolerated and encouraged wherever possible. In some locations the Conservation Commission has installed culvert fencing and/or pond levelers to manage beavers. Often, however, trapping has been required to protect vulnerable infrastructure.



Beaver pond on Warren Brook at the Former Stefans Farm property.

Fish: Upton's many ponds provide warmwater fisheries habitat. Species reported from Pratt Pond and Lake Wildwood include largemouth bass, brown bullhead, chain pickerel, yellow perch, black crappie, bluegill, pumpkinseed, and white suckers. Both ponds are popular fishing spots. Several streams are identified as "coldwater" streams and provide suitable breeding habitat for brook trout. These include Warren Brook, Center Brook, several tributaries of Center Brook, and the West River.

The West River represents the largest stream in southeastern Worcester County suitable for trout stocking and is managed as a "major" trout stream by the Massachusetts Division of Fisheries and Wildlife. Upton also has an exceptional number of streams that support wild brook trout due to the presence of numerous gravel deposits that contribute cold, high quality groundwater flows to these streams. However, these systems are fragile and extremely susceptible to watershed development.

Warren Brook is managed as a wild brook trout stream. Center Brook is managed as both a stocked and wild trout fishery. This stream has an exceptional high diversity of fish and contains a number of different warm and coldwater species. Several other small brooks within Upton, such as Taft Pond Brook and small tributary streams to Center Brook also contain known populations of wild brook trout.

Warren Brook, Center Brook, the West River and Pratt Pond are also stocked with trout each year by the Massachusetts Division of Fisheries and Wildlife.

Development, climate change and water withdrawals pose the greatest risks to Upton's cold water aquatic habitat.

Invertebrates: Upton's varied habitats provide habitat for many species of butterflies, moths, dragonflies, damselflies, and other invertebrates. The butterfly fauna is well known because a July butterfly census have been conducted in Upton for many years. A list of butterfly species known from town and from the Former Stefans Farm is provided in Appendix H. The Howarth Glen meadow provide habitat for a population of the colorful Baltimore checkerspot butterfly (right). Tufts university researchers are studying the Upton population, along with other populations in Massachusetts and Maryland.



2. Corridors

Animals may need only one habitat to satisfy all their life requirements or they may need several habitats. Wildlife species requiring two or more habitats must travel between these various habitats. These movements may only be seasonal (as observed in various amphibians, reptiles, and mammals) or may be undertaken by young individuals (primarily mammals and some birds) in order to disperse to new areas to establish their own living area. These movements within travel corridors are often along riparian zones, ridges, and other borders of differing habitats. Movement may be difficult or impossible if required habitats are widely separated or exist as isolated habitat "islands".

Although the movement of wildlife within most areas of Upton at present may be fairly unrestricted, in order to conserve wildlife diversity within Upton, important areas of wildlife habitat (Upton State Forest property, Peppercorn Hill area, Warren Brook Watershed Conservation Area, town water bodies and large wetland systems) should be connected by travel corridors. Important travel corridors for Upton wildlife may

potentially include the wide bands of riparian vegetation (wetlands) located along streams and existing gas line and powerline ROWs.

3 Rare Animal Species

Several state-listed rare animal species occur in Upton. These include two turtles, two salamanders, a fish, and three invertebrates (a freshwater mussel and two insects).

Wood turtle (*Clemmys insculpta*), and eastern box turtle (*Terrapene carolina*) have been reported within areas of Upton in the last few years. Numerous sightings of wood turtle have been reported with the last observation (near the West River noted in 2019). Using NHESP funds, the Commission hired a consultant to study an Upton wood turtle population. The study included radio telemetry tracking of several adults and located nesting areas. Wood turtle is listed as species of Special Concern by the MNHESP.



There are several reports of the Eastern box turtle since 2011, including sightings in Upton State Forest, near Warren Street and South Street. Eastern Box turtle is also listed as species of Special Concern by the MA NHESP. Priority habitat mapped for box turtle in Upton and elsewhere in MA was unfortunately significantly reduced in the 14th edition of the Massachusetts Natural Heritage published in 2017.

The marbled salamander (*Ambystoma opacum*) is a mole salamander that was last observed in Upton near Grafton Road 1996. This species is listed as Threatened by the MNHESP. Small numbers of the blue spotted salamander (*Ambystoma laterale*; photograph) have been observed migrating to breed in a vernal pool near Fowler Street several times between 2001 and 2010. This species is listed as Special



Concern by the MA NHESP and was last seen at Fowler Street in 2010. Upland habitat near this pool was acquired by the MA DCR in 2012.

The brindled shiner (*Notropis bifrenatus*), a fish listed as Special Concern occurs in the West River and Lake Wildwood.

The ringed bog haunter or banded bog skimmer (*Williamsonia lintneri*) is a dragonfly that is presently listed as Endangered by the MNHESP. The ringed bog haunter was first observed in Upton in 1916 and was last sighted in town in May of 2010.

The triangle floater (*Alasmidonta undulate*), a freshwater mussel, listed as Special Concern species was recently observed in Upton. The triangle floater occurs in in Center Brook and the West River.

Three uncommon species which were formerly listed as Special Concern by NHESP also occur in Upton. Spotted turtle (*Clemmys guttata*) has been found in several locations around town, including the Peppercorn Hill Conservation Area, the proposed crosswinds subdivision off Station Street, Fowler Street near Warren Street and the Red Farm Golf Course, and vernal pools near Kensington Way, a private drive off Mechanic Street. The four-toed salamander (*Hemidactylium scutatum*) was found in 2006 on Glen Echo open space land west of North Street. The oak hairstreak (*Satyrium favonius*), a butterfly, was recently observed in Upton. The hairstreak was observed near Mechanic Street in 2000.

5. BioMap2 and Rare Species Habitat

In 2010 the Massachusetts Department of Fish and Game and The Nature Conservancy published BioMap2. BioMap2 attempts to identify species habitats and high quality ecosystems across the state that are critical for biodiversity and that, if protected, will enhance ecological resilience to climate change and other threats. BioMap2 identifies two spatial layers, Core Habitat and Critical Natural Landscape. Core Habitat identifies key areas that are critical for the long-term persistence of rare species and other species of conservation concern, as well as a wide diversity of natural communities and intact ecosystems across the Commonwealth. Critical Natural Landscape identifies large natural landscape blocks that are minimally impacted by development. If protected, these areas will provide habitat for wide-ranging native species, support intact ecological processes, maintain connectivity among habitats, and enhance ecological resilience to natural and anthropogenic disturbances. About 40 percent of the Commonwealth is mapped as BioMap2 habitat.

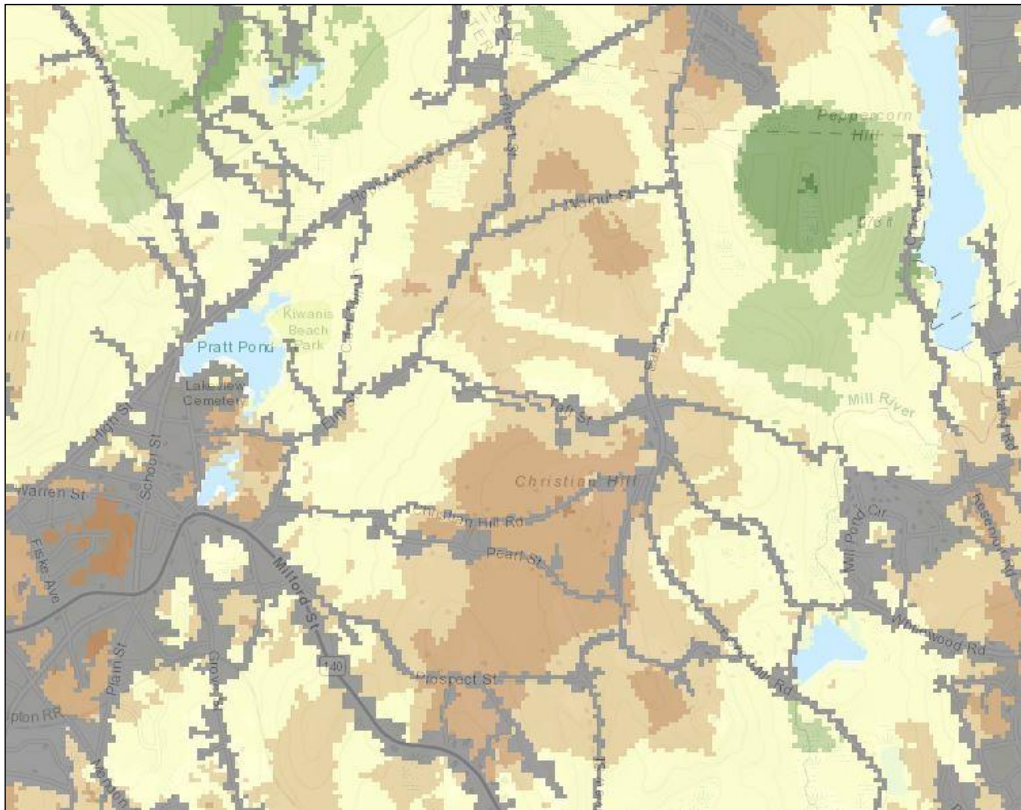
Approximately 25 percent of Upton is mapped as BioMap2 habitat (Figure 12). BioMap2 habitat in Upton includes Forest Core and Critical Natural Landscape in the

northern part of town, rare species habitat along Warren Brook, Center Brook, and the West River, Critical Natural Landscape in the Miscoe Hill area, and several other areas. According to MA Audubon's *Losing Ground* 2014 edition, 21% of BioMap2 habitat is protected in Upton. Upton ranked 284 out of 342 town and cities in level of protection.

Areas currently mapped as rare species habitat by the Massachusetts Natural Heritage and Endangered Species program are shown on Figure 14.

6. Climate Resiliency

The Natural Conservancy has developed an on-line interactive tool to assess climate change resiliency of natural habitats in eastern North America (<http://maps.tnc.org/resilientland/>). The tool shows areas that offer the greatest potential for species to adapt as the climate changes. A dark green color indicates that an area has high estimated resilience. Brown indicates areas more vulnerable to climate change. Most of Upton is mapped as average (yellow) or below average (brown) resilience. Peppercorn Hill (upper right corner) has above average resilience.



7. Ecological Integrity

Ecological integrity is the ability of an area to support plants and animals and the natural processes necessary to sustain them over the long term. Conservation Assessment and Prioritization System (CAPS), a computer model that was created by researchers at University of Massachusetts, Amherst, calculates and maps the ecological integrity of large geographical areas. The "index of ecological integrity" (IEI) was calculated for all areas of the state in 1971, 1985, 1999, and 2005. It considers eight factors when generating results: including habitat loss; microclimate alterations; impacts from and connectedness of the landscape. An area with a score of zero has no value and a score of 1 represents an area of pristine ecological function. The model also calculated units called IEI-acres. One IEI-acre is equivalent to an acre of cells with a perfect score of 1.

The index provides a measure of the impacts of development on Upton over the last 35 years. Upton's index of ecological integrity decreased from 0.44 in 1971 to 0.26 in 2005. The Town's ranking dropped from 114 to 141 out of 351 MA towns. The number of IEI acres dropped about 40 percent, from 6,154 to 3,582.

F. Scenic Resources and Unique Environments

1. Scenic Landscapes and Views

The town of Upton has a remarkably diverse landscape, a landscape shaped by the forces of nature and human culture over thousands of years. Its basic form is rooted in the geology of the region, shaped by the glaciers of the last ice age, and molded since by the action of wind, water, and communities of plants and animals. From the wooded hills in the north end of town, Warren and Center Brooks drain a series of narrow valleys, and merge to form the West River as it flows south to the Blackstone. Rich wetland areas spread across valleys where topography slows drainage. Large areas of forest remain, some of it protected as part of the Upton State Forest, but most is available for future development.

Overlaid with this natural landscape is a cultural landscape of farms, wood lots and villages that evolved in an intimate relationship with the land in three centuries since European settlement and previous millennia of use by Native Americans. Traditional land uses and settlement patterns were based on local resources of farmland, timber, and water power. The natural systems that underlie these human settlement patterns were not wholly erased, but rather incorporated into a larger composition that is both functionally stable and beautiful to look at. Descriptions of many noteworthy areas follow. Additional information is found in the Dodson Open Space Study (2005).

Sweetwilliam Farm:

This historic farm offers an extraordinary view from North Street of a pasture, beautiful stone walls, hayfields, and an 18th century home once owned by the Whitney family. The town acquired 63 acres (now known as the Whitney Conservation Area) in 2011. Most of the rest of the 101-acre farm is protected by a conservation restriction. The farm is now known as Five Forks Farm and specializes in cut flower production.



Upton State Forest: The Upton State Forest has an extensive system of roads and trails, many of which pass through scenic wooded areas. One of the most scenic trails is the Whistling Cave Trail, which winds through an unusual field of glacial erratic boulders. A view to the east (Hopkinton) of the “Painted Valley” from Park Road has been obscured by tree growth but could be restored.

Peppercorn Hill: A vantage point near the top of the hill offers a fine long-range view to the south and west. Mt. Wachusett is visible on good viewing days. A unique rounded glacial boulder is on a trail not far from top of hill. According to Donald Kerr, a longtime resident of Crockett Road, there was once a nice view of North Pond from the hill, now obscured by trees. Much of the Peppercorn Hill area is owned by the town. Migrating night hawks are visible soaring over the hill in late August. In-holdings owned by the Kelly family are for sale and a priority for acquisition by the town.

Grafton and Upton Railroad: Long in disrepair the railroad has been refurbished for commercial use by a new owner. The railroad passes through a largely undeveloped forested corridor from Hopedale to Grafton and could have been a truly spectacular rail trail.



Former Amato Farm: The Amato farm included views of agricultural fields along both sides of East Street. Seventy-eight acres to the east were sold to a developer. The Rockwood Meadows Over 55 subdivision preserved 53 acres, and concentrates development near the back of the fields, somewhat limiting impacts to the view from the road. Rockwood Meadows open space also provides a trail to access the Peppercorn Hill Conservation Area. Some fields on the west side of the road were allowed to come out of Chapter 61 and are being developed. Others support Long Life Farm, an organic CSA farm.

Pratt Pond: The pond has a swimming beach and is a popular spot for boating and fishing. There is pleasant view across lake from North Main Street and School Street. Beautiful mist shrouded views of the pond occasionally reward early morning commuters.

Views of Pratt Hill: This fully wooded hill northeast of Upton Center is one of the highest points in Upton. When viewed from the area of Kiwanis Beach, it is seen to rise above and beyond Pratt Pond. Taken in combination with the pond, the hill and, occasionally, its reflection, produce a pleasing picture. Other nice views of Pratt Hill include those from the upper fields at Stefans Farm on George Hill, from the St. Gabriel's Property (formerly Stockwell Farm) on Mendon Road, from Williams Street, from Hartford Ave South. Because it is so fully wooded, there are no good long-range vistas from Pratt Hill itself.

Brooks Pond (off Mendon Street): A scenic 3-acre pond with an undeveloped shoreline.

2. Scenic Roads

North Street: At the town border with Westborough (near the Mass. Pike), North Street travels southward for 2 1/2 miles and ends at Westborough Road. The curvy road passes by stonewalls, historic homes (including Sweetwilliam Farm), and alternating forest and meadow that characterizes rural Upton. The Glen Echo subdivision and recent construction of homes on frontage lots have detracted from its attributes.

Mendon Street: This road corridor is one of the last areas in Upton that retains its historic pattern of roadside meadows, historic farmsteads, and undisturbed forest. The result is a unique and beautiful composition of landscape elements.

Christian Hill Road: Large open fields afford nice views along the eastern end of this scenic roadway. Mature deciduous trees frame Christian Hill road and a nearby two-

story red barn with a cupola provides additional beauty. Unfortunately the fields are being developed.

Westborough Road: The road between Upton and Westborough includes stretches passing through mature forest preserved by Upton State Forest.

Ridge Road: This heavily wooded, lightly traveled road passes through Upton State Forest.

3. Some of Upton's Other Special Places



Maplewood Cemetery: Iron gates and a four-foot stone wall, and a stone chapel greet you at Maplewood Cemetery. A path leads you to a pond, and then to a second, larger pond. Giant mature pines ring the cemetery and stand guard over everything within. A covered seating area built of stone on the shore of the larger pond allows visitors to pause for a while. The cemetery rises from these ponds to allow those buried on the gentle knolls a

quiet and scenic place to rest. Walking about the cemetery, one views the many graves of Upton's famous residents of the nineteenth century. The period of Upton's industrial achievement and world-famous hat production is chronicled in the grave markers.

Old First Cemetery: Situated on a private setting at the end of a half mile of unpaved road, the cemetery is an undisturbed piece of Upton's history. This area was the location of Upton's first meeting house, from 1735 to 1770. The cemetery contains about 160 marked graves with some headstones coming from the 18th and 19th centuries. A stone wall surrounds the cemetery and it is ringed by a mature pine forest.

Bradish Cemetery. This cemetery is at corner of North Street and Westborough Road. Lined by stone walls, this small cemetery includes the graves of Revolutionary War soldiers.

Former Stefans Farm: Town owned land with complex of old agriculture fields and pasture, stone walls, a quarried bolder, an old stone dam, stone mounds, forest, with frontage on Warren Brook. Managed by the Land Stewardship Committee, the property includes an extensive trail system and a community garden.



Town Common (Upton Center): A small town park flanked by nearby historic churches, town hall, and the Knowlton-Risteen Building. The park includes a bronze memorial to World War I veterans attached to a large piece of quartzite reported to have come from Pratt Hill.

Warren Brook Watershed Conservation Area: Located in the northern part of Upton on the Grafton Town Line, this 230-acre wooded area offers excellent opportunities for hiking, horseback riding, cross-country skiing, and hunting. The area abuts the Howarth Glen Conservation Area, the Whitney Conservation Area, the Bonner Natural Area, the Pell

Farm in Grafton (protected open space) and hundreds of acres of privately owned open space.

CCC Buildings in Upton State Forest: The structures built by the Civilian Conservation Corps (CCC) in the 1930's serves as a unique record of that era. In 2005, the buildings were listed by Preservation Mass as one of the "Ten most endangered historic resources in Massachusetts." With limited funds available, the Commonwealth's Department of Conservation and Recreation continues to struggle to provide adequate maintenance. Heavy snow load collapsed historic CCC barns in 2003 and 2011. Renovations to the remaining structures are underway by the DCR and its partners, including the Blackstone Valley Technical High School.



Heritage Park (Elm Street): This seven-acre park on Mill Pond which houses the Upton Chamber, a

remarkable bee-hive shaped stone chamber of unknown origin. Purchase of the park was funded with Community Preservation Act Funds. The park features walking trails, meadows, and a brook. CPA Funds were appropriated in 2011 to conduct an archaeological study and repair the entrance to the chamber. The study suggests the chamber is of precolonial origin.

Goss Pond: A unique kettle hole pond with fringing wetland bog community. The Conservation Commission conducted a one-day limnological investigation of the pond in 2014 and found water pH to be less than 6. DO levels were above 5. Most of the pond is less than 4 ft. deep. Maximum depth was about 6 – 8 ft.

Lake Wildwood: Thirty-eight-acre elongate lake on Miscoe Brook with about 3 miles of largely wooded shoreline and an island. A town owned park provides access for canoes and kayaks and an unimproved boat ramp. Recreational use in some locations can be impaired by highway noise from Rt. 140 and dense beds of aquatic weeds.

Pratt Hill: The site contains a Native American ceremonial stone landscape consisting of stone mounds and other stone features. The stone features are land owned by the Narragansett Indian Historic Tribal and Upton State Forest. The largest mound (photograph) was sadly destroyed by a previous owner. Pratt Hill also has other historical sites, including remnants of the 19th century “Lead Aqueduct” water supply system and 20th century infrastructure built by the CCC.



Kuczinski's Farm (Williams Street): The farm includes the barns from a once large dairy complex and some fields. Much of the former farm has been developed. A portion of the farm remains in operation as the Town Line Dairy.

Glen Echo Open Space: This area includes a 3-acre hayfield. Although the land is permanently protected, the hayfield has been considered for development as an athletic field. It is managed by the LSC and currently supports a large population of the Baltimore Checkerspot butterfly.

Old Dam on Warren Brook: Site of old mill pond south of Fowler Street in the Robertson Conservation Restriction property. Deep pools along a trail to dam support native brook trout.

West River and Old Zachary: Upton's best flat-water canoeing - best attempted during spring or early summer when water levels are high, and swamp rose is in bloom. Most of the shoreline is undeveloped and part of Upton State Forest. The pond features a secluded cove with an enormous beaver lodge. Common reed detracts from the views along the river near Old Zachary.

North Pond Dam: Path along top of old stone dam with public access and view of the pond.

Baker Dam: Remains of old mill dam built with cut stone near Williams Street.

Old Stone Foundation (Mendon Street): Impressive cut granite block foundation preserved by conservation restriction at the Kenneth Village over 55 developments.

Old Stone Foundation (off North Street): Barn foundation and associated retaining walls likely date from the late 1700's or early 1800's. Preserved by conservation restriction placed on Bonner Natural Area.

Cut Stone Quarries at Upton State Forest: The late Carl Anderson, a CCC alumni, referred to an area near Middle Road Trail as Pilkington's Quarry". Alexander Pilkington was one of four brothers that came from Ramsbottom, England to Upton around the beginning of the Civil War. The Pilkington's cut stones for cemetery monuments, horse troughs, building foundations and mill stones. On the east side of Middle Road Trail, you can see round cut stones that were intended as mill stones but either broke while being transported or cut. All but Alexander died before 1873 but he continued the trade until his death in 1918 (FUSF Website, 2009). Quarried boulders are also known from elsewhere in town, including a fine example at the Former Stefans Farm.

Old Stone Dam at the Former Stefans Farm: Rediscovered in 2009, this small 30 ft. long stone dam on an intermittent stream may have been constructed to create a water supply pond for livestock.

Stone Paddock (off North Street): A well preserved rectangular paddock located in Upton State Forest.

Small Stone Paddock on Elm Street: Former town "Pound.

Memorial Marker: Memorial marker for Issac Nelson, where he was killed by a falling tree on December 28, 1812. Located in a forested area on private property off Walker Drive.

Old Connecticut Path: Faye Mountain Road, in Grafton and the northwest corner of Upton, is thought to follow the Old Connecticut Path, an ancient footpath used by native Americans and early colonists to travel from eastern Massachusetts to Hartford, Windsor, and Wethersfield Connecticut.

Stone Cairn near Triphammer Road: The stone mound was rebuilt in 1978 by Barbara Burke and others at the site of a stone monument built during the Revolutionary War.

Mill Site on Stone Quarries near Triphammer Road: A mill site (the Cutlery Factory) on private property where the inventor Eli Whitney may once have worked. Nearby on land now owned by the DCR are remnants of old cut stone quarries, including a cut boulder with an embedded iron wedge.

Old Roads: Upton has numerous abandoned or discontinued roads dating from the 19th century or earlier. These roads often now serve as hiking or riding trails as they wind through forested areas. The roads are on both private and public land. Examples include Miscoe Hill Road, Marlborough Road, Taft Street, Gore Road, Old Lackey Street, Triphammer Road, and others.

Stone Bridge across Mill River: Connects Peppercorn Hill Conservation Area with Milford conservation land. Cut stone slab decking and stone abutments.

Historic West River Bridge Site: The stone abutments of an old bridge still stand in a picturesque setting not far from the South Street Gravel Pits.

Fowler Street Vernal Pool: This highly productive, well vegetated vernal pool (photograph) provides breeding habitat for blue spotted salamander, yellow spotted salamander, spring peeper, wood frog, and spotted turtle. The pool is located on private property very close to Fowler



Street and the Red Farm Golf Course. Adjacent upland which provides critical foraging and overwinter habitat for salamanders was recently purchased by the DCR and is now part of Upton State Forest.

North Street Vernal Pools: Two large vernal pools likely provide the town's only known breeding habitat for marbled salamander. The pools are on private property located south of the Glen Echo Open Space managed by the LSC.

4. Unique Geological Features

Peppercorn Hill Conservation Area (boulder talus slope): A remarkable jumble of large probably glacial boulders on the western slope of Peppercorn Hill. There are old reports of there being "caves" in the area, perhaps referring to crevices between large boulders.

Peppercorn Hill Conservation Area (ravine): A narrow steep sided ravine with a stream flowing under massive glacial boulders.

Glacial Erratic at the Preserve at Wildwood (Williams Street): An unusually large boulder on privately owned open space preserved as part of the subdivision plan.

Upton State Forest: Glacial erratics along Middle Rd., Mammoth Rock Trail and Whistling Cave Trail (aka Cave of the Winds).

South Street Gravel Pits: An expansive sparsely vegetated sandy area near the West River and Goss Pond with some massive exposed boulders. The area is within the West Hill Dam flood control flowage easement and cannot be developed for housing. The area was often mentioned as an ideal location for much needed recreational fields, but town meeting voted down a purchase in 2012. The site still has value as habitat (when restored) and for passive recreation.



North Street Quarries: There is an abandoned rock quarry on private property off North Street. The quarry, operated by Browne Blasting and later Pyne Sand and Stone

Co., produced wall stone during the 1960's and 1970's. There are also reports of a mica quarry located off North Street, probably on the Forest Height property. Mr. Thomas Spinks of Brown Blasting saw the long-abandoned quarry in the early 1960's. He recalls it as being located within ½ mile due west of the Brown Blasting quarry, remains of which is now on a residential lot.

West River Road Cave: A natural cave, known as Rattle Snake Cave, is on Upton State Forest land off West River Road. The cave is described in an 1890's Milford Daily News article.

Devils Footprints. On the southern slope of Pratt Hill and on the south side of Mendon Road is a rock formation called Devil's Footprints. They are impressions in solid rock, over two miles apart. Both prints point southward. There is a photograph of one of the footprints in "Upton's Heritage". The location of the Mendon road "print" was recently documented.

4. Unique Environments

1. Miscoe, Warren, Whitehall Area of Critical Environmental Concern (ACEC)

The Grafton, Upton, and Hopkinton Conservation Commissions nominated portions of the upper West River watershed for designation as an Area of Critical Environmental Concern (ACEC) in 1999. Following a long series of public meetings, the State Secretary of Environmental Affairs designated the area as the state's 26th ACEC in July of 2000. The 8,700-acre Miscoe, Warren, and Whitehall Watershed ACEC encompasses much of the Miscoe Brook watershed in Grafton and the Warren Brook watershed in Upton. The ACEC includes 5,280 acres in Upton, about 38% of the town. The ACEC is highly valued because it provides habitat for rare wetland wildlife and plants, includes large contiguous parcels of undeveloped wetland and forest, contains numerous historic properties and viewsapes and is an important watershed for Upton and the Blackstone River. This area is the headwaters for the West River, one of the most pristine remaining tributaries of the Blackstone. Twenty-eight percent of the area was permanently protected open space in 2000. Several hundred acres of additional open space has been protected since the ACEC designation. Acquisition of Chapter 61 land and other key parcels within the area and preservation of land through open space developments could one day insure permanent protection of about 50 % of the area.

2. West River – Center Brook Corridor

This largely undeveloped stream corridor extends along the West River from Hartford Avenue south into Northbridge and along Center Brook from Plain Street to the West River confluence. In Upton, it includes several hundred acres of flowage easement land acquired by the Army Corps of Engineers for the West Hill Dam flood control project. Development on this land is strictly limited. The area provides habitat for several rare species and supports a coldwater fishery.

3. John H. Chaffee Blackstone River Valley National Heritage Corridor

Upton is within the Blackstone River Valley National Heritage Corridor. The Blackstone River Valley is the birthplace of the American Industrial Revolution. In recognition of its national significance, the U.S. Congress officially created this heritage corridor in 1986 as the nation's second National Heritage Corridor. The corridor stretches from the headwaters of the Blackstone in Worcester, Massachusetts to Narragansett Bay in Providence, Rhode Island. The heritage corridor is operated in conjunction with the Secretary of the Interior through the National Park Service, a National Corridor Commission representing the interests of the local communities, and several key state agencies from both Massachusetts and Rhode Island. The Corridor now includes 24 cities and towns and 400,000 acres.

G. Environmental Challenges

1. Habitat Loss and Fragmentation

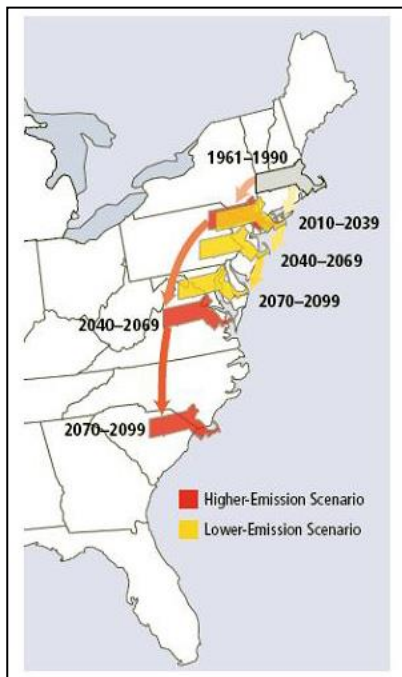
Wildlife habitat continues to be lost as development occurs throughout the town, with the CMRP build-out analysis projecting possible development of an additional 7,112 acres (*11 square miles*). In addition to the direct loss of habitat, the remaining areas of undisturbed woodlands, fields and wetlands are becoming increasingly fragmented into “islands” of habitat. The loss of large areas of open space will result in a decrease in wildlife diversity within portions of the town as those species requiring large tracts of undeveloped or lightly developed land are eliminated. The loss of ecological integrity assessed by MA Audubon from 1971 to 2005 quantifies the impact of development. In order to maintain the rich wildlife diversity throughout many areas of the town, there exists a need to preserve contiguous areas of habitat and connect the large remaining areas of open space with each other through “greenbelt” corridors.

2. Threats to Cold Water Streams

Upton has several high quality coldwater streams that support native brook trout populations. The streams are groundwater dependent and sensitive to development that draws down regional water tables. According to the Massachusetts Department of Fisheries and Wildlife, habitat quality of one of these streams, Warren Brook, has already been adversely affected (2019, pers. communication). Considerable future development in the Warren Brook watershed is likely, placing the brook at even greater risk. Coldwater stream habitat in the West River is vulnerable to future withdrawals for drinking water supply. Although the current DEP permitting process appears to be protective of these resources, there is no guarantee that water supply permits renewed decades from now will be protective. Climate change (see below) could provide an additional stress and may eventually eliminate most or all of Upton's remaining coldwater habitat.

3. Eutrophication of Town Ponds

Upton has several large ponds which provide recreational opportunities and warmwater fisheries habitat. Many of these ponds are shallow, very eutrophic, and plagued by invasive aquatic weed problems. The town has an active aquatic weed control program but lacks long-term lake and watershed management plans for any of the ponds. Three ponds, Pratt, Wildwood, and Taft have been treated with herbicides. Mill Pond (photograph) is in the worst condition and likely needs to be dredged.



4. Climate Change

Climate change (global warming) has the potential to profoundly affect the northeastern United States (UCS, 2008). By the later part of this century Massachusetts could have temperatures similar to Maryland under moderate warming scenarios and South Carolina under more extreme scenarios. Even modest warming would likely have a noticeable effect on Upton. Some familiar bird species such as black capped chickadee would likely be extirpated. Coldwater streams might be degrading to the extent that native brook trout is

extirpated. Trees like sugar maple, hemlock, and even oaks might decline and be replaced with more southern species. Our acidic plant communities (already remnants of a colder climate) would be severely stressed. Precipitation may decline, stressing both streams and water supplies. Safe yields of our well systems may decline. Severe conflicts may arise between water needs for water supply and protection of aquatic habitat. The Nature Conservancy has assessed the vulnerability of terrestrial habitats in New England to climate change. Only 31% of land classified as “resilient” in Upton is protected land.

The Upton Conservation Commission has been monitoring ice out at Pratt Pond since 2010. Ice-out dates have ranged from March 7 to April 11. The pond was ice free for the first time on January 1 in 2018 (photograph).



5. Loss of Agricultural Land.

Upton has lost much of its pasture and agricultural land. Much of the remaining land remains vulnerable to development. Conflicts are likely to arise between competing uses for preserved fields or pasture (i.e. agriculture, habitat, and athletic fields).

6. Invasive Plant and Animal Species

Expansion of invasive plant species populations threatens our ponds, wetlands, forest, and riparian habitat. Control of these species is not always possible or practicable given limited resources for stewardship of our ponds and conservation areas. The town should be on guard for emerging threats such as garlic mustard, Japanese stiltgrass, mile a minute weed, swallow-wort (black and pale), and kudzu.

Invasive insect species are also a concern. White and green ash in New England is threatened by the Emerald Ash Borer (EAB), a small insect that is moving rapidly eastward from the Midwest. The borer has reached Massachusetts and will likely decimate Upton's ash trees. In August of 2008 a colony of the Asian long horned beetle (ALB) was discovered in Worcester. The beetle is native to China and likely was introduced more than 10 years ago. Larvae of the beetle feed on hardwoods and it has the potential to decimate New England forests. Maples are most susceptible, but it also feeds on willows, aspen, birch, ash, and other hardwoods. Oak and pine are resistant. As of May 2011, ALB have been found in 6 Massachusetts communities: Worcester, Shrewsbury, Holden, Bolyston, West Bolyston, and Boston. The Central Massachusetts beetle control program will likely take years to eradicate ALB and nearby communities must be on guard. Spread of the beetle to Upton and subsequent controls efforts (host tree removal) could dramatically alter the town's landscape and threaten some of our most cherished trees.

7. Stewardship of Protected Lands

Management of town conservation land requires resources and a dedicated group of volunteers or professional staff. Although Upton has made great progress at managing our lands in the last several years, much remains to be done. Much can be accomplished by developing partnerships with other town boards, non-profit organizations such as the Friends of Upton State Forest, Bay State Trail Riders, and youth

organizations such as the Boy and Girl Scouts. An inventory of Upton conservation land "infrastructure", including boardwalks, kiosks, and signs, is provided in Appendix B. Stewardship plans are available for Stefans Farm and several town-owned properties off North Street.



8. Other Challenges

Hazardous Waste Sites and Landfills

Upton has just one active state listed 21E site and no Federal Superfund Sites. The waste site is the former town landfill off Maple Avenue. The site is in private ownership and the owners have capped and redeveloped the landfill. Closure activities included removal of mercury contaminated sediment from adjacent wetlands, capping the landfill with an impermeable cover, and construction of stormwater management facilities. The site is being redeveloped for light industrial and transportation (railroad) use. The town likely has numerous small old farm dumps. There is possibly an old municipal dump on the Pleasant Woods Conservation Area.

Erosion and Sedimentation

Sand and runoff from town roads enters streams and wetlands in numerous locations. Each year a few roads are repaved, and the town is slowly adding drainage improvements such as catch basins which reduce sedimentation to wetlands and waterways. The town has experienced serious erosion problems from several recent developments, including the Shinning Rock Golf Course in Northbridge, and the Glen Echo Subdivision off North Street. The Conservation Commission closely monitors construction sites and issues enforcement orders pursuant to the Wetlands Protection Act, and town wetland protection and stormwater bylaws.

Flooding

Upton has few areas which experience chronic flooding problems. The purchase of flowage easements for West Hill Dam by the Corps of Engineers has largely prevented development within the 100-year flood plain along the West River and Center Brook. Less than 100 structures in town are mapped within the 100 year flood zone. Beaver activity causes localized flooding in some areas but can be mitigated by culvert fencing, dam removal, or, as a last resort, trapping.



Environmental Equity and Environmental Justice

In the context of an Open Space and Recreation Plan, environmental equity refers to the distribution of open space and recreational resources throughout the town. Permanently protected open space is found throughout Upton but is concentrated in the northern part of town. Most recent large open space acquisitions have also been in this area. The Dodson Study identified priority areas for preservation throughout the town. Two of the town's most attractive preservation opportunities (Miscoe Hill and the Mendon Road area) are in southern Upton. Active recreation resources are mostly near the center of town. A likely location for a new athletic field complex is in the southern part of town, off South Street. There are few small neighborhood parks or play areas in Upton and many Upton residents drive to parks or trails or simply walk on the town's many quiet county roads. Use of the town's open space subdivision bylaw will likely encourage the creation of new neighborhood parks and trails. There are also several Upton State Forest parcels scattered around town which could be made more accessible to nearby residents.

No areas within Upton are mapped as environmental justice communities by the Commonwealth of Massachusetts.

Section 5

Conservation and Recreation Lands Inventory

Section 5

Inventory of Lands of Conservation and Recreation Interest

A. Introduction

This section provides an inventory of lands of conservation and recreation interest. These lands may be publicly owned, owned by non-profits, or privately owned. In general, lands of conservation interest include medium to large parcels of undeveloped land (i.e. > 20 acres), lands of any size with wildlife corridors, existing or potential trail corridors, or unique natural features (e.g. a vernal pool, rare species habitat or plant communities, geological resource), and agricultural land. Lands of recreational interest include lands currently used, or that could be used, for active recreation.

Open space makes an important contribution to quality of life. Public recreation areas and open space provide a focus for community life and promote a unique and identifiable community character. Open space also has important economic benefits. It protects and enhances the property values of nearby land. Additionally, open space serves important environmental functions, providing wildlife habitat, groundwater recharge, flood control, and carbon storage. Even small pockets of green space may serve an important function.

Protected open space refers to open space owned by a municipality, a state or federal agency, a non-profit land protection agency, or private entities, and managed primarily for conservation, recreation, or environmental protection. Protected open space is sheltered from development to a significant degree, although there is always the chance that the use of these areas will be changed.

The following tables are attached at the end of this section:

Table 5-1 is the required inventory of open space properties. It describes ownership, management, current use, condition, recreation potential, public access, type of public grant accepted, zoning, and degree of protection for each parcel of conservation or recreation interest. The table includes all publicly owned conservation land and recreation facilities and protected privately-owned parcels. Many of the properties are further described in this section.

Tables 5-2 and 5-3 are simplified open space summary tables.

Table 5-4 lists all parcels currently enrolled in the Chapter 61 program.

A list of conservation restrictions, other conservation related deed restrictions, and trail easements is provided in Appendix G. There are no Agricultural Preservation Restrictions (APRs) in Upton.

Publicly owned recreation facilities are evaluated for accessibility to people with disabilities in Appendix A.

B. Privately and Non-Profit Owned Parcels

1. Protected Open Space (Private)

Bernat Property (Conservation Restriction): A 64-acre wooded parcel off Chestnut St. is protected by a conservation restriction donated by the Bernat Family in 1996 and held by the Metacomet Land Trust. The parcel includes a pond and could be one of the core parcels of an open space corridor extending from Mendon Road southwest to the Northbridge town line.

Sweetwilliam Farm (Conservation Restriction): A 32.6-acre parcel bisected by North Street is protected by a conservation restriction. It protects a spectacular scenic view off North Street and approximately 18 acres of agricultural land and pasture. The property includes an 18th century farm house, fields, beautiful stone walls, and cart paths. It also includes an east-west trail easement which links Upton State Forest to the Warren Brook Watershed Conservation Area. The historic farm dates to the mid 1700's and was owned by the grandfather, uncle and cousin of Eli Whitney, the early American inventor. The CR was purchased with a LAND Grant, CPA funds, and private donations. The CR is held by the Sudbury Valley Trustees and the Upton Conservation Commission. It is now being operated as Five Forks Farm, a flower CSA.



Robertson Property: This 50-acre tract off Fowler Warren, and Mechanic Streets includes forested upland and wetland, meadows, 2,400 feet of frontage along Warren Brook, and an old mill site. State-listed wood turtle and eastern box turtle occur on the property. The town and DCR have purchased a conservation restriction and recreational (trail, fishing, and parking) easements on the property. Closing occurred in June of 2020.

West River Road (Conservation Restriction): A 13.1-acre area shared between three house lots protected by a conservation restriction held by the Upton Conservation Commission and the MA Division of Fisheries and Wildlife. The area contains a vernal pool and nesting and foraging habitat for wood turtle.

Preserve at Wildwood (Deed Restriction): A 14-acre mostly wooded parcel off Williams Street owned by a homeowner's association and protected from development by a deed restriction. The area contains trails used by the homeowner's association.

Kenneth Village (Conservation Restriction): A 3.6-acre parcel preserved as part of an over 55 open space subdivision. The property is protected by a conservation restriction held by the Upton Conservation Commission. The protected land features a well-preserved old stone foundation.

Kent Property (Conservation Restriction): A 3.8-acre parcel preserving views of an old pasture along Westboro Road. The property is protected by a conservation restriction held by the MA Department of Conservation and Recreation.

Rockwood Meadow (Conservation Restriction): A 32.8-acre parcel preserved as part of an over 55 open space subdivision. The property is protected by a conservation restriction held by the Upton Conservation Commission. The protected land provides access to the general public of the 300+ acre Peppercorn Conservation Area. The restriction protects prime farmland, open meadow, wetlands, and forested upland, and abuts a Zone 1 public water supply area.

JR Estates (Restriction): A 24.5-acre parcel off West River Road preserved as part of an Open Space Residential Development. The property is protected for important habitat, breeding sites, and migration routes for wildlife. The restriction is held by the Upton Conservation Commission and MA Division of Fisheries and Wildlife



U.S. Army Corps of Engineers (Flowage Easements): The Corps holds permanent flowage easements on about 740 acres of land along the West River and Center Brook. This includes about 540 acres of privately held property. The flowage easement prohibits construction of any permanent buildings on the properties or any actions which could reduce the capacity of the land to store floodwaters held back by the Corp's West Hill Flood Control Dam in Uxbridge. The land may be cleared for agriculture or forestry and developed for certain purposes such as gravel pits, athletic fields, well fields and pastures. The easement lands have enormous value as wildlife habitat and include (in part) the well head protection zones of all three of Upton's public water supply wells.

2. Protected Open Space (Non-Profit Organizations)

Blue Conservation Area (Conservation Restriction): A 2.8-acre parcel owned by the Metacomet Land Trust along Crockett Road preserves wildlife habitat and frontage and floodplain along the Mill River. The property is protected by a conservation restriction held by the Upton Conservation Commission. The protected property allows public access for passive recreation (includes walking, fishing, nature study).

Bonner Natural Area (Conservation Restriction): This 70.1 acre parcel off North Street is owned by the Metacomet Land Trust. Conservation values of the Bonner Natural Area include 1,000 feet of frontage along Warren Brook, a stone barn foundation thought to date from the late 1700s or early 1800s, rock outcrops, and several vernal pools. The parcel abuts the Whitney Conservation Area and is contiguous with over 400 acres of town and privately owned protected open space in Upton and Grafton. The land was donated to Metacomet and a Conservation Restriction on the property is held by the Sudbury Valley Trustees.



Glen View Parcel: Two parcels totaling 69 acres with ceremonial stone features owned by the Narragansett Indian Tribal Historic Trust. The parcels abut Nipmuc Rod and Gun Club property.

Maplewood Cemetery: This 17-acre parcel features gentle knolls and three small ponds. Iron gates, stone wall, and stone cottage mark the entrance off Maple Avenue. A path leads to a pond, and then to a second, larger pond. Giant mature pines ring the cemetery while mature sugar maples provide shade and beautiful fall foliage. A covered seating area built of stone on the shore of the larger pond allows visitors to pause for a while. The cemetery rises from these ponds to allow those buried on the gentle knolls a quiet and scenic place to rest. Walking about the cemetery, one views the many graves of Upton's famous residents of the nineteenth century.



Pratt Hill: This 32.6-acre tract (two contiguous parcels), which includes the top of Pratt Hill, is owned by the Narragansett Indian Tribal Historic Preservation Trust (NITHPT). According to Doug Harris, Assistant Historic Preservation Officer of the Narragansett Indian tribe, the property contains stone mounds and other features that are of great ceremonial significance to Native Americans. The stone mounds are believed to have a solstice sunset alignment with the chamber located at Heritage Park. The property has limited protection. It includes remnants of the Lead Aqueduct Society's 19th century water supply system and provides habitat for the rare oak hairstreak butterfly.

Ruguleiski Woods: A 26-acre parcel divided by the Massachusetts Turnpike owned by the Metacomet Land Trust. The mostly wooded parcel includes a large pond.

3. Chapter 61 Land

Massachusetts current use programs (Chapters 61, 61A, and 61B) were created to give preferential tax treatment to those landowners who use their property for the purposes of timber production, agriculture, or open space. Chapter 61 is intended for landowners interested in long-term, active forest management. Chapter 61A is intended for landowners engaged in agricultural or horticultural use. Chapter 61B is intended for landowners interested in maintaining land in a substantially natural, wild, or open condition. Chapter 61 program eligibility requirements and benefits to are summarized below. If landowners wish to sell land protected by the program, the town has the right to match the offer or assign that right to another entity such as a land trust.

CRITERIA	CHAPTER 61	CHAPTER 61A	CHAPTER 61B
Minimum Size	10 Acres	5 Acres	5 Acres
Eligibility Requirements	Commitment to improve quantity and quality of timber crop.	Minimum of \$500/year gross product sales, plus \$5.00 for each agricultural acre, or 50¢ for wetland or woodland acres above 5	Land in natural state to retain wildlife and natural resources ¹ , devoted to recreational uses. ²

Other	10-year Forest Management Plan	Agricultural or horticultural use at least 2 years before applying.	
Benefits			
Local Taxes	Assessment at per-acre values determined by the Farmland Valuation Advisory Committee, or fair market value based on current use as determined by Assessors. Tax rate based on commercial classification.	Assessment at per-acre value determined by the Farmland Valuation Advisory Committee, or at fair market value based on current use as determined by Assessors. Tax rate based on commercial classification	Assessment at 25% of the lands appraised value, or fair market value based on use as determined by Assessors. Tax rate based on commercial classification

There are 68 parcels of land in Upton that are currently in the Chapter 61 programs, totaling 1,561.5 acres (Table 5.4). This is an increase of 16 parcels and 261.5 acres since 2011. Many of these parcels have significant open space preservation value. Selected properties with high conservation value because of size, location, or resources are described below.

Kelly Parcels (Peppercorn Hill): There are 5 parcels that total about 100 acres of mostly wooded land that abut the Peppercorn Hill Conservation Area. Permanent protection of these parcels is one of Upton’s highest conservation priorities. One of the parcels includes the top of Peppercorn Hill. There are 2 additional parcels that total about 100 acres with prime farmland and upland forest that front Milford, Gable, Prospect, and Glenview Streets.

Kelly Farm Parcels: Several contiguous parcels of mostly agricultural land off Gable Street and 140 totaling about 86 acres. The Kelly farm stand is on the property.



South Upton Parcels: There are a number of wooded parcels on Miscoe Hill that are adjacent to Upton State Forest and to the town-owned Taft Mill open space. A 102-acre parcel under Chapter 61 owned by White, two parcels totaling 44 acres owned by Jorgensen, one under Chapter 61, and a 39-acre parcel owned by Mingace. These could form a large contiguous area of open space extending from near the Northbridge town line northeast to Mendon Road. However, there are access issues including the uncertain status of the old Miscoe Hill Road. A new 4.5-acre open space parcel, part of the Sylvan Springs development in Mendon, provides possible access (with wetland crossing required) from Rawson Farm Drive.

Nipmuc Rod and Gun Club & Central MA Beagle Club: A 47-acre parcel owned by the Central Massachusetts Beagle Club, a 66-acre parcel owned by the Nipmuc Road and Gun Club, and a parcel owned by the town of Milford offer the potential to create a 100+ acre protected area situated between Glenview and Fiske Mill Road.

Parcels Abutting Upton State Forest: Several Chapter 61 properties abut various parts of Upton State Forest. These include the Johnson and Rintala parcels off Westborough Road, the Brown/Wheeler parcels off Park Road, the Nelson parcel off Warren Street, the Compton parcel off the old McTeague Road, and the Arnold parcel off Ridge Road. All of these parcels would make excellent additions to Upton State Forest.

Mechanic Street and Orchard Street Parcels: The wooded 88-acre Mechanic Street Trust parcel, the 16-acre Claflin parcel, and the 78-acre Fitzgerald Orchard Street parcel abut the Former Stefans Farm. Protection of these parcels and Stefans Farm could create a 200+ acre block of contiguous open space. These parcels also offer an opportunity for a trail link between Fowler Street and the Warren Brook Watershed and Pell Farm Conservation Areas through the former Stefans Farm.

Stanton Parcels: Wooded and pasture land off Grove Street.

Trask Mendon Street Parcels: This 2-parcel 30-acre tract of wooded and agricultural land off Mendon Street was recently donated to the town by the Trask estate for recreation use. The parcels are a key part of the Recreation Commission's 2019 Four Parks Master Plan.

3. Other Open Space (unprotected, private ownership, not in Chapter 61)

There are numerous large parcels remaining in Upton which have high conservation value. Most of these are privately owned. Several of the most valuable properties are described below.

Brown/Wheeler Property: This 3-parcel 67-acre tract off Southborough Road includes the Southborough Road bog and adjacent in-holdings within Upton State Forest. The bog provides habitat for a state listed rare dragonfly. The MA DCR has been working to acquire this property for several years. Acquisition has been slowed by a myriad of title problems but is progressing.

North Upton Parcels: These wooded Warren Brook watershed parcels owned by Gordon, Johnson, Macchi (106 acres in Chapter 61), and Meichelbeck (26 acres in Chapter 61) total over 200 acres. Preservation of these parcels along with the nearby town owned Forest Heights property would create a 700+ acre block of protected open space contiguous with the Bonner Natural Area, and the Whitney, Howarth Glen, Sweetwilliam Farm, and Warren Brook Watershed Conservation Areas in Upton, and the Pell Farm and Hennessey Conservation Areas in Grafton. The northern part of that area would include Fay Mountain Road, which is likely part of the Old Connecticut Path, a Native American trail that led from Massachusetts Bay to the Connecticut River Valley.

Glenview Open Space: This 136-acre area consists of two parcels of privately-owned land in Chapter 61 programs and 23 acres of open space owned by the town of Milford. The Chapter 61 land includes 66 acres owned by the Nipmuc Rod and Gun Club and 47 acres owned by the Central Massachusetts Beagle Club.

Thompson Property: This 72-acre wooded parcel along Westborough Road provides pristine habitat along a tributary of Warren Brook originating at the Upton State Forest Bog. Development potential is limited by topography and wetlands.

Lake Wildwood: Several large undeveloped parcels on the western shoreline, totaling about 50 acres, are of high open space value. Additional open space in Grafton abuts these properties. There is a 5-acre island that is privately owned that would be a desirable town property.

Town Line Dairy: A 28.2-acre parcel of land in active agricultural use located off Williams St. The property abuts Upton State Forest.

Red Farm Golf Course, Davidson Pond, and Adjacent Davidson Family Land
These parcels off Fowler Street, totaling 24 acres, abut Upton State Forest and include a private 9-hole golf course, a pond, and forested areas which provide upland habitat for Upton's only known blue spotted salamander population. Wood turtle are frequently seen on the golf course. Twelve acres of the Davidson Family Land, which included part of Triphammer Road, a discontinued early town road, and part of Davidson Pond, was recently purchased by DCR and added to the Upton State Forest.

Long Life Farm CSA: A 5-acre CSA on former Amato Farm property on East Street. The farm is Upton's only row crop CSA.

Warren Brook Open Space: This elongate 6-acre parcel is situated between Warren Brook and several homes along Merriam and Jonathans Way. The area provides habitat for wood turtle. This parcel is currently undergoing tax taking.

C. Public Open Space Parcels

1. Protected Open Space

Upton State Forest: The Upton State Forest is comprised of 2,271 acres (16% of the Town of Upton). It is composed of several sections ranging in size from about 10 acres to more than 750 acres. The State Forest is owned by the Commonwealth and managed by the Department of Conservation and Recreation. State forest land includes many miles of trails, numerous vernal pools, and Dean Pond.



Historic sites include the CCC camp headquarters off Westborough Road, Pilkington's Quarry, old cellar holes, miles of stone walls, a stone paddock, and stone mounds on Pratt Hill. A non-profit citizens group, the Friends of Upton State Forest (FUSF), is a strong advocate for protection of the area.

The state continues to be active in acquiring abutting parcels that provide added connections and valuable resource protection. Since the 2011 OSRP was published, the state has added three parcels, for a total of 60 acres, to the Upton State Forest.

Peppercorn Hill Conservation Area: Acquired in 1985, this 283-acre area is managed by

the Upton Conservation Commission as a passive recreation area. The area can be accessed from Crockett Road and Taft Street in Upton and from Camp Street in Milford. The area is largely forested uplands, but includes some wetlands, cold water streams, several productive vernal pools, and a graminoid fen. A power line easement passes through the property, providing early successional habitat and a wildlife corridor. The area is the headwaters of the Mill River, a valued cold water stream. The area includes 17 acres owned by Upton in Hopkinton. It abuts the Snow Family Conservation Area and town of Milford conservation land. A forest management plan for the property was prepared in 1999. The area was last logged in the 1930s and may contain some Primary forest – areas which have not been forested from at least 1830 to present. The town expects to complete a Stewardship Plan for the area in 2020.

Warren Brook Watershed Conservation Area: This 225-acre area located off Grafton Road was purchased by the town in 1995. The area is mostly upland and is entirely forested. The area can be accessed via Grafton Road, Oak Knoll Lane and from North Street via the Howarth Glen Conservation Area. There is an extensive trail system. Adjacent protected lands include the 150-acre Pell Farm in Grafton and the 28-acre Howarth Glen Conservation Area off North Street. The Town of Upton also owns an abutting 30-acre parcel to the north that includes an unnamed hill that is Upton's highest (or second highest) elevation. Together these areas comprise nearly 450 acres of contiguous open space. Future acquisitions in Grafton and Upton could eventually increase the size of this protected area to over 700 acres. In 2018 the town completed the North Upton Open Space Forest Stewardship Plan, which includes this property. The property abuts the Whitney Conservation Area and Bonner Natural Area.

Richard and Naomi Howarth Conservation Area: This 34-acre tract consists of four parcels of open space included in the Glen Echo open space subdivision. The parcels were accepted by the town at the 2006 annual town meeting and designated a Conservation Area at the 2008 annual town meeting. The largest parcel is 26 acres and is mostly forested upland and wetland. It contains a vernal pool and abuts Upton State Forest, Whitney Conservation Area, and Sweetwilliam Farm. The other three parcels range in size from about one to five acres.

Whitney Conservation Area: This area consists of two 30-acre parcels of forestland on the east and west sides of the Sweetwilliam Farm CR-protected land. The west-side parcel protects a spectacular scenic view from North Street. A trail across the Whitney parcels and Sweetwilliam Farm connect the Warren Brook Watershed Conservation Area and Upton State Forest. The property is part of a historic farm which dates to the mid 1700's and was once owned by the grandfather, uncle and cousin of Eli Whitney, the early American inventor. The property was purchased along with the Sweetwilliam Farm CR using a 2011 LAND Grant, CPA funds, and private donations. The property is protected by a CR held by the Sudbury Valley Trustees.



Eleanor T. Howarth Glen Conservation Area: This 27-acre parcel is another Glen Echo open space subdivision open space parcel. It was accepted by the town at the 2006 annual town meeting and designated a Conservation Area at a 2007 special town meeting. The parcel abuts

the Warren Brook Watershed Conservation Area and a 9-acre parcel of Glen Echo open space given to the Recreation Commission for a possible field (it is now managed by the Land Stewardship Committee.) The area is a mosaic of forested upland and wetland. Warren Brook passes through it. It contains a vernal pool and provides habitat for two rare amphibians – the marbled salamander and four toed salamander. There is also a 3-acre hay field that is mowed annually that supports a population of Baltimore Checkerspot butterflies. Since 2017, students from Tufts University have been studying this population and making comparisons with another population in Harvard, MA. A trail provides a connection to the Warren Brook Watershed Conservation Area from North Street.

Pleasant Woods: This 30-acre wooded parcel off Warren Street, owned by the Town of Upton, was transferred to the control of the Conservation Commission in the 1970s. It has potential for use as a neighborhood park.

West Hill Dam Flood Control Project: The Federal government owns several parcels of land totaling about 64 acres near the West River in southern Upton. Most of the land is subject to inundation by West Hill Dam during floods. The land includes hiking trails which extend from the dam in Uxbridge north into Upton along the West River. Part of the land is leased to the Division of Fisheries and Wildlife for its E. Kent Swift Wildlife Management Area.

Pratt Pond Conservation Area: A 10.3-acre parcel adjacent to Pratt Pond was deeded to the Upton Conservation Commission in 1972. It is mostly forested with a stream and some wetland along Pratt Pond. Access is provided by a trail from the adjacent Kiwanis Beach Recreation Area.

Snow Family Conservation Area: This 8.6-acre parcel was donated to the town by the Snow Family in 2004 and designated a Conservation Area by a special town meeting vote in 2007. The area contains 2 vernal pools, trails, stone walls and provides important access to the Peppercorn Hill Conservation Area from Taft Street.

Heritage Park: This 7.5-acre parcel on Mill Pond was purchased with Community Preservation Act funds and is managed by the Upton Historical Commission. It is the site of a stone chamber of historic significance, which could date back to pre-colonial days. The park also features a kiosk, walking trails, meadows, views along Mill Pond and a parking area. Metacomet Land Trust holds a CR on the property.



Walker Drive: This one-acre parcel on the corner of Walker Drive and Milford Street was deeded to the town, acting through Conservation Commission, in 1977.

2. Other Notable Public Open Space Parcels

Former Stefans Farm: The town acquired this 121.1-acre parcel in early 2003 when it exercised its Chapter 61 option to purchase it. It included land on both sides of Mechanic Street, 8.5 acres on the east side and 112.6 acres on the west side. The town subdivided the west side

parcel to create four house lots on Orchard Street (7.8 acres) and has since sold three of the four lots. The property is within the Warren Brook watershed. It includes a variety of habitats including forested uplands and wetlands, meadows, hedgerows, streams, vernal pools, and several hundred feet of frontage on Warren Brook. The property is mostly wooded but approximately 13 acres of meadow and field are present. Deer, fisher, beaver, wild turkey, and numerous songbirds and butterflies have been observed on the property (Upton Land Stewardship Committee, 2007). Wood turtle occur on the east side near Warren Brook and Eastern box turtle have been seen in an adjacent power line easement. Much of the property is on George Hill and there are nice views of Pratt Hill from the upper fields. Historic features include stone walls, a stone dam, stone mounds, a large cut boulder, and an old cart path. The property was placed under the management of the Upton Land Stewardship Committee which has established a trail system on the west side and a community garden and a parking area on the east side.

Henderson Family Conservation Area: Goss Pond, acidic fen, and adjacent forest buffer was deeded to the town by Robert Henderson in 2009 and is managed by the Land Stewardship Committee. Access is provided via frontage on Green Lane. Development on most of the parcel is restricted by a Corps of Engineers flowage easement.



Forest Heights Property: The town acquired this 106-acre forested property by a tax taking which is expected to be finalized in July of 2020. The property includes a certified vernal pool, a wetland, and habitat for the rare state-listed eastern box turtle. It may also contain a long-abandoned mica quarry. It abuts the Bonner Natural Area to the south and owner unknown property to the northwest. Development potential is limited by poor access and topography.

Old Zachary: The town owns a 33-acre parcel that includes Old Zachary (a pond on the West River) and some adjacent land. Most of the property is wetland and restricted by an Army Corps of Engineers flowage easement. Old Zachary can be reached by canoeing up the West River from Pleasant Street. There are no trails. The parcel is not managed by the Land Stewardship Committee.

Milford Parcel: The town of Milford owns a 23-acre landlocked parcel near the Milford town line north of Route 140. The parcel connects a 47-acre parcel owned by the Central Massachusetts Beagle Club and a 66-acre parcel owned by the Nipmuc Road and Gun Club.

North Street Parcels: The town owns two landlocked parcels off North Street. These include a 22-acre parcel which lies directly north of the Warren Brook Conservation Area and a 20-acre parcel north of Sweetwilliam Farm. Both parcels are wooded and have high conservation value. The 22-acre parcel includes the highest (or perhaps second highest) elevation in town and is the backdrop of the beautiful vista from Sweetwilliam Farm on North Street.

Town of Northbridge Open Space Parcel: Northbridge owns a 7-acre wooded parcel off Oak Drive at the southern end of town. The parcel, adjacent Chapter 61 land, and other parcels could form a large contiguous area of open space extending from near the Northbridge town line

northeast to Mendon Road.

Taft Mill Estates Open Space: This 10-acre parcel was deeded to the town as open space by the developer of the Taft Mill Estates subdivision in 2004. The parcel is wooded and has two vernal pools. The parcel is currently not managed by the Land Stewardship Committee.



West River and Glen Avenue Well Fields: The town owns 56 acres at two well fields on the West River and 11 acres at Glen Avenue. Aside from about 0.5 acre at each site for infrastructure, the parcels are undeveloped and largely located on Army Corps of Engineers flowage easement land. Wood turtle nest at the Glen Avenue site

Town Cemeteries: Upton owns four cemeteries: Lakeview and Pine Grove Cemeteries near Pratt Pond, the Old First Cemetery near Mendon and Grove Streets, and the Bradish Cemetery near North Street and Westborough Road. Situated in a secluded setting at the end of a half mile of unpaved road, the Old First Cemetery was also the location of Upton's first meeting house, from 1735 to 1770. The cemetery contains about 160 marked graves with many headstones dating from the 18th and 19th centuries. A stone wall surrounds the cemetery and it is ringed by a mature pine forest. The Bradish cemetery also contains many early graves with faded headstones. The 12-acre Lakeview cemetery includes an old burial ground (Pine Grove) and a more recent (Lakeview) section with hundreds of 20th and 21st century graves. The cemetery wraps along the wooded Pratt Pond shoreline and offers some nice views of the pond. Much of the cemetery is rather sparsely vegetated but planting of more trees and shrubs is planned.



Nipmuc Regional High School: Undeveloped land owned by the school district includes forested upland and wetlands and 3 certified vernal pools. The land is contiguous with a large tract of Upton State Forest to the south. The undeveloped land owned by the school district provides a buffer between the school and adjacent homes. The site also may support a population of spotted turtle, with the last reported sighting about 19 years ago.

Old Knowlton Reservoir: The town owns a 3.25-acre parcel off Rockdale Circle. The parcel includes a small reservoir and a dam that used to serve the Knowlton hat factory. The parcel is adjacent to Upton State Forest.

BVT Chestnut St. Parcel: Blackstone Valley Tech owns a 6.2 acre parcel off Chestnut St. The parcel is mostly wetland and adjacent to Upton State Forest. It can be accessed from Chestnut St. by a trail easement granted to the town.

D. Recreation Facilities

1. Town Owned

Wildwood Park (Lake Wildwood): This 4.3-acre park provides public access to Lake Wildwood. Access is from a right-of-way through private property that fronts on Williams Street. The Park is open from the first of April through the end of October (the Park is gated through the winter). There is no formal parking area and the people park along the unpaved loop. There is an unpaved boat launch near the dam and a few picnic tables. Lake Wildwood is a popular fishing and ice fishing spot. The Upton Department of Public Works (DPW) manages the park.



Pratt Pond – Kiwanis Beach: This 27.4-acre property is accessed by Kiwanis Beach Road off Elm Street. There is a paved parking area that can accommodate roughly 70 cars. There is a gate attendant at the front during the summer months and users are charged \$10 per car or \$35 for a season pass (residents only). A second gated entrance off Cider Mill Lane was created for easier access to the soccer field and parking for 30 cars. Amenities include a beach area, a pavilion, a small building for use by recreation groups, softball field, soccer field, two asphalt-surfaced tennis courts, an asphalt-surfaced basketball court, 2 volleyball courts, 15 picnic benches and four grills (these are located in two tree-covered groves on either side of the beach area, as well as above the baseball field), a horseshoe pit, and beach house with restrooms. The Upton Recreation Commission charges user fees for use of the fields, with the proceeds paying for field maintenance and fertilizer. The Recreation Commission sponsors a summer concert series swim lessons and the Kids at Play Recreation Program here during the summer. It is a popular fishing spot and hosts a yearly fishing derby sponsored by the Upton Police Department. Ice fishing is allowed during the winter. The Upton DPW manages the property.



Upton Veterans Memorial Playground: A children's playground located in the center of town at 15 Milford Street. Parking is available in the abutting municipal parking lot, which has enough space for 70 cars, including several spaces for the handicapped. Amenities include two slides, two sets of swings, two sandboxes, a tire swing, monkey bars, a climbing apparatus, six benches and five picnic tables. It is open from dawn to dusk. The Upton DPW manages the property.

Richard Henderson and Ernst Rivers Memorial Field: This is a 120 x 200-foot soccer field with a gravel parking area for roughly 40 cars. CPA funds were recently used to install an irrigation system. The 7-acre property includes several hundred feet of frontage on the West River. The Upton DPW manages the property.

2. Other Sites

Memorial Elementary School (including the Howard Leland Memorial Field): Recreation facilities include a playground, hard-surface play area, one tennis court, one basketball court, one Little League baseball field, one Babe Ruth baseball field, and a gymnasium with a full-size basketball court. An outdoor ice rink is installed in the tennis court during the winter. The indoor court is used by the Upton Youth Club, Mendon-Upton travel basketball, and adult pickup basketball. The Recreation Commission sponsors a yoga program and a youth theater program in the school's library and music room, respectively.

Nipmuc High School: Located off of Pleasant Street, the school has a baseball field, softball field, soccer/lacrosse field, field hockey field, and an indoor gymnasium. There is also a cross-country running path through the property and the adjacent Upton State Forest. These facilities are used by the regional school district and town groups. The indoor court is used by Upton travel basketball and indoor adult volleyball program.

Blackstone Valley Regional Vocational Technical High School: Located off Pleasant Street, the school has two indoor gymnasiums, a softball field, and a baseball field whose outfield doubles as a soccer field. There is a running track with a football field inside of it. The field inside the running track is also used for lacrosse, soccer, and track and field events. There is also a cross-country running path through the property. The school does allow private entities to rent out its fields and they are heavily used by an assortment of recreation groups from throughout the Blackstone Valley.

Veterans of Foreign Wars (VFW): The property is located at 15 Milford Street near Upton's town center and includes one Little League field, one softball field, one batting cage, and two practice/warm-up pitching mounds. The Upton Youth Club makes use of these during the spring, fall, and summer months.

Red Farm Golf Course: A privately owned 9-hole (par 3) golf course off Fowler Street.

West River Boat Launch: An informal canoe/kayak launch on the West River at the Pleasant Street Bridge. The property is owned by Upton State Forest.

E. Summary of Protected Lands

Table 5-4 provides a summary of Upton's current public and private open space assets. Approximately 4400 acres, or 29%, is protected Open Space. This includes town conservation areas, Upton State Forest, cemeteries, Kiwanis Beach, athletic fields, town owned wellfields, Old Zachary, Goss Pond, and privately-owned parcels protected by conservation restrictions or deed restrictions. The total land area in town is 13,853 acres.

Table 5-2 - Open Space Summary Table

Municipal Open Space			
Category	Acres	LOP	Notes
Schools			
Blackstone Valley Reg Voc Tech High School	22.5	L	
Memorial School	10.6	L	
Nipmuc Regional High School	23.7	L	Abuts Upton State Forest.
Recreation Land			
Kiwanis Beach	38	L	Managed by Recreation Commission.
VFW	14.28	L	Recreational fields, parking, facility.
Heritage Park (Elm Street)	7.5	P	Managed by Historical Commission; CR held by Metacomet Land Trust.
Henderson and Rivers Memorial Field	7	L	Managed by Recreation Commission; flowage easement land.
Leland Field (behind Memorial School)	10	L	Managed by Recreation Commission.
Lake Wildwood Park	4.3	P	Established as recreation area by Town Meeting vote.
Upton Playground	2.1	L	Adjacent to VFW, includes a parking area.
Open Space			
Peppercorn Hill Recreation Area	283.7	P	Obtained with Self Help Grant.
Warren Brook Watershed Conservation Area	225	P	Obtained with Self Help Grant.
Former Stefans Farm (George Hill)	113.5	L	Excludes 10 acres sold or retained for frontage lots.
Eleanor T. Howarth Glen Conservation Area	27.4	L	Designated as Conservation Area at Town Meeting.
Richard and Naomi Howarth Conservation Area	34	L	Designated as Conservation Area at Town Meeting.
Whitney Conservation Area	63	P	Obtained with LAND grant, West side abuts Warren Brook Watershed CA, East side abuts Upton State Forest; Part of former Sweetwilliam Farm.
North Street Parcel	22	L	Landlocked, abuts Warren Brook Watershed Conservation Areas.
Thompson Parcel	7.4	L	Landlocked, abuts Whitney Conservation Area.
Pleasant Woods Conservation Area	33	P	Control transferred to ConCom by town meeting vote.
Old Zachary	33	L	Mostly flowage easement land; Donated to town.

Category	Acres	LOP	Notes
Henderson Family Conservation Area	23	L	Goss Pond. Deeded to Town; Managed by Land Stewardship Committee.
Center Brook Conservation Area	16.5	P	Crosswinds subdivision, deeded to town through Upton ConCom.
Miscoe Hill (Taft Mill Open Space)	12	L	Deeded to Town as Open Space. Not currently managed by ConCom.
Westborough Road Parcel	12.6		Managed by Board of Selectmen per Town Meeting vote.
Pratt Pond Conservation Area	10	P	Deeded to ConCom.
Glen Echo	9.2	L	Granted to Recreation Commission by Town Meeting vote; Managed by Land Stewardship Committee as open space. Includes historic schoolhouse site.
Snow Family Conservation Area	9	P	Designated as Conservation Area at Town Meeting. Donated with Deed Restriction.
Knowlton Reservoir	3		
Walker Drive Parcel	1	P	Deeded to ConCom.
Pixie's Park	1.4	P	Deeded to ConCom.
Town Common	0.26	P	War memorials.
Town Center (201-74)	0.17	L	Adjacent to library.
Wellfields			
Glen Avenue	11	L	
West River	46.2	L	Two locations.
Cemeteries			
Maplewood	15.3	L	Privately owned
Lake View	17.5	L	
Pine Grove	2.1	L	
Old First Cemetery	2.5	L	
Old North Cemetery (Bradish Cemetery)	0.6	L	
Open Space in Upton owned by Other Towns			
Town of Milford	23		Water supply watershed land.
Town of Northbridge	7		
Town of Hopkinton	2		

Notes: LOP = Level of Protection, L = Limited, P = Permanent

Other Open Space			
Narragansett Indian Tribal Historic Preservation Trust (NITHPT) - Pratt Hill	32.6	P	2 Parcels - Preserves the ceremonial stone features
NITHPT - Glen View St	69	P	2 Parcels - Preserves ceremonial stone features.
Nipmuc Rod and Gun Club	66	L	In Chapter 61.
Central Massachusetts Beagle Club	47	L	In Chapter 61.
VFW	8.1	L	Recreation fields.
Bernat Property Conservation Restriction	64	P	CR held by Metacomet Land Trust.
Sweetwilliam Farm CR	32.6	P	CR held by Sudbury Valley Trustees and town
Robertson Family CR	47.7	P	CR held by DCR and town
Preserve at Wildwood Deed Restriction	14.3	P	Homeowners Association.
West River Road Conservation Restriction	13.1	P	CR held by Upton ConCom.
Kenneth Village Conservation Restriction	3.6	P	CR held by Upton ConCom, Includes stone (barn) foundation.
Kent Property	3.8	P	CR held by MA DCR.
Rockwood Meadows	32.8	P	CR held by Upton ConCom.
Blue Conservation Area	2.8	P	Owned by Metacomet Land Trust, CR held by Upton ConCom.
JR Estates	24.5	P	Restriction held by Upton ConCom & MA Div Fisheries&Wildlife.
Warren Woods	3.9	P	CRs (n=2) held by Upton ConCom.
Bonner Natural Area	70.1	P	Metacomet Land Trust; CR held by Sudbury Valley Trustees
Ruguleiski Woods	22	P	2 parcels straddling Mass Pike owned by Metacomet Land Trust.
Private - Chapter 61			
Chapter 61 properties	1,561.5	n.a.	68 parcels.
State DCR – Parks			
Upton State Forest (USF)	2271	P	Approximate acreage, based on 2009 DCR Statewide Properties Inventory with consideration of recent activities.
Federal			
Army Corps of Engineers	64	P	West Hill Wildlife Management Area (Managed by MA Division of Fisheries & Wildlife).
Army Corps of Engineers - Flowage Easements	740	P	West Hill Dam. Includes numerous private parcels and ca. 200 acres of town, state, and federally owned land.

Table 5-3: Total Open Space Acreages

Category	Acres
Town Conservation Areas and Open Space	940
Land Trusts and other Non-profit Organizations	318
Private (protected by Conservation Restrictions)	201.5
Schools, Recreation Land, Cemeteries, & Wellfields)	225
Private (other)	38.7
Upton State Forest	2,271
Federal (Army Corps of Engineers)	64
Other Towns	32
Protected Open Space	4,090 (29.5%)

Note: Upton total land area:13,853 acres

F. Trails

Upton has a vast system of trails on public and private land. Excellent trail systems exist at Upton State Forest, Peppercorn Hill, the Warren Brook Watershed Conservation Area, and Stefans Farm. Trail maps are available for these areas on the town web site. There are also many miles of informal, unmapped, trails on public and private land. These include trails along the West River, in the vicinity of Miscoe Hill, north of the Warren Brook Watershed Conservation Area, on power line and gas line ROW'S, and at many other locations.

Linkages to trails in other towns exist (e.g. along the West River into Northbridge, from Upton State Forest into Hopkinton, from Warren Brook Watershed Conservation Area into the Pell Farm Conservation Area in Grafton), and from Peppercorn Hill north into Hopkinton. Trails are used by the horseback riders, hikers, mountain bikers, cross country skiers, hunters, and (often illegally) off road vehicles (ORVs). The power lines provide ORVs access to many parts of town. Conflicts between other users and ORVs exist at Upton State Forest and town conservation land.

Partnerships with Boy and Girl Scouts and the Friends of Upton State Forest have helped improve and expand the trail system in recent years. Scouts from Upton have built a number of kiosks, bridges and boardwalks in recent years.

G. 2019 OSRP Survey Results – Public Use of Open Space and Recreation Areas

An Open Space and Recreation Plan survey was mailed to each household along with the town census in January 2019. The survey contained 22 questions related to Open Space and Recreational needs and uses. There were 894 returned surveys for a total response rate of ~31%, (Upton had approximately 2900 occupied households at the time of the survey) providing a good sample from Upton residents. A copy of the survey and survey results are in Appendix C. Survey results are discussed further in Section 7. This section summarizes current public use of open space and recreation areas (survey questions 1-4).

The most frequented public open space areas were Upton State Forest – using a number of its entrances, Pratt Pond, Lakeview Cemetery, Heritage Park, and Peppercorn Hill. The most frequently noted areas are listed below. All other town conservation and open space areas were also visited.

Location	Responses	
	Number	Percent
USF (Westborough Road)	473	52.9
Pratt Pond Conservation Area	248	27.7
Lakeview Cemetery	243	27.2
USF (other locations)	189	21.1
USF (Pratt Hill)	172	19.2
Heritage Park	147	16.4
Peppercorn Hill Conservation Area	141	15.8
Maplewood Cemetery	97	10.9
Stefans Farm	86	9.6
Warren Brook Conservation Area	76	8.5
Other (n=12)		0.8 – 6.5

Note: Pratt Pond Conservation Area was mentioned frequently. The area has trails, but responses are likely to be confounded with visitation to the Kiwanis Beach Recreation Area and Pratt Pond.

The most frequented recreation areas were Kiwanis, with the swimming beach rated as the highest along with the picnic area, pavilion, tennis courts, and athletic fields. Other major locations were the VFW athletic fields and playground and Blackstone Valley's track.

Location	Responses	
	Number	Percent
Kiwanis Swimming Beach	354	39.6
VFW Playground	211	23.6
Kiwanis Athletic Fields	181	20.2
Blackstone Valley Outdoor Track	179	20.0
Kiwanis Picnic Area	177	19.8
Kiwanis Pavilion	160	17.9
Kiwanis Tennis Courts	92	10.3
VFW Athletic Fields	90	10.1

Other (n=17)		0.07 – 7.3
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All of the town’s larger streams and ponds had some level of public use. Pratt Pond and Lake Wildwood were the most frequented areas. Fishing, ice fishing, and canoe/kayaking were the most popular activities.

Location/Activity	Responses	
	Number	Percent
Pratt Pond (fishing)	145	16.2
Pratt Pond (canoe/kayaking)	116	13.0
Lake Wildwood (canoe/kayaking)	55	6.2
Pratt Pond (ice skating)	53	5.9
Pratt Pond (ice fishing)	37	4.1
West River (fishing)	29	3.2
Pratt Pond (motorized boating)	28	3.1
Other (N=22)		0.1 – 3.0

Residents indicated many reasons for visiting town owned open space and recreation areas. The most frequent reason for visiting Upton State Forest was walking or hiking (54%), dog walking (22%), and nature observation (19%).

Activity	Response	
	Number	Percent
Walking or hiking	423	47.3
Dog walking	217	24.3
Swimming	199	22.3
Nature/wildlife observation	191	21.4
Fishing	145	16.2
Playground activities	131	14.7
Canoeing or kayaking	123	13.8
Organized sporting event (watch)	104	11.6
Organized sporting event (play)	81	9.1
Sunbathing	78	8.7
Mountain biking	77	8.6
Trail running	75	8.4
Outdoor concert	68	7.6
Picnicking	66	7.4
Other (n=23)		0.3 – 6.3

Table 5.1 Open Space Inventory

Table 5-1 a. Town Owned Open Space and Other Properties

Location or Property	Map/Parcel	Book	Page	Manager	Current Use	Condition	Rec Potential	Public Access	Type Grant Accepted	Zoning	Protection	Area	Notes
Knowlton Building		5092	532	Town	Developed	n.a.	No	Yes	None	SRA-15000	n.a.	15,246 SF	
Forest Heights	001-010			Town	Wooded	Excellent	P	Yes	None	AR 2 ac.	None	56.0 AC	Recent tax taking
Forest Heights	001-010.01			Town	Wooded	Excellent	P	Yes	None	AR 2 ac.	None	43.8 AC	Recent tax taking
Westboro Rd. Parcel	002-056			Town BOS	Wooded	Excellent	P	Yes	None	AR 2 ac.	None	12.6 AC	
Fay Mountain Road	004-0-012-E	10385	185	ConCom	Wooded	Excellent	P	Yes	None	AR 2 ac.	Limited	22.00 AC	Abuts WBWCA
North Street - Thompson	005-0-005-E			ConCom	Wooded	Excellent	P	Yes	None	AR 2 ac.	Limited	7.44 AC	Abuts WCA
R & N Howarth CA	005-0-020.63-E	40532	220	ConCom	Wooded	Excellent	P	Yes	None	AR 2 ac.	Permanent	37,897 SF	
Howarth Glen CA/Glen Echo Field	005-0-020.65-E	40532	220	ConCom/Rec Com	Wooded/Meadow	Excellent	P/A	Yes	None	AR 2 ac.	Permanent	36.57 AC	
R & N Howarth CA	005-0-020.66-E	40532	220	ConCom	Wooded	Excellent	P	Yes	None	AR 2 ac.	Permanent	37,908 SF	
R & N Howarth CA	005-0-020.67-E	40532	220	ConCom	Wooded	Excellent	P	Yes	None	AR 2 ac.	Permanent	25.69 AC	
R & N Howarth CA	005-0-020.68-E	40532	220	ConCom	Wooded	Excellent	P	Yes	None	AR 2 ac.	Permanent	5.18 AC	
Francis Drive	005-0-020.69-E	40532	220	Town DPW	Detention Basin	n.a.	No	Yes	None	AR 2 ac.	Permanent	2.35 AC	Provides access to Howarth Glen CA
North Street	005-0-020.70-E			Town DPW		n.a.	No	Yes	None	AR 2 ac.	n.a.	2.55 AC	
Whitney CA	005-004.01			ConCom	Wooded	Excellent	P	Yes	LAND	AR 2 ac.	Permanent	63 AC	
Whitney CA	005-017.02			ConCom	Wooded	Excellent	P	Yes	LAND	AR 2 ac.	Permanent		CR Held by SVT
Warren Brook Watershed CA	007-0-027-E	17634	246	ConCom	Wooded	Excellent	P	Yes	Self Help	AR 2 ac.	Permanent	202.92 AC	CR Held by SVT
Oak Knoll Access to WBWCA	007-048			Town	Wooded	Excellent	P	Yes	None		None	0.11 AC	
Westboro Rd	008-0-032-E	3511	398	Town	Cemetery	Excellent	P	Yes	None	AR 2 ac.	Permanent	43,560 SF	
Former Stefans Farm	010-0-002-E	28697	97	ConCom/LSC	Wooded/Meadow	Good	P	Yes	None	AR 2 ac.	Limited	113.58 AC	Includes community garden.
Mechanic St	010-0-X001-E	6101	27	Town			No		None	AR 2 ac.	n.a.	3.77 AC	
Peppercorn Hill CA	013-022	8841	70	ConCom	Wooded	Excellent	P	Yes	Self Help	AR 2 ac.	Permanent	293 AC	Includes 17 acres in Hopkinton
Meadow Drive	014-84.03			ConCom	Wooded/Meadow	Fair	P	Yes	None		Permanent	1.13 AC	Pixies Park
North Main St.	015-0-089-E			Town	Cemetery	Good	P	Yes	None	SRA-15000	Permanent	9.79 AC	
North Main St.	015-0-105-E			Town	Cemetery	Good	P	Yes	None	SRA-15000	Permanent	2.05 AC	
Pratt Pond CA	016-0-008-E	5255	113	ConCom	Wooded	Good	P	Yes	None	AR 2 ac.	Permanent	10.30 AC	
Kiwanis Beach Rec Area	016-0-039-E	5221	416	Rec Com	Developed	Fair	A	Yes	None	AR 2 ac.	Permanent	27.53 AC	Beach, Rec Fields
Snow Family CA	017-0-053-E	35143	32	ConCom	Wooded	Excellent	P	Yes	None	AR 2 ac.	Permanent	8.60 AC	
Peppercorn Hill CA	017-027	8841	70	ConCom	Wooded	Excellent	P	Yes	Self Help	AR 2 ac.	Permanent	18,295 SF	
Glen Ave Wellfield	019-0-044-E			Town-DPW	Wooded/Turf	n.a.	No	Restricted	None	AR 2 ac.	Permanent	11.00 AC	Partially fenced.
Main Street	019-0-070-E			Town	Historic	n.a.	No		None	(6) - GB	n.a.	43,560 SF	Old dam
Old Knowlton Res.	019-0-081-E			Town	Passive	Wooded	P	Yes	None		Limited	3.25 AC	Historic reservoir
Williams Street	019-0-087-E	3424	133	Town			No	No	None	SRC-40000		43,560 SF	
Lake Wildwood	019-0-101-E	3943	588	ConCom/DPW	Passive	Wooded	P	Yes	None	(6) - GB	Permanent	4.30 AC	Parking, Water access
Lake Wildwood	019-0-114-E	5082	438	Town	Developed		P	Yes	None	(6) - GB	Permanent	20,473 SF	
Lake Wildwood	019-0-115-E	5024	112	Town	Developed		P	Yes	None	(6) - GB	Permanent	6,098 SF	

Table 5.1 Open Space Inventory

Table 5-1 a. Town Owned Open Space and Other Properties

Location or Property	Map/Parcel	Book	Page	Manager	Current Use	Condition	Rec Potential	Public Access	Type Grant Accepted	Zoning	Protection	Area	Notes
Heritage Park	021-0-020-E	40195	291	Hist. Comm.	Wooded/Turf	Fair	P	Yes	None	SRB-25000	Permanent	5.69 AC	CR Held by MLT
Heritage Park	021-0-028-E	40195	291	Hist. Comm.	Wooded/Turf	Fair	P	Yes	None	SRB-25000	Permanent	2.28 AC	CR Held by MLT
Pearl St.	021-051			DPW	Water Tower	Good	No	No	None		n.a.	1.25 AC	
Old Zac	023-0-001-E	11825	80	Town	Wooded/Pond	Fair	P	Yes	None	AR 2 ac.	Permanent	33.19 AC	Pond, stream, Phragmites
Maple Ave	024-0-016-E			Town	Developed	Good	No	Restricted	None	AR 2 ac.	n.a.	3.37 AC	Sewage Treatment Plant
West River Wellfield	024-0-091-E	5619	5	Town-DPW	Wooded, riparian	Good	P	Restricted	None	AR 2 ac.	Permanent	28.99 AC	
Maple Ave	024-021.01			Town - DPW	Wooded, riparian		P	Restricted	None		n.a.	10.93 AC	
Center Brook CA	024-061.05			ConCom	Passive	Excellent	P	Yes	None		Permanent		
Center Brook CA	024-061.06			ConCom	Passive	Excellent	P	Yes	None		Permanent	12.16 AC	
Old First Cemetary	025-0-022-E			Town	Cemetery	Fair	P	Yes	None	SRB-25000	Permanent	2.45 AC	
Walker Drive	025-0-034-E	122693		ConCom	Wooded	Fair	P	Yes	None	C&I	Permanent	43,560 SF	Adjacent to 140
Henderson Rivers Field	028-0-015-E			RecCom	Wooded/Turf	Fair	A	Yes	None	AR 2 ac.	Permanent	6.75 AC	
West River Wellfield	031-0-019.04-E	44317	92	Town-DPW	Wooded, riparian	Good	P	Restricted	None	AR 2 ac.	Permanent	17.22 AC	
Goss Pond	031-0-025-E	43953	276	ConCom/LSC	Wooded, pond	Excellent	P	Yes	None	AR 2 ac.	Permanent	22.77 AC	Henderson Family CA
Miscoe Hill Road	032-0-024-E	33804	253	Town	Wooded	Fair	P	Yes	None		Limited	12.10 AC	Deeded to town as open space
On Taft Pond	032E-0-001-E			Town	Passive	Good	P	Yes	None	AR 2 ac.		12,197 SF	
On Taft Pond	032E-0-003-E	40483	130	Town	Passive	Good	P	Yes	None	AR 2 ac.		5,663 SF	
Taft Pond Dam	032E-0-010-E			Town DPW	Dam	n.a.	P	Yes	None	AR 2 ac.	Permanent	3,049 SF	
Taft Pond Dam	032E-0-011-E	3828	279	Town DPW	Dam	n.a.	P	Yes	None	AR 2 ac.	Permanent	5,227 SF	
Shore Drive	032E-0-102-E	4732	122	Town	Passive	Excellent	P	Yes	None	AR 2 ac.		9,583 SF	
Shore Drive	032E-0-109-E	8563	263	Town	Passive	Excellent	P	Yes	None	AR 2 ac.		20,038 SF	
Police/Fire Stations	201-0-024-E			Town	Developed	n.a.	No	Yes	None	SRA-15000		3.96 AC	
Main Street	201-0-053-E	3125	492	Town	Parking/ Playground	Good	A	Yes	None	GB		1.78 AC	
Main St.	201-0-054-E	3125	492	Town	Developed	n.a.	No	Yes	None	GB		15,246 SF	
Town Hall	201-0-094-E			Town	Developed	n.a.	No	Yes	None	SRA-15000		10,454 SF	
Warren Street	201-0-095-E	5299	553	Town	Developed	n.a.	No	Yes	None	SRA-15000		5,663 SF	Parking
Town Common	201-0-096			Town	Developed	Good	P	Yes	None		Permanent		
off School Street	201-0-134-E	21597	69	Town (??)			No	?	None	SRA-15000		38,333 SF	Landlocked
Holy Angles	201-055			Town	Developed	n.a.	No	No	None				
Parcel adjacent to Knowlton	201-074			Town	Passive - Turf	Good	P	Tes	None	SRA-15000		0.17 AC	Adjacent to Center Brook
Main St.	202-0-098.01-E	4360	413	Town			No		None	SRA-15000		5,663 SF	
Center Brook CA	202-141			ConCom	Wooded	Fair	P	Yes	None		Permanent		
Main St.	203-0-076-E	4360	353	Town	Wooded	Fair	P	Yes	None	SRA-15000		2.65 AC	Adjacent to Leland with potential Vernal Pool.
Pleasant Woods CA	204-0-031-E	4775	494	Town	Wooded	Good	P	Yes	None	SRC-40000	Permanent	31.60 AC	

Notes:
Manager: ConCom: Conservation Commission; LSC: Land Stewardship Committee; RecCom: Recreation Commission
Recreation Potential: P: Passive; A: Active.
Zoning: AR: Agricultural/Residential; GB: General Buisness; C/I: Commercial Industrial; SR: Suburban Residential
Area: AC: acres; SF: Square Feet

Table 5-1 b. Other Significant Open Space Parcels

Owner	Location or Property	Map/Parcel	Book	Page	Manager	Protection	Area	Notes
ACOE	West River St.	024-0-027-E	4049	234	ACOE	Permanent	1.10 AC	West Hill Dam
ACOE	West River St.	024-0-028-E	4049	451	ACOE	Permanent	22,651 SF	West Hill Dam
ACOE	South St.	034-0-X001-E	4138	411	ACOE	Permanent	15.84 AC	West Hill Dam
ACOE	Oak Dr.	035-0-001-E			ACOE	Permanent	2.00 AC	West Hill Dam
Beagle Club	Glenview	026-015			CMBC	Temporary	47 AC	
Bernat	Chestnut St.	029-078			MLT	Permanent	61.9 AC	CR held by MLT
Blue Conservation Area	Crockett Rd	018-001.02.1			MLT	Permanent	2.8 AC	CR held by town
Bonner Natural Area	North St	005-053			MLT	Permanent	70.2 AC	CR held by SVT
BVRVHS	BVRVHS	024-0-018-E	4546	245	BVRVHS	Permanent	28.89 AC	Rec fields, track
Cem Assoc.	Maplewood Cemetary	024-017			Cem Assoc	Permanent	17.2 AC	
CLAFLIN	60 ORCHARD ST	007-015			Private	Temporary	18.9 AC	
Commonwealth	Upton State Forest	002-010			MA DCR	Permanent	32.62 AC	
Commonwealth	Upton State Forest	005-037			MA DCR	Permanent		
Commonwealth	Upton State Forest	005-038.1			MA DCR	Permanent		
Commonwealth	Upton State Forest	005-039.1			MA DCR	Permanent		
Commonwealth	Upton State Forest	005-039.2			MA DCR	Permanent		
Commonwealth	Upton State Forest	005-040			MA DCR	Permanent	17.3 AC	
Commonwealth	Upton State Forest	006-003			MA DCR	Permanent		
Commonwealth	Upton State Forest	006-004			MA DCR	Permanent		
Commonwealth	Upton State Forest	006-006			MA DCR	Permanent		
Commonwealth	Upton State Forest	008-0-X001-E	4887	517	MA DCR	Permanent	10.50 AC	
Commonwealth	Upton State Forest	008-0-X002-E	4887	519	MA DCR	Permanent	10.50 AC	
Commonwealth	Upton State Forest	008-0-X003-E	4846	72	MA DCR	Permanent	19.00 AC	
Commonwealth	Upton State Forest	008-0-X004-E	5674	217	MA DCR	Permanent	27.00 AC	
Commonwealth	off Triphammer Road	011-005			MA DCR	Permanent	20 AC	
Commonwealth	Warren St.	015-0-032-E	2632	177	MA DCR	Permanent	6.00 AC	
Commonwealth	Upton State Forest	023-035			MA DCR	Permanent		
Commonwealth	Upton State Forest	040-0-001-E			MA DCR	Permanent	2,035.45 AC	
Five Forks Farm	North Street	005-017.02			Private	Permanent		CR Held by town and SVT, LAND Grant
Five Forks Farm	North Street	005-017.03			Private	Permanent		CR Held by town and SVT, LAND Grant
FITZGERALD	68 GRAFTON RD	007-022			Private	Temporary	8.8 AC	
FITZGERALD	0 GRAFTON RD	007-023			Private	Temporary	2.7 AC	
FITZGERALD	0 GRAFTON RD	007-024			Private	None	1.5 AC	
FITZGERALD	0 ORCHARD ST	010-004.03			Private	Temporary	6.2 AC	
FITZGERALD	0 ORCHARD ST	010-005			Private	Temporary	8.9 AC	
FITZGERALD	0 ORCHARD ST	010-047			Private	Temporary	26 AC	
FITZGERALD	20 SOAP HILL ROAD	110/087.0-0000-0014.A	43869	139	Private	None	14.9 AC	
FITZGERALD	107 REAR GEORGE HILL ROAD	110/087.0-0000-0029.0	20391	72	Private	None	10.3 AC	

Table 5.1 Open Space Inventory

Table 5-1 b. Other Significant Open Space Parcels

Owner	Location or Property	Map/Parcel	Book	Page	Manager	Protection	Area	Notes
GORDON	0 FAY MOUNTAIN RD	001-002			Private	None	8.6 AC	
GORDON	0 FAY MOUNTAIN RD	001-003			Private	None	53.8 AC	
Grange	Grange Hall	201-140						Structure
HENDERSON	0 MECHANIC ST	014-055			Private	Temporary	87.9 AC	
Homeowners Assoc	Mendon Street - Kenneth Village	024-034			ConCom	Permanent	3.6 AC	CR held by Upton
Hopkinton	Crockett Rd.	018-0-001.03-E	41695	131			2.15 AC	Dam
JOHNSON	0 NORTH ST	004-004			Private	None	33 AC	
JORGENSEN	0 MISCOE HILL RD	032-019			Private	Temporary	34.4 AC	
JORGENSEN	0 MISCOE HILL RD	032-019.01			Private	None	10 AC	
JR Estates	West River Road	031-019.04			DCR, ConCom	Limited	24.5 AC	
KELLEY& PURRETTA	0 LAKE WILDWOOD	019-117			Private	None	5 AC	Lake Wildwood
Kent	Westboro Rd	011-027			DCR	Permanent	3.8 AC	CR held by DCR
MACCHI	0 FAY MOUNTAIN RD	004-001			Private	None	106 AC	
Maplewood Cemetary	Maple Ave	024-0-017-E	2630	571	Maplewood Cem Assoc	Limited	17.20 AC	
MEICHELBECK	0 FAY MOUNTAIN RD	001-004			Private	Temporary	26 AC	
Milford	Milford St.	026-0-012-E			Town of Milford		23.00 AC	Milford Water Department
MINGACE	0 MISCOE HILL RD	032-022			Private	None	39.2 AC	
MURSD	Henry's Path	024-0-019.22-E	17511	111	MURSD	Permanent	12.71 AC	Rec Fields
MURSD	Pleasant St.	024-0-020-E	5674	220	MURSD	Permanent	28.41 AC	Rec Fields
MURSD	Pleasant St.	024-0-021-E	5674	220	MURSD	Permanent	8.70 AC	Rec Fields
MURSD	Main St.	202-0-099-E			Memorial School	Permanent	17.37 AC	
NITHPT	Pratt Hill	015-154, 152			NITHPT	Limited	32.6 AC	Tribal
NITHPT	Glen View St	026-008, 010			NITHPT	Limited	69 AC	Tribal
Nipmuc RG	Fiske Mill	022-001			Nipmuc Rod&Gun Club	Temporary	64.84 AC	
Nipmuc RG	Fiske Mill	022-039			Nipmuc Rod&Gun Club	Temporary	5.03 AC	
Nipmuc RG	Fiske Mill	022-054			Nipmuc Rod&Gun Club	Temporary	3.3 AC	
Noble Vista	Hartford Ave.				Under Construction			Will include CR protected open space
Northbridge	Oak Dr,	035-0-027-E			Northbridge		7.00 AC	
Owner Unknown	off North Street	001-011			None	None	45 AC	
Owner Unkown	off Warren Street	015-029			Private	None	8 AC	
Owner Unkown	Old Mill Pond	016-121			Private	None	3.5AC	
Owner Unkown	Box Bill Pond	019-107			Private	None	0.65AC	
Owner Unkown	Miscoe Hill	035-035			Private	None	17 AC	
Preserve at Wildwood	off Williams Street	019-092				Limited	10.3 AC	Deed restricted.
Preserve at Wildwood	off Williams Street	019-092.8				Limited	4.0 AC	Deed restricted.
Private	Sweetwilliam Farm	005-017			SVT/ConCom	Permanent	33 AC	
Private	Fowler	011-003			Rec Farm Golf Course	Temporary	24.97 AC	
Private	West River Road	031-017.1			ConCom	Permanent	13.1 AC	
Private	West River Road	031-017.2			ConCom	Permanent		
ROBERTSON	59 MECHANIC ST	014-070			Private	None	38 AC	CR to be held by town and DCR
ROBERTSON	59 MECHANIC ST	015-008			Private	None	10.4 AC	CR to be held by town and DCR
Rockwood Meadows	East St				ConCom	Permanent	32.8 AC	CR held by town and SVT, LAND Grant
Ruguleiski Woods	North St	001-006			MLT	Permanent	22.3 AC	
St. Gabriels	Mendon Street	025-0-001.01-E	40390	115	Church	None	42.57 AC	Church, ca. 7 acres undeveloped
United Parish	Church St.	201-038			Church			Church and parking area near town center
United Parish	Church St.	201-098			Church			Church and parking area near town center
V F W POST	Milford St.	021-0-016-E	3182	331	VFW		12.50 AC	Parking, Rec Fields
WHITE	0 OAK DR	035-028			Private	Temporary	102.1 AC	

Table 5.4 - Chapter 61 Property

Parcel	Owner	Location	Acres		Total	Chapter
			Ch61	Not 61		
016-108	CARCHEDI ROBERT & SUSAN TRUSTE / ELM ST LADIES 2009 REALTY TRUS	53 ELM ST	12.1	1.5	13.6	61
026-015	CENTRAL MASS BEAGLE CLUB INC / C/O DAVID EDWARDS Note1	0 GLENVIEW ST	45.8	1.2	47.0	61
007-014	CLAFLIN THOMAS E /	0 ORCHARD ST	16.2	0.0	16.2	61
007-015	CLAFLIN THOMAS E	60 ORCHARD ST	13.8	5.1	18.9	61
015-077	CONLIN SOUTHLAND PHYLLIS A	30 JAMES RD	25.2	1.8	27.0	61B
014-074	DODD THOMAS J & CATHERINE A	0 MECHANIC ST	4.6	0.0	4.6	61
031-014	DWINNELL MAUREEN L	154 WEST RIVER ST	24.5	2.0	26.5	61A
015-071	EARL LINDA /	110 HIGH ST	16.6	1.8	18.5	61B
016-101	ENOS GEORGE T /	0 ELM ST	14.0	0.0	14.0	61
016-105	ENOS GEORGE T /	0 ELM ST	7.8	0.0	7.8	61
016-102	ENOS GEORGE T & LISA	61 ELM ST	1.5	1.8	3.3	61
005-022	FIFTY FOUR RIDGE ROAD REALTY T / ARNOLD RUSSELL B & ELLEN M TRS	54 RIDGE RD	15.0	2.0	17.0	61B
031-015	FILIOS MICHAEL & MEGANN	158 WEST RIVER ST	24.0	1.8	25.9	61B
031-016	FILIOS MICHAEL & MEGANN	0 WEST RIVER ST	3.0	0.0	3.0	61B
007-023	FITZGERALD BRIAN D /	0 GRAFTON RD	2.7	0.0	2.7	61A
007-024	FITZGERALD BRIAN D	0 GRAFTON RD	1.5	0.0	1.5	61A
010-004.03	FITZGERALD BRIAN D	0 ORCHARD ST	6.2	0.0	6.2	61B
010-005	FITZGERALD BRIAN D /	0 ORCHARD ST	8.9	0.0	8.9	61B
010-047	FITZGERALD BRIAN D /	0 ORCHARD ST	26.0	0.0	26.0	61B
028-004	FOWLER GLENN	0 WEST RIVER ST	7.0	0.0	7.0	61B
012-066	GALLANT LINDA & LUTZ MICHELLE / GALLANT FAMILY TRUST	32 WALNUT ST	9.6	5.0	14.6	61B
014-055	HENDERSON EDWARD S SR & RICHARD / & GORMAN EDWARD L	0 MECHANIC ST	87.9	0.0	87.9	61B
017-005	High Acres Farm -CHR REALTY TR / DICARLO EMIDIO & BARBARA TRUST	110 CHRISTIAN HILL RD	18.1	2.7	20.7	61A
002-031	JOHNSON IAN, OBERG PAGE, HALL / ALLISON	0 WESTBORO RD	5.5	0.0	5.5	61B
002-021	JOHNSON IAN, OBERG PAGE, HALL / ALLISON	0 WESTBORO RD	50.5	0.0	50.5	61B
017-011	KELLY FAMILY REALTY LLC	0 EAST ST	20.3	0.0	20.3	61A
017-026	KELLY FAMILY REALTY LLC	0 EAST ST	14.4	0.0	14.4	61A
017-028	KELLY FAMILY REALTY LLC	0 EAST ST	23.5	0.0	23.5	61A
017-029	KELLY FAMILY REALTY LLC	0 CROCKETT RD	18.2	0.0	18.2	61A
017-031	KELLY FAMILY REALTY LLC	0 CROCKETT RD	12.9	0.0	12.9	61A
025-057	KELLY FAMILY REALTY LLC	10 GABLE ST	83.0	3.0	86.0	61A
025-058.01	KELLY FAMILY REALTY LLC	146 MILFORD ST	15.8	0.0	15.8	61A
011-027	KENT ROCKWELL IV SALLY & GREGO TRUSTEES / KENT FAMILY TRUST	0 WESTBORO RD	3.9	0.0	3.9	61B
011-018	KENT ROCKWELL IV, SALLY & GREG TRUSTEES / KENT FAMILY TRUST	0 WESTBORO RD	24.7	0.0	24.7	61B
005-004	LAM JOYCE LYH-SHIN	0 NORTH ST	12.5	0.0	12.5	61A
005-017	LAM JOYCE LYH-SHIN	153 NORTH ST	16.5	1.8	18.3	61A
005-017.03	LAM JOYCE LYH-SHIN	0 NORTH ST	5.8	0.0	5.8	61A
030-004	MCKENNA ALICE & COMPTON SALLY	0 GLENVIEW ST	47.1	0.0	47.1	61B

Table 5.4 - Chapter 61 Property

Parcel	Owner	Location	Acres		Total	Chapter
			Ch61	Not 61		
014-048	MECHANIC ST REALTY TRUST / HENDERSON E SR G & R SR TRUS	0 FOWLER ST	6.3	0.0	6.3	61B
001-004	MEICHELBECK JOSEPH R / JUDITH	0 FAY MOUNTAIN RD	26.0	0.0	26.0	61A
032-019	MISCO HILL REALTY TRUST / C/O BINACO AMERICO J TRUSTEE	0 MISCOE HILL RD	34.4	0.0	34.4	61B
015-022	NELSON ERIK C & CATHERINE C	133 WARREN ST	22.0	2.4	24.4	61A
022-001	NIPMUC ROD & GUN CLUB / C/O BRUCE TIEDEMANN	0 FISKE MILL RD	64.8	0.0	64.8	61
022-039	NIPMUC ROD & GUN CLUB / C/O BRUCE TIEDEMANN	88 FISKE MILL RD	3.2	1.8	5.0	61B
022-054	NIPMUC ROD & GUN CLUB / C/O BRUE TIEDEMANN	0 FISKE MILL RD	3.3	0.0	3.3	61B
026-022	NPK LLC	0 MILFORD ST	31.3	15.5	46.8	61
026-024	NPK LLC	252 MILFORD ST	3.5	2.3	5.8	61
004-001	NYDAM RAYMOND G & SUSAN C / C/O CAROL MACCHI	0 FAY MOUNTAIN RD	106.0	0.0	106.0	61A
002-004.02	PATTERSON GEORGE & ELIZABETH	234 NORTH ST	5.6	1.8	7.5	61A
004-005	PIERIE THOMAS W JR	0 ORCHARD ST	25.9	0.0	25.9	61
008-021	RINTALA KAARLO A SR	0 WESTBORO RD	10.0	5.0	15.0	61A
008-022	RINTALA KAARLO S SR & LUCILLE	0 NORTH ST	10.0	4.4	14.4	61A
008-020	RINTALA KARLA & / BARROWS GLENN	59 NORTH ST	8.5	1.8	10.4	61B
029-050	SCANLON KATHY LEE TRUSTEE / KATHY-LEE SCANLON TRUST	124 SOUTH ST	15.8	1.8	17.6	61
025-015	STANTON MARGARET M TRUSTEE / MARGARET M STANTON REVOCABLE T TRUST	84 GROVE ST	11.0	1.8	12.9	61A
025-X001	STANTON MARGARET M TRUSTEE / MARGARET M STANTON REVOCABLE T TRUST	0 GROVE ST	18.0	0.0	18.0	61A
029-078	STERLING VALLEY LLC	0 MENDON ST	67.9	0.0	67.9	61B
025-002	THE HJT REALTY TRUST / MILFORD NATIONAL BANK & TR. CO	0 MENDON ST	10.0	0.0	10.0	61B
025-025	THE HJT REALTY TRUST / MILFORD NATIONAL BANK & TR. CO	142 MENDON ST	16.8	1.8	18.6	61B
025-030	THE HJT REALTY TRUST / MILFORD NATIONAL BANK & TR. CO	0 MILFORD ST	8.3	0.0	8.3	61B
025-031	THE HJT REALTY TRUST / MILFORD NATIONAL BANK & TR. CO	213 MILFORD ST	5.2	11.6	16.8	61B
025-037	THE HJT REALTY TRUST / MILFORD NATIONAL BANK & TR CO	0 WALKER DR	2.7	0.0	2.7	61B
025-038.01	THE HJT REALTY TRUST / MILFORD NATIONAL BANK & TR. CO	0 WALKER DR	0.4	0.0	0.4	61B
029-067	THE HJT REALTY TRUST / MILFORD NATIONAL BANK & TR CO	0 CHESTNUT ST	36.7	8.4	45.1	61B
005-039.01	WHEELER CHUN & THOMAS KYONG TR / SOON HWA BROWN REVOCABLE LIVIN TRUST	0 SOUTHBORO ST	2.0	0.0	2.0	61B
005-040	WHEELER CHUN & THOMAS KYONG TRU / SOON HWA BROWN REVOCABLE LIVIN TRUST	0 SOUTHBORO ST	17.3	0.0	17.3	61B
005-043	WHEELER CHUN AI & THOMAS KYONG TRUSTEES / SOON HWA BROWN REVOC LIVING TR	0 WOODVILLE RD	47.5	0.0	47.5	61B
035-028	WHITE EMERSON F	0 OAK DR	100.5	1.6	102.1	61
		Total Acres	1,467.6	93.8	1,561.5	
		Parcel Count	68			

From Report dated Dec 18,2018

Note1: This parcel did no show up in 2018 Assessors report. Maybe because of mixed use - not sure. Confirmed with Assessors on 6/5/19 that parcel is still in CH 61 program

Note: Ch61 property is also recorded on MassLandRecords as a Lien. See example search below:

Example: Recorded Land Recorded Date Search (Dates Available: 01/01/1961-Current) Date Range: 5/31/2014 To: 6/7/2019 Document Types: LIEN Town: UPTON

Section 6

Community Vision

Section 6

Community Vision

A. Description of Process

The goals for the 2020 Open Space and Recreation Plan update evolved from a number of public meetings and surveys conducted in 2018 and 2019. These were: an Open Space and Recreation survey mailed with the 2019 census to all town residents along with a follow-up public presentation; the development of the Four Parks Master Plan that included three public forums; a Town Center Visioning project that solicited input through public forums and from a large working group; and guidance from the Massachusetts SCORP goals and objectives.

The goals from the 2011 OSRP, which were based on results of previous OSRP surveys and public meetings and other planning documents, were also considered. The 2011 OSRP included the 1993 Open Space Survey, the 1999 Land Use Survey for Stefans Property, the 2005 Community Master Plan, the 2006 Community Recreation Survey, and the 2007 Upton Open Space Project (Dodson Study) when developing the vision and goals.

The feedback that was gathered from the public to determine the community's vision, goals, and needs in 2019 suggested that the needs, goals and objectives and action plans found in the 2011 OSRP are still relevant and valid. As such, the following sections, Analysis of Needs, Goals and Objectives, and Action Plan are very similar to their 2011 versions. It was gratifying to learn that we were still on the right path.

The following is a brief description of how the public was engaged to develop the goals for the 2020 OSRP. Public engagement is further described in Section 2.

1. 2019 Open Space Recreation Plan Survey

An Open Space and Recreation Plan survey (Appendix C) was mailed to each household along with the town census in January 2019. The survey contained 22 questions related to Open Space and Recreational needs and uses. There were 894 returned surveys for a total response rate of ~31%, (Upton had approximately 2900 occupied households at the time of the survey) providing a good sample from Upton residents. A public meeting was held on June 13, 2019 to present the results of the survey.

2. 2019 Four Parks Master Plan

In March 2019, the Recreation Department, along with the BSC Group, completed a master plan (Appendix D) for four town-owned properties. This plan covers a new property that was recently donated to the town by the Harvey J Trask estate and three other existing recreational facilities. The three existing properties include Kiwanis Beach Park, West River Field, and Leland Field. The planning process included gathering community input, preparing site analysis, developing plans of the improvements, along with costing, and priority information. The improvements will be accomplished using a phased approach. Community input was provided at three public meetings in September 2018 (existing site conditions and desired improvements), October 2018

(schematic design options), and a final meeting in January 2019 that presented a preferred plan for each park and as a final review.

3. 2019 Upton Center Visioning Project

A project led by the town's Economic Development Committee and facilitated by Dodson & Flinker looked at the opportunity to reimagine and revitalize the town center. They state that five factors have coalesced to create this opportunity: 1) the town has a large amount of land in its control, 2) Route 140 is scheduled to be resurfaced by the state with possible intersection and sidewalk improvements, 3) the town is considering inadequacies of the Knowlton-Risteen Building, 4) the economy is strong, and 5) town residents agree the town center should be a focus of attention.

Between January and April, 2019, the town held a listening session (130 attended), a day-long visioning session (60 attended), and four meetings of a Working Group (40 attended). The results of these sessions have helped to create a vision for Upton's town center.

The Working Group consisted of members of many different committees and local groups, including Open Space, Historical, Friends of Upton State Forest, Conservation Commission, Community Preservation, Council on Aging, Sports-facilities users, School Council, seniors and young people, and many others.

At the Annual Town Meeting in May 2019, the town took an important first step by voting to accept the Vision for a revitalized Upton center, allowing the town to move forward with the next steps of the process.

4. 2017 Statewide Comprehensive Outdoor Recreation Plan

The Statewide Comprehensive Outdoor Recreation Plan (SCORP) of 2017 is an update of the SCORP 2012 five-year plan. SCORP plans are developed by each state to be eligible for federal Land and Water Conservation Fund (LWCF) grants. There is a rating system that guides how the states LWCF apportionments will be distributed over the next five years.

The state sought citizen input in a number of ways. Meetings were held across the state to gather feedback on users' and providers' needs. Three on-line surveys were completed: one for residents that use outdoor recreation facilities, one for municipal recreation providers, and one for land trusts. Also, there were two state-wide statistical surveys completed, with the first, a phone survey gathering information on 400 residents' feelings towards open space and recreation. The second was a survey of 215 middle and high school students to better understand what outdoor recreation issues are most important to them. The results of the Upton 2019 OSRP survey were very consistent with the results of the 2017 SCORP survey.

Section 7

Analysis of Needs

Section 7

Analysis of Needs

A. Introduction

The town of Upton has a remarkable landscape shaped by the forces of nature and human culture over thousands of years. Its basic form is rooted in the geology of the region, shaped by the glaciers of the last ice age, and molded since by the action of wind, water, communities of plants and animals, many generations of Native Americans, and three centuries of European settlement. Although stressed by recent development the town retains a rich landscape heritage, one that offers clean waters, productive forests, abundant wildlife habitat, and scenic resources.

While many of Upton's most valued natural and cultural resources remain, still more can be done to permanently protect them from development. Upton's location near the 495 corridor assures that pressures for residential growth will continue to endanger its natural and cultural resources.

The Town of Upton contains approximately 13,853 acres of land. Approximately 29 percent of the town's land area has some protection from future development. This land includes Upton State Forest (2,271 acres), town conservation areas and open spaces (940 acres), federal land (64 acres), town-owned parks and recreation areas (57 acres), other town-owned lands (168), land held by land trusts and other non-profit organizations (318), and privately-owned land protected by conservation restrictions or deed restrictions (193 acres). Approximately 11 percent of Upton's land area is in Chapter 61 (1,500 acres.)

B. Analysis of Needs

The needs of the community can be addressed by meeting the following goals. These appeared in the 2011 OSRP and are carried forward as they are consistent with the results of the 2019 OSRP Survey (see Appendix C), the Vision Statement for Upton Town Center adopted at the May 2019 annual town meeting, and the Recreation Commission's Four Parks Master Plan completed in 2019 by the BSC Group.

- Goal One: Preserve Upton's rural, small-town character
- Goal Two: Preserve open space
- Goal Three: Preserve cultural and historical resources and landscapes
- Goal Four: Expand and improve active and passive recreational facilities
- Goal Five: Protect Upton's water resources
- Goal Six: Promote the stewardship of town-owned open space and conservation lands for natural resource protection and open space recreation
- Goal Seven: Improve Upton's trail system
- Goal Eight: Promote and encourage environmental education and awareness

Preservation of additional open space is important to Upton residents. Not only to preserve its rural small-town character, but to preserve open space to protect natural resources and for open space recreation. In response to the OSRP survey question "In general are you in favor of the town acquiring additional open space?", 62.3 percent responded "Yes." (There was a similar

response to the question “Are you in favor the state expanding Upton State Forest?)

Based on the responses to the 2019 OSRP survey question about why respondents favor open space acquisition, they want to protect natural resources and water quality, to preserve historic resources and Upton’s rural character, more trails, neighborhood parks, and to leave a legacy for future generations.

Reason for Supporting Open Space Acquisition	Responses	
	Number	Percent
Protect wildlife habitat	337	37.7
Preserve forests	331	37.0
Maintain Upton’s rural character	329	36.8
Passive recreation (hiking, etc.)	303	33.9
Trails	301	33.7
Protect water quality	293	32.8
Reduce development	276	30.9
Preserve scenic views	265	29.6
Protect rare species habitat	226	25.3
Legacy for future generations	215	24.0
Preserve historic resources	212	23.7
Neighborhood parks	210	23.5

This table shows all the responses to the question about why respondents favored open space acquisition where the response rate was more than 200. They were asked to check all that apply. Percentages shown for each response are based on the total number of respondents of 894.

Based on the responses to the 2019 OSRP survey question about what additions or improvements respondents want to the town’s open space and recreation resources, they want more trails and better trail conditions, a trail guide book, a dog park, neighborhood parks/playgrounds, and various other recreational facilities.

Addition/Improvement	Responses	
	Number	Percent
Town-wide loop trail	199	22.3
Better trail signage	190	21.3
More trails	181	20.2
Trail guidebook	180	20.1
Dog park	177	19.8
Better trail conditions	151	16.9
Neighborhood parks/playgrounds	133	14.9
Sledding area	132	14.8
Outdoor fitness trail	129	14.4
Playgrounds	116	13.0
Athletic fields	114	12.8
Community supported farm	110	12.3
Outdoor concerts	107	12.0
Splash pool	102	11.4
Firewood program for residents	102	11.4

The answers to the 2019 OSRP survey question about the deterrents to using Upton's open space and recreation resources respondents experience provide insight into what improvements we can make. We can improve trail conditions and awareness of trail information (ticks can be controlled to some extent by mowing and trimming around trails and encounters with hunters can be managed to some extent through education), and the quality of recreational water resources. Providing more group hikes can give those who prefer not to hike alone more opportunities to hike.

Type	Responses	
	Number	Percent
Ticks	193	21.6
Lack of time	149	16.7
Lack of trail maps/information	105	11.7
Poor water quality Kiwanis Beach	90	10.1
Don't want to hike alone	88	9.8
Poor trail conditions	59	6.6
Aquatic weeds in ponds	59	6.6
Encounters with hunters	57	6.4

This table shows the responses to the question about what deterrents to using our open space and recreation resources respondents experience where the response rate was more than 100. They were asked to check all that apply. Percentages shown for each response are based on the total number of respondents of 894.

The Vision Statement for the Town Center prepared by the working group and adopted at Town Meeting also expresses the desire of the community to maintain its small-town rural character and to preserve its cultural and historical resources. It stresses the community's strong preference to preserve the former Holy Angels Church and the desire to develop Upton Center in a way that maintains its village scale and building types.

We note that Goal 8 – Promote and Encourage Environmental Education and Awareness is not specifically identified as a need from the results of the 2019 OSRP Survey; however, it is key to promoting stewardship of open spaces to protect their natural resources and recreational services.

The following analysis is divided into a summary of Upton's Resource Protection Needs, Community Needs, and Management Needs. Specific opportunities or actions associated with this analysis can be found in Section 8 (Goals and Objectives), and Section 9 (Seven Year Action Plan).

C. Summary of Resource Protection Needs

Resource protection is based upon the need to preserve existing natural and cultural resources that are finite in quantity and otherwise irreplaceable. Wetlands, rivers, streams, aquifers, historical resources, and scenic views all encourage participation in recreation and outdoor activity. However, once these resources are destroyed, they cannot be replaced.

Through the 2019 Open Space and Recreation Survey, 2019 Town Center Vision, the 2017 Statewide Open Space and Recreation Plan, previous OSRPs (1985, 1996, 2000 and 2011), the 2007 Dodson Study, the 2005 Master Plan and committee meetings the following resource protection needs have been identified. This analysis of natural resources and the cultural landscape targets those areas most in need of protection to best serve the present and future inhabitants of the Town of Upton:

General Needs:

1. Protect undeveloped open space through use of the open space subdivision bylaw, Conservation Restrictions, and public land acquisition.
2. Preserve parcels containing unique natural features and/or other areas of special interest.
3. Protect the water resources for the Town, including new well locations, aquifer recharge zones, surface waterbodies and their water quality.
4. Protect streams, wetlands, and vernal pools.
5. Protect Upton's remaining farmland and encourage its use for agricultural purposes.
6. Expand existing protected areas and create new ones as opportunities allow and prevent the ecological isolation of conservation lands.
7. Improve and expand trail corridors.
8. Work with DPW to connect trails by sidewalk and bike lane where needed.
9. Increase the level of protection afforded to critical parcels of town-owned open space.
10. Protect wildlife and trail corridors.
11. Limit the impact of invasive species on native animal and plant communities
12. Preserve and protect early successional habitat (grasslands, meadows, and shrub land).
13. Protect rare species habitat.
14. Protect historic landscapes including ceremonial stone landscapes.
15. Educate people about the value of open space and threats to the town's natural resources.
16. Encourage actions that reduce the town's carbon footprint, promote carbon storage, and monitor the effects of global climate change in Upton.
17. Encourage local food production.
18. Encourage use of trails by seniors and teenagers.

Specific Needs and Opportunities:

This list of specific needs started with the 19 resource protection priorities identified in the 2007 Dodson study (many are still relevant and on-going) and were incorporated into the 2011 OSRP, and eliminated those that had been achieved or were no longer actionable, and added others identified through the 2019 OSRP survey or by town boards and committees.

<p>Open Space and Watershed Protection</p> <ul style="list-style-type: none"> • Designate former Stefans Farm a conservation area and protect adjacent properties • Link protected lands in southeast Upton • Expand Warren Brook Watershed Conservation Area northward • Expand Peppercorn Conservation Area by acquiring or permanently protecting in-holdings and adjacent parcels. • Protect Warren Brook Watershed Area of Critical Environmental Concern 	<p>Neighborhood</p> <ul style="list-style-type: none"> • Connect town center to Heritage Park and Pratt Pond by land acquisition for trails and sidewalks. • Protect Mendon Street/Grove Street corridor • Protect scenic West River Road • Protect Ridge Road and Upton State Forest area • Protect Warren Brook corridor along Mechanic Street and develop river walk trail.
<p>Historic and Landscape</p> <ul style="list-style-type: none"> • Protect ceremonial stone landscapes • Protect scenic roads, stone walls and special trees • Preserve CCC buildings in Upton State Forest. • Develop Upton Center according to the vision adopted at May 2019 Town Meeting 	<p>Town-wide</p> <ul style="list-style-type: none"> • Develop a town-wide loop trail with links to trail systems in neighboring towns • Pursue conservation of “owner unknown” properties and unprotected town-owned parcels • Encourage owners of Chapter 61 land and other large parcels to protect their lands with Conservation Restrictions • Foster good stewardship of town-owned lands • Control invasive species • Foster environmental education • Encourage use of open space and recreation resources by teenagers and seniors
<p>Recreation</p> <ul style="list-style-type: none"> • Implement the 2019 Four Parks Master Plan • Build an off-leash dog area • Improve water quality at Pratt Pond • Manage weeds in other town ponds • Improve the boat launch at Lake Wildwood • Work with DCR to develop accessible trail(s) at Upton State Forest 	

D. Summary of Community Recreation Needs

In March 2019, the BSC Group completed the Four Parks Master Plan for the Recreation Commission (Appendix D). This was a master plan for the town’s four recreation areas – the three existing facilities, Kiwanis Beach Park, West River Field, and Leland Field behind Memorial School, and a 30-acre parcel bequeathed to the town in 2017 by Harvey J. Trask for recreational facilities or schools. The Four Parks Master plan resulted in a comprehensive set of plans for the town’s four recreation areas that when implemented will meet the recreation needs of Upton for the foreseeable future. The task of the Recreation Commission is now to work with the community to determine how best to roll-out the plans.

The proposed plan for the Trask property includes:

- New community building/field house with bathrooms
- Office/concession stand
- 134 parking spaces
- Perimeter walking trails

- Disc golf course
- Full-size multi-use soccer field
- Cal Ripken scale little league field
- Four tennis courts
- Softball diamond
- Four squash courts
- Basketball court
- Playground and/or splash pad
- Universal accessibility
- Estimated cost \$7.7MM

The proposed plan for the existing Kiwanis Beach facility includes:

- Universal accessibility
- New two-story community building with indoor basketball court, bathrooms, changing rooms and community and camp activity rooms (replaces existing Ramsey building)
- Conversion of existing softball field to field for passive recreation uses associated with water access and community activities
- Expansion of beach area to include beach volleyball area, playground and possibly a splash pad
- Expansion/addition of hiking trails
- Increased parking
- Retention of existing soccer field
- Estimated cost \$6.2MM

The proposed plan for the existing Leland Field – Memorial School includes:

- Addition of a larger baseball/little league field in northwest corner of site
- Renovation of tennis and basketball courts
- Estimated cost \$1.0MM

The proposed plan for the West River Field Recreation Area includes:

- Reconfigure existing parking and field to accommodate two U10 soccer fields and universal accessibility
- Estimated cost \$567K

One other recreation-related resource need identified by the 2019 OSRP survey was for an off-leash dog area. As shown above it was one of the top-five responses to the question about improvements or additions respondents wanted. It falls outside of the scope of the Recreation Commission's responsibilities, though it is closely aligned with recreation, but is a resource need of the town. The Board of Selectmen intend to create an Off-Leash Dog Area Feasibility Committee to explore the feasibility of creating one.

E. Upton Open Space Recreation Needs and the SCORP Survey

The responses to the 2019 OSRP survey track closely with the responses the state received to its online SCORP survey. As such, Upton's goals are generally consistent with the goals found in the 2017 SCORP survey:

Goal 1. Access for underserved populations.

1. Support the acquisition of land and development of new open spaces in areas that lack existing or useable open spaces, such as Environmental Justice neighborhoods
2. Develop parks and open spaces that offer amenities that go above and beyond ADA requirements for people with disabilities
3. Consider the needs of underserved demographic groups — senior citizens and teenagers — in park and open space designs
4. Encourage establishment of programming endowments

Goal 2. Support state-wide trail initiative.

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

Goal 3. Increase the availability of water-based recreation.

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

Goal 4. Support the creation and renovation of neighborhood parks.

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

When asked which activities a member of their household planned to participate in over the next twelve months, the top SCORP survey responses included walking or jogging on trails or greenways and hiking/walking or jogging on streets or sidewalks. When asked for the reason they visited a town-owned open space or recreation area or the Upton State Forest the top Upton survey response was walking or hiking. 76.0 percent of the respondents to the Upton OSRP survey rated the town's conservation areas "Good" or "Excellent" which tracks very closely to the 78.1 percent of respondents to the SCORP survey that rated their community's outdoor recreation facilities "Good" or "Excellent."

In the Upton survey, "Lack of time" was the second-most frequent reason for not using town-owned open space ("Ticks" was the most frequent reason.) This also tracks with the SCORP survey where lack of time was the number one reason respondents said they do not use outdoor recreation facilities.

The reasons Upton residents gave for visiting outdoor recreation facilities also tracked with the SCORP survey. For town-owned open space or recreation areas (which include a beach and

several ponds and streams) the most frequent responses were walking or hiking, dog walking, swimming, nature/wildlife observation, fishing, playground activities, and canoeing/kayaking. For Upton State Forest (which does not have the same water resources), the most frequent responses were walking/hiking, dog walking, nature/wildlife observation, mountain biking and snow shoeing. Essentially the same trail-based, water-based and playground recreation activities found in the responses to the SCORP survey.

Upton's OSRP survey did not ask about programming for specific age groups. However, given similar response rates for similar questions, Upton should and will explore targeted programming to seniors and teenagers to see if there is an interest as was expressed in the SCORP survey.

The SCORP Survey highlights the need to better serve underserved populations such as people with disabilities, seniors, and teenagers. The 2019 Upton OSRP survey did not specifically address this issue; however, considering how close the SCORP and Upton OSRP surveys track and the Upton's commitment to serving people with disabilities as evidenced by, among other things, our efforts to make the existing recreation facilities accessible, the accessibility goals of the Four Parks Master Plan, the upcoming reconfiguration of the Town Hall parking lot improve accessibility, the community clearly supports this goal. More information on ADA Compliance can be found in Appendix A. In terms of developing accessible trails, the best opportunity to achieve that is probably at Upton State Forest where the existing parking and trails can be more readily adapted. Opportunities to develop accessible trails also exist at Heritage Park, Kiwanis Beach, and the Trask property on Mendon Road

F. Management Needs

Identification of funding and recruitment of volunteers will be key elements of the Town's strategy for open space acquisition and stewardship and building and upgrading recreation facilities.

The Community Preservation Fund provides funds for open space preservation and recreational facilities. We need to support efforts to keep the Community Preservation Act and the 3% surcharge rate if they are threatened.

One of the most significant management needs for the Town's active recreation areas is ensuring that all facilities are handicapped accessible. Several actions have been taken to improve the accessibility of the Kiwanis Beach facilities. The Four Parks Master Plan addresses this issue comprehensively.

The Town will need to prioritize its open space needs on an on-going basis. Communities acquiring land for open space, recreation and conservation purposes frequently attempt to devise a method to compare or prioritize land for acquisition. These systems often list locations of threatened or endangered plant or animal species as among the highest priority land to buy or protect. Also, usually highly ranked is water supply protection land. Agricultural land, particularly productive land, ranks high as does keeping open land undeveloped in more densely settled areas without open space at present. Land that connects existing open space areas and/or creates buffers between sensitive natural resources may rank high as well. It is proposed that land for acquisition should protect present or future water supplies, sensitive natural resource areas,

provide public access to natural resources, connect existing open space land, or provide recreational facilities or amenities, particularly in settled areas. Land that achieves more than one of these objectives would be highly ranked. Upton's current evaluation scheme is presented in Appendix F.

Creating a paid part-time stewardship position(s) would help ensure that stewardship activities such as implementing stewardship plans and trail monitoring, maintenance and improvement are completed timely. We need to ask Town Meeting for funding for a position and/or determine if a stewardship position would be eligible for the Senior Property Tax Work-off program.

Upton needs to expand our base of people willing and able to help do the work on protecting, developing, and managing open space and recreation areas. We also need to learn best practices from other groups. We need to look for opportunities to work with the Cub, Boy and Girl Scouts, Friends of Upton State Forest, Bay State Trail Rides Association, Metacomet Land Trust, Sudbury Valley Trustees, the MA Department of Conservation and Recreation, Blackstone River Heritage Corridor, Blackstone River Watershed Association, Narragansett Tribe Historic Preservation Office other organizations, and individuals.

Our town boards enjoy cordial working relationships with each other. Improving the distribution of information between boards will provide a better ability to mitigate the impacts of development on the vision of the community. We also need to periodically review bylaws, regulations, and policies to assure that Upton's rural character and precious natural resources are best protected. The Open Space Subdivision Bylaw is a powerful tool to manage the impact of growth and we need to work with the Planning Board to propose improvements to the bylaw to Town Meeting.

Section 8

Goals and Objectives

Section 8

Goals and Objectives

Goal #1: Preserve Upton's rural, small-town character.

Objectives:

- A. Bring a Scenic Roads bylaw to Town Meeting.
- B. Encourage the preservation of Upton's remaining farmland and working farms.
- C. Adopt design standards for new development.
- D. Protect scenic roads and landscapes.

Goal #2: Preserve open space for environmental and water supply protection.

- A. Continuously update and evaluate Upton's open space inventory.
- B. Promote the conservation of privately-held open space.
- C. Continue working with Metacomet Land Trust, Sudbury Valley Trustees, and other partners on open space acquisition projects. Cooperate with neighboring communities in preservation efforts.
- D. Enhance levels of protection of critical town-owned open space such as the former Stefans Farm.
- E. Preserve ecologically valuable field, meadow, and shrub habitat.
- F. Protect Upton's wetlands and vernal pools.
- G. Use the Planning Board's subdivision review process to achieve the Town's open space and recreation goals (i.e., greenways, historic landscape protection, trail links, etc.).
- H. Preserve more than 50% Warren and Whitehall Watersheds Area of Critical Environmental Concern and limit impervious area in the area to less than 15%.

Goal #3: Preserve cultural and historical resources.

- A. Support efforts to preserve historic buildings in town including the Civilian Conservation Corps buildings in Upton State Forest.
- B. Support efforts to preserve Native American ceremonial stone landscapes.
- C. Assist the Historical Commission in establishing neighborhood-level Historic Districts.
- D. Identify and protect Upton's trees and stonewalls of special significance.

Goal #4: Expand and improve active and passive recreational opportunities.

- A. Integrate passive recreation opportunities found in the town's conservation areas and open spaces into recreation activities sponsored by the Recreation Commission.
- B. Implement the Recreation Commission's Four Parks Master Plan.
- C. Build public awareness of active and passive recreational opportunities through brochures, maps, newsletters, community hikes and other programs. Target underserved populations, including the disabled, seniors, and teens).
- D. Sponsor group hikes and evaluate interest in recurring group hikes.
- E. Support development of neighborhood parks and playgrounds.

- F. Build a dog park.
- G. Improve the boat launch at Lake Wildwood.

Goal #5: Promote the stewardship of Upton's water resources.

- A. Continue partnerships with those governmental and non-profit entities that are charged with the protection, preservation, and improvement of water resources.
- B. Organize Stream Teams to monitor the water quality of Upton's rivers, streams, and brooks.
- C. Encourage the continued monitoring of Upton's ponds and work towards improving their water and habitat quality.
- D. Continue to enforce the Board of Health's Wellhead Protection Regulations for the municipal well Zone II recharge areas.
- E. Enforce groundwater protection and stormwater bylaws.

Goal #6: Promote the stewardship of town-owned open space and conservation lands for natural resource protection and passive recreation.

- A. Prepare and implement stewardship plans for all town-owned conservation properties and other town-owned land with significant open space value.
- B. Inventory and evaluate open space value of other town-owned lands.

Goal 7: Improve Upton's trail system.

- A. Create a town-wide loop trail.
- B. Link town center to Heritage Park and Pratt Pond.
- C. Improve trail systems on town-owned open space and improve trail links between protected lands. Work to obtain trail easements on private property and to connect trails with sidewalks and bike lanes where needed. Improve trailheads and parking.
- D. Work with the Department of Conservation and Recreation to develop accessible trail(s) at Upton State Forest.
- E. Increase frequency of trail maintenance. Ensure that trails in fields are mowed and brush is cut back from trails in woods in part to minimize ticks.
- F. Create a town-wide trail guide.

Goal #8: Promote and encourage environmental education and awareness.

- A. Encourage local schools to use state and town-owned conservation lands as part of their environmental science curriculums.
- B. Promote environmental education events (Earth Day, shoreline clean-up days, household hazardous waste collection days, etc.).
- C. Promote environmental awareness through a variety of mediums and events.
- D. Share information with citizens regarding Upton's open spaces, conservation properties and unique environments.
- E. Initiate a long-term project to document the impact of climate change on Upton and educate people about the likely effects of climate change.
- F. Cooperate with neighboring communities in education efforts.
- G. Encourage energy conservation and local food production.

Section 9

Seven Year Action Plan

Upton 2020 - 2026 Action Plan

Action	Organization				Year							Funding & Support
	Con Comm	Open Space	LSC	Rec Comm	2020	2021	2022	2023	2024	2025	2026	
Open Space Preservation												
Investigate and promote land conservation opportunities	•	•			•	•	•	•	•	•	•	CPA, LAND Grant, Donations
Permanently protect town owned open space parcels		•			•	•	•	•	•	•	•	None required, Grants
Promote establishment of town wide loop trail	•	•			•	•	•	•	•	•	•	CPA
Comment on subdivision and special permit applications	•	•			•	•	•	•	•	•	•	ConCom budget
Update open space maps		•			•	•	•	•	•	•	•	None required
Partner with MLT, SVT, MA DCR, and others to conserve land	•	•			•	•	•	•	•	•	•	None required
Promote conservation of privately-owned land		•			•	•	•	•	•	•	•	None required
Update Open Space bylaw		•				•	•					None required
Scenic Roads Bylaw		•					•					None required
Work with Historical Commission to protect historic landscapes		•			•	•	•	•	•	•	•	None required
Support the Community Preservation Act	•	•			•	•	•	•	•	•	•	None required
Promote “Right to Garden” provision in subdivision covenants		•			•	•	•	•	•	•	•	None required
Preserve, organize, and digitize Open Space records		•			•	•	•	•	•	•	•	None required
Stewardship of Conservation Land and Other Open Space Parcels												
Create paid part-time stewardship position(s)	•					•	•	•	•	•	•	ConCom budget, Senior Workoff Program
Update Stewardship Plan for Stefans Farm Open Space			•		•	•						LSC budget, grants
Implement updated Stefans Farm Open Space Stewardship Plan			•				•	•	•	•	•	LSC budget, grants
Prepare Stewardship Plan for Peppercorn Hill CA	•		•			•	•					LSC Budget
Implement Stewardship Plan for Peppercorn Hill CA			•					•	•	•	•	LSC budget, grants
Implement North Upton Open Spaces Forest Stewardship Plan	•		•		•	•	•	•	•	•	•	LSC budget
Dog Park Feasibility Study	•						•					Dog Park Committee, Grants
Establish sledding area at Stefans Farm Open Space			•			•	•	•	•	•	•	LSC Budget
Develop trails at Center Brook Conservation Area	•		•			•	•					LSC Budget
Develop trails at Pleasant Woods Conservation Area		•	•			•	•					LSC Budget
Develop trails and parking area on Robertson Property	•	•	•		•	•						CPA, Conservation Fund
Improve access to Stefans Farm Open Space			•		•	•	•	•				CPA

Action	Organization				Year							Funding & Support
	Con Comm	Open Space	LSC	Rec Comm	2020	2021	2022	2023	2024	2025	2026	
Stewardship of Conservation Land and Other Open Space Parcels												
Maintain community garden			•		•	•	•	•	•	•	•	LSC Budget, CG Revolving Fund
Promote pollinator habitat			•		•	•	•	•	•	•	•	LSC Budget
Prepare and update trail maps			•		•	•	•	•	•	•	•	None required
Publish trail guide book	•	•				•	•					ConCom budget
Hold occasional fuelwood lottery			•		•	•	•	•	•	•	•	None required
Inspect land subject to CR’s held by Upton ConCom yearly	•				•	•	•	•	•	•	•	ConCom budget
Prepare Baseline Reports for town held CRs without reports	•				•	•	•	•	•	•	•	ConCom budget, CPA
Document impacts of climate change (long term monitoring of phenology, stream temperature, ice in/out date at Pratt Pond, etc)	•				•	•	•	•	•	•	•	None required
Install and maintian wildlife camera(s)			•		•	•	•	•	•	•	•	ConCom budget
Environmental Education												
Participate in annual Earth Day event	•	•			•	•	•	•	•	•	•	Open Space budget
Maintain ConCom Facebook page and MailChimp newsletter	•	•			•	•	•	•	•	•	•	None required
Sponsor or cosponsor nature walks and talks		•			•	•	•	•	•	•	•	Open Space budget; FUSF, MLT, UHS
Maintain environmental information/links on town website	•	•	•		•	•	•	•	•	•	•	None required
Submit occasional environmental articles to the Town Crier	•	•	•		•	•	•	•	•	•	•	None required
Wetland Protection												
Administer Wetland Protection Act and Town bylaw	•				•	•	•	•	•	•	•	ConCom budget
Update wetland bylaw regulations for climate resiliency	•					•						MVP Grant
Support town MVP Program	•				•	•	•	•	•	•	•	MVP Grant
Certify vernal pools (goal = 1/year)	•	•			•	•	•	•	•	•	•	None required
Watershed/Water Quality Protection												
Organize /train watershed Stream Team(s)	•					•						ConCom budget
Stream Team survey of West River	•					•						ConCom budget
Stream Team survey of Warren Brook	•						•					ConCom budget
Stream Team survey of Center Brook	•							•				ConCom budget
Stream Team survey of Mill River	•								•			ConCom budget
Townwide culvert/stream connectivity survey	•						•					MVP Grant

Action	Organization				Year							Funding & Support
	Con Comm	Open Space	LSC	Rec Comm	2020	2021	2022	2023	2024	2025	2026	
Church Street culvert erosion repair	•							•				MVP Grant
Administer Stormwater Bylaw	•				•	•	•	•	•	•	•	ConCom budget
Update Stormwater Bylaw	•								•			ConCom budget
Bring Zone 2 Aquifer Protection Bylaw to Town Meeting	•										•	None required
Preserve water quality through open space protection		•			•	•	•	•	•	•	•	See Open Space Preservation
Work with Blackstone River Watershed Association	•	•			•	•	•	•	•	•	•	None required
Recreation												
Implement Four Parks Master Plan				•	•	•	•	•	•	•	•	CPA, grants, donations
Maintain existing recreation facilities				•	•	•	•	•	•	•	•	CPA, grants, donations
Integrate open space trails into Rec Comm recreation offerings		•	•	•	•	•	•	•	•	•	•	RecComm budget
Connect Heritage Park to Town Center (land aquisition)		•					•	•				CPA, HC
Lake Wildwood boat ramp improvement	•			•				•	•			CPA
Work with DCR to create accessible trails at Upton State Forest	•			•			•	•	•	•	•	CPA, FUSF

Legend and abbreviations:

High Priority
Medium Priority
Lower Priority

CA - Conservation Area
CG - Community Garden
CPA - Community Preservation Act
DCR - Division of Conservation and Recreation
FUSF - Friends of Upton State Forest
HC - Historical Commission
LSC - Land Stewardship Committee
MLT - Metacomet Land Trust
MVP - Municipal Vulnerability Preparedness
SVT - Sudbury Valley Trustees
UHS - Upton Historical Society

Section 10

Comments



The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Charles D. Baker
GOVERNOR

Karyn E. Polito
LIEUTENANT GOVERNOR

Kathleen A. Theoharides
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1181

October 3, 2019

Bill Taylor
Open Space Committee
One Main Street
Upton, MA 01568

Re: Open Space and Recreation Plan

Dear Mr. Taylor:

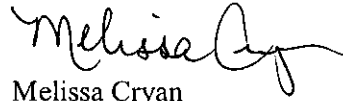
Thank you for submitting the draft Open Space and Recreation Plan for Upton to this office for review and compliance with the current Open Space and Recreation Plan Requirements. This plan was particularly thorough and has been conditionally approved through October 2026. Conditional approval will allow the town to participate in DCS grant rounds through October 2026 and a grant award may be offered to the town. However, no final grant payments will be made until the plan is completed.

Once the following items are addressed, your plan will receive final approval:

1. Plan Summary – the Planning Process and Public Participation section should discuss how the public meetings were advertised.
2. Growth and Development Patterns – the Transportation Systems section should include information on pedestrian and cycling options.
3. Section 5 – the table that lists town-owned conservation and recreation properties should have the current use column filled in completely, the condition column should be filled in with information such as “excellent”, “good”, “fair”, or “poor”, the recreation potential column should have specifics listed, the type of grant column should be filled in, and the degree of protection column should be filled in. Please note that this information is required only for town-owned property. Any Agricultural Preservation Restrictions in the town should be listed in Section 5.
4. Analysis of Needs – the Community’s Needs section should discuss the needs of special groups, such as teens and the elderly.
5. Action Plan – the goals and objectives should be listed in some sort of priority order and have a funding source identified for each.
6. Letters of Review – letters from the chief municipal officer, planning board, and regional planning agency are needed.
7. Maps – the Unique Features map is missing. Please include it.
8. ADA – this section is not complete. Please see the Open Space and Recreation Planner’s Workbook for more information.
9. The final plan should be bound solely with a binder clip.

Congratulations on working on such an important task for your community! Please contact me at (617) 626-1171 or melissa.cryan@mass.gov if you have any questions or concerns, and I look forward to reviewing your final plan.

Sincerely,

A handwritten signature in black ink, appearing to read "Melissa Cryan". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Melissa Cryan
Grants Manager



UNUM Building,
1 Mercantile St.
Suite 520
Worcester, MA 01608
www.cmrpc.org

Denny Drewry
Janet A. Pierce
Sujatha Krishnan
Dianna Provencher
Trish Settles

Commission Chair
Executive Director
Transportation
Business Manager
Regional Collaboration & Community Planning

May 20, 2020

Melissa Cryan
Division of Conservation Services
Executive Office of Energy and Environmental Affairs
100 Cambridge St., Ste. 900
Boston, MA 02114

RE: Town of Upton 2020 Open Space and Recreation Plan Update

Dear Ms. Cryan,

The Central Massachusetts Regional Planning Commission (CMRPC) is writing this letter in support of the Town of Upton and its recently completed 2020 Open Space and Recreation Plan Update. The Town and its Open Space Committee are to be commended for their diligent work completing this Plan.

The Town and the Open Space Committee have done a very thorough job, and the final document appears to meet the standards for such plans as promulgated by your office. This plan highlights how Upton continues to be a desirable place to live and examines the pressures associated with residential development. Upton recognizes the need to balance new development with the need to protect open space and natural resources, as well as enhance recreation opportunities. In particular, this Plan articulates a need for enhanced protection for critical town-owned open spaces; increased monitoring of Upton's ponds, rivers, streams and brooks; improved trail systems on town-owned open spaces, trail links between protected lands and the creation of a town-wide loop trail; and increased active and passive recreational opportunities for underserved populations. Upton's Plan provides the Town with specific guidance and action steps needed to accomplish its goals and objectives. This Plan also recognizes the need for partnerships with public and private entities to make its goals and objectives a reality. Many of these partnerships are currently being pursued by the Conservation Commission and Planning Board. Upton will be well-served by having a State-approved, updated Plan in order to plan for its recreation facilities and programs, as well as to preserve and protect its valuable open spaces and natural resources.

Please consider this letter to be a demonstration of CMRPC's support for the Plan and the process used to develop it. We find Upton's Plan to be fully consistent with CMRPC's Regional Open Space and Recreation Plan, our 2020 Growth Strategy for Central Massachusetts (2000), its 2011 update, and the Massachusetts Statewide Comprehensive Outdoor Recreation Plan.

Sincerely,

Mimi Kaplan
Associate Planner

CC: Upton Open Space Committee
Upton Planning Board
Upton Board of Selectmen

mpenko

From: Dan Lazarz <djlazarz@charter.net>
Sent: Monday, May 25, 2020 10:47 AM
To: openspacemember@uptonma.gov
Subject: Master Plan 2020 Citizen Review Comment

Flag Status: Flagged

Dear Committee Members,

Thank you for keeping the community's Open Space Masterplan up to date. In reviewing the Zoning Section, Action Plan Section and Four Parks Master Plan there is no mention or inclusion of the walking trails along the Center-Brook and the need to repurpose the recreation assets (playground) in this area. The walking trails in this area and the close proximity to Kiwanis Beach are elements of the Vision that are very exciting and have great potential in improving the quality of a heavily utilized and highly trafficked areas of the community with a project that is not that complicated. This vision element is really one of the first projects that begins to connect multiple recreation assets while highlighting and protecting water resources.

It is very unlikely that the planning and funding (possible shared funding in a Public Private Partnership) of these walking trails will not be realized in a project scope if this Downtown vision is not identified as an action plan element and developed further as a community priority. Identifying these trails and clearly communicating this to builders or developers (including Town funded projects) provides the certainty necessary to clearly define a scope and expectation for a building or development project. These trails are not just a recreation element to the area they are important site planning elements that protect the brook and support this downtown vision. Including them in the plan to clearly communicate these community priorities is important.

Thank you again for updating this plan and strongly advocating for Open Space & Recreation. In the few years that I have served as a member of Capital Committee it has been disappointing to see good work and good plans remain stalled or dormant because the community does not have any of these projects clearly prioritized in a comprehensive capital plan. I strongly recommend the Committee actively engage both the Finance and Capital Committees to ensure this plan is utilized to identify both funding opportunities/possibilities and to help establish the priorities of implementing the action plan elements in medium & long term Capital Plan for the Community.

Regards,

Dan Lazarz
10 Farrar Road

Sent from my iPad




TOWN OF UPTON, MASSACHUSETTS

Planning Board

DATE: MAY 28, 2020

TO: WILLIAM TAYLOR, CHAIR
OPEN SPACE COMMITTEE

FROM: GARY BOHAN, CHAIR 

SUBJECT: OPEN SPACE AND RECREATION PLAN

CC: CHRISTINE SCOTT, CHAIR
CONSERVATION COMMISSION

The Planning Board has reviewed the Open Space and Recreation Plan (draft May 2020) and is pleased to submit this letter of support. The plan is extremely thorough and will be an excellent resource for years to come. The plan is consistent with Upton's Master Plan with respect to the community vision and protection of open space and natural resources. We commend the Open Space Committee for their diligence and dedication to the Town of Upton and the residents.



TOWN OF UPTON, MASSACHUSETTS

BOARD OF SELECTMEN

June 2, 2020

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

June 2, 2020

RE: Town of Upton 2020 Open Space and Recreation Plan

Dear Ms. Cryan:

On behalf of the Upton Board of Selectmen, I am pleased to offer this letter of support for the 2020 update of the town's Open Space and Recreation Plan (OSRP). The Board voted unanimously to endorse the plan during our May 19, 2020 meeting. The plan well represents the views of the board and town residents with respect to continued efforts to preserve our open space and rural character.

Our other boards and committees, including the Planning Board, Conservation Commission, Recreation Commission, and Community Preservation Committee will all benefit from having this document as a resource when evaluating future opportunities for acquisition and stewardship of open space and the development of recreational resources.

We would also like to thank the Open Space Committee for their efforts, and the many town residents who responded to the opinion survey conducted for the OSRP update.

Sincerely,

Stephen Matellian, Chair
Upton Board of Selectmen

cc:

Conservation Commission and Open Space Committee
Recreation Commission
Planning Board
Community Preservation Committee

BOARD OF SELECTMEN
Stephen A. Matellian, Chairman
Brett A. Simas
Maureen Dwinnell

TOWN MANAGER
Derek S. Brindisi
One Main Street • Suite 1 • Upton, MA 01568
T: 508.529.6901 • F: 508.529.1010



TOWN OF UPTON, MASSACHUSETTS

Community Preservation Committee

DATE: JUNE 24, 2020

TO: WILLIAM TAYLOR, CHAIR
OPEN SPACE COMMITTEE

FROM: RENA RICHARD, CHAIR

SUBJECT: OPEN SPACE AND RECREATION PLAN

CC: CHRISTINE SCOTT, CHAIR
CONSERVATION COMMISSION

The Community Preservation Committee has reviewed the Open Space and Recreation Plan (draft May 2020) and is pleased to submit this letter of support. The plan is extremely thorough and will be an excellent resource for years to come. The plan is consistent with Upton's Master Plan with respect to the community vision and protection of open space and natural resources. We commend the Open Space Committee for their diligence and dedication to the Town of Upton and the residents.

COMMITTEE MEMBERS

Rena Richard, Chair
Paul Carey, Vice-Chair
Dave Adams
Joan Scribner
Richard Desjardins
Rich Gazorian
Mike Penko
Chris Scott
Russell Wood

COMMUNITY PRESERVATION COMMITTEE

CPC@uptonma.gov
One Main Street • Suite 6 • Upton, MA 01568
T: 508.529.3343 • F: 508.529.1010

Meeting Minutes

To: Members of Open Space Committee, Land Stewardship Committee

From: Tom Dodd

Re: Minutes of meeting Thursday, May 28, 2020

OS Members Attending:

Bill Taylor, Tom Dodd, Alan Miano, Chris Scott, Mike Penko

Land Stewardship Members Attending:

Eric Reustle, Scott Heim, Marcella Stasa, Bill Taylor, Mike Penko

Others Attending:

Daniel Lazarz (Capital Budget Committee), Kelly McElreath (Town Clerk), 1 unknown attendee

Meeting Timeline:

7:00PM

- BT read preamble relating to remote participation due to Covid-19 and opened Open Space meeting

Public Comments Session: (Open Space and Recreation Plan)

- Daniel appreciated the work that went into updating the plan. He thought the plan was not considering the Town Center project fully – specifically having walking trails from town center that connect to Heritage Park. MP stated this will be added to plan. BT stated will get on agenda of Town Center committee.
- Great to have connectivity. BT stated high priority for Open Space and Conservation Commission
- Closed Public Comments Session

Open Space Meeting

- Open Space Recreation Plan
 - Waiting on letter from Planning Board and Selectman – Both have voted to issue letter of support
 - Work on appendix to satisfy DCS
- Robertson
 - J Savello working on Survey Plan
 - getting trails into plan
 - Plan for Warren brook wetlands – looking into abutter plans
 - Received more definitive update from DCR on CR
 - Baseline Documentation Report in process
 - Next ConComm meeting will vote to authorize chair to sign CR
 - BT will place order for sign
 - Parking Lot, cuttings and leaves removed – will need to put down gravel later
 - We need a picture of parking lot and sign as part of BDR
- Kelly Land (in-holding at Peppercorn Hill)
 - Metacomet voted to apply for grant. MP and Krista Collins (SVT) working on budget.
 - SVT and ConComm need to decide who will hold CR.
 - Survey needs to be done next spring. Budgeted \$10k. 1 known boundary
 - Contacted NHESP about Great Laurel presence (2-3 plants). Looking for a letter of support from them (Lynn Harper) - Maybe can get additional points towards grant for plant inclusion in biomap
 - MP monitoring stream temperature using a digital logger
- Dean Pond Preserve
 - Questions about who will hold or own open space. DCR Land Acquisition will not be interested in Parcel B (6 acres). Perhaps town could hold it. Parcel AA is 60 acres. Will know better in June from DCR.
- Forest Heights
 - No Updates
- Joe Whitney – Mechanic St – Parcel 19-16 - 3.75 acres (open- lawn like)
 - Interested if town may acquire parcel. Believes lot is unbuildable. Oliver Map shows 10% is wet. Steep drop off Mechanic St. Abuts OS parcel being taken by town. Not sure what his intentions for use are. BT will run through scoring sheet
- CScott made Motion to approve Meeting Minutes of 4/30/20 and 3/26/20
 - Roll Call vote – BTaylor – yes, CScott -yes, AMiano -yes, TDodd-yes, MPenko-yes
- Land Stewardship Meeting opened
 - Eric Reustle asked if there were any questions – None asked
 - Motion to Adjourn Land Stewardship Meeting

Meeting Minutes

- Roll Call Vote – Btaylor=yes, SHeim=yes, Mpenko=yes, EReustle=yes
- Motion to Adjourn Open Space Meeting
 - Roll call vote - BTaylor=yes, CScott=yes, TDodd=yes, MPenko=yes, AMiano=yes

7:40PM Meeting Adjourned

Section 11

References

Section 11

References

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Upton Land Stewardship Committee, 2007. *Stefans Farm Land Stewardship Plan*. Town of Upton.

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Walsh, G.J., Aleinikoff, J.N., and Dorais, M.J., 2011, *Bedrock geologic map of the Grafton quadrangle, Worcester County, Massachusetts*. U.S. Geological Survey Scientific Investigations Map 3171, 1 sheet, scale 1:24,000, 39-p. text.

Note: see also "Supplemental Information" listed in the Table of Contents.