
MAY 2011

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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DEDICATION

The members of the Open Space Committee wish to dedicate this Plan to the memory of our late fellow member, Francis Walleston who graciously served on the Milford and Upton Conservation Commissions for many years.

ACKNOWLEDGEMENTS

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This plan was approved by The Commonwealth of Massachusetts, Division of Conservation Services and expires July, 2017.

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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. Large areas of forest remain, some of it protected as part of the Upton State Forest or Town Conservation Lands, but most is available for future development. 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.

Open spaces provide scenic vistas, habitat for wildlife, active and passive recreational opportunities, protection from flooding, groundwater resources essential for town water supplies, and forests which store carbon in biomass and soils. Community action and vigilance is essential to protect these features and benefits.

This Plan represents a major rewrite of the town's 2003 Open Space and Recreation Plan. It draws upon information in previous planning documents: the 2005 Upton Master Plan, the 2006 Recreation Master Plan and the 2007 Dodson Open Space Report.

Section 2 of the Plan documents the process involved in preparation of this plan.

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 23 percent of the town's land area is strongly protected from future development. This land includes Upton State Forest, town conservation areas, 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 following statement of open space and recreation goals:

- 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

Finally, the Plan presents objectives (Section 8) and actions (Section 9) that will guide efforts to achieve these goals through 2017.

While many of Upton's natural and cultural resources are protected, there is still much highly valued open space with no, or only limited 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.

Upton citizens, town boards, commissions, and committees, and interest groups have been working to proactively preserve open space for many years, however, the work needs to continue as development pressures mount. Without continued and intensified action by the Town to remove fragile land from potential development, Upton will likely lose much of its scenic and environmental resources that many 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 over 2500 acres of state forest and town conservation land. 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 (UOSC), a subcommittee of the Upton Conservation Commission. The UOSC was formed in May 1993 and has met monthly for most of the last 16 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 land owners 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) is dated February 1996. The 1996 plan was updated and submitted in draft to the state in 2000 but was not finalized. The plan was updated again in 2001 and 2003. 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 UOSC. This update of the OSRP has been in preparation since 2006.

The draft Open Space and Recreation Plan was prepared following the March 2008 guidelines established by the Massachusetts Division of Conservation Services 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

Previous drafts of the OSRP were circulated for public review and comment. The 2007 Open Space Study by Dodson Associates is integrated into this update of the OSRP. The Dodson study included a series of public meetings to solicit comments and recommendations from town boards and citizens. Dodson Associates also worked closely with the Upton Historical Commission to integrate the town's cultural resources into the 2007 study.

Copies of the draft of OSRP were provided to the Board of Selectmen, Planning Board, and Board of Health. The draft OSRP was available on the Town of Upton website and at the Town Clerk's Office and the Town Library. Information about the OSRP and requests for comments on the draft were published in the local paper, the Town Crier.

Public meeting to present the plan and solicit comments were held in December of 2009 and January of 2010. Review comments were received from the Central Massachusetts Regional Planning Commission, the Massachusetts Executive Office of Energy and Environmental Affairs, the Upton Planning Board, the Upton Board of Selectmen, and private citizens. Comments received are provided in Section 10.



Public participation during the Dodson Open Space Study

Section 3

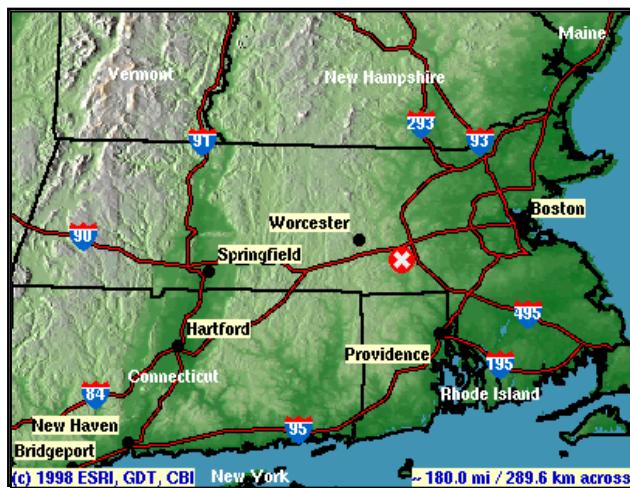
Community Setting

Section 3

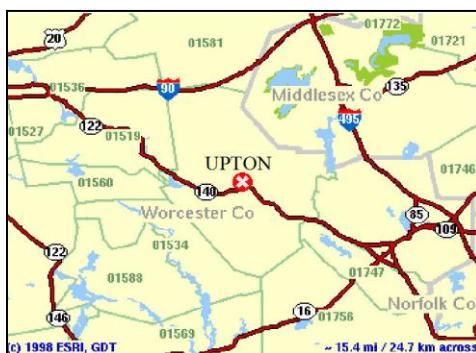
Community Setting

A. Regional Context

The town of Upton, incorporated in 1735, is located 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 located 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 25 percent of the land in Upton is protected in some way. This includes Upton State Forest and two large town-owned conservation areas. 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 is also in touch with its region through its participation in regional school systems. Within the town there are three schools that involve other towns along with Upton. Memorial School operates as a partial grade school for Mendon and Upton. Another grade school is in the town of Mendon. Nipmuc Regional Middle/High School provides education to Mendon and Upton for grades 7-12. 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 also a participant in a regional land trust, the Metacomet Land Trust. Other member towns include Franklin, Bellingham, Blackstone, Millville, Sutton, Norfolk and Mendon, Northbridge, and Milbury.

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, saw mill 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 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 41 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. History of Open Space Preservation

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 parcels by the town from 1985 to 2000 (Peppercorn Hill, Warren Brook, and the Former Stefans Farm) and 4), from 2001 to present efforts to the preserve additional

open space through purchase (Chamber Park and Sweetwilliam Farm) or the use of Open Space Development Bylaws (Glen Echo Open Space Subdivision).

Since completion of the last (draft) Open Space Plan in early 2003 the following open space and recreation related actions have been accomplished:

Bylaws and Regulations:

- Acceptance of Community Preservation Act
- Passage of Over 55 Bylaw (with open space preservation provisions)
- Passage of Special Permit Open Space Bylaw
- Passage of Demolition Delay Bylaw
- Passage of Wetland Protection Bylaw and Regulations
- Establishment of town Land Use Regulations

Planning:

- New Town Master Plan
- Recreation Master Plan
- Dodson Open Space Study
- Updated FEMA Flood Map

Land Protection:

- Purchase of Heritage Park with CPA Funds
- Preservation of Glen Echo subdivision open space (70 acres) and designation of Howarth and Howarth Glen Conservation Areas
- Donation of Snow Family Conservation Area
- Acceptance of deed to Goss Pond by Town
- Efforts to preserve Sweetwilliam Farm

Stewardship:

- Formation of Upton Land Stewardship Committee
- Former Stefans Farm Stewardship Plan
- Establishment of community garden, parking area, trail system at Former Stefans Farm. Construction of post and beam shed.
- Construction of 5 bridges/boardwalks at the Peppercorn Hill, Warren Brook, and Howarth Glen Conservation Areas (6 Boy Scout Eagle projects)
- Culvert replacement and installation of water bars at Peppercorn.Hill Conservation Area (old Taft Street)
- Preparation of trail maps for the Former Stefans Farm, and the Peppercorn and Warren Brook Conservation Areas

- Formulation of a plan for the Heritage Park (implementation underway by Historical Commission since 2008)
- Acquisition of ARC Map GIS software.
- Beaver management responsibilities given to Conservation Commission
- Hiring of a part time conservation agent (wetlands protection).
- Mowing of fields at Stefans (2006 and 2010) and Howarth Glen (2011)

Recreation:

- Donation of land for the Henderson/Rivers athletic field and construction of the field.
- Installation of irrigation system at the Henderson/Rivers athletic field
- Donation of land and approval of plans for the Trask athletic complex on Chestnut Street
- Partial design and permitting of the proposed Glen Echo soccer field off North Street (plans shelved by Recreation Commission)
- Ongoing plans to acquire land for a new athletic field complex off South Street.

Education and Outreach:

- Monthly series of open space walks (since 2007)
- Participation in the MA Bird Atlas Project by Open Space Committee members
- Open Space/Land Stewardship information on town website
- Formation of Friends of Upton State Forest

Appendix A provides a chronology of noteworthy events in Upton's history related to open space preservation and stewardship.

D. Population Characteristics

1. Population

Table 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 6,369 in 2000 and 7,366 in 2010. With a total landmass that consists of 21.81 square miles, Upton has a population density (based on the 2010 town census) of 338 people per square mile.

Table 1 shows that Upton has experienced substantial population growth over the past two decades, adding 2,483 new residents between 1980 and 2000. With an abundance of

developable land and quick access to Route 495, Upton is projected to add over 1,000 new residents in the next decade.

Table 2 displays change in age groups within the Town's population from 1990 to 2000. The number of very young children (under 5 years) grew substantially during the past decade, which means that most of these children are probably in the Upton school system today. The children of school age category (5-19) also showed a sizeable increase, as did the soon-to-be seniors age category (45-64).

Table 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	-	-
2020 Projection**	8,700	1,334	18.1

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

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

**Projections for 2020 provided by CMRPC Transportation Department.

Upton's senior population decreased slightly during the past decade, a trend that runs counter to the growth in the senior citizen population experienced by the rest of the region during the past decade. In responses to the 2003 Master Plan citizen survey, many seniors made note of the Town's high tax rate and the burden it placed on senior households. Upton hopes to counter this trend during the next few decades and has

adopted a Senior Housing Community provision within its Zoning Bylaw in an effort to create more senior-friendly housing in Town.

Table 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
Change	225	316	110	348	-54	20
% Change	67.6%	37%	5.5%	38.5%	16.4	8.3%

Source: 1990 and 2000 U.S. Census

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

Table 3
Housing Unit Growth in Upton

Year	# of Occupied Housing Units	Numerical Change	% Change
1980	1,369	----	-----
1990	1,810	441	32.2%
2000	2,351	541	29.9%
2006*	2,704	353	15.0%

Source: US Census. * = 2006 housing unit count provided by the Upton Town Clerk.

According to the US Census, there were a total of 2,042 occupied housing units in 2000. The rate of housing growth may be even higher as the 2000 US Census housing count is in dispute (the Town contends that as many as 300 housing units were not counted). If the percentage of owner-occupied housing for Upton is valid for 2000, then Upton has seen a substantial increase in this category, with owner-occupied housing rising from 73.9 percent of the total housing stock in 1990 to 82.4 percent of the total housing stock in 2000. Conversely, the percentage of rental units as a percentage of the total housing stock has dropped from 26.1 percent in 1990 to 17.6 percent in 2000. Numerically, Upton

has lost 114 rental units over the past decade, going from 473 rental units in 1990 to 359 rental units in 2000.

That the rate of housing growth is higher than the rate of population growth is not surprising when one considers the national trend towards smaller household sizes. Couples are having fewer children today and many households are of the single parent variety. Upton's US Census data confirms this trend. In 1960, the typical Upton household contained 3.38 people. By 1980, the persons per household figure had declined to 2.81 and by 2000, to 2.71 persons per household.

Another factor contributing to smaller household sizes is "the graying of America", that is, our nation's elderly population is expanding. In 1970, the median age of Upton's population was 30.2 years of age. By 1990, the median age had increased to 36 years of age and the recent year 2000 Census show the median age now stands at 37 years of age.

Table 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. Since the majority of suburban communities are largely made up of single-family homes, they tend to have a higher percentage of family households. The percentage of female-headed households held steady at 6.7 percent between 1990 and 2000. The number of senior households decreased during the past decade, dropping from 182 senior-headed households in 1990 to 156 senior-headed households in 2000.

Table 4
Upton Households by Type (2000)

Household Type	Number of Households	Percentage
Family Household	1,562	76.5%
Non-Family Household	480	23.5%

Source: 2000 US Census

2. Income

Upton's median household income is substantially higher than both the State and County median figures (Table 5). This is indicative of an affluent and prosperous community. Upton's median household income figure is much higher than the County median because the City of Worcester's median household income figure (\$35,623) is much lower than that of surrounding communities, thus bringing down the median household

income figure for all of Worcester County.

Upton's per capita income is again substantially higher than both the State and County per capita income. Again, as above, the City of Worcester's per capita income (\$18,164) is much lower than that of surrounding communities, thus bringing down the per capita income figure for all of Worcester County.

Table 5
Median Household and Per Capita Income (\$)

Geographic Location	Household	Per Capita
Upton	78,595	34,924
State	50,502	25,952
Worcester County	47,874	22,983

Source: 2000 US Census

3. Employment

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.

Statistics from the Division of Unemployment Assistance indicate that as of September, 2009 Upton had a labor force of 3,181 (Upton residents with jobs) and 306 Upton workers were unemployed. Upton's unemployment rate was 8.8 percent, slightly lower than the Massachusetts unemployment rate (9.1 percent).

E. Growth and Development Patterns

1. Patterns and Trends

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 6 outlines Upton's land use totals for the last three UMass-Amherst statewide mapping efforts and the 2005

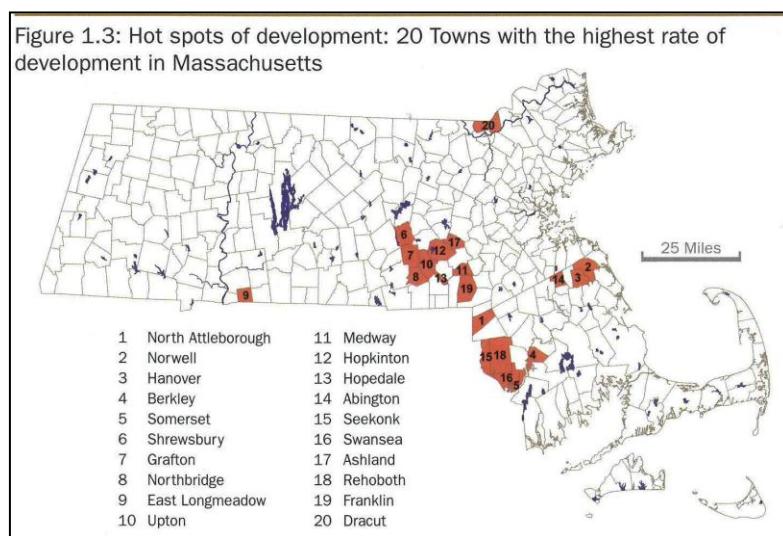
Massachusetts Audubon Losing Ground Study.

Table 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 Acres	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

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).

In the 4th 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”.

2. Infrastructure

2.1 Transportation Systems

Upton’s primary link to the interstate highway system is via Hopkinton Road/Hartford Avenue/High Street, which has become a major throughway 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. In 2011 funds are being sought to design improvements to the Hopkinton Road/Hartford Avenue/High Street corridor.

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.

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.

2.2 Public and Private Water Supply Systems

Existing System

Upton’s water distribution system consists of approximately 30 miles of water mains ranging from six to sixteen inches in diameter. Upton contains one wellfield and one additional well along with two water storage facilities. The Glen Avenue Wellfield, adjacent to the West River, contains twenty-four 2.5 inch tubular wells, separated into two groups of twelve wells each. Well depths range from 37 to 63 feet, with yields of 25 to 75 gallons per minute (gpm) per well in 2004. The pumping capacity of the wellfield is about 180 to 200 gpm. The town operates the wellfield 10 to 12 hours per day during non-peak usage periods and 24 hours per day during peak periods, with the wells redeveloped every three to five years to maintain yield. The permitted withdrawal rate for the wellfield is 0.21 million gallons per day (mgd) between 2004 and 2009.

The West River Street Well is 18 inches in diameter, 90 feet deep, and gravel packed. It is located about one mile north of where the West River and Center Brook meet. The

town calculated the safe yield as 0.85 mgd, based on a well depth of 99 feet. This well 300 gpm pump that is in use, on average, 14 to 16 hours per day, and 24 hours a day during peak demand periods.

There are two water tanks in Upton, one on Pearl Street and one on Pratt Hill. The Pearl Street Tank connects to the system via a 16-inch ductile iron main. This tank has a capacity of one million gallons (MG). With normal usage, the capacity is generally 65 to 75 percent full, which limits the storage capacity of the tank to approximately 0.75 MG. The Pratt Hill Tank, located in the northwest section of the system, is connected to the distribution system by a 12-inch main located off Warren Street. The tank has a capacity of 0.50 MG, but under normal operating conditions the available storage capacity is about 0.32 MG. Between both the Pearl Street and Pratt Hill Tanks, the total storage capacity is approximately 1.07 MG.

System Deficiencies & Needs

In October 1998, Tata and Howard, Inc. prepared a report for the Town of Upton that detailed an analysis of the town's water usage and distribution. The study examined the existing water demand and projected future needs as well as the ability of the water distribution infrastructure to meet these demands. Demand was projected out twenty years (2020) with the required storage capacity in the water system calculated using fire flow requirements from Insurance Service Office data.

Water Usage: Average day demand is calculated by dividing the total water supplied to a town by 365 days and is usually reported in millions of gallons per day (mgd). Analysis indicated that the average day demand for Upton ranged from 0.39 mgd in 1992 to 0.43 mgd in 1995. Tata & Howard estimated the average day demand to be 0.71 mgd in the year 2020.

Maximum day demand is the maximum amount of water supplied during a one-year period and is a critical factor to determine if the water supply system is adequate. Between 1992 and 1996, the maximum day demand ranged from 0.721 mgd to 0.816 mgd. Tata and Howard reported that the projected maximum day demand for the year 2020 is 1.48 mgd. Peak hour demand, much like maximum day demand, is the maximum amount of water supplied in a single hour during a one-year period and determines the adequacy of water storage facilities. Tata and Howard projected the 2020 peak hour demand at 2.41 mgd.

Based on this analysis, Tata and Howard calculated the adequacy of the water supply system through the year 2020. For a system to be adequate it must be able to meet the demands of peak consumption periods and provide flows at sufficient pressure for fire

protection. The study concluded that the town's distribution system can adequately meet the estimated fire flow requirements while maintaining minimum pressure requirements in a majority of the distribution system. The only areas where pressure was insufficient were at elevations above 475 feet.

Water Storage: Tata and Howard determined that in the year 2020, the town will need 0.61 MG of water storage. The combined usable storage between the Pearl Street and Pratt Hill tanks is 0.97 MG, which exceeds the minimum necessary requirement.

Water Supply: The average permitted withdrawal rate for the Glen Avenue Wellfield is 0.21 mgd, while the permitted withdrawal rate for the West River Street Well is 0.27 mgd through 2009. The current average day demand for Upton is 0.42 mgd. The town has adequate permitted withdrawal volume and pumping capacity to meet their current demands. By the year 2020, the maximum day demand is estimated at 1.48 mgd, which will create a deficit of 0.79 mgd in the town's supply.

Long Range Plans for Water Systems: Based on the analysis of Upton's water distribution system, Tata and Howard determined that new source development will be necessary, since by the year 2020 the current infrastructure and facilities will not be adequate to meet the town's needs. In 1999, the town initiated a study to identify potential public water supply source; this program is ongoing. A new well site on the West River off West River Road received preliminary approval from the MA DEP in October of 2009 and design work is underway. The approved maximum pumping rate for the new well is 0.5 MGD.



Water Quality and Wellhead Protection Zones: Aside from rare instances of bacterial contamination water quality is excellent. Wellhead protection zones in the vicinity of the West River wellfields is largely undeveloped. Land near the Glen Avenue wellfield is near more heavily developed. The town recently required nearby homes to upgrade subsurface disposal systems to enhance protection of the Glen Avenue wellfield.

2.3 Wastewater Systems

A 1996 study by Metcalf and Eddy determined that the average wastewater flows in Upton were approximately 200,000 gpd. 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.

Upton's wastewater collection infrastructure contains approximately 44,000 linear feet of gravity sewers, two pumping stations and force mains; it serves the West Upton and Upton Center areas of town.

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. Since 2006 the plant has met permit discharge standards for biological oxygen demand (BOD), total suspended solids (TSS), and ammonia nitrogen. The plant is unable to meet NPDES effluent discharge limitations for phosphorus, copper, lead, and zinc. With a current average annual flow of 0.16 mgd and a permitted capacity of 0.40 mgd, this facility is operating at 40 percent of its permitted capacity.

3. Long-Term Development Patterns

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.

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. Figures 3, 4, and 5 (from the EOEA study) and Table 7 provides a summary of Upton's buildout analysis.

Table 7
Upton Buildout Analysis

Remaining Acres of Vacant, Developable Land	7,112
Additional Residential Housing Units	2,713
Additional Population	6,701
Additional School-Age Children	1,547
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 indicates that Upton is roughly halfway towards full buildout based on the current standards of the Town's Zoning Bylaw. With a total land area of 13,760 acres, of which 6,648 acres are either developed, permanently protected or can't be built on because of environmental constraints, this leaves 7,112 acres of vacant developable land in Town (or 51.7 percent of the Town's land area). Looking towards the future, Upton will most likely retain its present land use pattern of suburban residential development with Route 140 supporting the majority of the Town's



commercial and industrial uses.
Subdivision

Glen Echo

Measures to Limit the Adverse Impact of Development

Upton supported the designation of much of the Warren Brook watershed as apart 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. 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, a Stormwater Management Bylaw, and a Right-To-Farm Bylaw.

Section 4

Environmental Inventory and Analysis

Section 4

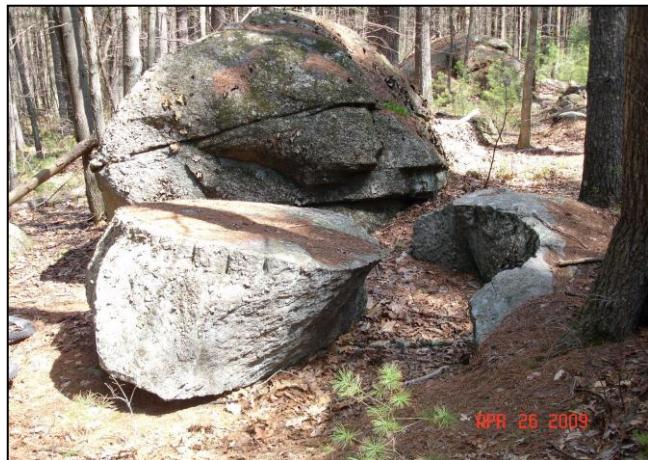
Environmental Inventory and Analysis

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 6). 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 8). Figure 7 shows the distribution and extent of each soil association. High quality agricultural soils are uncommon.

Table 8
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 – Scarborough – 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. Wauchusett, 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 Pratt Hill and Peppercorn Hill are conserved, land at or near the top of both hills is in private ownership and vulnerable to development. Construction of a proposed communications tower on Pratt Hill has been approved by Town boards and is under review by the Federal Communications Commission.

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, 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 subwatersheds, 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 8). 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 9). 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, 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 cold water streams. There are also numerous small tributary streams, many of which flow intermittently. Several of these smaller streams are classified as cold water streams by the MA DFW.

3. Aquifer Recharge Areas

Stratified glacial deposits along Warren Brook, Center Brook, and the West River are productive aquifers (Figure 10) and are critical to the Towns' water supply.

Upton's public water supply currently comes from the Glen Avenue and West River Road well fields near the West River. A third, also near the West River is under development. 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 of the two existing well fields is shown on Figure 10.

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. FEMA has recently updated flood zone maps in Upton.

5. Wetlands

Approximately 12.7 percent of the town of Upton is mapped as wetland by the Massachusetts DEP (Figure 9). 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.



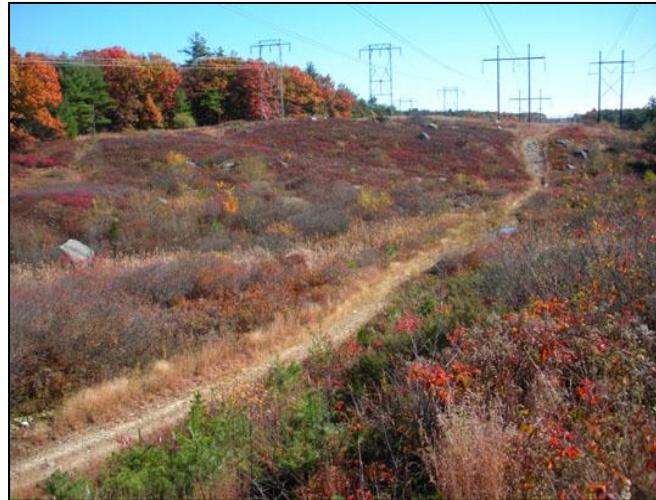
D. Vegetation

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 includes 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 six acre hayfield at Glen Echo which is approved for conversion to a soccer field.



Glen Echo Open Space hayfield off North Street.

2. Forest Land

Approximately 9,100 acres of forest land is present within Upton (Figure 11). 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 private owned land in the vicinity of Pratt Hill, the Warren Brook Conservation Area, Howarth Glen Conservation Area, Sweetwilliam Farm and private lands north off North Street

and west into Grafton, the Peppercorn Hill Conservation Area and adjacent private forest land, the West River floodplain corridor, the Former 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, and red cedar. American chestnut is common in the understory. Uncommon tree species include Eastern hemlock, white cedar, larch, and black spruce.

A map digitized by Harvard University shows forested areas in Upton in the 1830's (Figure 12). 1938 aerial photos and more recent aerials imagery provide additional information on the history 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 suggests 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 Stefan's Farm, the Peppercorn Hill Conservation Area, and the Warren Brook Conservation Area (Figure 12). 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 recently died and was cut down. 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.

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



Maple Avenue Cemetery

4. Agricultural Land

Although agriculture is no longer a major industry within the town, Upton does have some remaining crop land and pasture. Noteworthy examples include crop land on Christian Hill Road and Route 140 (Kelly Farm), hayfields on Williams Street, agricultural land at the former Amato Farm on East Street, and pasture, hayfields, and crop land at Sweewilliam Farm on North Street. Sweetwilliam Farm, the town's only community supported agriculture (CSA) farm, has been in operation for 4 years and has more than 100 subscribers in 2011.

In recent years a forestland has been converted to horse pasture, including an 8 acre field off North Street.



Corn field on Taft Street

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 is 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 is down 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.

The other rare plant species observed in Upton is 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 MNHESP.

7. Unique Plant Communities

Over the years, several types of acidic peatland natural communities have been identified in Upton (Figure 12; 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. 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 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 south of the MA Pike and west of North Street which needs further investigation. Black spruce is known to occur in the wetland.



Southborough Road acidic shrub fen.

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 (2005). 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 along the West River near the former town dump. *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 has been treated with herbicide to reduce risk of infestation to the Peppercorn graminoid fen, located ¼ mile away.



Phragmites along the West River downstream of Old Zachary.

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 the Chamber 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 carolininiana*): Abundant 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 x includes a summary of the MA breeding bird survey for habitat blocks in Upton. 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 birds species is wild turkey. The Massachusetts Division of Fisheries and Wildlife currently stock a small number of ring-necked pheasant in Upton for sportsmen. However, as the amount of suitable habitat (primarily agricultural/field areas) continues to decline in town, the stocking of pheasants is also likely to decrease.

Mammals: Approximately 40 species of mammals may inhabit the town of Upton. These include white-tailed deer, opossum, raccoon, fox (gray and red), coyote, rabbit, beaver, squirrels, mice, bats, and various mustelids (weasels, fisher, mink, otter). Moose and bear likely occur in the town as occasional transients. Beaver are becoming common and sometime threaten roads, septic systems, other development, and rare species habitat. Beaver ponds, however, add to habitat diversity and beaver activity should be tolerated and encouraged wherever possible. 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.



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 trout stream and has one of the finest native brook trout populations in the eastern part of the state. 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 butterflies fauna is best known because the July butterfly censuses have been conducted in Upton for several years. A list of butterfly species known from town and from the Former Stefans Farm is provided in Appendix B. The fields at the Former Stefans Farm provide habitat for a population of the colorful Baltimore checkerspot butterfly (right).



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 may presently 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. Vernal Pools

The town has 12 vernal pools certified by the Massachusetts Natural Heritage Program and hundreds of other potential vernal pools (Figure 11). These areas provide critical habitat for amphibians, including several rare salamander species.

4. 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 Warren Brook at the Former Stefans Farm noted in 2009). There are several reports of the Eastern box turtle since 2000, including sightings near Warren Street, Mechanic Street, North Street, South Street, and at the Former Stefans Farm (photograph). Wood turtle and Eastern Box turtle are listed as species of Special Concern by the MNHESP.



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*) [right] 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 MNHESP and was last seen at Fowler Street in 2010. Upland habitat near this pool is at risk of being developed.



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

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 oak hairstreak (*Satyrium favonius*), a butterfly, and the triangle floater (*Alasmidonta undulata*), a freshwater mussel were both recently observed in Upton. The hairstreak was observed near Mechanic Street in 2000. The triangle floater occurs in Center Brook and the West River. Both are Special Concern species.

Two 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 Acre 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.

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 BioMap 2 habitat.

Approximately 25 percent of Upton is mapped as BioMap2 habitat (Figure 13). 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.

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

6. 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 map 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 takes into account 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 than 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 (Appendix x).

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. It is currently Upton's only community supported agriculture farm and the only farm in Upton striving to produce organic produce. The town voted to preserve the farm in a January, 2011 town meeting.



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. 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.

Grafton and Upton Railroad:
Long in disrepair the railroad is being refurbished for commercial use by a new owner. The railroad passes through a largely undeveloped forested corridor from Hopedale to Grafton and could someday be a spectacular rail trail. In Upton, it provides hikers a fine view of Brooks Pond. Rock cuts and rubble piles are of geological interest.



Former Amato Farm: The Amato farm included views of agricultural fields along both sides of East Street. Seventy eight acres to the east have been sold to a developer. As currently approved, the Rockwood Meadows Over 55 subdivision would concentrate development near the back of the fields, thereby limiting impacts to the view from the road. Fields on the west side of the road are still owned by the Amato family.

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. Gabriels 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 and nice view from the Grafton and Upton Railroad.

2. Scenic Roads

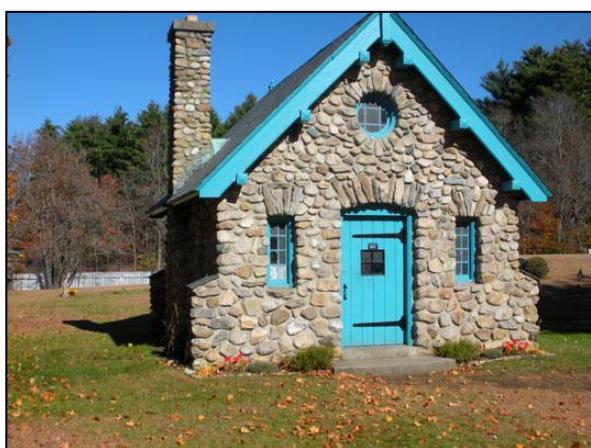
North Street: At the town border with Westborough (near the Mass. Pike), North Street travels southward for 2 1/2 miles and ends at Westborough Road. The curvy road passes by stonewalls, historic homes (including Sweetwilliam Farm), and alternating forest and meadow that characterizes rural Upton. The 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 copula provides additional beauty.

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, a trail system and a community garden are under development.



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, Sweetwilliam Farm, 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.



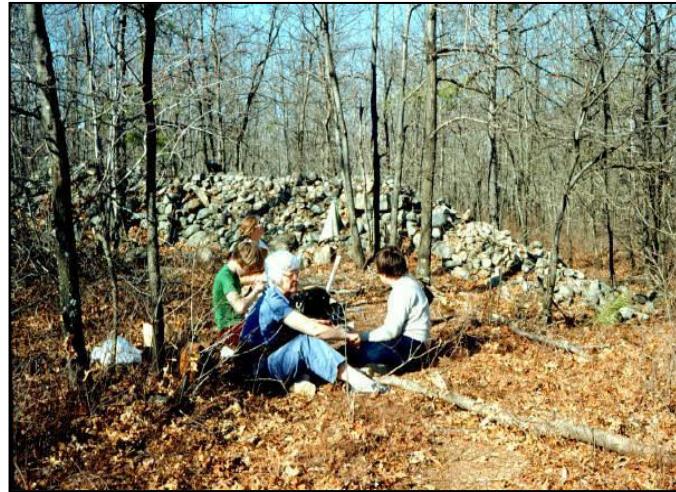
Heritage Park (Elm Street): This seven acre park on Mill Pond which houses the Upton Chamber, a remarkable bee-hive shaped stone chamber of unknown origin. Purchase of the park was funded with Community Preservation Act Funds. The park is being developed by the Historic Commission and features walking trails, meadows, and a brook. Funds were appropriated in 2011 to conduct and archaeological study and repair the entrance to the chamber.

Goss Pond: A unique kettle hole pond with fringing wetland bog community.

Southborough Road Bog: A 30 acre open emergent/shrub wetland with scattered stunted trees near the center.

Lake Wildwood: Thirty-eight acre elongate lake on Miscoe Brook with about 3 miles of largely wooded shoreline and an island. A small town owned park provides access for canoes and kayaks.

Pratt Hill: The site contains a Native American ceremonial stone landscape consisting of stone mounds and other stone features. The stone features are on both private land and Upton State Forest. The largest mound (photograph) was recently destroyed. 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.



Kazinski's Farm (Williams Street): The farm includes the barns from a once large dairy complex and some fields. Pasture on the west side of Williams Street has been developed.

Glen Echo Open Space: This area includes a 6 acre hayfield. Although the land permanently protected, the hayfield has been considered for development as an athletic field.

Old Dam on Warren Brook: Site of old mill pond south of Fowler Street. Deep pools along trail to dam hold native brook trout.

West River and Old Zachary: Upton 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.

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.

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 stone 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 passed away 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.

Stone Cairn and Mill Site on 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. Triphammer Road also features a mill site (the Cutlery Factory) where the inventor Eli Whitney may once have worked and a cut stone quarry.

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.

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 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. Adjacent upland which provides critical foraging and overwinter habitat for salamanders is privately owned and at risk of development. Volunteers have monitored and assisted salamander breeding migrations to the pool most years since 1997.



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 Recreation Commission.

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 is often mentioned as an ideal location for much needed recreational fields. The town is currently discussing acquisition of the property with the owner.



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 mica quarry located off North Street. 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 Browne Blasting quarry.

West River Road Cave: A natural cave, known as Rattle Snake Cave, is on privately owned land just off Puddon Street. The cave is described in a 1890's Milford Daily News article.

Devils Footprints. On the southern slope of Pratt Hill and on the south side of Upper Mendon Road is a rock formation called Devil's Footprints. They are impressions in solid rock, over two miles apart, both about five feet long and two feet wide. Both prints point southward. There is a photograph of one of the footprints in "Upton's Heritage".

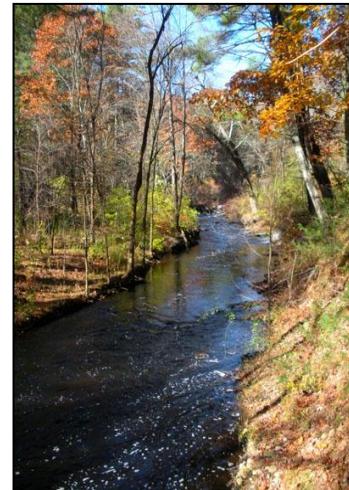
4. Unique Environments

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 viewscapes 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 within the 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 a recent 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 cold water 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. Considerable future development in the Warren Brook watershed is likely, placing the brook at even greater risk. Cold water 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 cold water habitat.

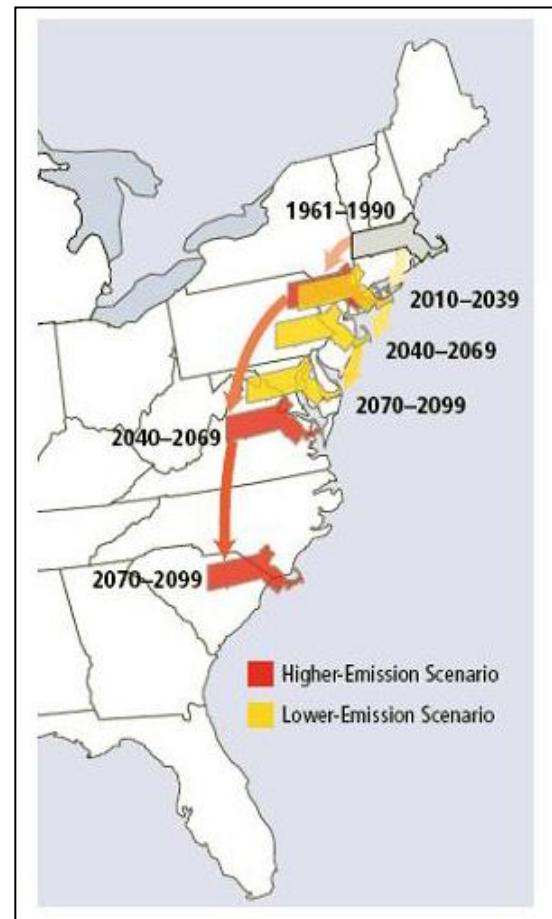
3. Eutrophication of Town Ponds

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. Cold water 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.



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, 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 may eventually reach Massachusetts and 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 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 organization such as the Friends of Upton State Forest, Bay State Trail Riders, MA Audubon, Blackstone River Watershed



Association, youth organizations such as Boy Scouts and 4-H, and state agencies such as DCR and Department of Fisheries and Wildlife.

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 been working to close the landfill for several years. Closure activities include 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 use. The town likely has

numerous small old farm dumps. There is possibly an old municipal dump on the Town's Warren Street property.

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 Bylaw as needed. The town has a draft stormwater bylaw but it has not been brought before town meeting for approval.

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.

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 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

Conservation and Recreational Lands Inventory

A. Introduction

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

Table 9 provides a list of all publicly owned land in Upton. Not all of these parcels are of conservation interest. Table 10 provides a more focused inventory of parcels of conservation interest. This inventory 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. An accompanying narrative is provided below for many parcels. All publicly owned conservation land and recreation facilities are included in this matrix as well as protected privately owned parcels. Parcels enrolled in the Chapter 61 program are listed in Table 12. Publicly owned recreation facilities are evaluated for accessibility to people with disabilities in Appendix G.

Table 9: Open Space and Public Land Inventory (page 1 of 3)

Map/lot	Location/Street	Book	Page	Zoning	Land Area	Owner	Notes
001-0-001-E	FAY MOUNTAIN RD	37861	335	(5) - AR-80000	20,473 SF	GRAFTON TOWN OF	
001-0-006.01-E	MASSACHUSETTS TPK			(5) - AR-80000	52.00 AC	MASSACHUSETTS DOT	
004-0-012-E	FAY MOUNTAIN RD	10385	185	(5) - AR-80000	22.00 AC	UPTON TOWN OF	ABUTS WARREN BROOK CONSERVATION AREA
005-0-020.63-E	NORTH ST	40532	220	(5) - AR-80000	37,897 SF	UPTON TOWN OF	
005-0-036-R	WESTBORO RD	40044	102	(5) - AR-80000	23,522 SF	UPTON TOWN OF	
005-0-020.66-E	HOWARTH DR	40532	220	(5) - AR-80000	37,908 SF	UPTON TOWN OF	HOWARTH CONSERVATION AREA
005-0-020.67-E	FRANCIS DR	40532	220	(5) - AR-80000	25.69 AC	UPTON TOWN OF	HOWARTH CONSERVATION AREA
005-0-005-E	NORTH ST			(5) - AR-80000	20.00 AC	UPTON TOWN OF	ABUTS SWEETWILLIAM FARM
005-0-020.69-E	FRANCIS DR	40532	220	(5) - AR-80000	2.35 AC	UPTON TOWN OF	HOWARTH CONSERVATION AREA
005-0-020.68-E	FRANCIS DR	40532	220	(5) - AR-80000	5.18 AC	UPTON TOWN OF	HOWARTH CONSERVATION AREA
005-0-020.65-E	HOWARTH DR	40532	220	(5) - AR-80000	36.57 AC	UPTON TOWN OF	HOWARTH GLEN CONSERVATION AREA
005-0-020.70-E	NORTH ST				2.55 AC	UPTON TOWN OF	PUMPING STATION
007-0-027-E	OLD GRAFTON RD	17634	246	(5) - AR-80000	202.92 AC	UPTON TOWN OF	WARREN BROOK CONSERVATION AREA
007-0-044-E	GRAFTON RD	40483	131	(5) - AR-80000	15,246 SF	UPTON TOWN OF	WARREN BROOK CONSERVATION AREA
008-0-X002-E	WESTBORO RD	4887	519	(5) - AR-80000	10.50 AC	MASSACHUSETTS COMMONWEALTH OF	DEPT OF NATURAL RESOURCES
008-0-X003-E	WESTBORO RD	4846	72	(5) - AR-80000	19.00 AC	MASSACHUSETTS COMMONWEALTH OF	DEPT OF NATURAL RESOURCES
008-0-X004-E	WESTBORO RD	5674	217	(5) - AR-80000	27.00 AC	MASSACHUSETTS COMMONWEALTH OF	
008-0-050.07-E	BRADISH FARM RD			(5) - AR-80000	1.40 AC	UPTON TOWN OF	
008-0-X001-E	WESTBORO RD	4887	517	(5) - AR-80000	10.50 AC	MASSACHUSETTS COMMONWEALTH OF	DEPT OF NATURAL RESOURCES
008-0-032-E	WESTBORO RD	3511	398	(5) - AR-80000	43,560 SF	UPTON TOWN OF	
008-0-015-E	NORTH ST	6121	297	(5) - AR-80000	1.90 AC	UPTON TOWN OF	
008-0-004-E	NORTH ST			(5) - AR-80000	19.10 AC	MASSACHUSETTS COMMONWEALTH OF	STATE FOREST
010-0-002-E	MECHANIC ST	28697	97	(5) - AR-80000	113.58 AC	UPTON TOWN OF	FORMER STEFANS FARM
010-0-002.03-E	ORCHARD ST			(5) - AR-80000	1.86 AC	UPTON TOWN OF	
010-0-002.02-E	ORCHARD ST			(5) - AR-80000	1.89 AC	UPTON TOWN OF	
010-0-X001-E	MECHANIC ST	6101	27	(5) - AR-80000	3.77 AC	UPTON TOWN OF	
013-0-X001-E	CROCKETT RD	8841	70	(5) - AR-80000	50.00 AC	UPTON TOWN OF	PEPEPERCORN HILL CONSERVATION AREA
013-0-023-E	CROCKETT RD	8841	70	(5) - AR-80000	18,295 SF	UPTON TOWN OF	
013-0-X002-E	PARCEL 5	8841	70	(5) - AR-80000	46.00 AC	UPTON TOWN OF	
013-0-X004-E	NORTH PND	8841	70		9.15 AC	UPTON TOWN OF	
013-0-X003-E	HOPKINTON LINE	8841	70		14.46 AC	UPTON TOWN OF	
014-0-028.04-E	OLD GRAFTON RD	20557	357	(3) - SRC-40000	1.50 AC	TOUCHSTONE COMMUNITY SCHOOL	
014-0-027-E	WEST MAIN ST	14848	258	(3) - SRC-40000	1.36 AC	TOUCHSTONE COMMUNITY SCHOOL	
015-0-105-E	NORTH MAIN ST			(1) - SRA-15000	2.05 AC	UPTON TOWN OF	LAKEVIEW CEMETERY
015-0-089-E	NORTH MAIN ST			(1) - SRA-15000	9.79 AC	UPTON TOWN OF	LAKEVIEW CEMETERY
015-0-032-E	WARREN ST	2632	177	(4) - SRD-60000	6.00 AC	MASSACHUSETTS COMMONWEALTH OF	
016-0-039-E	KIWANIS BEACH RD	5221	416	(5) - AR-80000	27.53 AC	UPTON TOWN OF	
016-0-008-E	HOPKINTON RD	5255	113	(5) - AR-80000	10.30 AC	UPTON TOWN OF	PRATT POND CONSERVATION AREA
016-0-005-E	HOPKINTON RD	17085	171	(5) - AR-80000	7.00 AC	IMMANUEL CHAPEL INC	
017-0-027-E	EAST ST	8841	70	(5) - AR-80000	11.50 AC	UPTON TOWN OF	
017-0-X002-E	TAFT ST	8841	66	(5) - AR-80000	70.00 AC	UPTON TOWN OF	PEPEPERCORN HILL CONSERVATION AREA
017-0-053-E	TAFT ST	35143	32	(5) - AR-80000	8.60 AC	UPTON TOWN OF	SNOW FAMILY CONSERVATION AREA
017-0-030-E	NORTH PND	8841	70	(5) - AR-80000	11.19 AC	UPTON TOWN OF	
017-0-051-E	CROCKETT RD	8841	70	(5) - AR-80000	30.00 AC	UPTON TOWN OF	NORTH POND
017-0-X001-E	CROCKETT RD			(5) - AR-80000	3,920 SF	UPTON TOWN OF	

Table 9: Open Space and Public Land Inventory (page 2 of 3)

Map/lot	Location/Street	Book	Page	Zoning	Land Area	Owner	Notes
017-0-X003-E	TAFT ST	8841	70	(5) - AR-80000	2,178 SF	UPTON TOWN OF	
018-0-001.03-E	CROCKETT RD	41695	131	(5) - AR-80000	2.15 AC	HOPKINTON TOWN OF	
019-0-101-E	WILLIAMS ST	3943	588	(6) - GB	4.30 AC	UPTON TOWN OF	
019-0-044-E	GLEN AV			(5) - AR-80000	11.00 AC	UPTON TOWN OF	
019-0-092.33-E	DAIRY DR	39350	281	(3) - SRC-40000	4.99 AC	TOWN OF UPTON	
019-0-081-E	OFF ROCKDALE HILL CIR			(3) - SRC-40000	3.25 AC	UPTON TOWN OF	
019-0-070-E	MAIN/WILLIAMS STS			(6) - GB	43,560 SF	UPTON TOWN OF	KNOWLTON RESERVOIR
019-0-115-E	LAKE WILDWOOD	5024	112	(6) - GB	6,098 SF	UPTON TOWN OF	
019-0-114-E	LAKE WILDWOOD	5082	438	(6) - GB	20,473 SF	UPTON TOWN OF	
019-0-087-E	WILLIAMS ST	3424	133	(3) - SRC-40000	43,560 SF	UPTON TOWN OF	
019-0-111-E	WEST MAIN ST	3928	465	(6) - GB	4.28 AC	UPTON TOWN OF	
021-0-028-E	ELM ST	40195	291	(2) - SRB-25000	1.25 AC	UPTON TOWN OF	
021-0-020-E	MILFORD ST	40195	291	(2) - SRB-25000	6.14 AC	UPTON TOWN OF	
021-0-051-E	PEARL ST	5971	91	(5) - AR-80000	1.25 AC	UPTON TOWN OF	
021-0-016-E	MILFORD ST	3182	331	(6) - GB	12.50 AC	V F W POST	
023-0-001-E	GLEN AV	11825	80	(5) - AR-80000	33.19 AC	UPTON TOWN OF	
024-0-019.22-E	HENRY'S PTH	17511	111	(5) - AR-80000	12.71 AC	MENDON-UPTON REGIONAL SCHOOL DIST	
024-0-021.01-E	PLEASANT ST	14667	269	(8) - MGF	10.93 AC	DEPARTMENT OF PUBLIC WORKS	TOWN OF UPTON
024-0-002.04-E	GLEN AV	17005	191	(3) - SRC-40000	1.14 AC	EVERGREEN CENTER INC	
024-0-016-E	MAPLE AVE			(5) - AR-80000	3.37 AC	UPTON TOWN OF	
024-0-021-E	PLEASANT ST	5674	220		8.70 AC	MENDON-UPTON REGIONAL SCHOOL DEPT	
024-0-020-E	PLEASANT ST	5674	220	(5) - AR-80000	28.41 AC	MENDON-UPTON REGIONAL SCHOOL DEPT	
024-0-091-E	WEST RIVER ST	5619	5	(5) - AR-80000	28.99 AC	UPTON TOWN OF	
024-0-028-E	WEST RIVER ST	4049	451	(5) - AR-80000	22,651 SF	UNITED STATES OF AMERICA	
024-0-027-E	WEST RIVER ST	4049	234	(5) - AR-80000	1.10 AC	UNITED STATES OF AMERICA	
024-0-017-E	MAPLE AVE	2630	571	(7) - C&I	17.20 AC	UPTON TOWN OF	MAPLEWOOD CEMETERY ASSOCIATION
024-0-018-E	PLEASANT ST	4546	245	(2) - SRB-25000	28.89 AC	BLACKSTONE VALLEY REGIONAL	VOCATIONAL TECHNICAL HIGH SCHO
025-0-022-E	OLD MILFORD LN			(2) - SRB-25000	2.45 AC	UPTON TOWN OF	
025-0-034-E	WALKER DR	122693		(7) - C&I	43,560 SF	UPTON TOWN OF	CONSERVATION AREA
025-0-062.05-E	MILFORD ST	11982	180	(7) - C&I	2.33 AC	VALLEY ADULT COUNSELING SERV	
025-0-001.01-E	MENDON ST	40390	115	(5) - AR-80000	42.57 AC	ROMAN CATHOLIC BISHOP OF WORC.	ST GARBIEL THE ARCHANGEL CH
026-0-012-E	MILFORD ST			(5) - AR-80000	23.00 AC	MILFORD TOWN OF	
028-0-015-E	WEST RIVER ST			(5) - AR-80000	6.75 AC	UPTON TOWN OF	
029-0-068.01-E	CHESTNUT ST	26952	330	(7) - C&I	3.12 AC	BLACKSTONE VALLEY VOCATIONAL	REGIONAL SCHOOL DISTRICT
029-0-068.02-E	CHESTNUT ST	26952	330	(7) - C&I	13.75 AC	BLACKSTONE VALLEY VOCATIONAL	REGIONAL SCHOOL DISTRICT
029-0-071-E	MENDON ST	38159	108	(7) - C&I	5.58 AC	BLACKSTONE VALLEY VOCATIONAL	REGIONAL SCHOOL DISTRICT
029-0-068-E	CHESTNUT ST	26952	330	(7) - C&I	6.31 AC	BLACKSTONE VALLEY VOCATIONAL	REGIONAL SCHOOL DISTRICT
029-0-064-E	CHESTNUT ST	7011	371	(5) - AR-80000	0 SF	UPTON HISTORICAL SOCIETY	
031-0-019.04-E	WEST RIVER ST	44317	92	(5) - AR-80000	17.22 AC	UPTON TOWN OF	
031-0-025-E	GREEN LN	43953	276	(5) - AR-80000	22.77 AC	UPTON TOWN OF	
032E-0-011-E	SOUTH STREET/TAFT PND	3828	279	(5) - AR-80000	5,227 SF	UPTON TOWN OF	
032E-0-052-E	SHORE DRIVE/TAFT PND				0 SF	UPTON TOWN OF	
032E-0-010-E	SOUTH STREET/TAFT PND			(5) - AR-80000	3,049 SF	UPTON TOWN OF	
032E-0-001-E	STURDLEY RD/TAFT PND			(5) - AR-80000	12,197 SF	UPTON TOWN OF	
032E-0-109-E	SHORE DR	8563	263	(5) - AR-80000	20,038 SF	UPTON TOWN OF	
032E-0-102-E	SHORE DR	4732	122	(5) - AR-80000	9,583 SF	UPTON TOWN OF	

Note: There is a discrepancy between town tax maps and Corps of Engineers real estate maps. According to the Corps maps, the Federal Government owns approximately 64 acres of land in Upton.

Table 10: Protected Open Space Inventory

Map/lot	Book	Page	Zone	Area	Owner	Location or Property	Protection	Manager	Current Use	Condition	Features	Public Access	Other
Public Land													
004-0-012-E	10385	185	AR 2 ac.	22.00 AC	Upton	Fay Mountain Road		Town	Passive	Wooded	Trails	Yes	Abuts WBWCA
005-0-020.63-E	40532	220	AR 2 ac.	37,897 SF	Upton	R & N Howarth CA	Permanent	ConCom	Passive	Wooded		Yes	
005-0-020.66-E	40532	220	AR 2 ac.	37,908 SF	Upton	R & N Howarth CA	Permanent	ConCom	Passive	Wooded		Yes	
005-0-020.67-E	40532	220	AR 2 ac.	25.69 AC	Upton	R & N Howarth CA	Permanent	ConCom	Passive	Wooded	Trails	Yes	
005-0-005-E			AR 2 ac.	20.00 AC	Upton	North Street		Town	Passive	Wooded		Yes	
005-0-020.69-E	40532	220	AR 2 ac.	2.35 AC	Upton	Francis Drive	Permanent	Town DPW	Detention Basin		Parking	Yes	Access to HGCA
005-0-020.68-E	40532	220	AR 2 ac.	5.18 AC	Upton	R & N Howarth CA	Permanent	ConCom	Passive	Wooded	Trails	Yes	
005-0-020.65-E	40532	220	AR 2 ac.	36.57 AC	Upton	Howarth Glen CA/Glen Echo Field	Permanent	ConCom/Rec Com	Passive	Wooded	Trails	Yes	
005-0-020.70-E			AR 2 ac.	2.55 AC	Upton	North Street							
005-			AR 2 ac.	63 AC	Upton	Whitney CA	Permanent	ConCom	Passive	Wooded	Trails	Yes	LAND
007-0-027-E	17634	246	AR 2 ac.	202.92 AC	Upton	Warren Brook Watershed CA	Permanent	ConCom	Passive	Wooded		Yes	Self Help
007-0-044-E	40483	131	AR 2 ac.	15,246 SF	Upton	Warren Brook Watershed CA	Permanent	ConCom	Passive	Wooded		Yes	Isolated Parcel
008-0-X002-E	4887	519	AR 2 ac.	10.50 AC	Commonwealth	FUSF	Permanent	MA DCR	Passive	Wooded		Yes	
008-0-X003-E	4846	72	AR 2 ac.	19.00 AC	Commonwealth	FUSF	Permanent	MA DCR	Passive	Wooded		Yes	
008-0-X004-E	5674	217	AR 2 ac.	27.00 AC	Commonwealth	FUSF	Permanent	MA DCR	Passive	Wooded		Yes	
008-0-X001-E	4887	517	AR 2 ac.	10.50 AC	Commonwealth	FUSF	Permanent	MA DCR	Passive	Wooded		Yes	
008-0-032-E	3511	398	AR 2 ac.	43,560 SF	Upton	Westboro Rd	Permanent	Town	Cemetery	Turf	Cart path	Yes	
010-0-002-E	28697	97	AR 2 ac.	113.58 AC	Upton	Former Stefan's Farm		LSC	Passive, CG	Wooded, Pasture	Trails, Parking	Yes	
010-0-X001-E	6101	27	AR 2 ac.	3.77 AC	Upton	Mechanic St							
013-0-X001-E	8841	70	AR 2 ac.	50.00 AC	Upton	Peppercorn Hill CA	Permanent	ConCom	Passive	Wooded	Trails	Yes	Self Help
013-0-023-E	8841	70	AR 2 ac.	18,295 SF	Upton	Peppercorn Hill CA	Permanent	ConCom	Passive	Wooded	Trails	Yes	Self Help
013-0-X002-E	8841	70	AR 2 ac.	46.00 AC	Upton	Peppercorn Hill CA	Permanent	ConCom	Passive	Wooded	Trails	Yes	Self Help
013-0-X004-E	8841	70		9.15 AC	Upton	Peppercorn Hill CA	Permanent	ConCom	Passive	Wooded	Trails	Yes	Self Help
013-0-X003-E	8841	70		14.46 AC	Upton	Peppercorn Hill CA	Permanent	ConCom	Passive	Wooded	Trails	Yes	Self Help
015-0-105-E			SRA-15000	2.05 AC	Upton	North Main St.	Permanent	Town	Cemetery	Turf	Cart path	Yes	
015-0-089-E			SRA-15000	9.79 AC	Upton	North Main St.	Permanent	Town	Cemetery	Turf	Cart path	Yes	
015-0-032-E	2632	177	SRD-60000	6.00 AC	Commonwealth	Warren St.							
016-0-039-E	5221	416	AR 2 ac.	27.53 AC	Upton	Kiwanis Beach Rec Area	Permanent	Rec Com	Active	Developed	Beach, Rec Fields	Yes	
016-0-008-E	5255	113	AR 2 ac.	10.30 AC	Upton	Pratt Pond CA	Permanent	ConCom	Passive	Wooded	Trails	Yes	

Table 10: Protected Open Space Inventory (continued)

Map/lot	Book	Page	Zone	Area	Owner	Location or Property	Protection	Manager	Current Use	Condition	Features	Public Access	Other
Public Land													
017-0-027-E	8841	70	AR 2 ac.	11.50 AC	Upton	Peppercorn Hill CA	Permanent	ConCom	Passive	Wooded	Trails	Yes	Self Help
017-0-X002-E	8841	66	AR 2 ac.	70.00 AC	Upton	Peppercorn Hill CA	Permanent	ConCom	Passive	Wooded	Trails	Yes	Self Help
017-0-053-E	35143	32	AR 2 ac.	8.60 AC	Upton	Snow Family CA	Permanent	ConCom	Passive	Wooded	Trails	Yes	
017-0-030-E	8841	70	AR 2 ac.	11.19 AC	Upton	Peppercorn Hill CA	Permanent	ConCom	Passive	Wooded	Trails	Yes	Self Help
017-0-051-E	8841	70	AR 2 ac.	30.00 AC	Upton	Peppercorn Hill CA	Permanent	ConCom	Passive	Wooded	Trails	Yes	Self Help
017-0-X001-E			AR 2 ac.	3,920 SF	Upton	Peppercorn Hill CA	Permanent	ConCom	Passive	Wooded	Trails	Yes	Self Help
017-0-X003-E	8841	70	AR 2 ac.	2,178 SF	Upton	Peppercorn Hill CA	Permanent	ConCom	Passive	Wooded	Trails	Yes	Self Help
018-0-001.03-E	41695	131	AR 2 ac.	2.15 AC	Hopkinton	Crockett Rd.							
019-0-101-E	3943	588	(6) - GB	4.30 AC	Upton	Lake Wildwood	Permanent	Town	Passive	Wooded	Parking, Water access	Yes	
019-0-044-E			AR 2 ac.	11.00 AC	Upton	Gen Ave Wellfield	Permanent	Town-DPW	Passive	Wooded		Restricted	
019-0-070-E			(6) - GB	43,560 SF	Upton	Main Street		Town			Old dam		
019-0-115-E	5024	112	(6) - GB	6,098 SF	Upton	Lake Wildwood	Permanent	Town	Passive	Wooded			
019-0-114-E	5082	438	(6) - GB	20,473 SF	Upton	Lake Wildwood	Permanent	Town	Passive	Wooded		Yes	
019-0-081-E				3.25 AC	Upton	Old Knowlton Res.		Town	Passive	Wooded	Old reservoir	Yes	
019-0-087-E	3424	133	SRC-40000	43,560 SF	Upton	Wiliams Street		Town	Passive	Wooded			abuts USF
021-0-028-E	40195	291	SRB-25000	2.28 AC	Upton	Heritage Park	Permanent	Hist. Comm.	Passive	Wooded	Trails, Stream	Yes	Upton Chamber
021-0-020-E	40195	291	SRB-25000	5.69 AC	Upton	Heritage Park	Permanent	Hist. Comm.	Passive	Wooded	Trails, Stream, Pond	Yes	Millpond shoreline
021-0-016-E	3182	331	GB	12.50 AC	V F W POST	Milford St.		VFW	Active	Developed	Parking, Rec Fields	Yes	
023-0-001-E	11825	80	AR 2 ac.	33.19 AC	Upton	Old Zac	Permanent	Town	Passive	Wooded, water	Pond, stream	Yes	no trails
024-0-019.22-E	17511	111	AR 2 ac.	12.71 AC	MURSD	Henry's Path	Permanent	MURSD	School	Developed, Wooded	Rec Fields	Yes	
024-0-016-E			AR 2 ac.	3.37 AC	Upton	Maple Ave		Town	Passive	Wooded		Yes	
024-0-021-E	5674	220		8.70 AC	MURSD	Pleasant St.	Permanent	MURSD	School	Developed, Wooded	Rec Fields	Yes	
024-0-020-E	5674	220	AR 2 ac.	28.41 AC	MURSD	Pleasant St.	Permanent	MURSD	School	Developed, Wooded	Rec Fields	Yes	
024-0-091-E	5619	5	AR 2 ac.	28.99 AC	Upton	West River Wellfield	Permanent	Town-DPW	Passive	Wooded, riparian		Restricted	
024-0-028-E	4049	451	AR 2 ac.	22,651 SF	ACOE	West River St.	Permanent	ACOE	Passive	Wooded			
024-0-027-E	4049	234	AR 2 ac.	1.10 AC	ACOE	West River St.	Permanent	ACOE	Passive	Wooded			
024-0-017-E	2630	571	C&I	17.20 AC	Upton	Maplewood Cemetary	Permanent	Town	Cemetary	Turf	Cart path	Yes	
024-0-018-E	4546	245	SRB-25000	28.89 AC	BVRVHS	BVRVHS	Permanent	BVRVHS	School	Developed	Rec fields, track	Yes	
025-0-022-E			SRB-25000	2.45 AC	Upton	Old First Cemetary	Permanent	Town	Cemetary	Turf		Yes	
025-0-034-E	122693		C&I	43,560 SF	Upton	Walker Drive	Permanent?	ConCom					
025-0-001.01-E	40390	115	AR 2 ac.	42.57 AC	RC Bishop of Worcester	Mendon Street		Local Parish	Church	Developed	Church		ca. 7 acres undeveloped
026-0-012-E			AR 2 ac.	23.00 AC	Milford	Milford St.		Town of Milford	Passive	Wooded			
028-0-015-E			AR 2 ac.	6.75 AC	Upton	West River St.							
029-0-068.01-E	26952	330	C&I	3.12 AC	BVRTHS	Chestnut St.	Permanent?	BVRHS	Passive	Wooded	Rec field planned	Yes	plans for field approved
029-0-068.02-E	26952	330	C&I	13.75 AC	BVRTHS	Chestnut St.	Permanent?	BVRHS	Passive	Wooded	Rec field planned	Yes	
029-0-071-E	38159	108	C&I	5.58 AC	BVRTHS	Chestnut St.	Permanent?	BVRHS	Passive	Wooded	Rec field planned	Yes	
029-0-068-E	26952	330	C&I	6.31 AC	BVRTHS	Chestnut St.	Permanent?	BVRHS	Passive	Wooded	Rec field planned	Yes	
031-0-019.04-E	44317	92	AR 2 ac.	17.22 AC	Upton	Henderson Rivers Field	Permanent	Rec Com	Active	Developed, turf	Rec field	Yes	
031-0-025-E	43953	276	AR 2 ac.	22.77 AC	Upton	Goss Pond	Permanent	LSC	Passive	Wooded, pond	trail planned	Yes	donated

Table 10: Protected Open Space Inventory (continued)

Map/lot	Book	Page	Zone	Area	Owner	Location or Property	Protection	Manager	Current Use	Condition	Features	Public Access	Other
Public Land													
032E-0-011-E	3828	279	AR 2 ac.	5,227 SF	Upton	Taft Pond Dam	Permanent	Town DPW	Dam			Yes	
032E-0-010-E			AR 2 ac.	3,049 SF	Upton	Taft Pond Dam	Permanent	Town DPW	Dam			Yes	
032E-0-001-E			AR 2 ac.	12,197 SF	Upton	On Taft Pond		Town					
032E-0-109-E	8563	263	AR 2 ac.	20,038 SF	Upton	Shore Drive		Town					
032E-0-102-E	4732	122	AR 2 ac.	9,583 SF	Upton	Shore Drive		Town					
032E-0-003-E	40483	130	AR 2 ac.	5,663 SF	Upton	On Taft Pond		Town					
032-0-024-E	33804	253		12.10 AC	Upton	Miscoe Hill Road		Town	Passive	Wooded	vernal pool		deeded as open space
034-0-X001-E	4138	411	AR 2 ac.	15.84 AC	ACOE	South St.	Permanent	ACOE	Passive	Wooded		Yes	
035-0-027-E			AR 2 ac.	7.00 AC	Northbridge	Oak Dr,		Northbridge	Passive	Wooded		Yes	
035-0-001-E			AR 2 ac.	2.00 AC	ACOE	Oak Dr.	Permanent	ACOE	Passive	Wooded		Yes	
040-0-001-E			AR 2 ac.	2,035.45 AC	Commonwealth	Upton State Forest	Permanent	MA DCR	Passive	Wooded		Yes	
201-0-096					Upton	Town Common	Permanent	Town					
201-0-134-E	21597	69	SRA-15000	38,333 SF	Upton	off School Street		Town	School?				landlocked
202-0-008-E	17808	77	SRA-15000	34,412 SF	Upton	Station Street		Town					wetland
202-0-099-E			SRA-15000	17.37 AC	MURSD	Main St.	Permanent	Memorial School	School, Rec Fields	Developed	Yes	Yes	
203-0-076-E	4360	353	SRA-15000	2.65 AC	Upton	Main St.		Town	School?				
204-0-031-E	4775	494	SRC-40000	31.60 AC	Upton	Warren Street		Town	Passive Rec	Wooded	Yes	Yes	
Private Land													
005-			AR 2 ac.	33 AC	Private	Sweetwilliam Farm	CR	SVT/ConCom	Agriculture	Open, wooded	Trail easement	Limited	
019-092			AR 2 ac.	10.3 AC	Homeowners Assoc	off Williams Street	Deed Restriction		Passive	Wooded	Trail	Yes	
019-092.8			AR 2 ac.	4.0 AC	Homeowners Assoc	off Williams Street	Deed Restriction		Passive	Wooded	Trail	Yes	
029-078			AR 2 ac.	61.9 AC	Private	Chestnut St.	CR	MLT	Passive	Wooded	Trail		
024-034				3.6 AC	Homeowners Assoc	Mendon Street - Kenneth Village	CR	ConCom	Passive	Wooded		No	
031-017.1			AR 2 ac.	13.1 AC	Private	West River Road	CR	ConCom	Passive	Wooded/Open	vernal pool	No	
031-017.2			AR 2 ac.		Private	West River Road	CR	ConCom	Passive	Wooded/Open	vernal pool	No	
031-017.2			AR 2 ac.		Private	West River Road	CR	ConCom	Passive	Wooded/Open	vernal pool	No	

Table 9: Open Space and Public Land Inventory (page 3 of 3)

Map/lot	Location/Street	Book	Page	Zoning	Land Area	Owner	Notes
032E-0-003-E	STURDLEY RD/TAFT PND	40483	130	(5) - AR-80000	5.663 SF	UPTON TOWN OF	
032-0-024-E	MISCOE HILL RD	33804	253		12.10 AC	UPTON TOWN OF	
034-0-X001-E	SOUTH ST	4138	411	(5) - AR-80000	15.84 AC	UNITED STATES OF AMERICA	
035-0-027-E	OAK DR			(5) - AR-80000	7.00 AC	NORTHBRIDGE TOWN OF	
035-0-001-E	OAK DR			(5) - AR-80000	2.00 AC	UNITED STATES OF AMERICA	
040-0-001-E	UPTON STATE FOREST			(5) - AR-80000	2,035.45 AC	MASSACHUSETTS COMMONWEALTH OF	
201-0-X001-E	CHURCH ST	5307	587	(1) - SRA-15000	37,462 SF	UNITED PARISH OF UPTON	
201-0-073-E	MAIN ST	5092	532	(1) - SRA-15000	15,246 SF	UPTON TOWN OF	KNOWLTON RESTINE BLDG
201-0-055-E	MILFORD ST			(6) - GB	10,890 SF	ROMAN CATHOLIC BISHOP OF WORCESTER	
201-0-094-E	MAIN ST			(1) - SRA-15000	10,454 SF	UPTON TOWN OF	TOWN HALL
201-0-054-E	MILFORD ST	3125	492	(6) - GB	15,246 SF	UPTON TOWN OF	LIBRARY
201-0-038-E	CENTRAL SQ			(1) - SRA-15000	37,462 SF	FIRST CONGREGATIONAL CHURCH	
201-0-024-E	CHURCH ST			(1) - SRA-15000	3.96 AC	UPTON TOWN OF	SCHOOLS & FIRE STATION
201-0-053-E	MILFORD ST	3125	492	(6) - GB	1.78 AC	UPTON TOWN OF	
201-0-107-E	NELSON ST				25,265 SF	ROMAN CATHOLIC BISHOP OF WORCESTER	
201-0-095-E	WARREN ST	5299	553	(1) - SRA-15000	5,663 SF	UPTON TOWN OF	
201-0-140-E	SCHOOL ST	2423	85	(1) - SRA-15000	37,026 SF	UPTON GRANGE	
201-0-134-E	SCHOOL ST	21597	69	(1) - SRA-15000	38,333 SF	UPTON TOWN OF	
202-0-X002-E	UPTON LAND-STATION ST			(1) - SRA-15000	43,560 SF	GRAFTON UPTON R/R	
202-0-125-E	STATION ST	4779	589	(1) - SRA-15000	26,136 SF	UPTON TOWN OF	
202-0-008-E	STATION ST	17808	77	(1) - SRA-15000	34,412 SF	UPTON TOWN OF	
202-0-098.01-E	MAIN ST	4360	413	(1) - SRA-15000	5,663 SF	INHABITANTS OF THE TOWN OF UPTON	
202-0-099-E	MAIN ST			(1) - SRA-15000	17.37 AC	UPTON MEMORIAL GRADE SCHOOL	
203-0-076-E	MAIN ST	4360	353	(1) - SRA-15000	2.65 AC	INHABITANTS OF THE TOWN OF UPTON	
203-0-011-E	MAIN ST	5022	276	(6) - GB	871 SF	UPTON TOWN OF	
203-0-X001-E	HARTFORD AV	5215	75	(5) - AR-80000	43,560 SF	UPTON TOWN OF	
203-0-063-E	HARTFORD AV	4917	439	(6) - GB	2.14 AC	UPTON HOUSING AUTHORITY	
203-0-132-E	VICTORIA DR			(1) - SRA-15000	2,614 SF	UPTON TOWN OF	
203-0-089-E	FLORENCE CIR	12696	29	(1) - SRA-15000	1.21 AC	UPTON TOWN OF	
204-0-031-E	WARREN ST	4775	494	(3) - SRC-40000	31.60 AC	UPTON TOWN OF	

B. Privately Owned Parcels

1. Protected Open Space

Bernat Property (Conservation Restriction): A 64 acre wooded parcel off of 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 south west to the Northbridge town line.

Sweetwilliam Farm (Conservation Restriction, expected June 2011): This 33.7 acre conservation restriction will protect a spectacular scenic view off North Street and approximately 18 acres of agricultural land and pasture. It also includes an east-west trail easement which will link Upton State Forest with the Warren Brook Watershed Conservation Area. The historic farm dates to the mid 1700's and was once owned by the grandfather, uncle and cousin of the Eli Whitney, the early American inventor. The CR will be purchased with a LAND Grant, CPA funds, and private donations. The CR will be held by the Sudbury Valley Trustees and the Upton Conservation Commission.

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 of Williams Street owned by a homeowners association and protected from development by a deed restriction. The area contains trails used by the homeowners 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.

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 Corps 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.

Easement plans prepared by the Corps are provided with the Supporting Information (CD). 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. Chapter 61 Land

Massachusetts current use programs (Ch. 61, Ch. 61A, and Ch. 61B) were created to give preferential tax treatment to those landowners who maintain their property as open space for the purposes of timber production, agriculture or recreation. Chapter 61 was designed to classify forestland. Chapter 61A was designed to classify agricultural land which may include forestland and Chapter 61B was designed to classify recreational land which can also include forestland. Table 11 summarizes the program eligibility requirements and benefits to landowners. If landowners wish to sell land protected by the program, Town's have the right to match the offer or assign that right to another entity such as a non-profit land trust.

Fifty-two parcels of land in Upton are currently in the Chapter 61 program, totaling 1,300 acres (Table 12). 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: These 5 parcels total about 100 acres of mostly wooded land that abuts 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.

Miscoe Hill Parcels: Wooded parcels on Miscoe Hill owned by White, Arnowitz, and Binaco total about 174 acres. These parcels, a 40 acre parcel owned by Beksha, the 64 acre Bernat CR property, an Upton State Forest parcel, and the town owned Taft Mill parcel could form a broad corridor from the West River Wildlife Management to Mendon Road.

Fay Mountain Road Parcels: These three wooded Warren Brook watershed parcels owned by Nydam and Meichelbeck total about 130 acres. Preservation of these parcels would expand a 400+ acre block of contiguous protected open space which includes the Warren Brook Watershed, Pell Farm, Howarth Glen, and Whitney Conservation Areas.

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 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 compartments of Upton State Forest. These include Kent Family parcels off Westborough Road, Johnson and Rintala parcels off Westborough Road, the Brown parcel off Park Road, the Nelson parcel off Warren Street, the Compton parcel off Glenview, the Arnold parcel off Ridge Road, and the Claffin parcel off Orchard Street. All of these parcels would make excellent additions to Upton State Forest.

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

Trask Chestnut Street Parcel: Wooded parcel abutting Grafton Upton Railroad.

Stanton Parcels: Wooded and pasture land off Grove Street.

Amato Parcel: Wooded and agricultural land off East Street.

Dicarlo Parcel: Mostly agricultural land off Christian Hill Road.

Trask Mendon Street Parcels: Wooded and agricultural land off Mendon Street. Protection of these parcels is a priority for scenic and agricultural land preservation.

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

There are numerous large parcels remaining in Upton which have high conservation value. The Dodson Study, see supplemental information, identified the 30 largest parcels. Most of these are privately owned. Several of the most significant properties are described below.

Brown Property: This 130 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.

Table 11
Chapter 61, 61A, and 61B Protected Program Summary

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.	Open to the public
Benefits			
Local Taxes	Assessment at 5% of fair market value, minimum of \$10 per acre plus 8% of the value of timber logged. Tax rate based on commercial classification.	Assessment based on actual farm use, not fair market value. Tax rate based on commercial classification	Assessment based on actual recreation use, not fair market value, but not more than 35% of fair market value. Tax rate based on commercial classification
Special or Betterment Assessments	Pro rata based on cost of water pipes providing fire protection to adjacent forest land	Pro rata based on improvement to agricultural use	Pro rata based on improvement to recreation use

Dallamora Property: This ca. 150 acre wooded tract off North Street abuts Sweetwilliam Farm and the Warren Brook Conservation Area. The tract includes several productive vernal pools, a wetland area with black spruce, and provides habitat for the rare state listed eastern box turtle. It may also contain a long abandoned rock quarry. The owners have prepared a conceptual development plan which would preserve about 100 acres of the property as open space.

¹ Including scenic resources

² Limited to hiking, camping, nature study, boating, golfing, horseback riding, hunting, fishing, skiing, swimming, picnicking, non-commercial flying, archery, and target shooting.

Table 12: Chapter 61 Land (May, 2011)

Parcel ID	Owners(s)	Location	Area (acres)
029-067	TRASK HARVEY J	0 CHESTNUT ST	45.1
017-005	CHR REALTY TRUST / DICARLO EMIDIO & BARBARA TRUST	110 CHRISTIAN HILL RD	35.7
017-029	KELLY RICHARD B 1/2 INTEREST / KELLY WILLIAM J 1/2 INTEREST	0 CROCKETT RD	18.2
017-031	KELLY RICHARD B 1/2 INTEREST / KELLY WILLIAM J 1/2 INTEREST	0 CROCKETT RD	23.2
017-011	KELLY RICHARD B 1/2 INTEREST& / KELLY WILLIAM J 1/2 INTEREST	0 EAST ST	20.3
017-026	KELLY RICHARD B 1/2 INTEREST / KELLY WILLIAM J 1/2 INTEREST	0 EAST ST	14.4
017-028	KELLY RICHARD B 1/2 INTEREST / KELLY WILIAM J 1/2 INTEREST	0 EAST ST	23.5
013-013	AMATO RICHARD A TRUSTEE / RICHARD A AMATO INVEST TR	11 EAST ST	55.5
016-108	CARCHEDI ROBERT A& SUSAN C	53 ELM ST	13.5
001-005	NYDAM RAYMOND G / SUSAN C	0 FAY MOUNTAIN RD	60.0
001-004	MEICHELBECK JOSEPH R / JUDITH	0 FAY MOUNTAIN RD	26.0
004-001	NYDAM RAYMOND G & SUSAN C	0 FAY MOUNTAIN RD	43.2
022-001	NIPMUC ROD & GUN CLUB / C/O BRUCE TIEDEMANN	0 FISKE MILL RD	64.8
022-054	NIPMUC ROD & GUN CLUB / C/O BRUE TIEDEMANN	0 FISKE MILL RD	3.3
030-004	COMPTON FRED & RUTH A / C/O ALICE MCKENNA	0 GLENVIEW ST	47.1
026-015	CENTRAL MASS BEAGLE CLUB INC / C/O DAVID EDWARDS	0 GLENVIEW ST	47.0
007-023	FITZGERALD BRIAN D /	0 GRAFTON RD	2.7
007-024	FITZGERALD BRIAN D	0 GRAFTON RD	1.5
025-018.02	STANTON MARGARET M /	0 GROVE ST	2.6
025-X001	STANTON MARGARET M /	0 GROVE ST	18.0
025-015	STANTON MARGARET M /	84 GROVE ST	15.7
014-055	HENDERSON EDWARD S SR &RICHARD / & GORMAN EDWARD L	0 MECHANIC ST	87.9
025-002	TRASK HARVEY J	0 MENDON ST	10.0
025-025	TRASK HARVEY J	142 MENDON ST	18.6
025-030	TRASK HARVEY J	0 MILFORD ST	8.3
025-031	TRASK HARVEY J	0 MILFORD ST	16.0
032-019	MISCO HILL REALTY TRUST / C/O BINACO AMERICO J TRUSTEE	0 MISCOE HILL RD	34.4
008-022	RINTALA KAARLO S SR & LUCILLE	0 NORTH ST	14.4
008-020	RINTALA KARLA & / BARROWS GLENN	59 NORTH ST	10.4
002-004.02	BAUR MATTHEW E / COSTA, LAIS	234 NORTH ST	7.5
035-028	WHITE EMERSON F	0 OAK DR	102.1
035-021	ARNOWITZ JERROLD N & / KELLAGHAN, MARIA	22 OAK DR	37.5
004-005	PIERIE THOMAS W JR	0 ORCHARD ST	25.9
007-014	CLAFLIN THOMAS E /	0 ORCHARD ST	16.2
010-004.03	FITZGERALD BRIAN D	0 ORCHARD ST	6.2
010-005	FITZGERALD BRIAN D /	0 ORCHARD ST	8.9
010-047	FITZGERALD BRIAN D /	0 ORCHARD ST	26.0
005-022	FIFTY FOUR RIDGE ROAD REALTY T / ARNOLD RUSSELL & ELLEN	54 RIDGE RD	17.0
029-050	SCANLON JOHN & KATHY LEE	124 SOUTH ST	17.6
005-039.01	BROWN H CLIFTON& SOON HWA TRS / C/O CHUN-AIE WHEELER	0 SOUTHBORO ST	2.0
005-040	BROWN H CLIFTON / C/O CHUN-AIE WHEELER	0 SOUTHBORO ST	22.0
025-038.01	TRASK HARVEY J	0 WALKER DR	0.4
025-037	TRASK HARVEY	0 WALKER DR	2.7
015-022	NELSON ERIK C & CATHERINE C	133 WARREN ST	24.4
028-004	FOWLER GLENN	0 WEST RIVER ST	7.0
031-014	DWINNELL CLARENCE & MAUREEN L	154 WEST RIVER ST	26.5
011-027	KENT ROCKWELL IV SALLY / CHRISTOPHER W TRS-KENT FAM TR	0 WESTBORO RD	21.8
002-031	JOHNSON IAN, OBERG PAGE, HALL / ALLISON	0 WESTBORO RD	5.5
002-021	JOHNSON IAN, OBERG PAGE, HALL / ALLISON	0 WESTBORO RD	50.5
008-021	RINTALA KAARLO A SR	0 WESTBORO RD	15.0
011-018	KENT ROCKWELL IV SALLY / CHRISTOPHER W TRS KENT FAM TR	68 WESTBORO RD	28.6
005-043	BROWN H CLIFTON / C/O CHUN-AIE WHEELER	0 WOODVILLE RD	47.5
		Total	1,300.2

Glenview Open Space: This 136 acre area consists of two parcels of privately owned land in Chapter 61 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.

Sweetwilliam Farm: This 92 acre tract (3 parcels) on North Street includes perhaps the most beautiful vista in town and is the town's only CSA farm. The property includes an 18th century farm house, fields, beautiful stone walls, and cart paths. It abuts the Howarth Conservation Area, Upton State Forest, and the Warren Brook Conservation Area. In 2010, the owner agreed to sell a portion of the farm to the town and protect most of the rest of the property with a conservation restriction. The town obtained a \$500,000 LAND Grant for the project in and in at a January, 2011 special town meeting voted to use the grant, CPA funds, and private donations to preserve the farm. The closing is expected to occur in June of 2011.



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.



Rockwood Meadows and the Amato Farm: Rockwood Meadows is a 79 acre tract on East Street which includes much of the former Amato Farm. The property abuts the Peppercorn Hill Conservation Area and includes about 22 acres of open fields and farmland. An "Over 55" development which would preserve about 61.5 acres of open space has been approved by the Planning Board but

economic conditions have precluded construction. Although the farm is no longer in

operation, Mr. Amato retains agricultural land across the street that is also of preservation interest.

Robertson Property: This wooded 52 acre tract off Fowler Street includes several hundred feet of pristine frontage along Warren Brook.

Pratt Hill: This 42 acre tract (contiguous two parcels) which includes the top of Pratt Hill is in private ownership. 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. At least one of the mounds on the property has recently been destroyed by the owner. The property also includes remains of Upton's "Lead Aqueduct" 19th century water supply system and provides habitat for the rare oak hairstreak butterfly. A proposed cellular communications tower may be built on a portion of the property as early as 2011.

Beksha Parcel: This 40 acre wooded semi-landlocked parcel off Miscoe Hill Road, 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. The owner has offered the land for sale to the town but action has been stymied by access issues and the uncertain status of Miscoe Hill Road.

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.

Red Acre Golf Course, Davidson Pond, and Adjacent Davidson Family Land

These two parcels, totaling 36 acre off Fowler Street, 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. An discontinued early town road, Triphammer Road, passes through the property.

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.

C. Public and Nonprofit Open Space Parcels

1. Protected Open Space

Upton State Forest: The Upton State Forest is comprised of 2,035 acres (15% of the Town of Upton). It is composed of several compartments 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.



FUSF sponsored hike to Dean Pond

Peppercorn Hill Conservation Area: Acquired in 1985, this 283 acre area is managed by the Upton Conservation Commission as a passive recreation area offering trails and wooded hiking areas. The area can be accessed from Crockett Road and Taft Street in Upton and via Camp Avenue in Milford. The area is largely forested uplands, but includes some wetlands, coldwater 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 coldwater stream. The area includes an additional 20 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 been forested from at least 1830 to present. The town expects to complete a Stewardship Plan for the area in 2011.



Mill River Tributary



Peppercorn Hill

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 a 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 600 acres. The town expects to complete a Stewardship Plan for the area in 2012. The property abuts the Sweetwilliam Farm and the Dallamora property.

Richard and Naomi Howarth Conservation Area: This 34 acre area consists of four parcels of Glen Echo Subdivision open space 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 and Sweetwilliam Farm. The other three parcels range in size from about one to five acres.

Whitney Conservation Area Sweetwilliam Farm (expected fee acquisition, June 2011): This acquisition will protect a spectacular scenic view off North Street and approximately 60 acres of forestland. It also includes an east-west trail which will link Upton State Forest with the Warren Brook Watershed Conservation Area. 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 the Eli Whitney, the early American inventor. The

property will be purchased along with the Sweetwilliam Farm CR using a FY 2011 LAND Grant, CPA funds, and private donations. The property will be managed by the Upton Conservation Commission and protected by a CR held by the Sudbury Valley Trustees.

Eleanor T. Howarth Glen Conservation Area: This 27 acre parcel is Glen Echo Subdivision open space accepted by the town at the 2006 annual town meeting and designated a conservation area at a 2007 special town meeting. The area abuts the Warren Brook Watershed Conservation Area and a 9 acre parcel of Glen Echo open space managed by the Recreation Commission. 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. Trails provide a connection to the Warren Brook Conservation Area from North Street.

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.

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.

Upton Chamber and Park: This 7.5 acre parcel on Mill Pond is the most recent purchase of land by the town of Upton. Purchased with Community Preservation Act funds and 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 is in the development stage and not yet fully open to the public. When completed it will feature an educational display near the chamber, walking trails, a canoe launch on Mill Pond, meadows, and a parking area.

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

2. Other Notable Public and Non Profit Open Space Parcels

Goss Pond: The 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.



Black Spruce at Goss Pond

The Former Stefans Farm: In 2001 the Town exercised its option to purchase the Stefans Farm, a 126 acre property. The land is within the Warren Brook watershed off Mechanic Street and Orchard Street. The property includes an x acre parcel east of Mechanic Street and an xx acre parcel west of Mechanic Street. Four 2 acre frontage lots along Orchard Street have been subdivided off for sale by the town and two of the lots have been sold. The remaining property 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 13 acres of meadow 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 eastern parcel 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. A community garden and a parking area were established on the eastern parcel in 2009 and development of a trail system is underway. The property is managed by the Upton Land Stewardship Committee.



Community Garden and Cart Path at the Former Stefans Farm

Old Zachary: The town owns a 33 acre parcel that includes Old Zachary (a pond on the West River) and some adjacent land. Use of 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.

Warren Street Property: This 30 acre wooded parcel owned by the town of Upton has potential for use as a neighborhood park. The property has minimal frontage, steep slopes, and little potential for development. 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.

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 a certified vernal pool. The parcel is not yet managed by the Land Stewardship Committee.

Town of Northbridge Open Space Parcel: Northbridge owns a 7 acre wooded parcel off Oak Drive at the southern end of town. The parcel and 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.

West River and Glen Avenue Well Fields: The town owns 29 acres at the West River site and 11 acres at the Glen Avenue site. 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. The town also recently purchased 17.2 acres off West River Road for a new West River well site.

Town Cemeteries: Upton has four cemeteries; Maplewood Cemetery off Maple Avenue, Lakeview Cemetery 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 17 acre Maplewood Cemetery 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. The 12 acre Lakeview cemetery includes an old burial ground (Pine Grove) and a more recent (Lake View) 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 10 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. The parcel is adjacent to Upton State Forest.

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 Public Works Department is responsible for managing park.

Pratt Pond – Kiwanis Beach: This 27.4 acre property is accessed by Kiwanis Beach Road off Elm Street. The Upton Public Works Department is responsible for property management. 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). Amenities: beach area, 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 swim lessons and the Kids 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. Construction of a dock for kayaks and canoe access is planned (Boy Scout Project).

Upton Veterans Memorial Playground: Located at 15 Mill Street, this is a childrens playground area in Upton's town center. Parking is associated with the nearby municipal parking lot that has enough space to accommodate roughly 100 cars, including several spaces for the handicapped. The Upton Public Works Department is responsible for property management. Amenities include two slides, two sets of swings, two sandboxes, a tire swing, monkey bars, a climbing apparatus, six benches and five picnic tables. Hours of operation are from dawn to dusk. The property is half an acre in size



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

Glen Echo Soccer Field (Proposed): The town has prepared draft plans for a full sized lacrosse field on this 9.2 acre property managed by the Recreation Commission. The plan includes a 60 acre paved parking lot off North Street. Due to high cost of construction plans to build the field have been indefinitely shelved by the Recreation Commission.

2. Other Sites

Memorial Elementary School (including the Howard Leeland 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 placed inside the tennis court is sponsored by the Recreation Commission every winter. The indoor court is used

by the Upton Youth Club, Mendon-Upton travel basketball, and adult pickup basketball. The Library is used for a yoga program and the Music Room for youth theatre sponsored by the Recreation Commission.

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 in-door adult volleyball program.

Blackstone Valley Regional Vocational Technical High School: Located off Pleasant Street, the school 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 utilized by an assortment of recreation groups from throughout the Blackstone Valley.



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

Blackstone Valley – Trask Facility: Plans have been approved to build an adult softball field on 29 acres of land off Chestnut St. donated to the Blackstone Valley Regional Vocational School District by Mr. Harvey Trask.

Red Acre Golf Course

A privately owned 9 hole (pare three) gold course off Fowler Street.

West River Boat Launch: There is 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 13 provides a summary of Upton's current public and private open spaces assets. Approximately 5,500 acres has some type of permanent or temporary protection. Approximately 3,320 acres are considered to be permanently or very strongly protected. 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.

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. Old discontinued roads, some hundreds of years old, and the Grafton Upton railroad have found a second life as trails. The railroad is being reactivated by a new owner so the possibility of a spectacular rail trail between Grafton and Hopedale through Upton has faded.

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 county 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.

Table 13 - Open Space Summary Table

Category	Acres	Notes
Town of Upton Open Space		
Peppercorn Hill Recreation Area	283	Obtained with Self Help Grant
Warren Brook Watershed Conservation Area	225	Obtained with Self Help Grant
Former Stefans Farm (George Hill)	113.5	Excludes 10 acres to be sold for frontage lots.
Howarth and Howarth Glen Conservation Areas	64	Designated as Conservation Areas at Town Meetings
Whitney Conservation Area	63	Expected to close, June 2011
North Street Open Space Parcels (n=2)	43	Landlocked, abut Warren Brook Watershed and/or Whitney Conservation Areas
Warren Street Parcel	33	
Old Zachary	33	Flowage Easement Land
Goss Pond	23	Deeded to Town, not Designated as a Conservation Area
Miscoe Hill (Taft Mill Open Space)	12	Deeded to Town as Open Space; not Designated as a Conservation Area
Pratt Pond Conservation Area	10	Deeded to ConCom.
Snow Family Conservation Area	9	Designated as Conservation Area at Town Meeting. Donated with Deed Restriction
Knowlton Reservoir	3	
Walker Drive Parcel	1	Deeded to ConCom
Town of Upton Recreation Land		
Kiwanis Beach	38	Recreation Commission
Glen Echo	9	Parcel managed by Land Stewardship Committee
Heritage Park (Elm Street)	7.5	Historical Commission
Henderson and Rivers Memorial Field	7	Recreation Commission
Lake Wildwood Park	4.3	
Town of Upton – Wellfields	57	Glen Ave, West River, Richards
Commonwealth – Upton State Forest	2222	Reference: 2009 DCR Statewide Properties Inventory
Federal – Army Corps of Engineers	64	West Hill Wildlife Management Area (Managed by MA DFW)

Table 13: Continued:

Category	Acreage	Notes
Other Towns		
Town of Milford	23	
Town of Northbridge	7	
Town of Hopkinton	2	
Cemeteries		
Maplewood	17	
Lake View	12	
Other	< 1	
Schools (including infrastructure, fields)		
BVRVHS	29	
Memorial School	17	
Nipmuc Regional High School	50	
Chestnut Street – Trask/BVRVHS	29	
Milford Street – VFW	12.5	Recreational fields, playground
Private – Permanently Protected		
Bernat Property Conservation Restriction ³	64	CR held by Metacomet Land Trust
Sweetwilliam Farm Conservation Restriction	33.7	Expected to close, June 2011
Preserve at Wildwood Deed Restriction	14.3	Homeowners Association
West River Road Conservation Restriction	13.1	CR held by Upton ConCom
Kenneth Village Conservation Restriction	3.6	CR held by Upton ConCom
Corps of Engineers Flowage Easements	740	Includes numerous private parcels and ca. 200 acres of town, state, and federally owned land listed elsewhere in this table.
Chapter 61 (as of May, 2011)	1,300	As of May 2011, temporary protection; 52 parcels
Total Land Area in Town	13,853	Reference: Annual Town Report

Partnerships with Boy Scouts and the Friends of Upton State Forest have helped improve and expand the trail system in recent years. Scouts from Milford, Mendon, and Upton have built three badly needed bridges at Peppercorn Hill in recent years. Upton has recently received a trail grant from the MA DCR to improve the Former Stefans Farm trail system.

Upton has talked about forming a trails committee for years. Currently this function is served by the Open Space Committee and the Land Stewardship Committee. These groups have limited resources and other responsibilities so there is a need for a group to focus on a town wide trail system and links with other towns. This group would inventory existing trails, identify gaps, assist the Land Stewardship Committee with trail work on town land, and work with private landowners to secure permanent trail easements.



Section 6

Community Vision

Section 6

Community Vision

A. Description of Process

Over the past decade, The Town of Upton has sponsored a series of surveys and public forums in an attempt to determine citizen preferences in regards to open space and recreation. A summary of these efforts and their results is presented below.

1. 1993 Open Space Survey

The Town conducted an open space survey in 1993, sending a 15-question survey to each household in Upton. The Town received 234 returned surveys for a total response rate of 12.9% (Upton had approximately 1,810 occupied households at the time of the survey). The major findings of this survey are as follows:

- When asked which Town-owned recreation site the respondent had used during the previous year, 58% said the Upton Town Beach located on Pratt Pond. This was the only choice that received a majority, although a significant percentage of respondents indicated using the Town Common (33%), the Pratt Pond Recreation Area (31%) and the Memorial School (30%).
- When asked about the importance of land preservation, 64% of the respondents rated land protection as important or very important.
- In terms of open space initiatives, 92% of respondents supported protecting Warren Brook and 79% of respondents supported establishing a walking path through Upton.

2. 1999 Land Use Survey for Stefans Property

This was a project-specific survey that the Conservation Commission sponsored for the 100-acre Stefans property. This was a random sample two-question survey where 150 active voters were chosen at random to receive the survey. The Commission received 47 returned surveys for a response rate of 31%. The major findings of this survey are as follows:

- When asked about how this property should be used, roughly 45% of the respondents chose the option that would preserve 80 acres as protected open space and the remaining 20 acres for municipal use, while roughly 43% of the respondents chose the option that

would preserve 90 acres as protected open space and the remaining 10 acres for municipal use.

- When asked how they would like to see the municipal portion of the land used, roughly 60% of the respondents chose active recreation, 21% chose town cemetery, 15% chose limited development and 13% chose municipal buildings.

3. 2005 Community Master Plan

Begun in early 2003 and completed in March 2005, Upton's master planning effort sought the public's participation through two methods: a 26-question survey sent to 600 randomly selected households (328 surveys were returned for a response rate of 55%), and three public forums held periodically throughout the master planning process. A summary of the Master Plan's public outreach efforts is presented below:

- Citizen Survey: The citizen survey was conducted in early 2003 as the first step in the master planning process. The survey covered a broad range of topics and there were several questions that had implications for open space and recreation planning efforts.
 - When asked what people like about living in Upton, 150 respondents ranked "small town rural character" as their first choice, followed by "family ties" (40 votes) and "open spaces" (38 votes).
 - When asked which initiatives they would choose to preserve Upton's rural character, 132 respondents voted for creating an historic district, 105 respondents voted for adopting the Community Preservation Act (CPA) and 74 respondents voted for adding scenic road designations.
 - When asked to rate the Town's commitment to the preservation and acquisition of open space, 133 respondents felt it was "not enough", 120 respondents felt it was "just right" and 35 respondents felt it was "too much".
 - When asked to rate Upton's Recreation Department, 57% of the respondents rated it excellent or good, while 43% of the respondents rated it as fair or poor.
- Master Plan Public Forum #1: Held on the evening of May 8th, 2003, the first public forum for the master planning process had roughly 40 people in attendance. The purpose of the first forum was to go through a SWOT exercise (Strengths, Weaknesses, Opportunities and Threats). The participants were broken into four groups. Each of the

four groups listed rural character or the beauty of the land among Upton's top three strengths. Each group listed uncontrolled development or overdevelopment as either a top three weaknesses or threats. One group listed developing more recreation opportunities among the Town's top three opportunities.

- Master Plan Public Forum #2: Held on the Saturday morning of April 3rd, 2004, the second public forum for the master planning process had roughly 60 participants in attendance. The purpose of the second public forum was to discuss the issues of housing, economic development, land use, open space and recreation, with the participants divided into groups for each topic. Each group was instructed to prepare a list of action items for their topic and then prioritize them into a list of their “top three” action items. It appears the Open Space and Recreation Group could not stop at its top three action items and instead listed the following seven priority action items:
 - Prepare a comprehensive water and sewer plan
 - Establish a Town Planner position
 - Define/create a Town Center
 - Identify appropriate use of land resources
 - Review existing bylaws for consistency with Town values
 - Prepare a comprehensive Open Space and Recreation Plan
 - Achieve a balance between residential and non-residential tax base
- The third and final public forum for the master planning process was held on the evening of April 7th, 2005. At this meeting the Master Plan Committee outlined the Plan's major findings and recommendations. The Master Plan's chapter on natural resources, open space and recreation set forth the following goals and objectives:
 - Goal: Ensure that Upton has a good and ample amount of publicly accessible, multi-use open space land that provides both passive and active recreational opportunities, as well as aesthetic enjoyment, wildlife protection and watershed protection.
 - Goal: Create and maintain plans to safeguard Upton's many scenic and recreation lands, undeveloped parcels, fragile water resources and wildlife habitats.
 - Objective: Protect water resources.
 - Objective: Protect and manage critical natural resources.
 - Objective: Promote a cooperative and regional approach to open space resource protection.

- Objective: Preserve significant land for open space and recreation.
- Objective: Remedy Upton's shortage of recreational fields and facilities and continue to enhance recreational opportunities appropriate and accessible to all Upton residents.

4. 2006 Community Recreation Survey

On the weekend of April 24th, 2005, the Upton Recreation Commission's New Fields Sub-Committee and other volunteers initiated a 12- question community recreation survey. The survey was available in electronic form via the Town's website and hard copies were available at the Town Clerk's Office, the Public Library and a few local businesses. This effort saw 171 surveys returned for a total response rate of 6% of all Upton households. While this is a very low response rate, the Recreation Commission was able to identify some trends in community preferences in regards to open space and recreation. The major findings of this survey are as follows:

- When asked how important it was to have a local parks and recreation opportunities in Upton, 91% of the respondents that answered this question rated such opportunities as important or very important.
- When asked which age groups need more recreation programs, the younger age groups received the most votes: 11-14 years (85 votes), 15-19 years (73 votes), 7-10 years (70 votes), and 4-6 years (61 votes).
- When asked what programs residents would like to see added, nature and outdoor programs received the largest number of votes (64), followed by summer programs (59 votes) and adventure programs (47 votes).
- When asked to be more specific about what new programs citizens would like to see added, the only choice to receive double figures in votes was summer camp/lessons (25 votes). Tennis lessons were a distant second with eight votes.
- When asked which facilities residents used within the last twelve months, 142 respondents said they had used the VFW Playground at least once, 134 respondents said they had used the Kiwanis Beach at least once, 74 respondents said they had used the Kiwanis Softball Field, 56 said they had used the Kiwanis Soccer Field, 42 said they had

used the Pratt Pond Boat Launch, and 38 said they had used the Kiwanis Tennis Courts. Thus, it appears that Upton residents frequently utilize the Kiwanis Recreation Facility.

- When asked to rate the maintenance of town-owned recreation facilities, 51.8% of the respondents that answered this question rated the Town's maintenance as good or very good, and 48.2% rated the Town's maintenance as average, poor or very poor.
- When asked which new recreation facilities they would support through the use of CPA funds or tax dollars, the top five choices were: bicycle/pedestrian paths (127 votes), indoor swimming pool (88 votes), multi-generational community center (81 votes), more recreation fields (75 votes), and walking/hiking/cross-country skiing trails (71 votes).
- When asked if they would support a bicycle path being constructed within 200 feet of their residence, only twelve respondents said "no", while 63 said "probably" and 65 said "yes".

5. 2007 Upton Open Space Project (The Dodson Study)

From 2005 to 2007 the Open Space Committee worked with Dodson Associates to inventory Upton's resources and develop an action plan. The study was funded through the Community Preservation Act. The results of this study are incorporated into this Open Space Plan.

The method used for the Upton Open Space Project followed a traditional landscape planning model. First, data about different types of resources were compiled, starting with the information that is available on the Massachusetts Geographic Information System (MassGIS), a central depository of maps and data that is maintained by the Massachusetts Office of Energy and Environmental Affairs. Supplemented with information provided by the town boards and committees, inventory maps were prepared showing the location and patterns of these resources. Finally, these inventory maps were overlaid with each other to identify those areas and connecting corridors with multiple resource values. The planning process revolved around separate workshops for each theme: the first, convened by the Upton Historical Commission, focused on cultural resources; the second, looking at natural resources, was held by the Conservation Commission; finally, the Recreation Commission facilitated a meeting to examine opportunities for a town wide system of recreational trails.

Following this first round of meetings, a town-wide workshop was held to discuss the resulting maps and evaluate potential conservation strategies. Residents heard a presentation of the

Natural, cultural and recreational inventory maps and draft priority maps for each type of resource. After the presentation participants were divided into small groups to discuss a series of questions:

- Are we missing any important resources or opportunities?
- Are these the correct conclusions regarding the priorities?
- If you had a million dollars, what are the first six projects or properties you would spend it on?

Each group then presented its conclusions about the maps and recommended priorities and focus areas for conservation. Reviewed and supplemented by the Open Space Committee and the consultant in a series of public meetings, the results were shaped into an action plan which can be found at the end of this report. The final plan was presented to residents at a public meeting. Nineteen preservation priorities were recommended and divided into four themes:

Open Space and Watershed Protection	Neighborhood
<ul style="list-style-type: none"> • Designate Former Stefans Property as conservation area and protect adjacent properties • Link protected lands in Southeast Upton • Expand Warren Brook Conservation Area • Protect Area of Critical Environmental Concern • Protect land abutting State forest along Westborough and Hopkinton Roads. • Fill in Peppercorn inholdings. 	<ul style="list-style-type: none"> • Revitalize Milford Street. • Protect Mendon Street/Grove Street corridor & woods along railroad • Protect scenic North Street. • Protect scenic Taft Street & Christian Hill Road fields • Protect West River district • Protect Ridge Road and State Forest Area • Protect Warren Brook Corridor along Mechanic Street
Historic and Scenic	Townwide
<ul style="list-style-type: none"> • Protect scenic roads, stone walls and special trees • Preserve CCC Buildings in Upton State Forest. • Protect historic district from Elm Street to West Upton 	<ul style="list-style-type: none"> • Develop a Town wide loop trail. • Pursue conservation of “owner unknown” Properties • Pursue conversion of Grafton & Upton Railroad to a rail trail.

6. SCORP

The Statewide Comprehensive Outdoor Recreation Plan (SCORP), *Massachusetts Outdoors 2006* is an update of the SCORP 2000, five-year plan. SCORP plans are developed by individual states to be eligible for federal Land and Water Conservation Fund (LWCF) grants. The 2006 report includes the results of regional public surveys. Upton is located within the Central Region and the results of the survey for the Central Region are summarized below.

According to MassOutdoors (2006), in the Central Massachusetts Region, swimming (61.4%) is the activity most widely engaged in by residents, even more so than in any other region of the state. Also highly popular in this county are walking, at 58.6% participation, and sightseeing, tours and events with 55.9% (highest in the state). These three activities dominate the recreation picture for Central Massachusetts.

Also important, in terms of the number of individuals served, are those activities reporting between 25 and 50% participation rates, including hiking, fishing, picnicking, playground activity (the second highest of the regions at 31.8%), wildlife and nature study, and golfing (second highest rate statewide), in that order. This region also expressed the strongest participation rate statewide in boating, especially non-motorized. Participants in Central Massachusetts enjoyed ice-skating (2.2%) and camping (10.7%) at a rate that was the second highest among all the regions. Taken in the aggregate as types of activity, this region shows a broad interest in all types of recreation, with at least one significant activity noted in each of the field-based, water-based, trail-based, passive and wilderness activities. The greatest emphasis would appear to be found in Passive Recreation Activity.

The overall pattern of preferences among Central Region residents regarding new funding initiatives follows that of the statewide patterns. Support (>80%) was highest for maintaining existing facilities, improving access for people with disabilities, improving existing outdoor recreation areas, environmental education, trail maps and interpretive information, and purchasing new outdoor recreation areas. When asked what new facilities would most benefit them, residents of the Central Region showed the highest interest in facilities for walking (16.4%), swimming (17.0%), hiking (14.4%, the strongest interest in the state), road biking (12.1%), and playgrounds (10.2%).

B. Statement of Open Space and Recreation Goals

The Town's Open Space Committee and Recreation Commission used the results of the various surveys, the Master Plan public forums, the Recreation Study, and the Dodson Study to formulate the following statement of open space and recreation goals:

- 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

Section 7

Analysis of Needs

Section 7

Analysis of Needs

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, 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, only a modest percentage of the town is permanently protected from development. While the rate of growth has slowed in recent years, Upton's location near the 495 corridor assures that pressures for vigorous residential growth will return as the economy improves.

The Town of Upton contains approximately 13,853 acres of land. Developed residential and commercial industrial land accounts for about 19 percent of the town's land area (2,642 acres). Approximately 20 percent of the town's land area is strongly protected from future development. This land includes Upton State Forest (2035 acres), town conservation areas (592 acres), federal land (64 acres), town owned parks and recreation areas (57 acres), and privately owned land protected by conservation restrictions or deed restrictions (92 acres). Developable land accounts for about 50 percent of the town's total land area.

In order to preserve Upton's historical character and natural resources additional critical parcels of open space must be preserved. Passage of the Community Preservation Act and a flexible Open Space development bylaw gives Upton two powerful tools to manage the impact of growth on the landscape.

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 the sections that follow, specifically Section 8 (Goals and Objectives), and Section 9 (Seven Year Action Plan).

A. 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 public hearings, committee meetings, and the Dodson Study 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) Encourage the protection of undeveloped open space through use of the open space 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) Increase the level of protection afforded to critical parcels of town owned open space.
- 9) Protect wildlife and trail corridors.
- 10) Limit the impact of invasive species on native and animal plant communities.
- 11) Preserve and protect early successional habitat (grasslands, meadows, and shrub land).
- 12) Protect rare species habitat.
- 13) Protect historic landscapes.
- 14) Educate people about the value of open space and threats to the town's natural resources.
- 15) Encourage actions that reduce the town's carbon footprint, promote carbon storage, and monitor the effects of global climate change in Upton.
- 16) Encourage local food production.

Specific Needs and Opportunities:

The Dodson study identified 19 resource protection priorities. The list is not exhaustive and in the two years since the study was completed other priorities have become apparent and are added to the table below:

<p>Open Space and Watershed Protection</p> <ul style="list-style-type: none"> • Designate Former Stefans Property a conservation area and protect adjacent properties • Protect and link protected lands in Southeast Upton • Expand Warren Brook Conservation Area • Protect Land Abutting State forest along Westborough and Hopkinton Roads. • Expand Peppercorn by acquiring or permanent protection of in holdings and adjacent parcels. • Protect Area of Critical Environmental Concern (Warren Brook watershed) 	<p>Neighborhood</p> <ul style="list-style-type: none"> • Revitalize Milford Street. • Protect Mendon Street/Grove Street corridor & woods along railroad • Protect scenic North Street and Sweetwilliam Farm • Protect scenic Taft Street, East Street Christian Hill Road fields • Protect scenic West River Road • Protect Ridge Road and state forest area • Protect Warren Brook Corridor along Mechanic Street
<p>Historic and Landscape</p> <ul style="list-style-type: none"> • Protect scenic roads, stone walls and special trees • Preserve CCC Buildings in Upton State Forest. • Protect historic district from Elm Street to West Upton • Protect Pratt Hill and its historic stone features • Preserve Sweetwilliam Farm landscape 	<p>Townwide</p> <ul style="list-style-type: none"> • Develop a Town wide loop trail with links to trail systems in neighboring towns. • Establish trail corridor along the west River • 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 • Pursue conversion of Grafton & Upton Railroad to a rail trail should the opportunity ever exist. • Foster good stewardship of Town owned lands • Control invasive species • Foster environmental education
<p>Recreation</p> <ul style="list-style-type: none"> ▪ Acquire land for new recreational fields ▪ Construct new fields 	

B. Summary of Community Needs (Recreation)

In 2004 the Town retained the services of Joe Kacevich of Recreation Facilities Inc. for the preparation of an Athletic Fields Master Plan. This effort made use of the Level-of-Service (or LOS) guidelines for planning new active recreation facilities, as recommended by the National Recreation and Parks Association and the American Academy for Park and Recreation Administration. These two entities have jointly prepared a set of guidelines for the local provision of open space and recreation facilities that are based on an LOS analysis.

The LOS is a ratio expressed as acres-per-1,000 population, which represents the minimum

amount of ground space needed to meet real time recreation demands of the local citizens. The LOS planning concept for active recreation facilities includes both the land needed for the actual facilities, but also ancillary land for parking, restrooms, walkways, etc. The 2004 Athletic Fields Master Plan considered the following factors:

- Enrollment figures for the Town's sports programs from the previous three-to-five years.
- Demographic data for the K-8 school population and the adult population.
- A projection of the number of participants for each sports program for the outgoing five years.
- A determination of the program needs for the Town's various sports teams.
- A determination of the facility needs necessary to meet identified program needs and the projected growth for each sports program.
- The "wear factor" for "high impact sports" such as soccer, lacrosse and football.
- The physical condition of Upton's existing recreation facilities and related infrastructure.
- A determination of any gaps between the existing inventory and the desired inventory.

The 2004 Athletic Fields Master Plan drew the following conclusions:

- Upton's fall soccer program will have a shortage of either one or two fields between 2006 and 2010 even after the Kiwanis Beach soccer field comes back online (target date: fall 2007).
- The needs of the women's soccer program can be achieved through the continued use of the fields at Nipmuc Regional High School.
- The youth baseball program needs two diamonds with 45-foot base paths, one diamond with 60-foot base paths and one diamond with 90-foot base paths for Babe Ruth-level play.
- The needs of the girl's softball program can be achieved with the existing facilities inventory assuming that the VFW softball field will be used for softball play and that the program receives permission to use the softball diamond at one of the two high schools.
- The facility needs of Upton's youth basketball program cannot be realized with the use of the gymnasiums at the Memorial School, the Town Hall or the gymnasiums at either high school and one full-sized basketball court is needed.
- The Town will need two full-size athletic fields to meet the needs of emerging sports programs such as Pop Warner football and youth lacrosse.

The 2004 Athletic Fields Master Plan went on to evaluate several properties for their potential as future recreation sites based on the needs analysis. This evaluation considered field size requirements, site considerations, lighting needs, parking needs, infrastructure needs, as well as time and cost estimates for completion. Eight potential sites in Upton were evaluated for their recreation field potential, although only a few were deemed suitable. The most promising

opportunity is the prospect of a full-sized athletic field being constructed on the Glen Echo property, as per the agreement between the Town and the developer. The Poirier and Richard properties in the southern part of Town also have recreation potential. Both parcels are very large with soils suitable for recreation facilities. Plans for the Blackstone Valley Regional Vocation Technical High School to expand its athletic fields onto the newly acquired Trask and Willard properties is already in progress.

Upton Community Recreation Needs and the SCORP Report

Upton Community needs identified in various surveys conducted by the town are in broad agreement with SCORP survey results for Central Massachusetts (see Chapter 6 for survey results). Upton residents appear to be more concerned with a need for active recreational opportunities than Central Massachusetts residents in general. This may reflect an actual variance between populations or be an artifact of survey methodology. The Upton survey relied on self-selected respondents rather than a true random survey. It may also represent demographic differences, with Upton being a relatively young, rapidly growing community in need of active recreational facilities for school age children. Swimming was identified as important to a majority of both Upton respondents and Central Massachusetts residents. Although Pratt Pond is a popular outdoor swimming facility, the town lacks an indoor facility. Town and SCORP surveys both indicate that providing opportunities for passive recreation is also very important. Both town residents and Central MA residents support purchasing new outdoor recreation areas.

C. Management Needs

Identification of funding and staffing resources will be key elements of the Town's strategy for open space acquisition and upgrading recreation facilities. One of the most significant management needs for the Town's active recreation areas is ensuring that all facilities are handicapped accessible. All of Upton's recreation facilities have been evaluated for handicapped accessibility and the results of this evaluation can be found in the appendices.

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 E.

Upton needs to expand our base of people willing and able to help do the work of protecting, developing, and managing open space and recreation areas. The town needs a Trail Committee to plan and implement a town wide trail system. We need to look for opportunities to work with the Boy 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, and other organizations.

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 better protected.

Section 8

Goals and Objectives

Section 8

Goals and Objectives

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

Objectives:

- A. Enact a local scenic roads bylaw.
- 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 identified in the Dodson Study.

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.
- 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.).

Goal #3: Preserve cultural and historical resources.

- A. Support efforts to conserve the Civilian Conservation Corps buildings in Upton State Forest and other historic buildings.
- B. Build public awareness of Heritage Landscapes as a focus for historic preservation.
- 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. Acquire and develop properties for active recreation, especially when they can be combined with other preservation priorities.

- B. Maintain and improve Upton's recreation fields and facilities in accordance with the plans of the Recreation Commission.
- C. Improve trail systems on town-owned open space and improve trail link between protected lands. Work to obtain trail easements on private property.
- D. Work with Grafton, Hopedale, town boards, and others to develop a rail trail along the Grafton & Upton Railroad right-of-way should an opportunity ever present itself.
- E. Work with the Blackstone Valley Regional Technical High School to develop the Trask property for recreation and nature education.
- F. Create a local Trails Committee to connect, develop and maintain a town wide trail system.
- G. Build public awareness of passive recreational opportunities through brochures, maps, newsletters, community hikes and other programs.

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. Enact 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: Promote and encourage environmental education and awareness.

- A. Encourage local schools to use 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 and preservation efforts.
- G. Encourage energy conservation and local food production.

Section 9

Seven Year Action Plan

Upton 2011 - 2017 Action Plan

Action	Organization				Year				
	Con Com	Open Space	LSC	Rec Con	2011	2012	2013	2014	2015
Open Space Preservation									
Investigate and Promote Land Conservation Opportunities	•	•			•	•	•	•	•
Sponsor Town Meeting Articles to Enhance Protection of Town Owned Parcels (e.g Taft Mill Estates Open Space)		•			•	•	•	•	•
Review all Preliminary and Definitive Subdivision Plans	•	•			•	•	•	•	•
Update Open Space Map		•				•		•	
Partner with MLT, SCT, and MA DCR to Conserve Land	•				•	•	•	•	•
Promote Conservation of Privately Held Open Space	•				•	•	•	•	•
Bring Scenic Roads Bylaw to Town Meeting	•					•			
Work with Historical Commission to Protect Historic Landscapes	•				•	•	•	•	•
Support the Community Preservation Act	•	•			•	•	•	•	•
Work with Planning Board to add “Right to Garden” provision to subdivision bylaws.		•				•			
Stewardship of Town Conservation Land and Other Parcels									
Implement Stewardship Plan for the Stefans Property			•		•	•	•	•	•
Prepare Stewardship Plan for Peppercorn Hill			•			•			
Implement Stewardship Plan for Peppercorn Hill			•				•	•	•
Forest Stewardship Plan for Warren Brook & Adjacent Properties			•			•			
Prepare Stewardship Plan for Warren Brook			•				•		
Implement Stewardship Plan for Warren Brook			•					•	•
Prepare Stewardship Plan for Howarth & Howarth Glen CA's			•				•		
Implement Stewardship Plan for Howarth & Howarth Glen CA's			•					•	•
Organize Annual Public Land Clean-up Day			•		•	•	•	•	•
Prepare and Update Trail Maps			•		•	•	•	•	•
Update Stefans Stewardship Plan			•				•		
Investigate Options for Phragmites Control at Old Zac	•					•			
Hold and Annual Fuelwood Lottery			•		•	•	•	•	•
Yearly Inspection of CR's Held by Upton ConCom	•				•	•	•	•	•
Document Impacts of Climate Change (long term monitoring of phenology, stream temperature, and/or ice out date at Pratt Pond)	•				•	•	•	•	•

Upton 2011 - 2017 Action Plan

Action	Organization				Year		Funding
	Con Com	Open Space	LSC	Rec Con	2016	2017	
Open Space Preservation							
Investigate and Pursue Land Conservation Opportunities	•	•			•	•	CPA, LAND Grant, Donations
Sponsor Town Meeting Articles to Enhance Protection of Town Owned Parcels (e.g. Stefans Farm, Taft Mill Estates Open Space)		•			•	•	Annual Open Space/ConCom Budget
Review all Preliminary and Definitive Subdivision Plans	•	•			•	•	ConCom Agent Line Item
Update Open Space Map		•				•	None required
Partner with MLT, SCT, and MA DCR to Conserve Land	•				•	•	None required
Promote Conservation of Privately Held Open Space	•				•	•	Annual Open Space/ConCom Budget
Scenic Roads Bylaw to Town Meeting	•					•	None required
Work with Historical Commission to Protect Historic Landscapes	•				•	•	None required
Support the Community Preservation Act	•	•			•	•	None required
Work with Planning Board to add "Right to Garden" provision to subdivision bylaws.		•				•	None required
Stewardship of Town Conservation Land and Other Parcels							
Implement Stewardship Plan for the Former Stefans Farm			•		•	•	Annual LSC Budget, Grants
Prepare Stewardship Plan for Peppercorn Hill			•			•	Annual LSC Budget
Implement Stewardship Plan for Peppercorn Hill			•				LSC Budget, Grants
Forest Stewardship Plan for Warren Brook & Adjacent Properties							CPA
Prepare Stewardship Plan for Warren Brook			•				Annual LSC Budget
Implement Stewardship Plan for Warren Brook			•				LSC Budget, Grants
Prepare Stewardship Plan for Howarth & Howarth Glen CA's			•				Annual LSC Budget
Implement Stewardship Plan for Howarth & Howarth Glen CA's			•				Annual LSC Budget, Grants
Organize Annual Public Land Clean-up Day			•		•	•	Annual LSC Budget
Prepare and Update Trail Maps			•		•	•	None required
Update Stefans Stewardship Plan			•				Annual LSC Budget
Investigate Options for Phragmites Control at Old Zac	•					•	None required
Hold and Annual Fuelwood Lottery			•		•	•	None required
Yearly Inspection of CR's Held by Upton ConCom	•				•	•	None required
Document Impacts of Climate Change (long term monitoring of phenology, stream temperature, and/or ice out date at Pratt Pond)	•				•	•	None required

Upton 2011 - 2017 Action Plan

Action	Organization				Year				
	Con Com	Open Space	LSC	Rec Com	2011	2012	2013	2014	2015
Environmental Education									
Establish and Organize an Annual Earth Day Event	•	•			•	•	•	•	•
Publish Electronic Newsletter ("Upton Tomorrow") twice a year		•			•	•	•	•	•
Sponsor Nature Walks and Talks (including Biodiversity Days)		•			•	•	•	•	•
Maintain Environmental Information/Links on Town Website	•	•	•		•	•	•	•	•
Occasional Environmental/Open Space Column in Town Crier		•	•		•	•	•	•	•
Wetland Protection									
Administer State Wetland Protection Act and Town Bylaw	•				•	•	•	•	•
Certify Vernal Pools (goal = 1/year)	•	•			•	•	•	•	•
Watershed/Water Quality Protection									
Organize /Train Watershed Stream Team	•				•				
Stream Team Survey of West River	•					•			
Stream Team Survey of Warren Brook	•						•		
Stream Team Survey of Center Brook	•							•	
Stream Team Survey of Mill River and Miscoe Brook	•								•
Bring Stormwater Bylaw to Town Meeting	•								
Zone 2 Aquifer Protection Bylaw	•								
Preserve Water Quality through Open Space Protection		•			•	•	•	•	•
Work With Blackstone River Watershed Association	•	•			•	•	•	•	•
Create Greenways									
Establish Town Trails Committee	•	•			•				
Map Existing Trails and Identify Greenway and Trail Easement Opportunities						•	•	•	•
Recreation									
Investigate & Promote Acquisition of Land for New Athletic Fields		•		•	•	•	•	•	•
Maintain Existing Fields				•	•	•	•	•	•
Enhancements to Town Beach Softball Field for Baseball				•	•				
Develop New Athletic Field Complex				•		•	•	•	•

Upton 2011 - 2017 Action Plan

Action	Organization				Year		Funding
	Con Com	Open Space	LSC	Rec Com	2016	2017	
Environmental Education							
Establish and Organize an Annual Earth Day Event	•	•			•	•	Annual Open Space Budget
Publish Electronic Newsletter ("Upton Tomorrow") twice a year		•			•	•	None required
Sponsor Nature Walks and Talks (including Biodiversity Days)		•			•	•	Annual Open Space Budget; FUSF
Maintain Environmental Information/Links on Town Website	•	•	•		•	•	None required
Occasional Environmental/Open Space Column in Town Crier		•	•		•	•	None required
Wetland Protection							
Administer State Wetland Protection Act and Town Bylaw	•				•	•	Annual ConCom Budget
Certify Vernal Pools (goal = 1/year)	•	•			•	•	None required
Watershed/Water Quality Protection							
Organize /Train Watershed Stream Team	•						Annual ConCom Budget
Stream Team Survey of West River	•						Annual ConCom Budget
Stream Team Survey of Warren Brook	•						Annual ConCom Budget
Stream Team Survey of Center Brook	•						Annual ConCom Budget
Stream Team Survey of Mill River and Miscoe Brook	•						Annual ConCom Budget
Bring Stormwater Bylaw to Town Meeting	•						None required
Zone 2 Aquifer Protection Bylaw	•						None required
Preserve Water Quality through Open Space Protection		•			•	•	See Open Space Preservation
Work With Blackstone River Watershed Association	•	•			•	•	None required
Create Greenways							
Establish Town Trails Committee	•	•					None required.
Map Existing Trails and Identify Greenway and Trail Easement Opportunities					•	•	Annual LSC Budget, Grants
Recreation							
Investigate & Promote Acquisition of Land for New Athletic Fields		•		•	•	•	CPA, Grants, Donations
Maintain Existing Fields				•	•	•	CPA, Grants, Donations
Enhancements to Town Beach Softball Field for Baseball				•	•		CPA, Grants, Donations
Develop New Athletic Field Complex				•	•	•	CPA, Grants, Donations

Section 10

Comments

LETTERS RECEIVED

PLANNING BOARD

Town of Upton

E-Mail: planningboard@upton.ma.us
Phone: (508) 529-1008



Massachusetts

P.O. Box 463
Upton, Massachusetts 01568

May 24, 2011

Christine Scott, Chair
Upton Conservation Commission
P.O. Box 516
Upton, MA 01568

Dear Ms. Scott:

Per our request the Central Massachusetts Regional Planning Commission (CMRPC) has reviewed the Upton Open Space and Recreation Plan. We are in receipt of CMRPC's letter dated May 16, 2011 (attached) which fully supports the plan.

The Planning Board is in agreement with CMRPC's comments and would further add that the plan is consistent with the 2005 Upton Master Plan with respect to the community vision and protection of open space. We encourage the Conservation Commission, Open Space Committee, Recreation Commission, and Land Stewardship Committee to work towards its implementation.

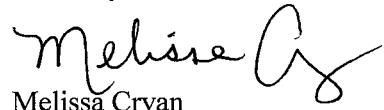
Sincerely,

A handwritten signature in black ink, appearing to read "Paul Carey".

Paul Carey
Chairman
Upton Planning Board

Congratulations on the great start you've made on this important undertaking! Please contact me at (617) 626-1171 or melissa.cryan@state.ma.us if you have any questions or concerns, and I look forward to reviewing your final plan.

Sincerely,



Melissa Cryan
Grants Manager



Central Massachusetts Regional Planning Commission

Lawrence B. Adams Executive Director
Mary Ellen Blunt Transportation
Megan T. DiPrete Regional Services &
Janet A. Pierce Community Development
James R. Bates, Jr. Business Manager
 Commission Chair

*Rec'd
5-17-11*

May 16, 2011

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

Dear Ms. Cryan;

RE: Town of Upton Open Space and Recreation Plan (April 2011)

The Central Massachusetts Regional Planning Commission (CMRPC) is writing this letter in support of the Town of Upton and its recently completed Open Space and Recreation Plan 2011. The Town and its Open Space Committee are to be commended for its hard work putting this Plan together as well as the efforts taken in implementing many actions indicated in its previous plan.

The Open Space Committee has done a very thorough job and the final document appears compliant with the standards for such plans as promulgated by your office. Upton has recognized the need to "intelligently plan for the coming storm (development pressures) – to identify critical resources and special places that must be preserved and to bring all available tools to bear on the preservation effort."

Upton's Open Space and Recreation Plan 2011 provides the Town with the specific guidance and action steps needed to accomplish its goals and objectives. Maybe most exciting, Upton plans to encourage the coordination of open space and recreational efforts among neighboring towns, area non-profit institutions and civic-minded organizations to promote a cooperative approach to protect open space, natural, historic and cultural resources and to improve recreation opportunities. The Town of Upton will be well served by having a State-approved up-to-date 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.

We find Upton's Plan to be fully consistent with Massachusetts Outdoors: Statewide Comprehensive Outdoor Recreation Plan (SCORP), CMRPC's Regional Open Space and Recreation Plan as well as the conservation priorities outlined in our 2020 Growth Strategy for Central Massachusetts and its 2004 Update. Please consider this letter to be a demonstration of CMRPC's support for the Plan and the process used to develop it.

Sincerely,

Trish Settles, AICP
Principal Planner

Cc: Upton Open Space Committee

Board of Selectmen

Town of Upton



Massachusetts

BOARD OF SELECTMEN

Michael E. Goodwin, Chairman
Robert J. Fleming
Kenneth E. Picard

TOWN MANAGER

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November ¹⁶
₁₀, 2010

Christine Scott, Chair
Upton Conservation Commission
P.O. Box 516
Upton, MA 01568

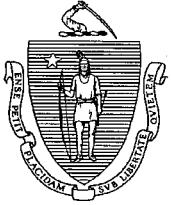
Dear Ms. Scott:

At their meeting on November ¹⁶₉, 2010 the Upton Board of Selectmen voted to express their support for the 2010 Open Space and Recreation Plan Update for the Town of Upton.

The comprehensive plan is consistent with the 2005 Upton Master Plan and the 2006 Recreation Master Plan with respect to the protection of open space and provision of recreational opportunities for our citizens. We encourage the Conservation Commission, Open Space Committee, Recreation Commission, and Land Stewardship Committee to work towards its implementation.

Sincerely,

Michael E. Goodwin
Chairman
Upton Board of Selectmen



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July 28, 2010

Mike Penko
1 Grafton Road
Upton, MA 01568

Re: Open Space and Recreation Plan

Dear Mr. Penko:

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 July 2015. Conditional approval will allow the town to participate in DCS grant rounds through July 2015, 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. History of the Community – please include more information in this section, specifically 20th century history.
2. Environmental Challenges – this section should also include information on hazardous waste sites, landfills, erosion, chronic flooding, sedimentation, and environmental equity issues.
3. Section 5 – I can't find Table 9 that is referenced in this section. The data that seems as if it will be included in this section is required. The section should also list any Conservation Restrictions or Agricultural Preservation Restrictions in town as well.
4. Analysis of Needs – SCORP and how it relates to Upton must be included in the Community's Needs section. It can be found online at <http://www.mass.gov/Eoeea/docs/eea/dcs/massoutdoor2006.pdf>.
5. Action Plan – each goal and objective should also have a potential funding source associated with it. Action Plans can now be written for seven years, which gives the OSRP two more years worth of approval. If the town changes the five year action plan into a seven year action plan, the OSRP will expire in July 2017.
6. Letters of Review from the Regional Planning Agency, Chief Municipal Officer, and Planning Board are needed.
7. Maps – be sure that the key on the maps are legible when printed. Currently, many of them are not.

OTHER COMMENTS

From: Ellen Arnold
To: Mike Penko
Email dated February 8, 2010

I apologize that I have not been able to go through your entire document although I have read much of it. Thank you once again for all the time, energy and knowledge you have contributed toward this update. Here are the comments that I have, some that I may have expressed at your meeting. I am using the summary you attached to the map in your handout.

1. Upton State Forest acreage discrepancy should be resolved if possible. DCR states that the forest is 2660 acres. Your table shows 2035. I believe you said the smaller number is from Upton Assessor's records. Perhaps Christine Berry could help resolve that. I think that at one time some of the DCR land in Northbridge was once considered part of USF but is now considered part of the Blackstone River/River Bend Farm complex.

Response: 2035 acres is from Tax Assessors Records. The 2660 value includes portions of Upton State Forest in other towns. A DCR webpage at http://www.mass.gov/dcr/news/publicmeetings/forestry/dcr_properties.pdf indicates the total acreage of Upton State Forest in Upton is 2761.5, with 2221.8 acres in Upton.

2. The map does have some discrepancies that should be resolved if possible.

Response: Acknowledged. Discrepancies will be resolved.

3. In your table that is attached to the map. Page 1 under Open Space Preservation, fifth line down. I think there is a typo. Did you mean SVT or SCT?

Response: Typo corrected.

4. Same page under Open Space. Bring Scenic Roads to Town Meeting. I think that there should also be some sort of protection for stone walls. At least along public ways. Don't know if that is part of a scenic roads bylaws or if it is developed separately.

Response: Stone wall protection along public ways would be part of scenic road bylaw.

5. Work with His. Comm to protect historic landscapes. This could also include protection of stone walls. Maybe not from a bylaw but more as a educational/cr type of thing. Could also consider something that would encourage developers to use something a little more in keeping with the heritage of stone walls so that we don't end up with another "Walmart Wall" as happened at the Glen Echo project.

Response: Comment noted. Town needs to improve design review standards. Language on stone wall protection added to document.

6. Stewardship of Town Conservation Land and other Parcels. Obvious goals but I would just say that in that goal you might say to identify leaders that could develop and implement plans for the

properties. Instead of having one person in charge of all. Make it a committee with one person in charge of one property but all reporting to one chair and meeting as a committee to review.

Response: Comment noted. The charter for the Land Stewardship Committee does provide for naming stewards for individual properties.

7. Organize public lands clean up day. Very good but may want to consider working with FUSF or Men's Club and other organizations to do that but keep in mind that too many clean ups spread the volunteers too thin. FUSF has Park Serve Day and Men's Club has a town roads clean up. It might be better to put out a list of properties and let an organization adopt an area to keep clean. Maybe a Cub Scout pack could take a couple of trails and keep that clean. Would mean that they are outdoors doing it more often instead of just one day. Also would teach a stewardship lesson as well as pride of ownership. Less work to do it that way than to organize one big day. There could be an adopt a trail or adopt a park on the town website with contact info. Have a work sheet that the steward turns in periodically and recognize the stewards in the Town Crier or at a Selectmen's meeting.

Response: Public lands cleanup day added to Action Plan.

8. Same Section. Typo. Hold an (not and) Fuelwood Lottery. May want to say hold fuelwood lottery as necessary instead of making it annual. Not sure if the goal is to provide wood for people or if goal is to thin dead wood and undesirable wood on public property. Is this part of a forest plan?

Response: Text changed.

9. Add to this list. Report vernal pool data for certification as soon as possible after collected.

10. Environmental Education. Add- partner with other like minded organizations like Friends of Upton State Forest...This is already happening but is good to make partnerships part of a goals process.

11. Add. Identify potential links to other towns and work toward Regional Partnerships.

12. Watershed/Water Quality Protection

Same comments as #6 and #7. Adopt a stream is a good project for an organization or neighborhood.

13. Create Greenways.

Reach out regionally. Same as #11.

Work with landowners to identify ways to preserve os without town purchase.

Educate that there are other sections to the Chapter 61 law. Most people are only familiar with 61a and don't know about 61b.

14. Add. Monitor grant programs to use when appropriate. (You have already done this but it is a good goal.)

15. Already mentioned the cemetery identification. The one across from Lakeview is known as 2nd. Cemetery or Pine Grove. Not sure if you mentioned the small cemetery in South Upton and not sure if that is public or private land.

Thanks for taking my comments.

Ellen Arnold

Section 11

References

Section 11

References

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