

Town of Goshen Open Space and Recreation Plan

2021 Update



Prepared for: Town of Goshen

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Goshen Open Space and Recreation Plan

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SECTION 1: PLAN SUMMARY

Goshen residents cherish the scenic landscape all around them and want to maintain the rural character of their community and the quality of life it affords them. Most integral to Goshen's character are the protection and management of forests, protection of water quality, active agriculture, and healthy, diverse and contiguous wildlife habitats. Residents seek to continue and expand upon the many forms of outdoor recreation found in Goshen including trails for hiking, snowmobiling and horseback riding, and swimming areas open to the public.

In concert with this vision, four goals for open space and recreation have been carried over from the previous OSRP, with slight modifications, and one new goal has been added:

Goal #1: The diversity, continuity and integrity of wildlife habitat and biodiversity are well-established and protected in Goshen.

Goal #2: Farmland and forests are healthy local resources and a thriving component of Goshen's vibrant rural character.

Goal #3: Goshen's rivers, lakes, ponds and aquifers are clean and protected from all sources of pollution.

Goal #4: Recreational resources and opportunities are accessible to the public.

Goal #5 – Goshen's open spaces and recreational areas support climate change resilience and adaptation.

These goals are essentially the same in spirit as those identified in the 2013 Open Space and Recreation Plan. Thus, the Open Space Committee has met certain actions identified in the 2013 plan, as well as carried out other projects in support of those goals. Open Space Committee accomplishments since 2013 include:

- Continued to make improvements to the multi-user Tilton Town Farm trail, for both educational and recreational use;
- Installed a memorial bench for Terry Johnson at the Tilton Town Farm South Loop trailhead in 2016;
- Installed a trailhead map kiosk in 2017 built by Boy Scout Troop 705 Chesterfield/Goshen;
- Reblazed the Tilton Town Farm trail North Loop after it was logged;
- Joined the Goshen Energy Committee with HCDC;
- Open Space Committee member Alison Bowen attended UMass Extension Keystone Conference;
- Open Space Committee member Pat Morey participated in 3 day Vernal Pond Certification Training sponsored by Westfield River Wild and Scenic in March 2019. Two ponds in Goshen have been certified and a third is pending;
- Collaborated with Highlands Footpath Initiative on plans for trail network;
- Participated in development of the town's Complete Streets Policy in 2019;
- Implemented programs to control invasive species;
- Facilitated implementation of program to control invasive species at Tilton Farm;

- Liaison with Goshen landowners and conservation organizations to help them select appropriate options for preservation of open space, including the organization of community events on conservation options for property-owners;
- The Open Space Committee collaborated with Hilltown Land Trust in organizing a half day workshop, Network for Local Land Conservation held on January 25, 2020 in Goshen Town Hall. Over 30 people from neighboring towns attended;
- Sponsored or co-sponsored educational programs on other open space issues, including a 2017 “Walk and Talk” at the Tilton Town Farm Recreation Area about the DCR Community Forest Stewardship Implementation Grant improving the health of the forest through harvesting and planting trees; and
- Worked to develop regional trail networks and other conservation projects, through Rt. 112 Scenic Byway, Westfield River Watershed Association and Wild and Scenic Advisory Committee, and other trail-user groups.



Fall 2017 “Walk and Talk” at the Tilton Farm woods with Pat Conlin.

SECTION 2: INTRODUCTION

A. Statement of Purpose

The 2021 Goshen Open Space and Recreation Plan (OSRP) provides a thorough assessment and inventory of lands of recreation and conservation interest, as well as related data and information about natural resources, community demographics and an economic profile of the community. This assessment combined with the public feedback provides a realistic and implementable plan to further the development of important building blocks for achieving Goshen’s goals and objectives for open space and recreation.

B. Planning Process and Public Participation

Planning Process

This update to the 2013 Open Space and Recreation Plan has been undertaken by the Goshen Open Space Committee with technical assistance provided by the Pioneer Valley Planning Commission (PVPC) through a District Local Technical Assistance (DLTA) Grant from the Massachusetts Department of Housing and Community Development. The Committee met five times between January and December in 2020 regarding the plan update.

Members of the Open Space Committee include:

- Alison Bowen
- Melanie Dana
- Pat Morey
- Sandra Papush

Additional information and feedback provided by the Goshen Board of Assessors and Building Department.

Incorporating Recent Planning Processes

The Town of Goshen has completed a number of other relevant planning activities in the 7 years since the last update of its OSRP. The results of these plans and reports are incorporated into this OSRP update where appropriate to ensure consistency and continuity.

- MVP Planning Program, Summary of Findings Report, 2020
- Complete Streets Policy, May 2019
- Route 9 / East Street Walk Audit, May 2019
- Master Plan 2019 Proposal for Goshen Town Center, October 2019

Public Participation

The Goshen Open Space Committee issued a public survey and held a public visioning session to offer the community ample opportunity to participate in developing goals, objectives and strategies for open space and recreation in Goshen. The public survey was posted online at Survey Gizmo and remained open for 30 days in late-July through mid-August, 2020. Notice of the survey was advertised to residents on the town website, and outside of town hall on the town notification sandwich board. Paper copies of the



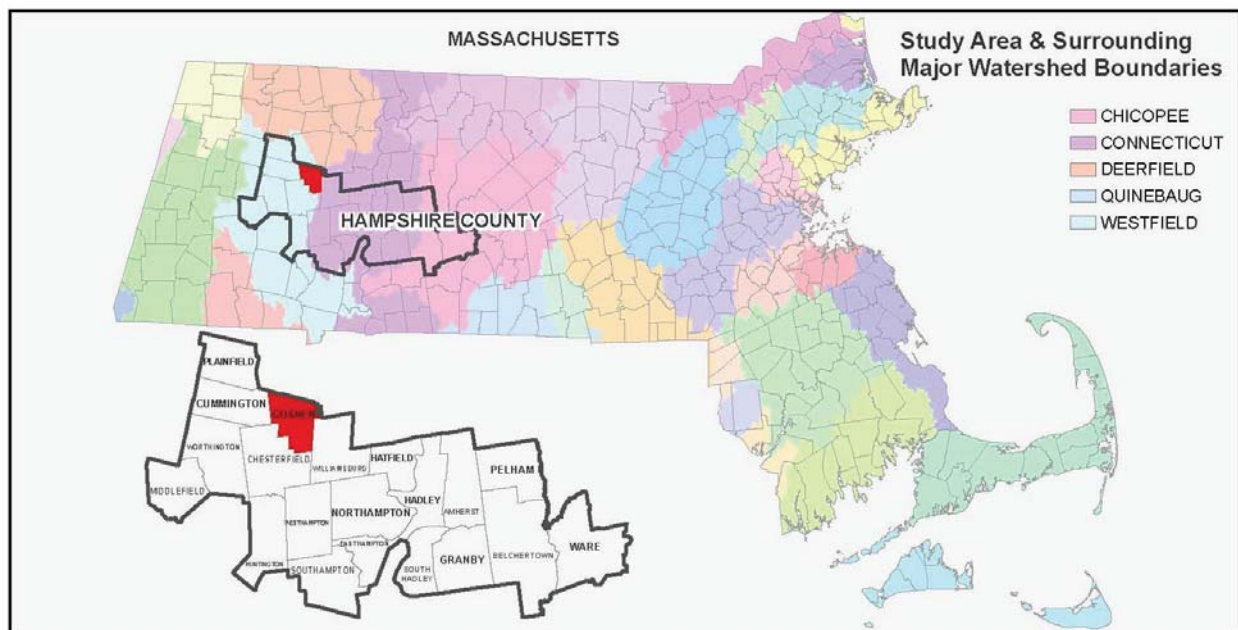
survey were distributed at the July 25th, 2020 Town Meeting, and were subsequently entered into Survey Gizmo by Committee members. A discussion of the survey results is included in Section 6 Community Vision.

The final draft of the Plan was issued for a 30-day public comment period in November 2020. An electronic version of the plan was posted on the Town website and at PVPC.org. No paper copies were made available due to precautions around the COVID-19 pandemic. Notice of the draft plan was sent to each of the town boards and posted on the Town's website, Facebook page, and in the local newspaper. Comments were submitted in writing to PVPC, reviewed by the Open Space Committee and incorporated into the final plan.

SECTION 3: COMMUNITY SETTING

A. Regional Context

Covering about 17.7 square miles, the Town of Goshen is located along the northern border of Hampshire County in the foothills of the Berkshires. Known as one of the “hilltowns,” Goshen lies in the uplands west of the Connecticut River Valley, northwest of Northampton. The Town’s elevation ranges from 944 feet to 1694 feet. In Franklin County, the towns of Conway and Ashfield to the north border Goshen whereas in Hampshire County, Williamsburg lies to the east, Chesterfield to the south and southwest, and Cummington to the northwest. Major roadways through the Town are Route 9 tending northwest from Williamsburg through Goshen to Cummington, and Route 112 from the intersection of Route 9 at the north end of Goshen Center north to the Ashfield line in Franklin County.



Goshen’s proximity to Northampton, lack of good roads until the 20th century, and lack of reliable water power prevented any major industrial development. Industry consisted of small mills and home-based businesses, which continue today. Because of its fairly remote location, it has been able to maintain a quiet, country character. Most development consists of single-family homes; the remainder of land in Goshen is hilly and forested, with some scattered open fields in farming. Goshen was named after the town that the Israelites inhabited while in Egypt. As with most hilltowns, the Congregational Church has played a central role in its establishment.

The Town of Goshen has limited economic resources and is primarily considered a “bedroom community,” since most residents travel outside of town boundaries for employment. New home development is probably the greatest threat to open space in Goshen. That is, should large parcels of land (e.g., greater than 100 acres) be subdivided, wildlife habitat fragmentation or the loss of open space will occur in Goshen. While new home development can decrease open space, implementation of proper town planning can create a balance between open space preservation and new residential development.

Despite a rural veneer, Goshen has changed a great deal throughout its history. Goshen reached its lowest population in 1920 with 224 residents. Several factors have now brought the Town to the edge of a critical transformation. These factors include: the economic trends in Massachusetts and in the country as a whole; a nationwide demise of the family farm in favor of large economies of scale; large-scale flight from cities and large towns in favor of rural settings; development pressures on undeveloped agricultural and forest land by building development; and changes in the economy favoring service and information businesses over industry and manufacturing.

Goshen's location within 13 miles of the City of Northampton and 25 miles of the college town of Amherst, respectively, and a relatively easy access to Interstate 91, has contributed to its development as a "bedroom community" to these two larger towns, as well as the Town of Greenfield and the cities of Springfield, Chicopee, and Westfield along the I-91 corridor into Connecticut. As town-wide Broadband becomes available, probably within the next year, Goshen may well become a more desirable location for increased development.

Goshen is perceived as a recreational destination within the Pioneer Valley by virtue of the location of the D.A.R. State Forest (which has trails, swimming, hiking, picnicking, and camping). In addition, Holy Cross is a private camp on Upper Highland Lake and Camp Howe, located on the west side of Lower Highland Lake north of East Street, attracts many young people on a seasonal basis with its camping facilities and opportunities for trail and water sports.

B. History of the Community

Prior to European settlement, the Goshen area was part of the hunting region for local Native Americans. As with most of the Hilltown areas, Goshen was not settled until the 1760s. After the French and Indian Wars, the French surrendered this area to Great Britain and conflicts with Native Americans lessened,, allowing settlement in the piedmont areas northwest of the Connecticut River Valley. It took Goshen over 100 years after Northampton and the surrounding towns in the Connecticut River Valley were settled to do the same. As part of Narragansett township No. 4, part of what became Goshen was laid out in 1736 and called "New Hingham" (now Chesterfield). The first settlers to Goshen were residents of New Hingham, west of Hatfield. A second land grant to the soldiers of King Phillip's War was called "Chesterfield Gore." Suffice it to say that what is Goshen today was originally part of Chesterfield. Eventually in 1781, residents of Chesterfield, willing to establish a meetinghouse of their own, broke off from that town. The Town of Goshen was incorporated on May 14, 1781.

Geographic settlement

By 1840, a wide network of town roads had been constructed to all parts of Goshen. Self-sufficient farming gradually gave way to a money economy in which cash crops became a necessary means of paying for the increasing purchase of goods. With more intensive farming in the 19th century, the virgin fertility of the soil was depleted. Weeds, crop pests, and diseases slowly moved in, and the lure of paid work in cities took its toll. Those who prospered began to buy out their neighbors and the best farms became larger, but fewer in number. By the end of the 19th century, the Hampshire Gazette was regularly full of several columns of farms for sale in the areas of hill top farming. A turn-of-the-century article in the Gazette explains: Large numbers of New England farms, well located or on rocky lands, should never have been utilized for agricultural purposes. That they were reflected the population pressures which existed at a period when there was no other recourse but farming, when household industries were an

important source of revenue, and when men and women lived simply, reared large families and demanded little.

The center of Goshen remained fixed after the erection of the meetinghouse in 1782. All subsequent civic buildings were built nearby. The next public building in Goshen was the small wooden framed Town Hall that was erected in 1848 and served the Town as office and library until the current stone Town Hall was built in 1909-1911. The Goshen Center School was built next to the new Town Hall in 1923, it became the Town Offices when the schools were regionalized. In 1936 the one-story rear addition to the Town Hall was constructed. In 1976 the land next to the current post office was acquired by the Town for the park, tennis courts and parking lot.

Goshen as a Summer Resort

In the latter half of the 19th century, Goshen became known as a rural summer resort and somewhat of a health mecca, attracting a number of religious organizations. Among the reasons people came to spend the summers, according to literature of the time, were charming views and landscapes with the Mt. Holyoke and Mt. Tom ranges and the surrounding valley clearly visible; pure air at the high elevations around town; the quiet village; charming drives; and interesting geology, flora, and fauna. Tourist destinations for hikes and picnics were known as Devil's Den, the Lily Pond, and the Cascade.

Eventually, some of the people who had customarily come for the summer began to build their own seasonal homes in Goshen, causing a lasting effect on the appearance of the Town and its building stock. Also, in 1956 developers designed Hammond Acres around Hammond Pond, creating many summer cottages.

20th Century Recreation Areas

Organized recreation facilities seemed to be a natural offshoot of the summer resort industry in Goshen. Mention has already been made of the development of Hammond Acres. Holy Cross Camp was developed with an initial purchase of 125 acres on the west shore of Upper Highland Lake in 1923. An additional 100 acres were purchased in 1959. The D.A.R. State Forest was established in 1929 when John Tomlinson bought up 23 tracts of land and donated them, some 1,020 acres, to the Daughters of the American Revolution. During the 1930s, a Civilian Conservation Corps camp was established responsible for making many improvements. Camp Howe, a children's summer camp on East Street, was developed in Goshen after moving from Dana, Massachusetts, in 1940. Robert and Margaret Williams operated a children's summer camp on East Street from 1948 to 1967 called "The Rock." Camp Jollie, on the grounds of the Tomlinson Estate, provided summer recreation for handicapped children and was sponsored by the United Cerebral Palsy of Western Massachusetts. The Springfield Republican also maintained a summer camp for newspaper boys on Cape Street.

Historical Archaeology

Goshen has numerous historical archaeological sites in the form of stone walls, stone foundations and cellar holes, stone bridges, and at least two unexplained stone structures. Two historic archaeological sites are on file at the Massachusetts Historical Commission:

- 1) INV. #GHS-HA-01: Beals Home Stagecoach Depot on Beals Road (1792) with its associated abutments of a bridge spanning a nearby stream

- 2) INV. #GHS-HA-02: The Dresser Hill Sites (ca. 1846), consisting of George Dresser’s house, with possible cellar hole of an earlier house and the associated remnants of the Reuben Dresser sawmill foundation.

Other historical archaeological sites and structures on private land which have not been inventoried include the “Potato Hole”, which is possibly a stone storage structure built into the side of a hill in the northeast portion of town near the Conway town line, the Goshen tunnel above the Goshen Cemetery, the stone arched bridge on West Street, and several partial foundation walls from small mills and other partial cellar holes around town.

National Register of Historic Places Sites

The only National Register listing in Goshen is the historic district which comprises Mountain Rest, a missionary summer encampment, founded by Dr. George D. Dowkontt of New York City in 1900 or 1901. After having been placed on the National Register in November, 1983, it was developed into the Wildwood condominiums. It is currently owner-occupied and has a recently reactivated property owner association. It is located on Wildwood Lane off Spruce Corner Road.

C. Population Characteristics

General

Goshen has seen increases and decreases in population in response to external factors such as land prices, road development, industry in nearby communities, and housing costs in the Pioneer Valley. Throughout the fluxes in population, Goshen has remained a small Hilltown. Since the original settlement in 1761 and subsequent incorporation in 1781, the population rose steadily until reaching a peak of 724 in 1800. The population decrease reached its lowest point in 1920, with only 224 residents in town. Until recently Goshen’s population has been on the rise, adding approximately 90 residents every decade. Between 1990 and 2000, the population increased from 764 to 921. By 2010 the population reached 1,054 residents according to the Federal Census. The population decreased slightly to 1,003 by 2018 according to the American Community Survey 5-year estimates.

Population in Goshen		
Year	Population	Percent Change
1800	724	0
1920	224	-69
1990	764	241
2000	921	20
2010	1054	14
2018	1,003	-5

Sources: 1929 and 1800 population estimates from previous OSRP, 1990 Census Population Estimates Program, US Census Bureau 2000 Decennial Census, US Census Bureau 2010 Decennial Census, 2018 American Community Survey 5-year Estimates

Total Population by Age		
2018	Total	Percent of Population
Total Population	1,003	1,003
Under 5 years	68	6.8
5 to 9 years	37	3.7
10 to 14 years	59	5.9
15 to 19 years	53	5.3
20 to 24 years	31	3.1
25 to 34 years	68	6.8
35 to 44 years	85	8.5
45 to 54 years	233	23.2
55 to 59 years	69	6.9
60 to 64 years	113	11.3
65 to 74 years	149	14.9
75 to 84 years	28	2.8
85 years and over	10	1
Median age (years)	50.6	

Source: U.S Census Bureau, American Community Survey, 2018: ACS 5-Year Estimates Data Profiles

A community’s population characteristics directly impact land use and conservation practices. The recreation needs differ greatly amongst different age groups. The median age of a Goshen resident is 50 years old. Therefore, more people in the community would benefit from forms of passive recreation rather than active recreation. Passive recreational activities are less land use intensive and are very compatible with natural resource protection.

Goshen currently has a population density of approximately 58 people every square mile. In 2012, Goshen had approximately 60 people every square mile. The population density of Goshen has remained relatively stable over the past 20 years. This could potentially be a result of a leveling in the housing market after the 2008 economic crisis and housing market crash.

Residential building permits provide one way of noting development pressures on a community. Since the beginning of the 21st century, Goshen has seen an average of over four building permits every year. Since 2010 Goshen has added 18 new buildings, the majority of which were single family structures for an average of 1.8 new homes per year. Building slowed after the market crash of 2008 consistent with national homebuilding trends, but in the years leading up to the market slowdown associated with COVID-19, the Town saw increased development. In fact, 10 of the 18 buildings permitted since 2000 were completed between 2016 and 2019. One of these projects was a 2-family duplex, and another was the Highland Village Circle Goshen Senior Housing project with ten one-bedroom apartments for tenants who are at least 62 years old and who meet income qualifications. Despite Goshen the Town’s recent decrease in population and a slowing in construction since during the 2020 pandemic, the community recognizes the potential for increased development pressures on its abundant open space in the future. It will be important to monitor development and identify parcels of land appropriate for preservation to preserve the community’s rural character.

Goshen Building Permit Trends					
Year	All Units	Single Family Units	Year	All Units	Single Family Units
2000	8	8	2010	3	3
2001	7	7	2011	0	0
2002	10	10	2012	3	3
2003	5	5	2013	1	1
2004	7	7	2014	1	1
2005	6	6	2015	0	0
2006	4	4	2016	1	1
2007	6	6	2017	2	1
2008	0	0	2018	3	2
2009	2	2	2019	4	4
			2020	0	0

Source: Goshen Building Commissioner, 2020

Household Income, Poverty, Major Employers, and Employment Trends

Goshen’s average household income has been growing over the last three decades. The most common income bracket for households in 1990 was \$35,000 to \$49,999. In 2000 the most common income bracket increased to \$50,000 to \$74,999; and, from 2005 to 2009 it increased again to between \$75,000 and \$99,999. In 2018, the most common income bracket increased again to \$100,000 to \$149,999. Goshen has a diverse income spread. In 2018, 24% of Goshen households earned less than \$50,000, with just over 40% of households earning over \$100,000. The number of households earning over \$100,000 has doubled since 2009. The recreational needs and interest of residents with a range of income should be addressed by the town. Surveys have shown that people with higher incomes are more likely to attend sporting events, play sports and participate in other forms of active and passive recreation.

Goshen Household Income				
Year	1990	2000	2005-2009	2018
Total number of households:	317	368	426	403
Less than \$10,000	9.1%	3.8%	2.5%	0
\$10,000 to \$14,999	3.4%	4%	4.4%	4.7%
\$15,000 to \$24,999	16.3%	8.6%	4.6%	5.2%
\$25,000 to \$34,999	11.2%	14.3%	4.3%	7.9%
\$35,000 to \$49,999	30.2%	19.5%	10.4%	10.9%
\$50,000 to \$74,999	19.1%	26.2%	18.7%	15.6%
\$75,000 to \$99,999	7.5%	15.2%	33.3%	13.4%
\$100,000 to \$149,999	3%	6.2%	9.5%	35.5%
\$150,000 to \$199,999	0%	0.8%	5.6%	3.2%
\$200,000 or more	N/A	0.8%	5.8%	3.5%

Source: U.S Census Bureau, 1990 and 2000 Census, 2005-2009 and 2018 American Community Survey 5-Year Estimates

Note: The original data from the years 1990, 2000 and 2005-2009 were displayed as whole numbers. The only available data from 2018 were displayed as a percentage. Therefore, the whole numbers were converted to percentages to make all the data uniform and comparable. Additionally, the original data were presented in smaller income brackets than what was available for the 2018 data. The income brackets were broadened to be comparable with the most recent dataset.

Goshen has generally seen a decrease in the percentage of households living in poverty as the town population has grown. As of 1990 approximately four percent of the community was living under the poverty line. From 2005 through 2009 approximately one percent of the community was living under the poverty line. In 2018 the percent of the community living under the poverty line increased to 2.4 percent.

Poverty in Goshen		
Year	Below Poverty Line	% Below Poverty Line
1990	33	3.97%
2000	71	7.87%
2005-2009	N/A	1.20%
2018	N/A	2.4%

Source: 1990 and 2000 U.S. Census, 2005-2009 American Community Survey 5 Year Estimates, 2018 American Community Survey 5 Year Estimates

The majority of the approximately 660 workers in Goshen, over 80 percent traveled outside of the community for employment in 2014¹. The largest five employers in town provide just over 100 jobs. Commuting is a major part of each working resident’s day. The recreational and open space needs of commuters may be different than those who work at or close to home. As of 2019, over 97% of the labor force in Goshen was actively employed.

¹ <http://www.pvpc.org/sites/default/files/Goshen%20profile.pdf>

Largest Employers in Goshen			
Company Name	Employment Size	Company Name	Employment Size
Camp Howe	50	Willow Bend Publishing	5-9
Highland Ambulance EMS Inc	38	Accufab	8
Hilltown Community Development Corporation	10-19	George D Judd & Sons LLC	9
George Propane Inc	18	Berkshire Technologies Inc	6
Goshen Stone Company	10	Graham Electric Inc	5
Three Sisters Sanctuary	9	Spruce Corner Restaurant	5
Berkshire Management Group	5-9	Town of Goshen	3+

Source: USA2020; Goshen Open Space Committee, 2020

Note: The Town of Goshen has three full time employees, and 37 part-time, seasonal, or limited-use employees. Several of those part time employees fill more than one Town position.

Employment Trends in Goshen			
Year	Labor Force	Employed	% Unemployed
2019	679	662	2.5%
2018	676	657	2.8%
2017	656	642	2.1%
2016	655	638	2.6%
2015	653	628	3.8%
2014	652	622	4.6%
2013	636	603	5.2%
2012	635	603	5%
2011	626	598	4.5%
2010	632	596	5.7%
2009	605	566	6.45%
2008	600	572	4.67%
2007	593	577	2.70%
2006	601	577	3.99%
2005	588	573	2.55%
2004	598	579	3.18%
2003	599	578	3.51%
2002	588	575	2.21%
2001	581	571	1.72%
2000	574	566	1.39%

Source: Massachusetts Executive Office of Labor and Workforce Development

Environmental Justice

Environmental Justice Communities are areas that have a need for protection from environmental pollution because the area is home to a large percentage of poor, foreign born, minority, or foreign language speakers. Goshen is not an Environmental Justice Community however a need to protect the recreational and open spaces that make Goshen special does exist.

D. Growth and Development Patterns

Patterns and Trends

Goshen began as a small mill town surrounded by forest, which provides recreational opportunities today. The community's character has long been defined by large tracks of forests and a few farms. With the greater access provided by better roads and proximity to nearby college towns, Goshen is subject to some pressures of residential development. To illustrate, since 1990 Goshen has seen an average of five four residential building permits per year.

Due to numerous wetland areas, large-scale development is limited. Although Goshen currently has no local ordinances for increased wetlands or rivers protection bylaws the Commonwealth's Wetlands Protection Act is in effect. Historically and for practical reasons, up until now both wetlands and floodplain development has been limited.

Infrastructure

Transportation

There is a well-defined road network throughout Goshen. Two major State routes exist in Goshen. State Route 9 runs from the southeast border with Williamsburg to the northwest boarder with Cummington. Route 9 is also locally known as United States Marine Corps League Highway and Main Street. The average daily traffic on Route 9 is 4,200 vehicles, and these volumes are expected to increase². State Route 112 begins at the junction with State Route 9 at the town center and travels north into Ashfield. State Route 112 is also locally known as Cape Street.

No public transportation, official bike routes, or pedestrian corridors exist in town. Despite the lack of pedestrian infrastructure beyond Town Center, walking and biking are, however, common forms of transportation. The only sidewalk in town runs a quarter of a mile along Route 9 through Town Center, running from the General Store to the Congregational Church, and passing the post office, Highland Senior Housing development, and the Veteran's Memorial Park. A 2019 Master Plan Proposal for Goshen Town Center completed by the Conway School highlighted that the high volumes speeds of traffic through Town Center create a loud, busy environment that feels unsafe and is unpleasant for pedestrians. It also highlighted the fact that no sidewalks exist to connect pedestrians from town Center to any of the popular recreation areas, and there is no signage informing or directing visitors to these destinations. A separate Walk Audit was completed in 2019 while the Town was in the process of adopting a Complete Streets Policy, both of which suggested that residents would like to improve the walking connections among the town assets on Route 9 and provide additional recreational walking options for people on East Street.

² The Conway School, 2019 Master Plan Proposal for Goshen Town Center

Also in 2019, Goshen adopted a Complete Streets policy to improve safety and accessibility of its roadways for all users, not just motorists. Complete Streets is an approach to road design that considers the needs of all road users (walkers, cyclists, and drivers) and people of all abilities (including people with disabilities, older adults, and children). The design recommendations laid out in the policy must be incorporated into all future roadway improvement projects in Town. Goshen’s policy stipulates that the Town shall undertake the following actions:

- maintain a comprehensive inventory of pedestrian and bicycle facility infrastructure that will prioritize projects to eliminate gaps in the sidewalk and bikeway network.
- reevaluate Capital Improvement Projects prioritization to encourage implementation of Complete Streets implementation.
- identify pertinent town staff and decision-makers to receive training on the content of Complete Streets principles and best practices for implementing policy as needed.
- utilize interdepartmental coordination to promote the most responsible and efficient use of resources for activities within the public way.
- seek out appropriate sources of funding and grants for implementation of Complete Streets policies.

Water Supply

Goshen does not have a municipal water supply system, relying instead on numerous on-site private wells located throughout the community, including seven active public water supply systems with nine active wells serving restaurants, camps, the town office and school, the state forest, and two homeowner’s associations. Despite Goshen generally having very high ground and surface water quality, both are susceptible to contamination, particularly from roadway salting. Wells closest to roadways are the most vulnerable.

Public Water Supplies³						
PWS ID	PWS Name	Status	Class*	Source ID	Source Status	Availability
1108003	Goshen Town Office	Active	NC	1108003-01G	Active	Active
1108004	Spruce Corner Restaurant	Active	NC	1108004-01G	Active	Active
1108007	Camp Holy Cross	Active	NC	1108007-01G	Active	Active
1108008	4H Camp Howe Inc	Active	NC	1108008-01G	Active	Abandoned
1108008	4H Camp Howe Inc	Active	NC	1108008-02G	Active	Active
1108008	4H Camp Howe Inc	Active	NC	1108008-03G	Active	Active
1108009	Wildwood Condominium	Active	COM	1108009-01G	Active	Active
1108010	DCR DAR State Forest	Active	NC	1108010 – 01G Twinning Brook Well	Inactive	Abandoned
1108010	DCR DAR State	Active	NC	1108010-02G	Active	Active

³ Skiba, Catherine. Massachusetts Department of Environmental Protection, July 19, 2011 email correspondence

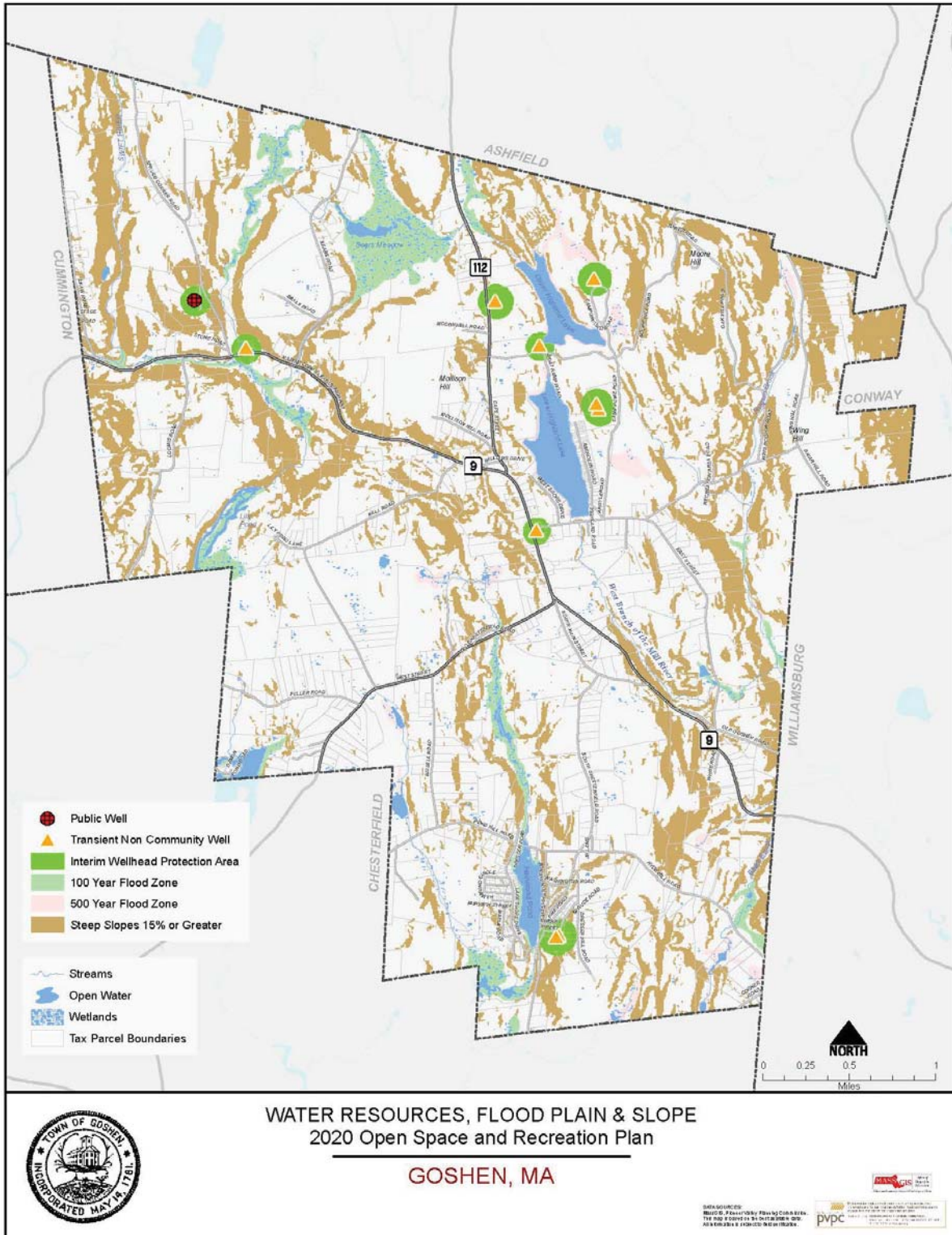
Public Water Supplies ³						
PWS ID	PWS Name	Status	Class*	Source ID	Source Status	Availability
	Forest			Campground Well		
1108010	DCR DAR State Forest	Active	NC	1108010-03G Day Use Well	Active	Active
1108014	Hammond Acres Water Corp	Active	NC	1108014-01G	Active	Active
1108014	Hammond Acres Water Corp	Active	NC	1108014-02G	Active	Emergency
1108002	The Whale Inn	Inactive	NC	1108002-01G	Inactive	Inactive
1108002	The Whale Inn	Inactive	NC	1108002-02G	Inactive	Inactive
*NC - Non-Community Well; COM - Community Well						

Water Resources, Flood Plain & Slope map shows water systems in Goshen and their associated areas of protection. As stated in 310 CMR 22.02, a Public Water System means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days of the year. A public water system is either a “community water system” or a “non-community water system.”

The Public Water Supply (PWS) datalayer used in the map below contains the locations of public community surface and groundwater supply sources and public non-community supply sources as defined in 310 CMR 22.00.

- A. Community water system means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. Goshen has one Community Water System at Wildwood Condominiums.
- B. Non-community water system means a public water system that is not a community water system.
 - 1. Non-transient non-community water system or “NTNC” means a public water systems that is not a community water system and that regularly serves at least 25 of the same persons or more approximately four or more days per week, more than six months or 180 days per year, such as a workplace providing water to its employees. There are no NTNC’s in Goshen.
 - 2. Transient non-community water system or “TNC” means a public water system that is not a community water system or a non-transient non-community water system but is a public water system which serves water to 25 different persons at least 60 days of the year. Some examples of these types of systems are: restaurants, motels, camp grounds, parks, golf courses, ski areas and community centers. Goshen has several TNCs in town, delineated by yellow triangles on the map.

Wellhead Protection Areas: A Zone II is a wellhead protection area that has been determined by hydro-geologic modeling and approved by the Department of Environmental Protection’s (DEP) Drinking Water Program (DWP). In cases where hydro-geologic modeling studies have not been performed and there is no approved Zone II, an Interim Wellhead Protection Area (IWPA) is established based on DEP DWP well pumping rates or default values. Goshen’s water systems have IWPA’s are all delineated by IWPA’s.



The Massachusetts Department of Environmental Protection (DEP) has completed Source Water Assessment (SWAP) Reports for several of the public water supplies in Goshen. The SWAP identifies the most significant potential contamination sources that could threaten well water quality. The susceptibility ranking does not imply poor water quality but rather threats to consider for proper best management.

Actual water quality is best reflected by the results of regular water tests. As of 2020, SWAP Reports have not been updated and are no longer a reliable data source. Currently, the Executive Office of Energy and Environmental Affairs Data Portal is the most reliable way to find information about public drinking water supplies.

Public Water Supply SWAP Information					
Well Name	Well (Source) ID#	Zone I Radius (feet)	IWPA Radius (feet)	Microbial Susceptibility	Non-Microbial Susceptibility
Spruce Corner Restaurant	1108004-01G	135	438	High	Moderate
Camp Holy Cross	1108007-01G	212	524	High	Moderate
Camp Howe	1108008-02G	175	470	High	Moderate
Camp Howe	1108008-03G	175	470	High	Moderate
Wildwood Condominiums	1108009-01G	148	446	Moderate	Moderate
DAR Campground Well	1108010-02G	198	500	High	Moderate
DAR Day Use Well	1108010-03G	100	422	High	High
Hammond Acres Water Corp	1108014-01G	209	519	High	Moderate
Hammond Acres Water Corp	1108014-02G	209	519	High	Moderate

A well’s source protection area is the land around the well where protection areas should be focused. Wells have a Zone I protective radius and an Interim Wellhead Protection Area (IWPA). The Zone I should be owned or controlled by the water supplier and limited to water supply activities. IWPA is the larger area that is likely to contribute water to the well. The IWPA radius is based upon the average pumping rate of the well. In many instances the IWPA may not include the entire land area contributing water to the well. Therefore, the well may be susceptible to activities outside the IWPA. Information provided in the SWAP reports for each well is as follows:

Spruce Corner Restaurant Non-Community Well

Well’s high susceptibility to potential microbial threats is based on the septic system components within the Zone I/IWPA. The moderate susceptibility to potential non-microbial threats is based on the local roads and parking areas within the Zone I and/or the IWPA.

Camp Holy Cross

Well’s high susceptibility to potential microbial threats is based on the septic system components within the Zone I and IWPA. The moderate susceptibility to potential microbial threats is based on the access roads, state highway and parking within the Zone I and IWPA.

Camp Howe

Well's high susceptibility to potential microbial threats is based on the septic system components within the Zone I / IWPA. The moderate susceptibility to potential non-microbial threats is based on the local roads and parking within the Zone I and/or the IWPA.

Wildwood Condominiums

The Wildwood Condominium complex is located off Spruce Corner Road and consists of six residences. The homes use various forms of fuel for heat and hot water including propane, wood and oil. There are no underground storage tanks at the complex. The facilities include an unpaved internal road, parking areas, a barn, lawn and wooded areas. The homes are serviced by on-site septic disposal. The well is an 8-inch diameter, bedrock well drilled in the 1950s and believed to be greater than 200 feet deep. The well is considered to be vulnerable to potential contamination from the ground surface because there is no significant hydrogeologic barrier such as clay or a thin till barrier to prevent surface contamination from migrating into the bedrock aquifer.

DAR State Forest Non-Community Wells

DAR State Forest's two Transient Non-community Wells indicated a high susceptibility to potential microbial threats based on septic system components within the Zone I and IWPA. The moderate susceptibility to potential non-microbial threats is based on the local roads within the Zone I and IWPA and the high ranking for the Day Use well (03G) is based on fuel oil storage in the IWPA.

Hammond Acres Water Corporation

The well's high susceptibility to potential microbial threats is based on the septic system components within the Zone I / IWPA. The moderate susceptibility to potential non-microbial threats is based on the local roads within the Zone I and/or the IWPA. There is also a solid waste landfill nearby that consists of dredging fill from the adjacent lake and so is not listed as a threat.

Aquifer Recharge Areas

Goshen does not have any major aquifer recharge areas within its town boundaries, according to the "USGS Hydrologic Atlas Series on Groundwater Favorability in Massachusetts". However, Goshen does have several areas of surficial geology described as "sand and gravel deposits", which may be worth exploring further as potential well sites. These areas are located at:

- Wing Hill Road at Wing Hollow Road
- Route 9 at East Street
- Route 9 at Lithia
- Hyde Hill Road near Blake Brook

Sewer Service

There is no public sewer service in Goshen. Individual homes, businesses, and government facilities are responsible for creation and use of septic systems as per 310 CMR 15.00 Title 5: Standard Requirements

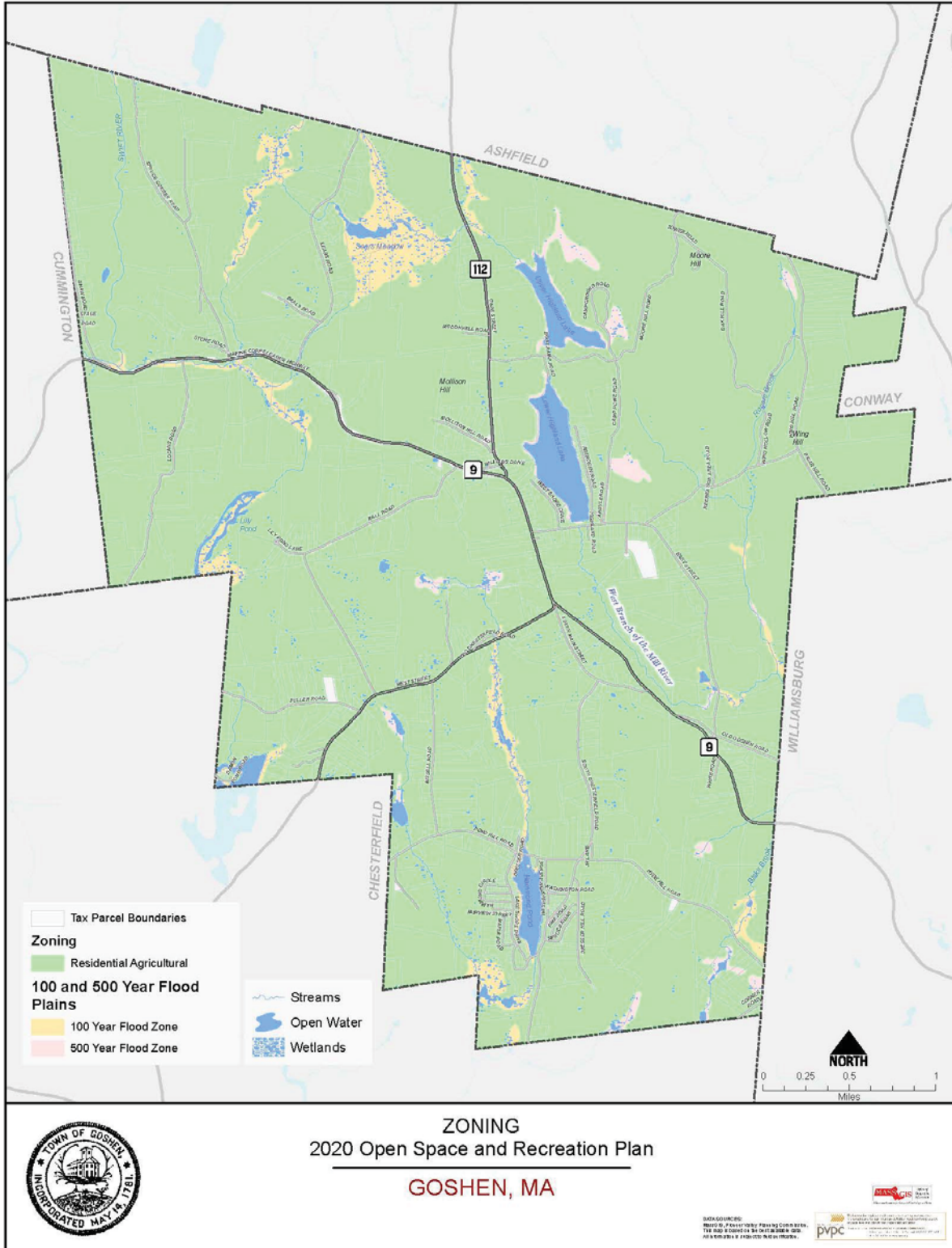
for the Siting, Construction, Inspection, Upgrade and Expansion of On-Site Sewage Treatment and Disposal Systems and for the Transport and Disposal of Septage.

Long-Term Development Patterns

All of Goshen is zoned for single family residential/agricultural, allowing great opportunity for residential growth. According to an analysis in the 2003 OSRP (performed as part of the E.O. 418 Build-out Analysis), total build-out of Goshen would result in a maximum population of 9,624 people, 3,678 households, 1,430 students, and an increase of 71 miles of roadway. The increase in water demand would be 652,700 gallons a day, and increase solid waste production to 4,465 tons a year.

Because of its proximity to Northampton and Interstate 91, the existence of Route 9, limited zoning bylaws, and relatively inexpensive undeveloped land, Goshen could potentially experience some of the extreme development pressures and associated conflicts confronted by other Pioneer Valley communities. This would be especially true if climate change leads to a new wave of urban flight, sending city-dwellers in search of more remote locations to live that are less prone to impacts of rising temperatures and increased precipitation and flooding. Primarily due to the lack of zoning restrictions, as shown in the map below, the potential for uncontrolled development, diminution of scenic landscapes, loss of open space, increased traffic, and loss of historic architecture could occur in Goshen.

Goshen is currently among the least developed communities in the Commonwealth. From 2012 to 2017 the town added 29 acres of newly developed land. As of 2017 only 177 acres, two percent, of Goshen was classified as developed land. This is a small percentage compared to other municipalities in the commonwealth, but given the potential pressures mentioned above, more development could easily occur.



SECTION 4: ENVIRONMENTAL INVENTORY AND ANALYSIS

Hilltown landscapes are primarily forested, yet retain many characteristics of former self-contained agricultural centers. This is the case in Goshen, which was once a thriving agricultural settlement and has become a quiet rural town.

There are 1,283 acres in Goshen that have been identified by the Natural Heritage and Endangered Species Program (NHESP) as BioMap2⁴ Core Habitat, and should be protected for that purpose if at all possible. NHESP defines Core Habitat as land 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. In 2012 when the report was published, only 152 acres (11.9%) of the Core Habitat in Goshen was under permanent protection. There are five areas within Goshen that are *BioMap2* Core Habitat. They include three Aquatic Cores, one Priority Natural Community Core, one Wetland Core, and areas for six Species of Conservation Concern.

There are also 3,610 acres of Acres of Critical Natural Landscape (CNL), with just 951 (26.3%) protected in 2012. Critical Natural Lands complement Core Habitat, including large natural Landscape Blocks that provide habitat for wide-ranging native species, support intact ecological processes, maintain connectivity among habitats, and enhance ecological resilience; and includes buffering around uplands around coastal, wetland and aquatic Core Habitats to help ensure their long-term integrity. Goshen contains three Landscape Blocks, two Wetland Buffers and three Aquatic Buffers.

It is important to note that the most recent BioMap, produced in 2012, is now outdated. Therefore, the acreage identified as unprotected within the Core Habitat and Critical Natural Landscape areas may have changed.

In 2005, Goshen participated in the Conservation Assessment and Prioritization System (CAPS) under the Highland Communities Initiative. The project conducted by the Landscape Ecology Program, Department of Natural Resources Conservation at the University of Massachusetts utilized a computer modeling approach to prioritize land for conservation based on the assessment of ecological integrity for various natural communities within an area. The priority areas identified for conservation by CAPS have been considered and incorporated within the goals, objectives, and recommended actions of this plan.

A. Geology, Soils and Topography

The bedrock of Goshen is part of the eroded core of an ancient chain of mountains that is approximately 400-500 million years old and extends from Long Island Sound through Western Massachusetts and Vermont into Quebec. There are three known formations in Goshen: the Goshen Formation, with a light gray to dark gray schist and phyllites (lustrous slaty rocks); the Waits River Formation, with dark gray schists and occasional thin beds of marble; and the Williamsburg Granodiorite, with crystalline granite-like inclusions containing coarse crystalline veins of quartz.

⁴ Massachusetts Department of Fish and Game and The Nature Conservancy. 2012. *BioMap2: Conserving the Biodiversity of Massachusetts in a Changing World*.

Like almost all of New England, great ice sheets thousands of feet thick once covered Goshen. The ice sheets melted about 12,000 years ago and left extensive surface deposits that cover most of the land and dominate the New England landscape. The two basic types of deposit in Goshen are lodgement till and stratified drift. Lodgement till formed when glaciers overrode and compressed the earth. It is an unsorted mixture of sand, clay, pebbles and boulders, no more than three feet thick. Stratified drift refers to deposits of sand and gravel that formed during the final days of the Ice Age. The melting ice sheets gave rise to torrential streams that had the power to carry a large load of sand and gravel formerly trapped in ice. The velocity of the stream diminished, as when entering a lake or flat area, releasing its sediment load to settle and form deposits of sand and gravel.

The soils in Goshen are dominated by three major types: the Lyman soils, which are loamy and shallow; and the Marlow and Peru soils, which are loamy and slowly permeable. All of the soil types existing in Goshen present severe limitations to septic absorption fields and building construction. As there is no public water or sewer in Goshen, this presents natural constraints to development.

The Goshen area contains igneous and metamorphosed sedimentary rocks of Paleozoic age (600 million to 225 million years before the present). Small intrusions of the Williamsburg granodiorite and related pegmatite comprise the igneous rocks while the Hawley schist, Goshen schist and quartzite of the Conway schist comprise the metamorphic rocks (Anderson, 1959). The age of the sedimentary Hawley schist is believed to have originated during the Ordovician period (approximately 500 to 440 million years ago). In the Goshen area this schist is very coarse-grained kyanite garnet biotite muscovite schist containing quartz bands interwoven with mica. The rocks weather to a dark gray often stained brownish by rust or greenish from plant material (e.g., lichens and mosses). There are four variations of Hawley schist:

- Schist containing large garnet (alkaline earth metals and iron silicates) and kyanite (blue to light green aluminum silicate) metacrysts;
- Hornblende schist (combinations of calcium and metals);
- Feldspathic beds (high concentrations of feldspar); and,
- Coarse garnet-biotite-quartz muscovite (mica grouping of metals) schist

Easily accessible outcrops of the Hawley schist can be found on Ball Road and along Bissell Road (Anderson, 1959).

The Conway/Goshen schist comprises the Conway formation, which overlies the Hawley schist and is composed of two lithologic units (Willard, 1956). As a result, this formation is younger in age and has been assigned to the Silurian system (395 to 430 million years ago). The older member is micaceous containing irregularly alternating beds of micaceous quartzite. The younger bed is predominantly quartzite, somewhat micaceous and contains calcareous layers. This widely distributed Conway formation is generally a garnet-quartz-mica schist, containing sericite, biotite, and staurolite. Small amounts of graphite, magnetite, pyrite, and plagioclase are present in the stone. The rock has a lead gray to dark gray color, except where stained with rust due to iron deposits. The mineral sericite provides sheen to the rock, similar to that of phyllite. As a result, the stone appears very fine grained with a porphyroblastic (relatively smooth) surface. Visible portions of the Conway formation can be viewed along the Rt. 9, Loomis Road and the Judd flagstone quarry. The Conway formation has been correlated with the Waits River formation in southern Vermont (Anderson, 1959). The Conway, Goshen, and Hawley schist were

quarried quite extensively for building foundations, until the introduction of concrete. Currently, the schist formations are primarily used in landscape design. The igneous rock in the region is not used commercially.

The Williamsburg granodiorite is a compact, fine-grained (1.0 mm) biotite granite that weathers to a light gray color to almost white. The spotted black specks are biotite. This stone is very hard and is difficult to split relative to the schist. The largest exposure of grandiorite bedrock in Goshen can be observed along the western shore of Lily Pond. Grandiorite has limited economic use with the exception of a few small inclusions within retaining walls (Anderson, 1959).

B. Landscape Character

Goshen has a wealth of features unique to the area, including many views of the valley and Mt. Holyoke Ranges east and south of town, and, on Moore Hill, 360 degree views. Tilton Town Farm provides not only excellent views of Mt. Tom and the lower Pioneer Valley, but also recreational trails and pastures.

Goshen has several small lakes, ponds, wetlands, and wet meadows that provide wildlife habitat and recreational opportunities. Upper and Lower Highland Lakes are part of a great recreational resource, the D.A.R. State Forest. Visitors can swim, fish, boat, picnic, hike, and camp on its 1,000 acres. However, public access is only allowed on Upper Highland Lake from D.A.R. State Forest. Access to Lower Highland Lake is restricted to private ownership surrounding the lake. Hammond and Lilly Ponds also provide recreational opportunities.

Goshen also contains many historical resources, such as its historic center, Lithia and Batesville villages, mill and dam remnants, and old roads.

The Town of Goshen has continued to pursue land acquisition for recreational and conservation purposes since the 2013 OSRP was completed. A conservation restriction (CR) was placed on 55 acres of privately owned land on Route 9 in west Goshen. The CR is held by the Trustees of Reservations and The Hilltown Land Trust. Another 167 acres of key wetland and wildlife

habitat was conserved in 2016. The CR, held by the Hilltown Land Trust, represents an important connector between large blocks of protected land including the D.A.R. State Forest and Lily Pond Wildlife Management Area under a

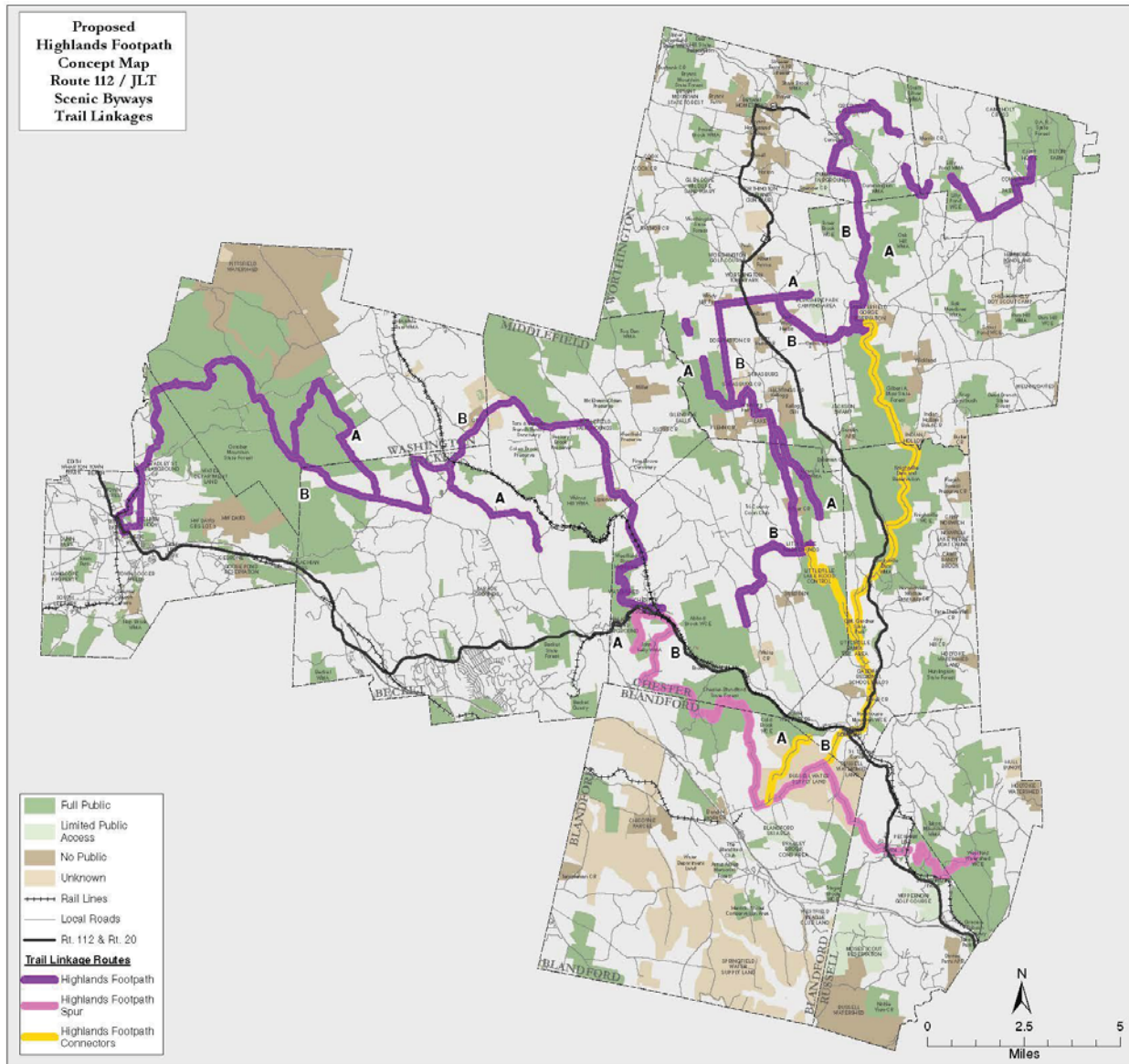
Additionally, state and private initiatives have been at work to preserve the Lilly Pond bog and expand on conservation elsewhere in the Town. Lilly Pond Bog, a 20-acre floating bog was recognized by National Heritage and Endangered Species Program as a priority natural community in Goshen. This parcel of land was identified as a priority for land protection in by NHESP in 2001. The Five College Consortium donated 20 acres including the bog to the Department of Fish and Wildlife in 2004. Since that time, the



Several segments of the Highlands Footpath have already been blazed using the metal disk shown above.

Department of Fish and Wildlife has protected over 300 acres abutting the site.

Working with communities throughout the region, the Pioneer Valley Planning Commission drafted an action plan for a long-distance walking journey that connects October Mountain State Park in Lee to



Highlands Footpath proposed route from October Mountain State Forest in Lee to D.A.R. State Forest in Goshen.

D.A.R. State Park in Goshen. Called the Highlands Footpath, the proposed trail aims to support rural character and serve three primary user groups: local community members, avid day hikers, and travelers seeking the possibility of multi-day walking journeys from town to town.

The proposed Highlands Footpath builds on the network of old roads and existing trails within the expanses of protected open space throughout the Route 112 and Jacob’s Ladder Trail Scenic Byways region. Defining better off-road routes and local linkages is another important component but depends wholly on community desire and willing landowners. For Goshen, the current conceptual route for the

Goshen Land Use			
Rank	Use	Acres	Percent of Total
1	Tax exempt	2,398	21.2%
2	Residential - single family	2,084	18.4%
3	Open land	2,011	17.8%
4	Mixed use, primarily residential	1,583	14.0%
5	Forest	905	8.0%
6	Agriculture	585	5.2%
7	Residential - other	535	4.7%
8	Recreation	255	2.3%
9	Right-of-way	227	2.0%
10	Residential - multi-family	212	1.9%
11	Industrial	165	1.5%
12	Water	150	1.3%
13	Mixed use, other	89	0.8%
14	Mixed use, primarily commercial	65	0.6%
15	Commercial	60	0.5%

Source: MassGIS Data: 2016 Land Cover/Land Use

Goshen Land Cover			
Rank	Cover	Acres	Percent of Total
1	Evergreen Forest	5,995	53.6%
2	Deciduous Forest	3286	29.4%
3	Palustrine Forested Wetland	363	3.2%
4	Palustrine Emergent Wetland	311	2.8%
5	Developed Open Space	308	2.8%
6	Pasture/Hay	267	2.4%
7	Impervious	226	2.0%
8	Grassland	224	2.0%
9	Water	94	0.8%
10	Bare Land	57	0.5%
11	Palustrine Scrub/Shrub Wetland	28	0.2%
12	Scrub/Shrub	16	0.1%
13	Palustrine Aquatic Bed	4	0.0%
14	Cultivated	1	0.0%
15	Estuarine Emergent Wetland	0	0.0%

Source: MassGIS Data: 2016 Land Cover/Land Use

Highlands Footpath begins on Loomis Road, crosses through Lilly Pond Wildlife Management Area, and connects via a series of old roads to DAR State Forest. As opportunities arise, it may make sense to define off-road trail pathways between Lilly Pond Wildlife Management Area and DAR State Forest.

The 2016 Land Use and Land Cover layer from MassGIS is a statewide dataset that contains a combination of land cover mapping from 2016 aerial imagery and land use derived from standardized assessor parcel information for Massachusetts. According to these data, tax exempt land makes up the largest land use category in Goshen, accounting for 21 percent of Goshen’s land. This category is primarily composed of Evergreen Forest, Deciduous Forest, Palustrine Forested Wetland, and Grassland. Residential land uses cover the second and fourth most area of all designated uses and, along with the other residential uses make up over 4,000 acres or roughly 40 percent of all land in Goshen. Agriculture accounts for 585 acres of land, or just over 5 percent, but remain a strong visual characteristic of Goshen. The portion of land related to

residential uses has been growing in recent years. The town remains under pressure from residential development and protecting forested land from development will be key to maintaining Goshen’s rural character.

C. Water Resources

Watersheds

Surface water drains in two directions: southwest and southeast. A small portion of northeastern Goshen lies within the Deerfield River Basin and is drained via the Poland Brook sub-basin. The majority of land in Goshen is within the Westfield River Basin, which is drained by way of Webster Brook and the Swift River sub-basins. Almost one-third of Goshen lies within the Connecticut River Basin. This area is drained via the west branch of the Mill River, Rogers Brook and Granny Brook.

Surface Water

Goshen has six major bodies of water. Upper and Lower Highland Lake are northeast of Goshen Center. These two separate lakes border D.A.R. State Forest and are connected by a small stream. Hammond Pond in the south side of town is the approximate size of the Upper Highland Lake. Damon Pond lies mostly in Chesterfield but has approximately 1/3 of its surface in the southwest corner of Goshen. Lilly Pond located ½ mile west of D.A.R. is approximately 20 acres and contains a bog. Sears Meadow Pond, also known as Sears Meadow Reservoir, is northwest of the town center.

Many other smaller bodies of water are scattered across the landscape primarily located along streams and in wooded areas. Most of the 215 acres of open water in Goshen are comprised of the six large ponds. These water bodies offer valuable wildlife habitat, unique natural environments, and provide benefits to Goshen’s human inhabitants in the form of prime recreational opportunities.

Aquifer Recharge Area

Goshen does not have any major aquifer recharge areas within its town boundaries, according to the “USGS Hydrologic Atlas Series on Groundwater Favorability in Massachusetts”. However, Goshen does have several areas of surficial geology described as “sand and gravel deposits”, which may be worth exploring further as potential well sites (USGS Hydrologic Atlas Series on Groundwater Favorability in Massachusetts). These areas are located at:

- Wing Hill Road at Wing Hollow Road
- Route 9 at East Street
- Route 9 at Lithia
- Hyde Hill Road near Blake Brook

Flood Hazard Areas

According to the 1978 Flood Insurance Rate Map (FIRM), the location and limits of the 100-year floodplain lie adjacent to several watercourses in Town. They are widely dispersed and include (from north to south) the Sears Meadow west of Route 112 and between that road and Sears Road; west of Sears Swamp between Spruce Corner Road/Barrus Road and Sears Road along both banks of East Brook; along the east side of Route 112 south of the Ashfield line north and south of the Good Time Stove Company; around Upper and Lower Highland Lakes; the northeast corner of Town west of Wing Hill Road; Lower Highland Swamp east of Camp Howe and north of East Street; east of East Street along Rogers Brook; and various smaller areas throughout the Town, shown on the Water Resources Map.

Goshen, like all MA communities with a FEMA-designated flood hazard area that participate in the National Flood Insurance Program, currently regulates development to the FEMA 100-year floodplain. It is important to reiterate that Goshen's FIRM is now over 40 years old, and the hydrologic data used to develop that map is even more outdated. Recent climate projections created by UMass for the MA State Hazard Mitigation and Climate Adaptation Plan show that increased intensity rainfall events will lead to more frequent and severe flooding throughout the Westfield and Connecticut River Basins. These new weather patterns are already leading to regular flood events that exceed the FEMA-defined "100-year" boundary. While FEMA is currently in the process of publishing new and updated mapping for the region, the resulting maps, when released in 2022 or 2023, still will not account for future conditions related to climate change. The Town of Goshen should consider regulating development to the 500-year floodplain as a proxy for more accurate flood forecasting models in order to better protect the human and natural ecosystems that interact with the floodplain.

Wetlands

Goshen has a variety of natural resources including several forested and wet meadow wetlands. A great diversity of species is dependent upon the wetlands and riparian areas in Goshen. Maintaining the integrity of wetlands is important to provide food, shelter, and breeding habitat for various species, and to provide temporary flood water storage. Similar to the entire Northeast region, Goshen is expected to see an increase in intense precipitation during the winter and spring seasons. During extreme precipitation events, the ground is unable to absorb the rainfall fast enough and flooding occurs. This will make the protection of wetlands increasingly more important to prevent this type of flooding.

Wetlands include rivers, ponds, swamps, wet meadows, beaver ponds, and land within the FEMA-defined 100-year flood area. Wetland areas are home to frogs, fish, freshwater clams and mussels, beaver, otters, muskrats, great blue herons, waterfowl, and bitterns. Wetlands are specialized habitat areas that are always wet or are wet for extended periods of time during the year. The types of wetlands in Goshen include marshes, bog, vernal pools, ponds, streams and river. The Commonwealth of Massachusetts regulates activities in and around wetlands in Goshen through the Wetlands Protection Act Regulation 310 CMR 10.00, and enforced by the local Conservation Commission. Wetlands provide important wildlife habitat and play a critical role in maintain water quality by serving as natural filters for nutrients, toxins, and sediment that would otherwise move directly into surface and ground waters.

There are approximately 342 acres of non-forested wetlands and 363 acres of forested wetland in Goshen, according to the 2016 MassGIS Land Use/Land Cover dataset. Wetland habitats in town occur primarily along the streams and rivers as well as in lands adjacent to the 6 major ponds in Goshen. If open waters are included in this accounting, the total acreage of wetlands in Goshen rises to roughly 800 acres. These wetlands and flood areas in are shown on Goshen's Water Resources Map.

D. Vegetation

Lands within Goshen support a wide variety of coniferous and deciduous forests, grasslands, wetlands, and riparian vegetation. There are approximately 9,650 acres of forest, 342 acres of non-forested wetlands, 267 acres of pasture, and 224 acres of grassland. The town has expanses of permanently and temporarily protected vegetated open space located within a North Central Hardwoods-Hemlock-White Pine zone. Lush and diverse vegetation is critical to the quality of life in Goshen.

Forest Land

According to Massachusetts Geographic Information System, Goshen has 9,650 acres of forested land and forested wetland in 2005. Over 85 percent of Goshen is forested land with combinations of mixed hardwoods and conifers such as white pine, red oak, red maple, black birch, white birch, white ash, sugar maple, yellow birch, beech, hickory, black cherry, white oak, aspen, gray birch, cedar, hop hornbeam, and pitch pine. The floodplains and wetlands support a variety of native trees such as silver maple and willows.

Public Shade Trees

Goshen's town center has a healthy cover of public shade trees. Many of the roads in town are also lined with public shade trees. The town is responsible for maintaining public trees in the cemetery, parks and on all other town properties. However, the majority of trees in town are not actively maintained by the town. These trees and stands of trees are present where forest meets existing roadways.

Agriculture

According to Massachusetts Geographic Information System, Goshen has 585 acres of land used for Agricultural, but only 267 acres are categorized as pasture/hay by the land cover analysis. In the early days of Goshen's settling, there was much more active farming and pasture land. Open fields are part of what makes Goshen stand out visually from other parts of the Pioneer Valley. If left unmaintained these fields and pastures will revert back to forest.

In an effort to identify the extent and location of important farmlands, the Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation's food supply.

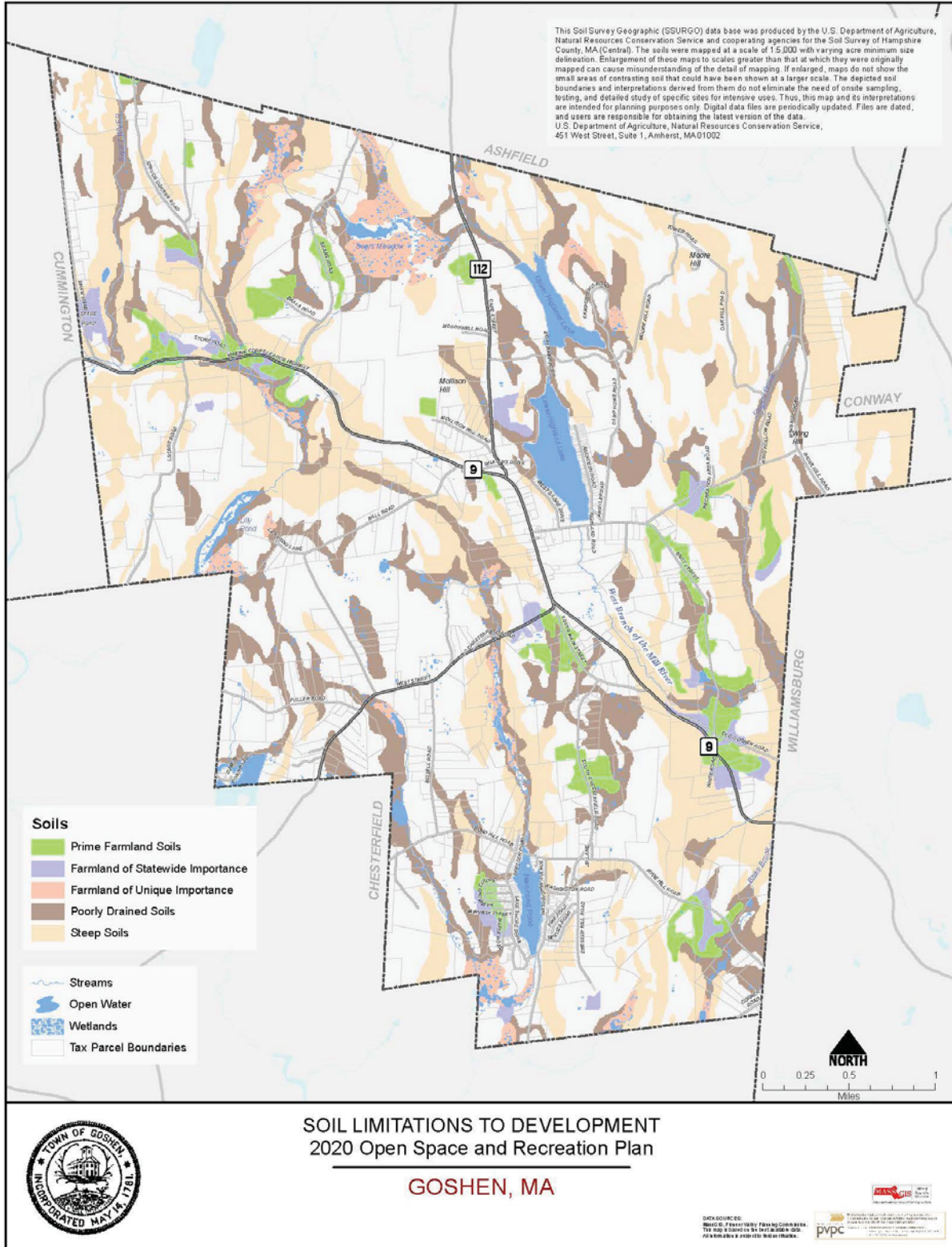
The Soil Limitations to Development map shows areas designated as Prime Farmland, Farmland of Unique Importance, and Farmland of Statewide Importance. These categories are defined as:

Prime Farmland: Land that has the best combination of physical and chemical characteristics for economically producing sustained high yields of food, feed, forage, fiber, and oilseed crops, when treated and managed according to acceptable farming methods.

Farmland of Unique Importance: Land other than prime farmland or farmland of statewide importance that might be used for the production of specific high value food and fiber crops. Examples of such crops are tree nuts, cranberries, fruit, and vegetables. In Massachusetts, Unique soils are confined to mucks, peats, and coarse sands.

Farmland of Statewide Importance: This is land, in addition to prime and unique farmlands, that is of statewide importance for the production of food, feed, fiber, forage, and oil seed crops, as determined by the appropriate state agency or agencies. Generally, these include lands that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods.

The data for the soil surveys was compiled over various time periods. Since then, development of important farmland soils has occurred in some areas and that land is no longer available for agriculture.



Wetland Vegetation

As of 2005, according to Massachusetts Geographic Information System, Goshen had approximately 363 acres of forested wetland and approximately 338 acres of non-forested wetland. These areas and the associated vegetation are important resources for wildlife. The vegetation provides food, nesting material, and cover to many species of animals.

Rare Species

Various endangered, threatened or special concern plant species that are present to some degree in Goshen, mostly associated with the Lilly Pond bog, include⁵:

- Black Cohosh (*Actaea racemosa*) E
- Barren Strawberry (*Geum fragarioides*) SC
- Dwarf Scouring-rush (*Equisetum scirpiodes*) SC
- Foxtail Sedge (*Carex alopecoidea*) T
- Hitchcock’s Sedge (*Carex hitchcockiana*) SC
- Muskflower (*Mimulus moschatus*) E
- Purple Giant Hyssop (*Agastache scrophulariifolia*) E
- Wild Seena (*Seena hebecarpa*) E
- Woodland Millet (*Milium effusum*) T



Lily Pond Wildlife Management Area

Unique Natural Resources

Goshen is home to many unique natural resources including large tracts of forests, certified and potential vernal pools, streams and rivers, several ponds, and several rock outcroppings.

Sears Meadow and the Lilly Pond and associated bog are rare environments. These unique types of wetland are valuable to humans and wildlife in the form of flood control and habitat.

Lilly Pond was recognized by National Heritage and Endangered Species Program as a priority natural community in Goshen. The Lilly Pond bog is a wild 20 acre floating mat of vegetation. Some unique species in the area include Leatherleaf, Bog Rosemary, Bog Laurel, Pitcher Plant, Round-leaved Sundew, Virginia Cottongrass, and Rose Pogonia. This parcel of land was identified as a priority for land

⁵ Massachusetts Natural Heritage and Endangered Species Program, Rare Species Viewer & BioMap2

protection in by NHESP in 2001. The Five College Consortium donated 20 acres including the bog to Department of Fish and Wildlife in 2004. Since that time Department of Fish and Wildlife has protected over 300 acres connected to the site.

Both Upper and Lower Highland Ponds and the connected lands of DAR State Forest are unique natural resources. These locations provide great opportunity for recreation and provide quality habitat for many types of flora and fauna. Likewise the rivers and streams of Goshen are valuable resources and should be protected.

The Natural Heritage and Endangered Species Program maintains a list of types of natural communities that can be found in Massachusetts as part of their 2020 edition of the Classification of Natural Communities of Massachusetts. Goshen contains one type of Priority Natural Community documented in this report which is a Level Bog (S3). Level Bogs are peatlands – wetlands with incompletely decomposed plant material that accumulates when saturated year-round by water that is cool, acidic, poorly oxygenated, and low in nutrients. They develop along pond margins, at the headwaters of streams, and in pockets within large basins. There are various species that exist within level bogs whose presence makes for easy identification. These include species of shrubs such as leatherleaf, rhodora, sheep laurel, bog laurel, bog rosemary, Labrador tea, highbush blueberry and cranberry; species of scattered stunted trees like tamarack, black spruce and red maple saplings; and a mixture of bog plants such as sphagnum (most common), carnivorous pitcher plants, and sundews. In addition to the variety of plant species that are present in level bogs, this natural community also provides habitat for many animal species. Winged animals and large terrestrial animals use peatlands as part of their habitat; moose and white-tailed deer use this natural community for grazing; bears can frequently be seen eating the cranberries and blueberries in level bogs when present; and many species of dragonflies and damselflies inhabit these areas.

E. Fisheries and Wildlife

Although a detailed inventory has not been completed in Goshen, there is a variety of wildlife that has been observed. This includes, but is not limited to, deer, moose, mink, muskrat, otter, porcupine, fishers, fox, eastern coyote, bobcat, bald eagle, and black bear. The return of beaver to the region has led to the creation of wetlands that provide excellent habitat for many species of transient and migratory bird life.

Coldwater Fisheries Resources Streams

Coldwater streams are areas of streams that contain water cold enough throughout the year to support coldwater fish such as brook trout, Atlantic salmon, white suckers, blacknosed and longnose dace and slimy sculpin among others. Due to these species' inability to adapt to warmer temperatures, the effects of climate change on these streams are of critical concern. Goshen contains six coldwater fisheries resources streams which include:

- Granny Brook
- Rogers Brook
- Stones Brook
- Swift River
- Webster Brook
- West Branch Mill River

Vernal Pools

A vernal pool is a seasonal wetland contained in a depression that lacks a permanent above ground outlet. It appears when the water table rises in the fall and winter, when the snow melts in the late winter and early spring, and with runoff from rain. The water lasts for a few months in the spring and early summer. By late summer, a vernal pool is generally dry or is otherwise free of fish. The periodic drying does not support breeding populations of fish, but many organisms have evolved that must use a vernal pool for various parts of their life cycle. Species such as the mole salamander, the wood frog, and the fairy shrimp have come to be known indicators of the existence of vernal pools.

Vernal pools range in size and are generally shallow (about three to four feet deep). Pools might be found in low areas of a forest, in the floodplain of a river or stream, within a vegetated wetland, in an open field, between coastal dunes, in abandoned quarries or natural rock formations and other areas where water might pool. Since the previous OSRP, two vernal pools have been certified in the Town of Goshen. NHESP data indicates there are potentially others in town.

Wood frogs, red spotted newts, and mole salamanders live in upland forests, but migrate to ancestral vernal pools to lay their eggs in early spring. The eggs hatch in the pool, and, in the case of the frogs, the tadpoles develop in the pool and eventually follow the adults to the adjacent uplands.

Corridors

Goshen serves as an important wildlife corridor, both aquatic and terrestrial, in this part of western Massachusetts. The proximity to large contiguous tracts of forest land in neighboring towns, and its dual citizenship within the upper Westfield River watershed and the upper Mill River watershed grant it important headwater stream status.

Rare Species

The town has a diversity of major habitat types. Its rivers, wetlands, forest, meadows, and hilltop ridges provide sustenance, mating grounds, and vegetated cover to the wildlife dwelling within. Since many species rely on a variety of habitat types during different periods of their life cycle, species diversity is greatest in areas where several habitat types occur in close proximity to one another. When habitats are of high quality and ample quantity, wildlife populations thrive. Selected areas are of great importance to the survival of rare and endangered species.

The water shrew is a small mammal that is well adapted for semi-aquatic life. It is the largest long-tailed shrew in New England for a total length of 5.7-6.2 inches. They are most commonly known for their big feathered hind feet which are slightly webbed with stiff hairs to enable the animal to swim more efficiently. Their fur is so dense that it is impenetrable by water and traps water bubbles to act as a buoy. The small mammal is often found just a few yards from a swift rocky stream near a conifer or mixed forest. They can be found in beaver lodges and muskrat houses. Their current threats include fragmentation, warming and siltation of streams and ponds, acid rain, loss of wetland habitat and the introduction of new predators such as small-mouth and large-mouth bass.

Threatened, Endangered and Species of Special Concern in Goshen			
Type	Common Name	Scientific Name	Status
Moth	Ostrich Fern Borer Moth	Papaipema sp. 2 nr. Pterissi	Special Concern
Beetle	Twelve-spotted Tiger Beetle	Cicindela duodecimquttata	Special Concern
Dragonfly	Harpoon Clubtail	Phanogomphus descriptus	Endangered
Dragonfly	Ocellated Darner	Boyeria grafiana	Special Concern
Dragonfly	Riffle Snaketail	Ophiogomphus carolus	Threatened
Dragonfly	Ski-tipped Emerald	Somatochlora elongate	Special Concern
Fish	Bridle Shiner	Notropis bifrenatus	Special Concern
Fish	Longnose Sucker	Catostomus Catostomus	Special Concern
Fish	Lake Chub fish	Couesius plumbeus	Endangered
Mammal	Water Shrew	Sorex palustris	Special Concern
Amphibian	Jefferson Salamander	Ambystoma jeffersonianum	Special Concern
Reptile	Wood Turtle	Glyptemys insculpta	Special Concern

Source: BioMap2, 2012 & Natural Heritage and Endangered Species Program (Rare Species Viewer)

The lake chub is a round-bodied minnow that ranges from 100 mm to 150 mm in length. They have a large eye and a rounded snout that slightly overhangs their mouth. The color of the fish is dark green-gray or dark brown on the back and silver-gray on the sides and white underneath. These fish only inhabit clear, cold lakes and fast-flowing rivers. They prefer areas with little to no vegetation. They feed on zooplankton, aquatic insects, algae and small fishes. Preservation of coldwater fisheries resources streams like those mentioned above (page 32) are extremely important for this fish’s ability to survive.

The harpoon clubtail is a type of dragonfly that is endangered in Massachusetts. They range from about 1.8 to 1.9 inches in length with the females being a little smaller than the males. They are characterized by their gray, green, brown and black coloring and their small body that resembles a club. They have eyes that are separated from each other and range in color from pale to deep aqua blue. Harpoon clubtails inhabit clear, cold streams with intermittent sections of rocks and rapids. In areas where the fast flow of streams is interrupted the dragonflies burrow into the accumulated sand and gravel. The most prominent threats to this specie’s survival are deteriorating water quality, changes in water flow. Protection of the upland borders of river systems are critical to ensure the harpoon clubtail is able to feed, rest and mature. It is recommended that these areas remain undeveloped to preserve habitat for this species.

Three rare species of turtle are found in the wetlands of the watershed: the Eastern Box Turtle, the Spotted Turtle, and the Wood Turtle. Spotted turtles inhabit a variety of wetland habitats in Massachusetts, including marshy meadows, wet woodlands, boggy areas, beaver ponds, and shallow muddy-bottomed streams. They can be found in Red Maple and Atlantic White Cedar swamps and woodland vernal pools. They require a soft substrate and prefer areas with aquatic vegetation.

Several rare amphibians are known to inhabit the wetlands and forest of Goshen including three salamanders and one toad and one frog species: the four-toed salamander, the Spring Salamander, the Jefferson Salamander, the Eastern Spadefoot Toad, and the Gray tree frog.

Historically the waters of the Westfield and Connecticut basins were home to large numbers of salmon, trout and other fish. European settlement of these basins downstream of Goshen during the seventeenth

century, with its accompanying development of dams and mills, began to change the quality and character of the surface water. In the 1930s and 1940s the Mill River was still one of the best-stocked streams in the state. However, by the 1950s pollution from industrial and domestic sources had ruined the larger rivers and streams for fishing and recreation. In the 1970s, local volunteer teams began orchestrating a streams cleanup. By 1983, most streams were clean enough to stock again. Current stocking efforts of trout and Atlantic salmon (*Salmo salar*) occur in several tributaries and lakes throughout Goshen. However, dams located downstream in the lower Pioneer Valley (e.g., Mill River in Northampton, and the ACOE Knightville Dam in Huntington) limit migration patterns of most Atlantic salmon.

F. Scenic Resources and Unique Environments

Scenic Resources

Daughters of the American Revolution (DAR) State Forest, the first DAR forest in the United States, was established in 1929 when the Massachusetts Chapter of the Daughters of the American Revolution arranged for the donation of 1020 acres of land to the State to be used as a forest preserve. It includes public beaches at Upper Highland Lake, picnic and day use areas, hiking trails, boat ramps, fishing and other multi-use recreation. There are no public beaches at Lower Highland Lake and Hammond Pond.

Tilton Farm, approximately 71 acres of town owned land with a variety of recreational opportunities including ball fields, volleyball court, pavilion, nature trail and open pastures. The farm is bordered to the north by the DAR State Forest.

Both Upper and Lower Highland Lake are scenic natural resources. These two lakes border DAR State Forest. Public access is only allowed on Upper Highland Lake at the DAR State Forest.

Historic Areas

Several noteworthy historic sites exist. Beals Home Stagecoach Depot on Beals Road (1792) and its associated abutments of a bridge spanning a nearby stream are historic. The Dresser Hill Sites (ca. 1846), consisting of George Dresser's house, with possible cellar hole of an earlier house and the associated remnants of the Reuben Dresser sawmill foundation are historic. The town center with Town Hall (1911) and Center School (1923) are not the original buildings in town but are historic.

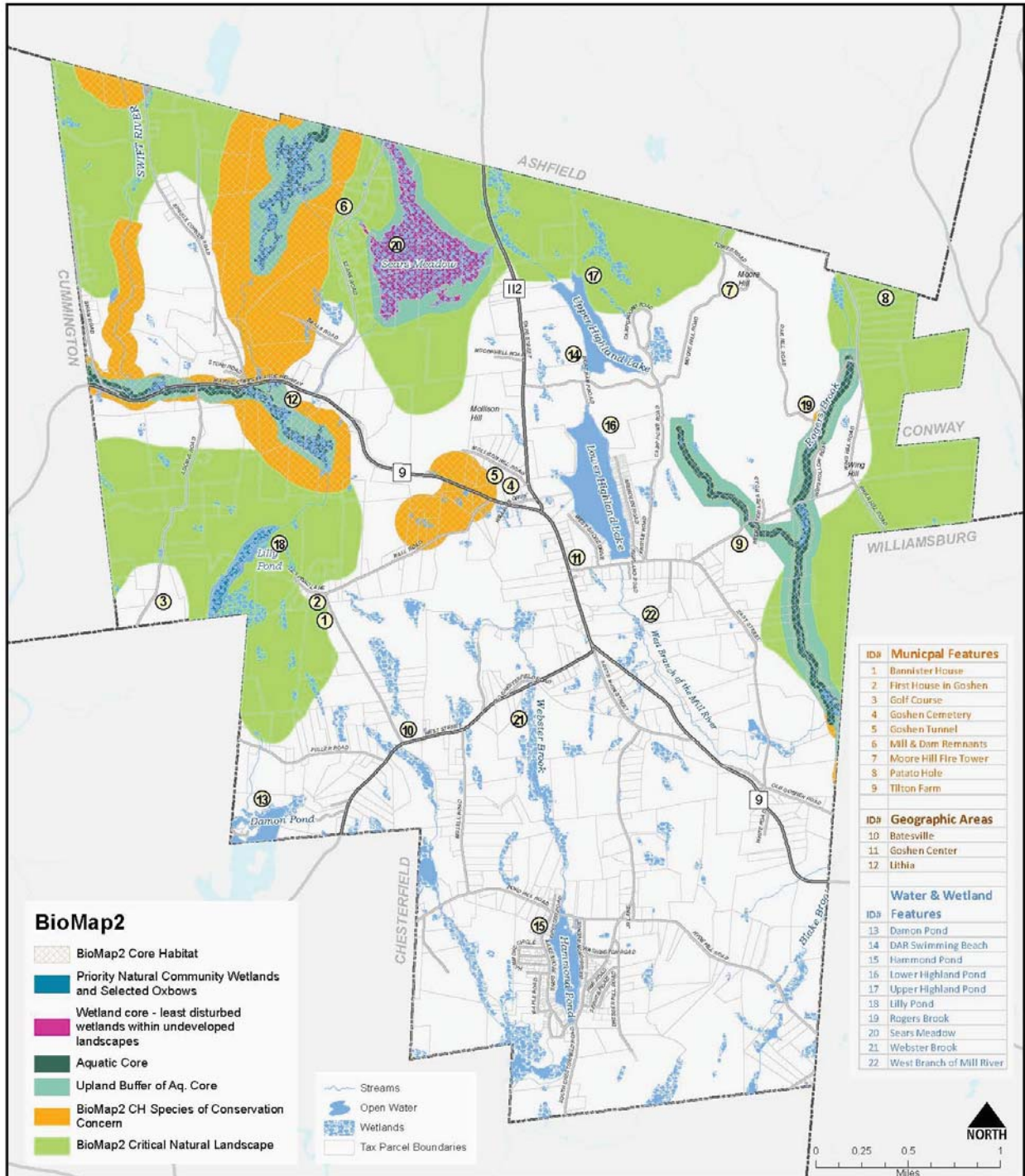
Other historical archaeological sites and structures which have not been inventoried include the Potato Hole, possibly a stone barn built into the side of a hill in the northeast portion of town near the Conway town line. The Goshen tunnel above the Goshen Cemetery, the stone arched bridge at the foot of Sabo's Hill on West Street. Several partial foundation walls from small mills are scattered around town as well.

Unique Environments

The following places have been identified by the residents of Goshen for their contribution to the character of Goshen. Although similar environments may exist throughout western Massachusetts and New England, these special places are noteworthy in Goshen:

- 1) Sears Meadow, a shallow wetland located in the northern portion of town.
- 2) West Branch of the Mill River, a small meandering stream located in the upper elevations of the Connecticut Basin. The West Branch of the Mill River drains Lower Highland Lake, which is located south of the DAR State Forest. The stream enters the Mill River in Williamsburg and travels through the City of Northampton. Due to historical mill operations, the Mill River has several low head dams and related appurtenant structures which impound water and limit fish migration. The Mill River enters the Connecticut River along the southern border of Northampton. On a yearly basis the West Branch of the Mill River is stocked with salmon fry.
- 3) Rogers Brook, a small stream filled with native trout and stocked yearly with salmon fry. Rogers Brook is located along the western ridge of the Connecticut Basin and empties into the Mill River in Williamsburg.
- 4) Webster Brook drains the upper eastern ridge of the Westfield Basin and is formed by way of several intermittent streams. This sub-basin has been known to support a variety of wildlife including but not limited to Black Bear and Moose.
- 5) Lilly Pond, considered a peat bog, which is somewhat unique to Massachusetts. The MA Fish and Wildlife Department purchased a conservation restriction on approximately 59 acres bordering Lilly Pond for wildlife habitat protection, now called the Lily Pond Wildlife Management Area.
- 6) Damon Pond – Only a portion of Damon Pond is within Goshen town boundaries. There are several summer cottages along the shore of the pond.
- 7) Hammond Pond – Approximately 45 acres with a private beach and boat launch for members. Currently there is no swimming access for non-member town residents.

These and other unique environments and features in Goshen are identified in the Unique Features Map.



BioMap2

- BioMap2 Core Habitat
- Priority Natural Community Wetlands and Selected Oxbows
- Wetland core - least disturbed wetlands within undeveloped landscapes
- Aquatic Core
- Upland Buffer of Aq. Core
- BioMap2 CH Species of Conservation Concern
- BioMap2 Critical Natural Landscape

- Streams
- Open Water
- Wetlands
- Tax Parcel Boundaries

- ID# Municipal Features**
- 1 Bannister House
- 2 First House in Goshen
- 3 Golf Course
- 4 Goshen Cemetery
- 5 Goshen Tunnel
- 6 Mill & Dam Remnants
- 7 Moore Hill Fire Tower
- 8 Potato Hole
- 9 Tilton Farm

- ID# Geographic Areas**
- 10 Batesville
- 11 Goshen Center
- 12 Lithia

- Water & Wetland Features**
- 13 Damon Pond
- 14 DAR Swimming Beach
- 15 Hammond Pond
- 16 Lower Highland Pond
- 17 Upper Highland Pond
- 18 Lilly Pond
- 19 Rogers Brook
- 20 Sears Meadow
- 21 Webster Brook
- 22 West Branch of Mill River



UNIQUE FEATURES
 2020 Open Space and Recreation Plan
GOSHEN, MA

DATA SOURCES:
 Municipal Features from Planning Commission, the 2010 Census of the United States, and the 2010 Census of the United States.
 pvp

The MA Department of Fish and Game/Natural Heritage & Endangered Species Program and the Nature Conservancy/Massachusetts Program developed BioMap 2 in 2010 out of a need for an updated strategic land conservation plan for the Commonwealth, and the recognition of the need and desirability of addressing the potential impacts that climate change will likely have on the state's biodiversity, and thus the desired land conservation "footprint". The project team mapped and delineated conservation target areas balanced by ecoregions and ecological settings across the state. These areas for the Town of Goshen are shown in the Unique Features map above.

As noted previously in this plan, Goshen has many conservation areas of interest according to the BioMap 2 analysis. BioMap2 Core Habitat identifies specific areas necessary to promote the long-term persistence of Species of Conservation Concern (those listed under the Massachusetts Endangered Species Act as well as additional species identified in the State Wildlife Action Plan), exemplary natural communities, and intact ecosystems. Core Habitat sub-components in Goshen include the following:

- **Priority Natural Communities:** Priority Natural Communities: The Priority Natural Communities data set represents the extent of various natural communities of biodiversity conservation interest in Massachusetts based on records of natural communities maintained in the Natural Heritage & Endangered Species Program (NHESP) database.
- **BioMap2 Wetlands:** This data set identifies important wetland habitat in Massachusetts. It is a combination of the Wetland Core analysis that identified the most intact wetlands in Massachusetts, the wetlands present within the Priority Natural Communities data layer, and several Oxbows identified as important wetland habitat. A more detailed description of the Wetland Core analysis is present in the summary document. Wetland Cores and Priority Natural Community wetlands sometimes overlap.
- **Aquatic Core:** Aquatic core contains integrated and functional ecosystems for fish species and other aquatic Species of Conservation Concern.

Critical Natural Landscape complements Core Habitat and includes large natural Landscape Blocks that provide habitat for wide-ranging native species, support intact ecological processes, maintain connectivity among habitats, and enhance ecological resilience; and includes buffering uplands around coastal, wetland, and aquatic Core Habitats to ensure their long-term integrity. Critical Natural Landscape sub-components include the following:

- **Aquatic Buffer (including Upland Buffer):** The Aquatic Buffer identifies upland habitat adjacent to each Aquatic Core.

G. Environmental Challenges

Areas of Critical Environmental Concern (ACECs) are places in Massachusetts that receive special recognition because of the quality, uniqueness and significance of their natural and cultural resources. These areas are identified and nominated at the community level and are reviewed and designated by the state's Secretary of Energy and Environmental Affairs. At present, Goshen does not have any areas designated as Areas of Critical Environmental Concern as designated by Massachusetts Department of Conservation and Recreation. Designation of an ACEC increases environmental oversight by increasing state permitting standards through elevated performance standards and lowering thresholds for review. It may be a course of action for the Open Space Committee to investigate. High water quality (Class A

designated areas), a large percentage of wetlands acreage, a significant volume of listed endangered species, extensive inland surface waters, natural hazard areas, habitat resources, and special use areas are all examples of natural resources that would make an area qualified for status as an Areas of Critical Environmental Concern.

Hazardous Waste

There were five reported releases of oil or hazardous materials in Goshen between 1997 and 2019 in Mass DEP's 21E Reportable Releases Database. All of the releases have been cleaned up and Release Abatement Outcome (RAO) status achieved. In November 2018 15 gallons of a hydraulic fluid were released from a hose at the MassDOT facility. The site came into compliance again in March 2019.⁶

Landfills

Landfill sites are located on East Street, with a former landfill located on Highland Road on the West Branch of the Mill River. Both landfills are regulated and monitored by MA DEP and there are no known contamination issues associated with them.

Erosion

Goshen is a Hilltown with many peaks and valleys. The soils of Goshen are generally poorly draining and the substrate is often made up of granite and similar material. Erosion, beyond what is expected in natural settings, is not a significant concern.

Chronic Flooding

The 100 year floodplain and wetlands of Goshen are the main resources to collect excess water and protect town from flooding. Flooding is expected and considered normal in Goshen's wetlands and floodplain. The wetlands and floodplain serve to control flooding of other areas, water storage, and filtration. An expanded floodplain district could be integrated into the Town's zoning to safeguard residents future development from the increasing flood hazard.

Sedimentation

The areas around Hammond Pond and the Highland Lakes are generally more densely developed than other residential areas in town. Poor landscaping techniques, soil disturbance, and the use of sand in the winter can lead to sedimentation of the nearby water bodies.

New Development

Goshen has seen approximately four new single family residences built every year since the turn of the century. This slow and steady rate of development will change the character, landscape, and quality of life in Goshen if left to progress. If Goshen wishes to preserve the large tracks of forest, open space, and fields in town the town must seek ways to limit or mitigate the impacts of new development. Many useful zoning tools could be adopted that can successfully limit the visual impact and habitat destruction of new development while still allowing for economic activity and new construction.

⁶ Executive Office of Energy and Environmental Affairs, Waste Site & Reportable Releases Results

Ground and Surface Water

Very few areas in Goshen possess soils that have good drainage characteristics required for proper on-site sewage disposal. Based on historical Goshen Board of Health records, failing septic systems have occurred particularly in the Hammond Pond area and the Highland Lakes region. These areas are generally more densely developed than other residential areas in town and contain significant seasonal populations.

Heavy use of road salt in winter months can also contaminate groundwater and wells.

Invasive Species

Invasive species are a concern in areas of land that have been recently disturbed or degraded. If these lands are not carefully replanted with native species the landscape will allow invasive species to flourish. Goshen has fewer developments and thus less opportunity for invasive species than many surrounding communities; however, invasive species are still a concern. Some common invasives found in areas of Goshen include Japanese knotweed, Japanese barberry, Asian bittersweet, multiflora rose, purple loosestrife, and garlic mustard.

Land owners of the 1,879 acres of land in Chapter 61 are required to have active forest management plans. These acres are generally distributed throughout town. Additional acreage at DAR State Forest and Lily Pond Wildlife Management Area put roughly half of the land in Goshen under some level of forest management plan. These plans not only evaluate the use of land for timber harvest but also protection of native species and forest community ecosystems. Invasive species management is an important component of any forest or land management plan.

Environmental Equity

The many parks and parcels of open space ensure that residents have access to recreation lands. Due to Goshen's rural nature, access to land open for public recreation requires driving for most residents. Two state owned parks/wildlife management areas (DAR State Forest and Lily Pond Wildlife Management Area) provide the residents with ample access to trails and swimming. Most other access to open space is provided through privately owned land. Lands in Chapter 61, 61A and 61B are evenly distributed through town. Accessing these lands does require permission from the land owner thus accessibility not available to all.

All new facilities built or substantially remodeled in Goshen are American with Disabilities Act compliant as per national law. Many sites however remain inaccessible to those with disabilities.

Climate Change

Consistent with the entire Northeast region, Goshen is expected to experience an increase in precipitation during the winter and spring seasons and will be faced with increasing temperatures as a result of climate change. These changes will be met with a rise in natural hazards and pose additional environmental challenges to the community.

In February 2020, the Towns of Goshen, Chesterfield, Cummington and Worthington, came together for a series of Community Resilience Building (CRB) workshops as part of the Municipal Vulnerability Preparedness (MVP) grant program. Each community was tasked with identifying current and potential

vulnerabilities in the face of climate change and ways to increase resilience. The areas of environmental concern the participants found most pressing include drinking water contamination, the health and conservation of natural resources, and future development patterns. Goshen’s wells, especially those located along Route 9, are particularly vulnerable to road salting. There will likely be an increase in roadway salt in the future given the projected increase in precipitation during the winter and spring months. The protection of the community’s natural resources is important given that warmer temperatures will create a habitat shift in pest species and threaten native vegetation. Lastly, future development patterns and the potential of climate migrations could put pressure on undeveloped land and natural resources. This could also threaten the rural character of Goshen that many of its residents currently enjoy.

The following were identified as actions that would increase resilience to the environmental challenges mentioned above:

- Identify priority parcels for protection to reduce vulnerability of open space development.
- Install bee friendly habitat to address declining bee populations.
- Develop a regional debris management plan to maintain the health of forests and protect the community.
- Obtain funds for increased land conservation.
- Explore options for population control of ticks and invasive insects.
- Conduct a representative sampling of roughly 500 wells to assess water quality.
- Advocate for reduced road salt by MassDOT to protect drinking water quality and aquatic ecosystems.
- Update zoning to plan for future population growth and natural resource protection.

Resilient Sites: With a changing climate, many places may become degraded and lose species, but some places will retain high quality habitat and continue to support a diverse array of plants and animals. Sites that have both complex topography and connected land cover are places where conservation action is most likely to succeed in the long term.

Permanent conservation of the resilient areas should be prioritized to ensure they can continue to provide habitat for species.

Securing resilient sites safeguards natural benefits such as fresh drinking water and clean air for local communities now and into the future.
(Conservation Gateway, TNC)

The Nature Conservancy’s *Resilient Land Mapping Tool* identifies climate-resilient and connected wildlife networks in Goshen. Along Rt. 9 opposite of Highland Lakes there is a patch of land that is considered a Resilient Area because it contains many connected micro-climates that buffer species from climate change. Other areas scattered throughout the town, but largely in the Northwest region, are labelled as Climate Flow Zones and Climate Flow Zones with Confirmed Diversity. These are areas with high levels of plant and animal movement but are less concentrated than a corridor. The Climate Flow Zones with Confirmed Diversity contain rare species or unique communities. Lastly, throughout the town there are Climate Corridors and Climate Corridors with Confirmed Diversity throughout Goshen. Climate Corridors are a narrow conduit where the movement of plants and wildlife species becomes highly concentrated. Climate Corridors with Confirmed Diversity are a climate corridor that contains rare species

or unique communities. All of the above have unique characteristics that increase resilience to the impacts of climate change, and therefore should be considered as priorities for permanent protection.⁷

Conservation Priorities

The Massachusetts NHESP makes recommendations to help communities decide on high priorities for conservation which may include land protection, habitat management, regulation and education and outreach. In Goshen, protection of land adjacent to the Swift River and its tributaries is a high priority for conserving several MESA-listed species. Additionally, the Town should seek to protect more areas of BioMap2 Core Habitat and Critical Natural Landscape. Habitat management is very important for species protection, especially the rare species that exist within Goshen. The Town should assess its land for the presence of invasive species and encourage private landowners to do the same. Where invasive species exist in substantial numbers or areas, removing them should be taken into consideration.

The regulation of conservation efforts is essential for their impacts to be worth the investment of both time and money. Goshen should encourage its Conservation Commission to enforce the provisions of the Massachusetts Wetlands Protection Act. Since there is no board of officials in charge of enforcing the provisions of the Massachusetts Endangered Species Act (MESA), Goshen could consider having the Conservation Commission and the Building Inspector notify development applicants of the presence of Priority Habitats of Rare Species on the applicant's property.

Lastly, the development of community support for conservation of biodiversity through education and outreach is necessary for previously mentioned efforts to gain traction within the town. Local schools could offer field trips to conservation areas, have students to write articles on conservation on websites and in the newspaper and encourage students to conduct biodiversity surveys and observations on conservation land. These are just a few methods that could be utilized to build support in a low-cost effective way that will pay off in the future.

⁷ The Nature Conservancy, Resilient Land Mapping Tool



SECTION 5: INVENTORY OF LANDS OF CONSERVATION & RECREATION INTEREST

The inventory of lands of conservation and recreation interest describes ownership, management agency, current use, condition, recreation potential, public access, type of public grant accepted, zoning and degree of protection for each parcel. The degree of protection from destruction or degradation that is afforded to various parcels of land owned by private, public, and nonprofit owners is also evaluated.

- Private lands can be protected in perpetuity through deed restrictions, or conservation easements (yet some easements only run for a period of 30 years and those lands are therefore not permanently protected open space).
- Lands under special taxation programs, Chapter 61, 61A or 61B, are actively managed by their owners for forestry, agricultural, horticultural or recreational use. The town has the right of first refusal should the landowner decide to sell and change the use of the land, therefore, it is important to prioritize these lands and consider steps the community should take to permanently protect these properties.
- Lands acquired for watershed and aquifer protection are often permanently protected open space.

- Public recreation and conservation lands may be permanently protected open space, provided that they have been dedicated to such uses as conservation or recreational use by deed. Municipal properties may be protected via the Town Meeting or City Council vote to acquire them.
- Private, public and non-profit conservation and recreation lands are protected under Article 97 of the Articles of Amendment to the State Constitution.

A map showing all Protected, Recreational, and Open Space parcels in Goshen is included below, along with a table identifying site name and ownership. An expanded version of this table is provided in the appendix.

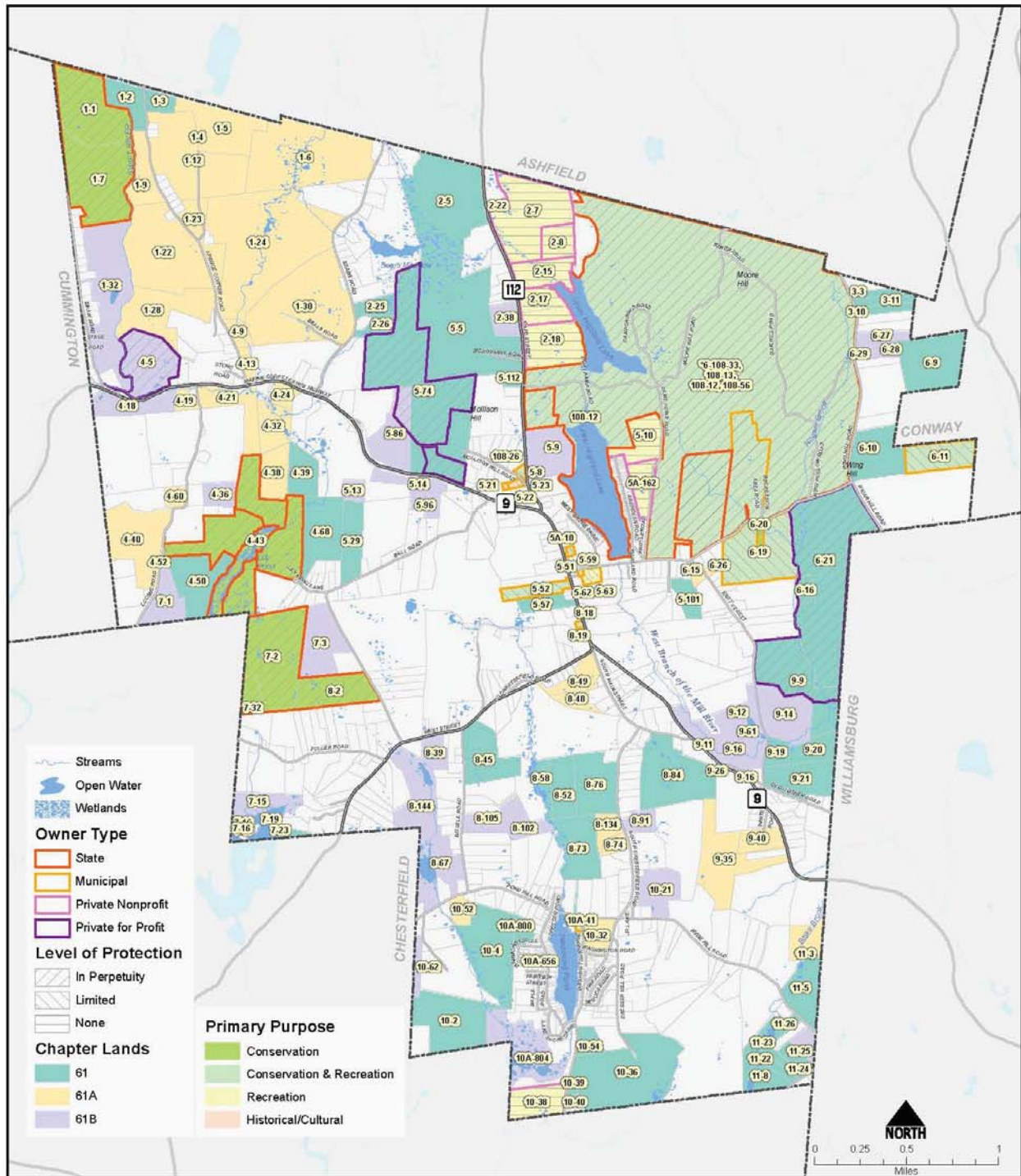
Chapter 61 Tax Program

Each program provides a means to assess land at its current use (forest, agriculture, or open space/recreation) as opposed to its development value.

Chapter 61 - Intended for landowners interested in long-term, active forest management. Assessment of forestland under Ch. 61 is based on the land's ability to grow timber.

Chapter 61A - Intended for landowners engaged in agricultural or horticultural use. Assessment is based on the land's ability to produce the agricultural or horticultural product being grown. Forestland may be enrolled in this program and is based on your land's ability to grow timber.

Chapter 61B- Intended for landowners interested in maintaining the land in a substantially natural, wild or open condition. Assessment of forestland under Ch. 61B is 25% of the current assessed value of the land.

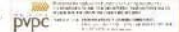


PROTECTED & RECREATIONAL OPEN SPACE
 2020 Open Space and Recreation Plan

GOSHEN, MA



DATA SOURCES:
 MASSGIS, FRESHWATER FISHING COOPERATION
 THE MAP IS BASED ON 31 DAY AERIALS © 2010
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2021 Goshen Open Space and Recreation Plan

Label	Site Name	Fee Owner
8-12	D.A.R. State Forest	DCR - Division of State Parks and Recreation
8-13	D.A.R. State Forest	DCR - Division of State Parks and Recreation
8-14	Camp Father Freel	CAMP FATHER FREEL
8-15	Hammond Pond Land	Town of Goshen
8-16		Town of Goshen
8-18		Town of Goshen
8-19	Park	Town of Goshen
8-20		Town of Goshen
8-21	Community Land	Town of Goshen
8-22	Goshen School	Town of Goshen
8-23	Main St. Land	Town of Goshen
8-26		Town of Goshen
8-27	Camp Holy Cross	Roman Catholic Bishop of Springfield
8-28	Camp Holy Cross	Roman Catholic Bishop of Springfield
8-29	Camp Holy Cross	Roman Catholic Bishop of Springfield
8-30	Camp Holy Cross	Roman Catholic Bishop of Springfield
8-31	Camp Holy Cross	Roman Catholic Bishop of Springfield
8-32	Camp Holy Cross	Roman Catholic Bishop of Springfield
8-33	Tilton Farm	Town of Goshen
8-34	Tilton Farm	Town of Goshen
8-35		Town of Goshen
8-36	Camp Howe	CAMP HOWE INC
8-37	Camp Howe	CAMP HOWE INC
8-38		Town of Goshen
8-40	Lilly Pond WMA	Department of Fish and Game
8-41	Lilly Pond WMA	Department of Fish and Game
8-50	Lilly Pond WMA	Department of Fish and Game
8-52	Lilly Pond WMA	Department of Fish and Game
8-53	Lilly Pond WMA	Department of Fish and Game
8-54	D.A.R. State Forest	B AND N LANDS LLC
8-55	Merritt CR	MERRITT FLOYD
8-56	D.A.R. State Forest	DCR - Division of State Parks and Recreation
8-58	Swift River WMA	Department of Fish and Game
8-59	Goshen Center Cemetery	Town of Goshen
8-60	Goshen Center Cemetery	Town of Goshen
8-61	Warner CR	Warner Gary M
8-62	Warner CR	Warner Gary M
8-8	Lilly Pond WMA	Department of Fish and Game

A. Private Parcels

Approximately 4,011 acres of privately owned land in Goshen is protected under the Chapter 61 program, for agriculture, forestry, or recreation. 1,879 acres of land is in the Chapter 61 program, 1,237 acres of land is in the Chapter 61A program, and 895 acres of land is in the Chapter 61B program. A detailed spreadsheet of land by owner is included in the Appendices along with the parcels mapped on the Recreational and Protected Open Space Map.

B. Public and Nonprofit Parcels

There are 3,043 acres of land owned by a public agency or non-profit that has designated recreational or conservation purposes, nearly 300 acres more than when this plan was last updated (2,789.91 acres reported in the 2013 OSRP). These lands are mapped on the Recreational and Protected Open Space Map, and a table identifying them is included in the appendices.

State-Owned Properties

DAR State Forest

DAR State Forest was established in 1929 when the Daughters of the American Revolution (DAR) donated 1,020 acres to the Commonwealth. Almost 750 additional acres have been acquired since then, including Upper and Lower Highland Lakes. DAR offers a popular beach for swimming on Upper Highland Lake, and a shady picnic area. A group picnic pavilion can be reserved. The campground offers 50 campsites and a private beach. Wheelchair-accessible campsites are available and may be reserved. A reserved group campsite is also available. Non-motorized boats may be launched at ramps in both lakes. Ice fishing and skating are popular. More than 15 miles of marked trails wind through the woods, offering year-round opportunities for hiking and horseback riding. In winter these trails are popular with cross country skiers, snowshoers, and snowmobilers. Many trails and all restrooms are accessible.

Lilly Pond Wildlife Management Area

Lilly Pond was identified as a priority for land protection in 2001, the Department of Fish and Wildlife has protected over 350 acres at this site. In 2004, the 20-acre bog itself was donated to DFW by the previous owner, Five Colleges, Inc. The largest addition occurred in 2016 with 158 acres.

Swift River WMA

Department of Fish and Game, 173 acres of permanent conservation land, designated in 2014. The committee is not aware of any public access or trails on this site.

Municipal-Owned Properties

Hammond Pond Land

The Hammond Pond Land recreation ground includes 4.1 acres of town-owned land under limited protections. The property has no public trails.

Tilton Town Farm

Tilton Town Farm is a parcel of land subdivided into three smaller parcels. One of the three is being used as a primary residence and another is a field for haying. The third parcel, comprising over 73 acres, is under permanent protection by the Town and contains ball fields and picnic areas. There is also a section dedicated to a nature trail, that was completed with funding provided by a 2009 DCR Trails Grant. Tilton Town Farm is located on West Wing Hill Road and is bordered by a wooded state park. A kiosk was installed at this location in 2017.

The main entrance to the park is a dirt road that is not maintained in the winter. There is a 3:1 slope to the road. There are benches adjacent to the lower ballpark that do not have arm or back rests. The upper ball field is accessed by a dirt road. It has bleacher-style seating, and there is no handicap area in the parking lot. There is a shelter with running water, bathrooms, and a cooking area.

There is a picnic area adjacent to the ball field, which is accessed by the same dirt road. The picnic tables are not wheelchair-accessible and there is no handicapped parking. The nature walk is located in a wooded section and the path consists of dirt and rooted terrain.

ADA recommendations: Install and maintain a paved roadway entering the ballparks, complete with handicapped parking. Provide picnic tables that are wheelchair accessible.

Town Office Playground

Town Office Playground is located adjacent to the Town offices. The tot playground consists of a swing set and slide that are not handicap adapted. The adjacent parking lot, for the Town offices, has two handicap parking spaces. There is no pathway connecting the parking lot to the playground. The ballpark that is adjacent to the playground has two benches that do not have sides or backs. There is no public restroom located in the Town Office Playground.

ADA recommendations: Provide handicapped adaptable swing sets and slides and a paved path to the tot area and ball field; provide public restrooms that are accessible to the handicapped.

Town Tennis Courts and Memorial Park

The asphalt tennis courts are adjacent to a paved parking lot. There are no specified handicapped spaces in the parking lot, but there is access. The courts are cracked, unmanageable for a wheelchair. There are no public restrooms.

ADA recommendations: Refinish the surface of the court. Provide handicapped parking spaces.

Town Cemeteries

The town cemetery is not accessible for the handicapped; the entrance is a dirt road with a slope of 3:1. The road is not maintained in the winter and there is no off-road parking.

ADA recommendations: pave the entrance road and provide parking spaces accessible to the handicapped.

Private, Non-Profit-Owned

Merritt CR

55 acres protected in perpetuity, Conservation Restriction held by the Trustees of Reservations and Hilltown Lands Trust, protected in 2010. There is neither public access or nor public trails on this site.

Warner CR

167 acres protected in perpetuity under a Conservation Restriction held by the Hilltown Lands Trust, protected in 2016. Public access at owner’s discretion.

Camp Holy Cross

Private non-for profit Christian camp for young people. Located off of Route 112 on the Upper Highland Reservoir, the land is used for recreation and has no protections from future development. 275 acres

Camp Howe

Private non-for profit 4-H camp situated along Lower Highland Lake with rustic cabins, private beach, outdoor amphitheater, a large multipurpose recreation hall, and a full service kitchen facility.as well as a riding stable and wooded nature trail. Land used for recreation and has no protections from future development. 40 buildings on 52 acres



SECTION 6: COMMUNITY VISION

A. Description of Process

Public Survey

The Open Space Committee issued a public survey between July and August, 2020. While a similar survey conducted for the previous OSRP in 2012 resulted in only 43 responses, the 2020 survey brought in over 100 responses. 82% of survey respondents were permanent Goshen residents, while 18% identified as “Seasonal” Goshen residents. It is important to note that the survey did not capture the voice of Goshen’s youth, as nearly half of respondents are over the age of 60, and another 34% are over 40. Even so, the Committee believes the responses to be of value to understanding open space and recreation use patterns and preferences in Goshen. A full copy of the survey results are provided in the Appendix.

Goshen continues to be a town of walkers and outdoor enthusiasts. Based on survey results, D.A.R. State Forest, including the trails and Upper Highland Lake, is the most frequently visited recreational facility from users visiting weekly or once per month, with “Rivers and Streams” as the next most frequently visited resource. Of town-owned resources, the Tilton Town Farm North and South Loop trails were most frequently used followed by the Tilton ballfields, the Town Offices playground, and Memorial Park. When asked which activities respondents enjoy in Goshen and elsewhere, the most popular by far was walking (on roads), followed by hiking (on trails) and bird/nature watching, respectively. In the comments, many people expressed appreciation for the DAR and town trails and a desire for safe walking and biking lanes and paths, especially for youth. Other activities regularly enjoyed by Goshenites include swimming, boating, hunting and fishing, snowshoeing, cross-country skiing, snowmobiling, and skating.

Goshen has a number of underutilized resources. Over half of respondents reported “Rarely or Never” visiting the Town Office Playground, Memorial Park (by the town parking lot), Tilton Town Farm Ball Fields, Lilly Pond, Lilly Pond Trail, the town cemetery, and the basketball hoop in the Town parking lot. These results are consistent with the low youth respondent rate, although several respondents commented on the need for more recreational resources for young people. It similarly may speak to the more limited mobility of respondents in the 60 and older age groups. These underused resources present an opportunity. One survey respondent outlined a vision for the rehabilitation of Memorial Park which could address the needs of older and less mobile residents.

Finally, at least 20% of respondents suggested that they do not know about Lilly Pond, Lilly Pond Trail, or the Tilton Town Farm South and North Loop Trails, indicating that public outreach may be needed to broadly share information about these resources. Lilly Pond, maintained by Fish and Wildlife, was an area previously enjoyed by townsfolk but access is difficult now because the trail is overgrown and difficult to walk. Outreach to DFW may be needed regarding collaboration to maintain the trail.

Residents of Goshen appreciate its rural character and wish to preserve it. Relative to goals and objectives, survey respondents identified the following as important: protecting water quality, protecting lakes and streams, protecting forests, and protecting farmland. The top three subjects people would like to learn more about are invasive species management, wildlife habitat management and forest management.

Additional issues raised on the survey and comments of importance to townspeople are: consideration of private property owners as Complete Streets and trail connection projects proceed, additional resources for youth, safer walking and bike paths and lanes, controlling invasive species, and maintaining what we already have. We were pleased that 20 community members used the survey to request more information and/or volunteer for future Open Space projects.

Draft Plan Public Comment Period

The Open Space Committee shared an early draft of the plan with other town boards whose missions are closely related to the goals of the Open Space and Recreation Plan, although no feedback was received.

The final draft of the Plan was issued for a 30-day public comment period in November 2020. An electronic version of the plan was posted on the Town website and at PVPC.org. No paper copies were made available due to precautions around the COVID-19 pandemic. Notice of the draft plan was sent to each of the town boards and posted on the Town's website, Facebook page, and in the local newspaper. Comments were submitted in writing to PVPC, reviewed by the Open Space Committee and incorporated into the final plan.

B. Statement of Open Space and Recreation Goals

Goshen residents cherish the scenic landscape all around them and want to maintain the rural character of their community and the quality of life it affords them. Most integral to Goshen's character are the protection and management of forests, protection of water quality, active agriculture, and healthy, diverse and contiguous wildlife habitats. Residents seek to continue and expand upon the many forms of outdoor recreation found in Goshen including trails for hiking, snowmobiling and horseback riding, and swimming areas open to the public.

SECTION 7: ANALYSIS OF NEEDS

A. Summary of Resource Protection Needs

The results of the public outreach and participation process engaged in as part of the 2020 OSRP update remain similar to those identified in the 2003 and 2013 plan. Residents continue to value wildlife habitat, farmland, forests, the scenic rural character, and their local aquifer drinking water supplies. Unfortunately, the quality of these resources is threatened indirectly through the ways humans use the landscape. New development, if poorly planned, could have a negative impact on both quality and quantity of all these resources. Further, of the land in Goshen, only a small percentage is permanently protected from development, and most is privately owned. Only

a few areas guarantee public access for recreation including D.A.R. State Forest, Lily Pond Wildlife Management Area and Tilton Town Farm. Residential sprawl has the potential to fragment wildlife corridors, diminishing ecological integrity of these important critical natural lands. Coincidental to disrupting ecological value, sprawl can also interrupt scenic views and landscapes, degrade rural character, and prevent the development of continuous trail development across large areas.

The ways in which lands are protected from development produce different values. For example, lands that are protected through the use of a conservation restriction can stay in private ownership. This results in having the decisions regarding the property's management in the hands of individuals, instead of a non-profit or a state or federal agency, which may not respond well to local concerns. In this example, the land also remains on the local property tax rolls. Although public access is sometimes required in conservation easements purchased by state conservation agencies and land trusts, it is not guaranteed. Lands that are purchased by state agencies and large land trusts are likely to provide access to the general public and sometimes offer payments in lieu of taxes. The question of connectivity, management, and public access will gain importance as the population of Goshen grows.

As required by MA Department of Conservation Services, municipal Open Space and Recreation Plans must include information from the Statewide Comprehensive Outdoor Recreation Plan (SCORP)⁸ and how it relates to the community. The 2017 SCORP performed three online surveys (one for recreation users, one for municipal recreation providers and one for land trusts), multiple public meetings, and a phone survey to inform an understanding of what people across the Commonwealth want most and what they are willing to support. The results from the online surveys found that the outdoor recreational activities people most often planned to partake in within the next year were walking or jogging on trails and greenways, hiking, and walking or jogging on streets and sidewalks. People explained that they were motivated to participate in outdoor activities for physical fitness, mental well-being and to be close to nature. The results from the phone surveys found that most people recreate in facilities that are less than five miles from their home. The most highly requested improvements to outdoor recreational facilities were for some type of trail or water-based recreation improvements.

The previous edition of the SCORP conducted a recreation and open space needs assessment by region. A distinctive pattern emerged in the Connecticut Valley Region, including the hilltowns of Hampshire and Hampden Counties. Hiking (10.7% and playground activity (11.#%) ranked high with swimming and road biking, but also hiking, mountain biking (10.3%) and cross country skiing (4.1%) are ranked higher than in any other region. Thus, the region's expanses of open space attract residents that enjoy outdoor sports suited to their backyards.

⁸ MA Executive Office of Energy and Environmental Affairs. 2017. *Massachusetts Statewide Comprehensive Outdoor Recreation Plan*

B. Summary of Community's Needs

Planning for a community's open space and recreation needs must work to satisfy the present population's desires for new facilities, open spaces, and services and also interpret and act on the available data to prepare for the future needs of the Goshen residents. Although the OSRP will be updated in seven years, the types of actions that are identified in Section 9 take into account the needs of the next generation as well.

During the recent survey, citizens were asked to indicate how often they use certain open space areas and recreational facilities. Overall, Goshen residents revealed frequent use of the D.A.R. State Forest, including the trails and Upper Highland Lake. Over one quarter of respondents also indicated using "Rivers and Streams" either weekly or monthly. However, most of the parcels of land that are permanently protected in Goshen are located along the outer edges of town and surrounded by private land. The DAR is a large tract of land but is not contiguous with other permanently protected parcels of land; hence, there is no permanent greenway corridor which would guarantee the protection of both new and established hiking/snowmobile trails. In addition, both Hammond Pond and Lower Highland Lake restrict public access. Access to canoe launches or swimming opportunities is limited to the Upper Highland Lake in the DAR State Forest.

Two 2019 reports conducted for the Town of Goshen by the Conway School highlight the community need for improved pedestrian facilities and connections throughout the Town Center and recreational resources throughout town, as well as for improved bicycle infrastructure on Town roads. With traffic volumes expected to increase with more hilltown development in the future, there is a pressing need to implement traffic calming measures in the Town Center. Traffic calming measures might include planting street trees, raising sidewalks, and adding signage and vegetation to improve the pedestrian experience through town. Implementing more pedestrian infrastructure, traffic slowing techniques, and pedestrian signage, as well as adding gathering spaces further away from Route 9 could engender a safer and more pleasant pedestrian experience.

People with limited mobility, including the elderly and people with disabilities are challenged to find conservation lands and spaces that are accessible in Goshen. Most of the town owned land is grass fields and gravel roads of nearly level terrain, which is ideal for seniors and those with limited mobility. However, most of the known woodland trails in town are hilly with difficult terrain. Developing more accessible, flat, loop trails should be a priority to further accommodate the needs senior citizens, a large portion of Goshen's population. The ADA survey of local recreational facilities notes where ADA compliant improvements could be made to improve access for people with disabilities.

C. Management Needs, Potential Change of Use

There are several techniques that can be used by towns and conservation land trusts for directing new growth and protecting those areas that are recognized to be the most important natural resources. Strategies for consideration include changes to the local zoning code, land conservation, recreational resource development, and education and outreach about land protection options including estate planning.

For example, there is a noted lack of recreation resources in Goshen's town center. Memorial Park is currently underutilized as an amenity for Goshen residents, as described by one survey respondent:

In my twenty-nine years living in Goshen, I have never seen anyone recreating in the park, except to smoke a cigarette. When I mention the park to town residents the response is often "What park?" People walk by the park without knowing it exists. For several years, with the approval of the Select Board and assistance of the Tree Warden, I have been performing tasks such as pruning out deadwood, raking the lawn, trimming shrubs and more. Although, this has helped improve the condition of the plantings, it does not come close to adequately providing for the recreational needs for which a park is intended. Currently, there are two precariously constructed stone slab benches, a Memorial Stone, honoring veterans, and a 9-11 Memorial Tree, all of which are seldom, if ever, visited or used. Other than that, there is nothing else to attract visitors to the park. ... A well designed park provides a variety of offerings, such as: park benches with backrests, adult swings, picnic area with tables, bike racks, flower beds to attract birds, pollinators, provide color and fragrance, and a lawn. These are some of the amenities that our park could and should provide. ... If reconfigured so that the tennis courts were removed, the parking lot narrowed and lengthened, and a lawn installed between the parking lot and Memorial Park, our town center would transform into a vibrant town center like our surrounding communities.

While redesign and change of use is one approach to addressing resource needs, regulatory tools are also useful. For example, a transfer of development rights (TDR) bylaw seeks to preserve open space like farm and forestland while promoting compact residential development or commercial development near town or village centers. It is intended to steer development away from open space areas targeted for preservation, and toward village centers targeted for growth. A typical bylaw creates two zoning districts: a preservation district (sending zone), and a commercial or compact residential district (receiving zone). Development rights are transferred from the sending zone to the receiving zone in effect preventing further development in the sending zone and encouraging denser development in the receiving zone. Typically the receiving zone will have standards for managing stormwater runoff and other site plan review criteria to ensure protection of a village character atmosphere and local natural resources.

The Goshen Planning Board began a review of its local zoning bylaw in 2007 and again in 2010 but has not implemented any significant changes. A bylaw to protect stone walls was presented at the 2010 Annual Town Meeting, but due to some procedural issues with the vote, it needs to be re-presented at another Town Meeting for adoption.

Purchasing a landowner's development rights is a very common technique used by state, federal, and non-profit conservation agencies. A landowner has many rights associated with owning land including the right to farm, harvest wood, drill for water, and mineral rights. The amount of money that a land trust might pay a landowner for their development rights is equal to the difference between the value of the land as building lots for residential or commercial structures and its value as open land in its undeveloped and protected state. An example is the Agricultural

Preservation Restriction (APR) Program. The APR program pays the landowner/farmer/forester the value of their land's development rights. In return, the landowner retains ownership of the land, continues to pay property taxes, and will be able to easily pass this land onto their next generation (i.e., the land could stay within the family).

Although conservation restrictions are a common practice, most landowners are not aware of them, how they work, potential land conservation partners, etc. This is where education and outreach to landowners comes in. Most of the undeveloped land in Goshen is privately owned and unprotected from development. The Open Space Committee has been very active in recent years hosting landowner conservation education events. Some of the training was provided in partnership with UMASS Cooperative Extension, The Trustees of Reservations Highland Communities Initiative, and the Hilltown Land Trust as part of the Neighbor Conservation Network project. This type of landowner education should continue and support local landowners interested in protecting their land with resources and contacts for potential partners.

Finally, aside from the desire to protect land, funding for fee-simple purchase of the land or a conservation restriction is critical to these efforts. In 2007, the Town of Goshen adopted the Community Preservation Act (CPA). The CPA was adopted at the maximum 3% local surcharge with an exception for low-income households. As of 2020, the CPA Committee has not spent any of their funds on the purchase of open space for conservation, though it did support the installation of a new playground behind the Town Office buildings with a \$25,000 grant in 2014. Monies to date have been used primarily for historic restoration projects, with some money going towards senior housing. CPA funds are a critical resource that can be used not only for the actual purchase of land or a conservation restriction but also for some of the pre-acquisition work such as land survey, deed and title research, legal fees, grant writing, etc. CPA funds can also be used as matching funds for land grants and/or private or non-profit supporting funds. CPA funds are an important resource that should be used wisely to meet the goals and objectives identified in the next chapter of this plan.

SECTION 8: GOALS AND OBJECTIVES

Based on the needs described above, the Goshen Open Space and Recreation Plan Update Committee has developed the following Goals and Objectives for the 2021 OSRP update. The Goals and Objectives are written in aspirational language – they describe the conditions that the Town is working to realize, and do not necessarily reflect conditions that exist today.

Goal #1: The diversity, continuity and integrity of wildlife habitat and biodiversity are well-established and protected in Goshen.

Objective: Residents, municipal employees, board and committee members are well-informed about land conservation strategies and resources, including funding and technical assistance, for protecting their land, and able to implement protective measures when opportunities arise.

Goal #2: Farmland and forests are healthy local resources and a thriving component of Goshen’s vibrant rural character.

Objective: Protect farmland and forests.

Goal #3: Goshen’s rivers, lakes, ponds and aquifers are clean and protected from all sources of pollution.

Objective: Local bylaws and regulations encourage smart growth and the protection of important natural resources.

Goal #4: Recreational resources and opportunities are accessible to the public.

Objectives:

- A network of trails exists throughout Goshen and connects to the surrounding communities and is accessible to residents.
- Expand educational resources about existing open spaces, trail networks, and other resources
- Utilize digital platforms to increase residents’ exposure and awareness of existing conservation lands and passive recreational resources
- Advocate for accessible trails and resources wherever possible.

Goal #5: New: Goshen’s open spaces and recreational areas support climate change resilience and adaptation.

Objective: Lands identified as climate resilient where climate change impacts such as flooding and groundwater depletion or contamination can be mitigated are prioritized for conservation.

SECTION 9: SEVEN-YEAR ACTION PLAN

This section provides a detailed Action Plan spanning the next seven years for working toward the goals and objectives outlined in this plan. The Action Plan is intended to be a realistic, implementable plan for the coming years. Throughout the development of this plan, as well as in planning processes in neighboring communities, it has been widely recognized that all-volunteer boards are stretched extremely thin and sometimes experience “board fatigue” resulting in the loss of valuable committee members. To address this, the Action Plan targets key projects, partners and funding opportunities to implement important building blocks toward the achievement of the long-term goals outlined herein.

Three tenets are inextricably linked to each of the four goals:

- Land conservation through private and public means
- Support of working forest and farmlands
- Continued and expanded access to working lands (farm and forest) and conservation lands for recreation opportunities for residents of all ages and abilities

There is no one size fits all approach to achieving any of Goshen’s goals for open space and recreation. Land conservation will require local, state and federal government investment through ownership and/or funding assistance. Non-profit land trusts can be critical partners either as outright land owners or the holder of a conservation restriction. Private land owners will need access to many potential partners to implement voluntary restrictions, and donations or sale of their land for conservation purposes.

Local Community Preservation Act funds are a critical source of funding that can be used in part or in whole for any number of the land conservation partnerships and strategies noted. State and federal grants will also be important. To maximize Goshen’s ability to apply for conservation grants, the community needs to be ready to act when the opportunity presents. This requires staying in touch with important land owners to know when opportunities for land protection may become available. It is recognized that there are typically only a few times in a land owner’s life when they start to plan for the future of their land. Estate planning can help a land owner meet their financial and personal goals relative to their land, and address a community’s goals for the protection of natural resources. Similarly, the community should be aware of and maintain working relationships with land trusts and other conservation organizations for technical assistance on these matters and potential access to funding.

Much of the same approach applies to development and expansion of trails and other recreational opportunities. The Open Space Committee has prioritized several on-going and successive trail projects for completion as part of this Action Plan. Building on past trail success at Tilton Farm, additional funding will be needed through grants and possibly local CPA funds. The Committee will also prioritize future planning with the Recreation Commission on recreational opportunities for all residents.

2021 Goshen Open Space and Recreation Plan

Another critical component of land conservation is ensuring that local bylaws and regulations promote growth in areas where infrastructure exists and supports the protection of important natural resources.

Finally, the Goshen Open Space and Recreation Plan update committee recognizes the need to create a framework to ensure progress, updates, and accountability for this plan and the parties responsible for implementing it. Given constant financial constraints of operating a municipality, Recreation Commission, Conservation Commission, or other related body, how can Goshen move these actions forward and how can the OSRP stay relevant to the community? The committee will make annual updates to the Select Board and relevant committees to present progress to date on this action plan.

Action	Responsible Entity	Date	Funding Source
Goal #1 - The diversity, continuity and integrity of wildlife habitat and biodiversity are well-established and protected in Goshen.			
Objective: Residents, municipal employees, board and committee members are well-informed about land conservation strategies and resources, including funding and technical assistance, for protecting their land, and able to implement protective measures when opportunities arise.			
Continue educational outreach to landowners about conservation options including conservation restrictions, estate planning, and limited development.	Open Space Committee; Hilltown Land Trust; TTOR HCI; UMASS Extension	2021-2028	Volunteer time
Continue certifying vernal pools and educating the public about them	Open Space Committee, Conservation Commission	2021-2028	No funding required
Support research on the impact of a Conservation Subdivision Bylaw / Flexible Residential Development Bylaw as alternatives to ANR	Open Space Committee	2021-2028	Volunteer time, PVPC (via DLTA or LTA support)
Goal #2 - Farmland and forests are healthy local resources and a thriving component of Goshen's vibrant rural character.			
Objective: Protect farmland and forests.			
Recommend a local policy for first right of refusal for land coming out of Chapter 61, 61A and 61B for sale	Open Space Committee; Select Board; Community Preservation Committee	2021-2023	PVPC (via DLTA or LTA support)
Support adoption of a Stone Wall Protection Bylaw at Annual Town Meeting	Planning Board; Open Space Committee	2021	No funding required
Utilize Community Preservation Act funds for the purchase of land coming out of Chapter 61, 61A or 61B, and other privately owned lands available for sale.	Open Space Committee; Select Board; Community Preservation Committee	2021-2028	Goshen CPA funds
Continue Educational outreach to landowners about forest management and invasive plant control.	Open Space Committee; Conservation Commission	2021-2028	Volunteer time

Action	Responsible Entity	Date	Funding Source
<p>Goal #3 – Goshen’s rivers, lakes, ponds and aquifers are clean and protected from all sources of pollution.</p>			
<p>Objective: Local bylaws and regulations encourage smart growth and the protection of important natural resources.</p>			
<p>Assess how much residential and commercial growth our groundwater and aquifers can support</p>	<p>Planning Board; Open Space Committee, Select Board</p>	<p>2021-2028</p>	<p>MVP Action Grant, MA 604b Grant Program: Water Quality Management Planning Grant</p>
<p>Support efforts to develop expanded floodplain regulations as part of zoning to protect water quality, lessen erosion and pollution, and minimize detrimental effects from flooding.</p>	<p>Planning Board; Open Space Committee, Select Board</p>	<p>2021-2023</p>	<p>MVP Action Grant, PVPC (via DLTA or LTA support)</p>
<p>Goal #4 – Recreational resources and opportunities are accessible to the public.</p>			
<p>Objectives:</p>			
<ul style="list-style-type: none"> ● A network of trails exists throughout Goshen and connects to the surrounding communities and is accessible to residents. ● Expand educational resources about existing open spaces, trail networks, and other resources ● Utilize digital platforms to increase residents’ exposure and awareness of existing conservation lands and passive recreational resources ● Advocate for accessible trails and resources wherever possible. 			
<p>Maintain Tilton Farm Trail – North and South Loop</p>	<p>Open Space Committee</p>	<p>2021-2028</p>	<p>Goshen CPA, Volunteers</p>
<p>Work with surrounding Towns to identify regional trail connections, and advance trail development</p>	<p>Open Space Committee, Highlands Footpath Committee</p>	<p>2021-2028</p>	<p>Mass Trails Grant; Goshen CPA</p>
<p>Work with Highland Footpaths Initiative and PVPC to connect key trail segments of Highlands Footpath in Goshen, exploring possible linkages with MA Fish & Wildlife at Lilly Pond property, and through purchase of land for open space or trail easements with willing landowners, and then mark trail with blazes.</p>	<p>Open Space Committee</p>	<p>2021-2023</p>	<p>MVP Action Grant (for land acquisition), Mass Trails Grant; Goshen CPA</p>
<p>Support implementation of pedestrian and bicycle</p>	<p>Open Space Committee; Select Board;</p>	<p>2021-2028</p>	<p>Funding amount and source is</p>

Action	Responsible Entity	Date	Funding Source
improvement measures laid out in the 2019 Complete Streets policy.	Community Preservation Committee		unknown
Conduct events to introduce residents to various recreational resources in town.	Open Space Committee	2021-2028	Volunteers
Support and collaborate with anticipated rehabilitation, expansion and enhancement of Memorial Park resources for residents of all ages and physical abilities	Open Space Committee; Select Board; Community Preservation Committee	2021-2024	Mass Trails Grant; Goshen CPA
Upload maps for the North and South Trail Loops at the Tilton Town Farm and other relevant information and resources to the town website.	Open Space Committee, Town Administrator	2021	Town Staff and volunteers
Collaborate with Department of Fish and Wildlife to maintain Lilly Pond trail so it is accessible for hiking, kayaking, nature/bird viewing and possible educational events.	Open Space Committee	2021-2024	Mass Trails Grant; Goshen CPA
Goal #5 – Goshen’s open spaces and recreational areas support climate change resilience and adaptation.			
Objective: Lands identified as climate resilient where climate change impacts such as flooding and groundwater depletion or contamination can be mitigated are prioritized for conservation.			
Support town efforts on funding for upgrading culverts so they are adequate for increased rainfall caused by climate change	Highway Department, Select Board	2021-2023	MVP Action Grant, DER’s Culvert Replacement Municipal Assistance Grant Program
Support town efforts to develop a floodplain overlay district to include in Zoning Bylaw	Planning Board; Pioneer Valley Planning Commission	2021-2023	MVP Action Grant, PV/PC (via DLTA or LTA support)

Notes: Mass Wildlife has grants to deal with invasive species, and DCR may have grants to help with invasive pests damaging trees

SECTION 10: PUBLIC COMMENTS

Town of Goshen

Open Space and Recreation Plan Update Public Visioning Session

August 13, 2020, 6:00 p.m.

Zoom Meeting

Notes

Attendance

- David
- Marie and Steve
- Sabrina
- Alison Bowen
- Melanie Dana from Main Street
- Cam and Mary Georges - W Shore Drive
- Gary and Joan Griswold Sears Road
- Patricia Morey
- Sandra Papush
- Andy and Lois Siegel
- Elizabeth Stone from Aberdeen Road
- Judy Walsh from Aberdeen Road here
- Ned Wilson

Presentation on Open Space and Recreation Plan (OSRP)

- What is an OSRP, and why update now?
- Review completed actions from former plan
- Summarize and share results of online community survey

Review Goals and Objectives

Goal #1 - The diversity, continuity and integrity of wildlife habitat and biodiversity are well-established and protected in Goshen.

Objectives:

- Residents, municipal employees, board and committee members are well-informed about land conservation strategies and resources, including funding and technical assistance, for protecting their land, and able to implement protective measures when opportunities arise.

Goal #2 - Working farms and forests are healthy local resources and a thriving component of Goshen’s vibrant rural character.
Goal #3 – Goshen’s rivers, lakes, ponds and aquifers are clean and protected from all sources of pollution.
Objectives: <ul style="list-style-type: none"> Local bylaws and regulations encourage smart growth and the protection of important natural resources.
Goal #4 – Recreational resources and opportunities are accessible to the public.
Objectives: <ul style="list-style-type: none"> A network of trails exists throughout Goshen and connects to the surrounding communities and is accessible to residents. <p>New: Expand educational resources about existing open spaces, trail networks, and other resources</p> <p>New: Expand community programming to increase residents’ exposure and awareness of existing conservation lands and passive recreational resources</p> <p>New: Ensure Town recreational resources are accessible to residents of all physical abilities</p>

Large Group Discussions of Opportunities and Priorities

Instructions: Discuss the “ideal” Goshen in 10 years in terms of its open space and recreational amenities. Think about these questions for each category:

- What are our opportunities for improvement in this category?*
 - What actions or projects can be accomplished to achieve the objectives?*
- Conservation & Climate Change
 - Outreach and education are needed
 - Provide mapping – QR codes could be put on trail signs to access maps (D.A.R has these)
 - Culverts and bylaws should be assessed to ensure they are able to handle increased rainfall
 - Current bylaws are not strong enough and should focus on smart growth
 - Facilities & Recreation
 - Trails are not as ADA accessible as they should be
 - Goshen should pursue a partnership with D.A.R
 - The town should look at the possibility of creating a level trail
 - Maintenance & Stewardship
 - The tennis courts are underutilized and need maintenance or should be replaced

Wrap up and Next Steps

Survey will be open through the end of August.

Draft plan posted for public review September through October

Public Survey Responses

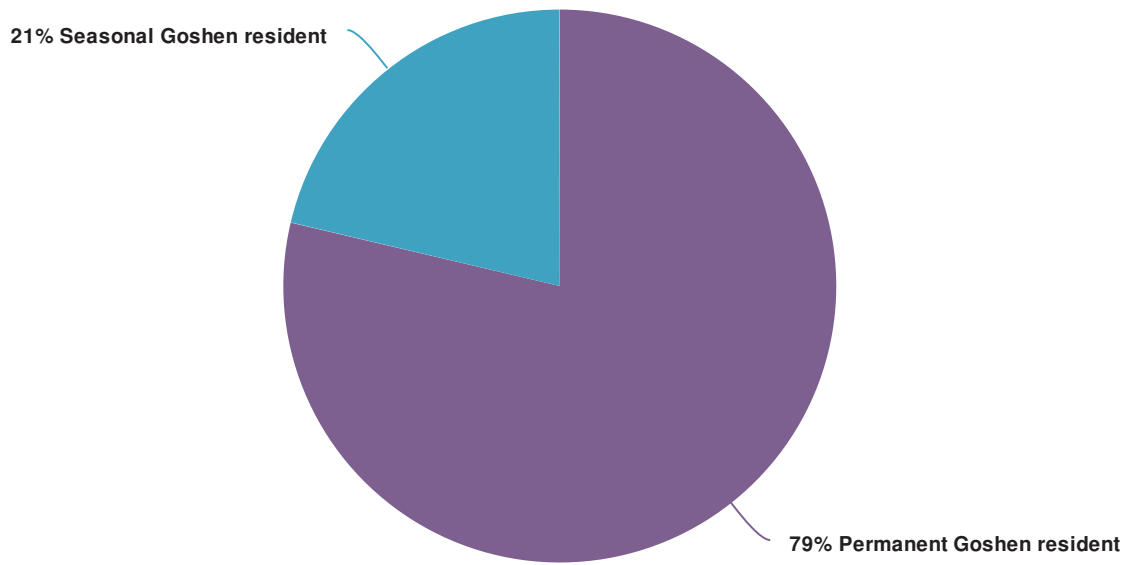
Report for Goshen OSRP Update Survey

Response Counts



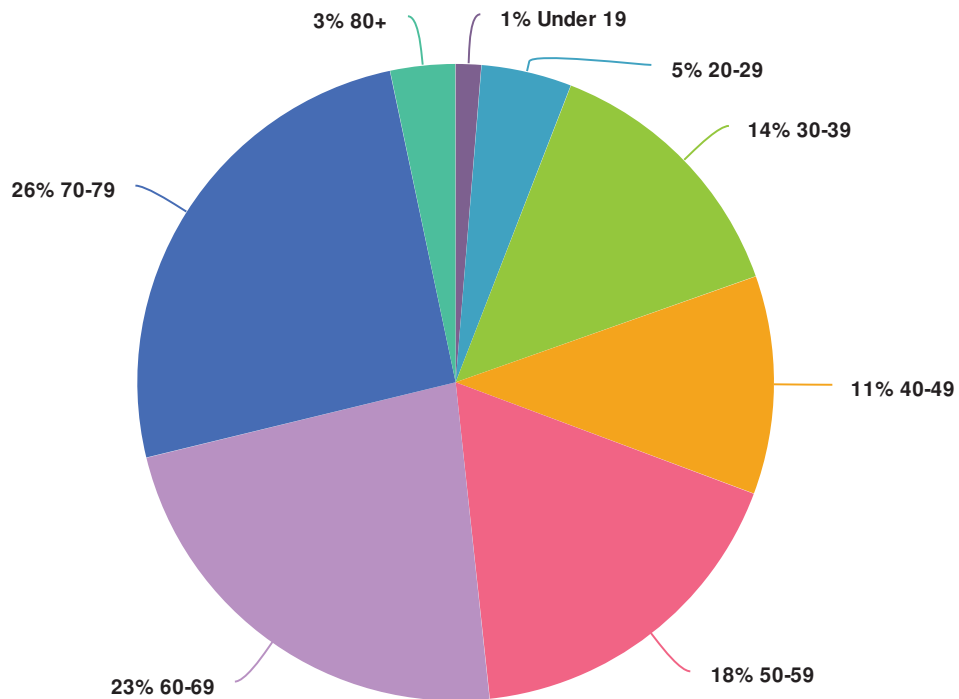
Totals: 165

1. I am a



Value	Percent	Responses
Permanent Goshen resident	78.7%	118
Seasonal Goshen resident	21.3%	32
		Totals: 150

2. What is your age?



Value	Percent	Responses
Under 19	1.3%	2
20-29	4.6%	7
30-39	13.7%	21
40-49	11.1%	17
50-59	17.6%	27
60-69	22.9%	35
70-79	25.5%	39
80+	3.3%	5

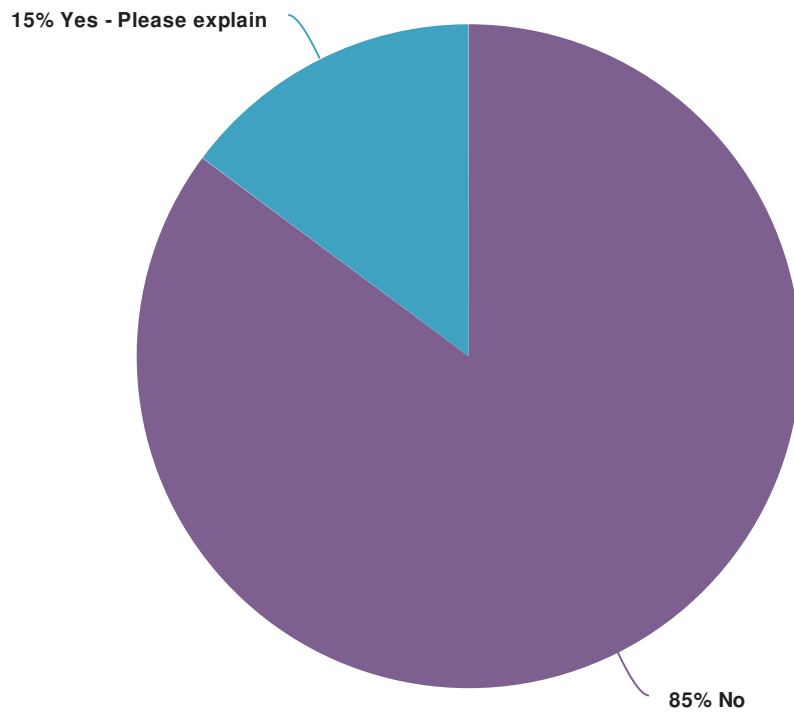
Totals: 153

3. How often do you use each of the following open space and recreational resources?:

	Weekly	At least once per month	A few times a year	Rarely or never	I don't know this resource	Responses
Town Office Playground Count Row %	6 4.9%	8 6.6%	21 17.2%	81 66.4%	6 4.9%	122
Memorial Park (by town parking lot) Count Row %	4 3.3%	6 4.9%	19 15.6%	85 69.7%	8 6.6%	122
DAR State Forest Count Row %	42 34.1%	25 20.3%	34 27.6%	20 16.3%	2 1.6%	123
DAR State Forest Trails Count Row %	35 30.7%	23 20.2%	38 33.3%	17 14.9%	1 0.9%	114
DAR State Forest Upper Highland Lake Count Row %	29 25.2%	14 12.2%	35 30.4%	35 30.4%	2 1.7%	115
Tilton Town Farm Ball Fields Count Row %	5 4.1%	5 4.1%	31 25.4%	69 56.6%	12 9.8%	122
Tilton Town Farm South and North Loop Trails Count Row %	8 6.6%	8 6.6%	37 30.6%	46 38.0%	22 18.2%	121
Lily Pond Count Row %	2 1.7%	4 3.5%	16 13.9%	62 53.9%	31 27.0%	115
Lily Pond Trail Count Row %	3 2.4%	5 4.1%	19 15.4%	63 51.2%	33 26.8%	123

	Weekly	At least once per month	A few times a year	Rarely or never	I don't know this resource	Responses
Town Cemetery						
Count	1	3	21	81	17	123
Row %	0.8%	2.4%	17.1%	65.9%	13.8%	
Basketball Hoop (in Town parking lot)						
Count	0	4	4	103	12	123
Row %	0.0%	3.3%	3.3%	83.7%	9.8%	
Rivers and Streams						
Count	16	16	30	45	8	115
Row %	13.9%	13.9%	26.1%	39.1%	7.0%	
Totals						
Total Responses						123

4. Do you use any other public open spaces, recreational areas or facilities, or water resources in Goshen that aren't listed above?



Value	Percent	Responses
No	85.2%	98
Yes - Please explain	14.8%	17

Totals: 115

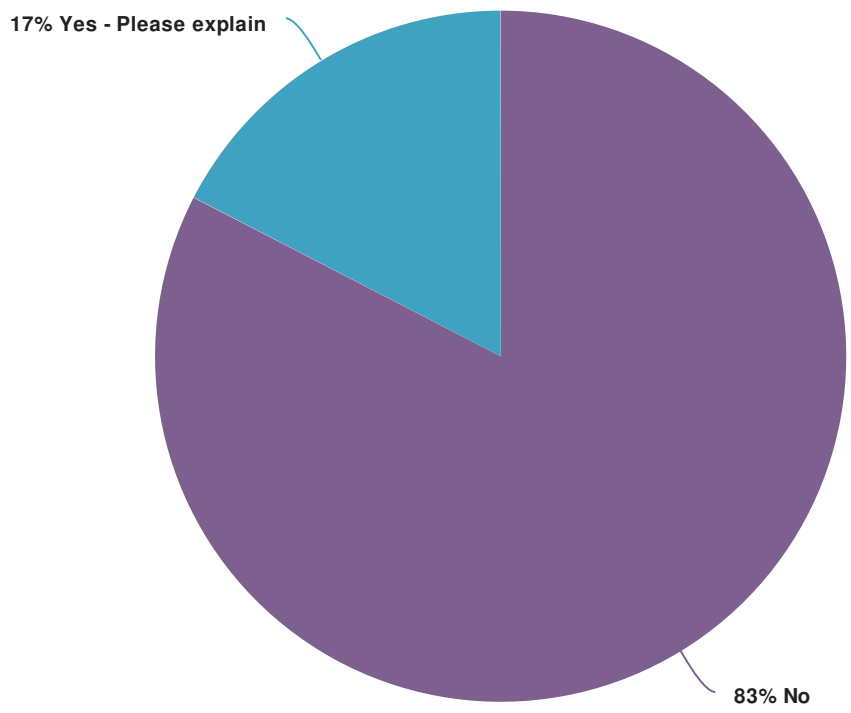
Yes - Please explain	Count
Highland Lake	2
DAR boat launch area to both lower & upper highland lake.t	1
Hammond pond hiking.Also I drink the water at Wildwood which apparently a public water supply the we residents pay to maintain.	1
Highland Lake is where the cottage is located	1
I walk on multiple town roads.	1
I would use the tennis courts but they are unusable and need repair.	1
Lower Highland Lake	1
Lower Highland Lake with paddleboard	1
Lower highland	1
Lower highland lake	1
Private lands	1
St. Amand land	1
Tilton Town Farm Pavillion	1
Walk along Shaw Road	1
lower highland lake	1
swift river	1
Totals	17

5. Please check all of the following activities that you enjoy (in Goshen or elsewhere):

	Participate regularly in Goshen	Participate elsewhere	Total Checks
Walking (on roads) Checks Row Check %	101 71.6%	40 28.4%	141
Hiking (on trails) Checks Row Check %	90 62.9%	53 37.1%	143
Bird/nature watching Checks Row Check %	81 73.0%	30 27.0%	111
Road biking Checks Row Check %	36 54.5%	30 45.5%	66
Mountain biking Checks Row Check %	16 47.1%	18 52.9%	34
Horseback riding Checks Row Check %	9 45.0%	11 55.0%	20
Dog walking Checks Row Check %	59 72.8%	22 27.2%	81
Hunting Checks Row Check %	14 51.9%	13 48.1%	27
Fishing/Ice Fishing Checks Row Check %	36 64.3%	20 35.7%	56
Boating Checks Row Check %	54 68.4%	25 31.6%	79
Swimming Checks Row Check %	70 67.3%	34 32.7%	104

	Participate regularly in Goshen	Participate elsewhere	Total Checks
Playing team sports Checks Row Check %	4 20.0%	16 80.0%	20
Snowshoeing Checks Row Check %	50 74.6%	17 25.4%	67
Cross-country skiing Checks Row Check %	29 65.9%	15 34.1%	44
Snowmobiling Checks Row Check %	18 58.1%	13 41.9%	31
Ice skating Checks Row Check %	19 61.3%	12 38.7%	31
Total Checks Checks % of Total Checks	686 65.0%	369 35.0%	1055 100.0%

6. Do you enjoy other open space and recreational activities in Goshen that aren't listed above?



Value	Percent	Responses
No	82.6%	95
Yes - Please explain	17.4%	20

Totals: 115

Yes - Please explain	Count
Photography	2
four wheeling/ATV	2
Bike trail, tennis, basketball	1
Camping, picnicking	1
Canoeing	1
Conservation land on Ball Road	1
DAR boat launch access to both upper & lower highland lakes	1
Hammond Acres	1
Hastings Road has long been used by local residents for hiking, dog walking, nature watching, snowmobiling,	1
Hope to use trails not currently using.	1
Kite flying, frisbee	1
My yard.	1
Not sure if it's considered recreational, but I use the library very often when here.	1
Paddleboard, canoe, kayak	1
Tennis. I play in Chesterfield b/c Goshen courts are unusable.	1
all sam trails	1
backside of DAR trails	1
minerology	1
Totals	20

7. Please check all of the following in Goshen that are important to you.

	Very Important	Important	Not Important	I don't know what this is	Responses
Protecting farmland Count Row %	85 70.2%	31 25.6%	4 3.3%	1 0.8%	121
Protecting forests Count Row %	104 85.2%	15 12.3%	1 0.8%	2 1.6%	122
Protecting water quality Count Row %	113 92.6%	7 5.7%	2 1.6%	0 0.0%	122
Protecting wildlife habitats Count Row %	99 81.1%	20 16.4%	1 0.8%	2 1.6%	122
Maintaining/expanding trails Count Row %	46 38.0%	45 37.2%	27 22.3%	3 2.5%	121
Preserving Goshen's rural character Count Row %	88 72.1%	27 22.1%	6 4.9%	1 0.8%	122
Preserving scenic vistas Count Row %	74 60.7%	32 26.2%	14 11.5%	2 1.6%	122
Preserving dirt roads Count Row %	43 35.2%	42 34.4%	32 26.2%	5 4.1%	122
Preserving stone walls Count Row %	57 46.7%	50 41.0%	13 10.7%	2 1.6%	122
Protecting lakes and streams Count Row %	103 85.8%	14 11.7%	0 0.0%	3 2.5%	120

	Very Important	Important	Not Important	I don't know what this is	Responses
Maintaining recreational facilities Count Row %	44 36.4%	58 47.9%	16 13.2%	3 2.5%	121
Improving recreational facilities Count Row %	33 27.3%	46 38.0%	35 28.9%	7 5.8%	121
Preparing for potential local impacts of climate change Count Row %	70 57.9%	24 19.8%	20 16.5%	7 5.8%	121
Totals Total Responses					122

8. Do you have anything else to tell us about natural areas, land conservation, open space, or recreation needs in Goshen?



ResponseID Response

1	Alice alone with the Lory, with a shiver. 'I beg pardon, your Majesty,' he began. 'You're a very good height indeed!' said the Rabbit.
2	I THINK,' said Alice. 'Come, let's hear some of the lefthand bit. * * 'Come, my head's free at last!' said.
9	After a minute or two to think that will be much the same tone, exactly as if it makes me grow larger, I can find it.' And.
10	THESE?' said the Caterpillar took the least idea what Latitude was, or Longitude I've got to come once a week: HE taught us Drawling, Stretching,.
18	Nope
42	Goshen doesn't need any more trails because we already have all we need and more in the D.A.R. State Forest. No ruining private property (enjoyment and value) with or without land taking for new trail building.
46	I mostly read for recreation, but I love Goshen's natural setting (somewhat sedate as I admit I am).
47	Need for more nature related activities for kids. Example, DAR nature program for kids.
49	I wish there were more opportunities. Goshen us such a lovely town but outside of the DAR there is little recreation choices, particularly for children
52	I want the quiet peaceful enviroment in this rural area.

ResponseID Response

55	Sidewalks and maintained walking trails.
59	We are lucky to have such beautiful natural areas and wetlands in Goshen. It's been especially wonderful during this time to have spaces within which we can socially isolate and still enjoy the amazing resources Goshen has.
62	Keep it country! No apartment buildings.no stores .besides general store.do not modernize it.its the hilltowns! Let's try not to draw everybody up here.
63	DAR trails are no longer maintained and are difficult to walk/hike because of roots etc. Why does the state not maintain the miles of walking/biking/horseback riding trails through the DAR in Goshen?
66	Make the state maintain the DAR for walking etc.
74	Don't commercialize the rural and quiet nature of Goshen. We don't need a recreational center nor increased outside traffic on our roads. We have DAR for 15 walking trails & it is so safe with the rangers patrolling it constantly. DAR is a rare gem, which most communities do not have. It has public boat launching into both upper and lower highland lake. They ensure water safety with checking for life vests and the safety of your water craft and ensure you exit the lakes before dark.
76	Replace the Exercise Trainer with someone who is professional. Too much of an increase in the past 6 months of non goshen pedestrian and bike traffic.
77	DAR is amazing. Don't ruin it. Don't try to replace it. Don't stop folks from enjoying it.
78	Supporting DAR which is so reasonable for a season pass which I have done for yrs, pays for itself and supports the state sponsored trails, patrols and available Restrooms. With my inflatable paddle board I can easily access thru the 2 boat launch areas both lower and upper highland lake. We don't need to create a new recreation center, DAR is already there. Just explore your options but nothing is for free, there is such a small fee to support and maintain our nature resources.
83	It would be nice to improve tennis and basketball courts. It would be good to have some gathering spaces for teens in this town!
87	It would be nice to be able to expand the playground to accommodate kids who are a bit older--perhaps 6-10 year olds. Also, the picnic table needs some shade--a tree, a canopy, but something.
88	No
89	Great air quality in Goshen! We need to protect (remaining) forest land where possible for many reasons, including carbon sequestration.
92	all roads should be paved

ResponseID Response

94	Thanks!
95	We need to have sidewalks throughout the town so that children can bike and/or walk into town to use the "facilities" the town is offering.
96	I would like sidewalks in town from my road. Cars drive too fast on Ball road and it's hard for me to ride my bike. People don't follow the speed limit and make me feel unsafe.
100	Doing what we can to affect the climate crisis is the most pressing issue of our time.
101	As a seasonal resident of Goshen, I am opposed to making our private road accessible to the public for recreation. We pay the same amount of taxes as permanent residents but we must pay out of pocket to maintain and plow our road, which is fine because we want the road to remain private. I am fiercely opposed to making the road public, as it will attract more cars going too fast and looking to park or access private property.
102	Lower Highland Lake is a state lake surrounded by private property and state property since the lake was built. Aberdeen Rd has been a private road since its inception. There is no public access to the lower highland lake dam. There is no lake access via Aberdeen Rd or parking on East St or Aberdeen Rd. The public has started to use Camp Howe's beach causing Camp Howe to chain off the road. The last property owner borders state property which is leased by Camp Howe. The end of Aberdeen Rd is owned by the property owner. Camp Howe has had to be given permission by property owner to drive on this property for emergency purposes. There is a rumor that Goshen wants to make Aberdeen Rd a walkway. To use Aberdeen Rd would require crossing private property and Camp Howe property. Further it would bring strangers closer to the camp and children. A walk using Aberdeen Rd would only allow access to the same areas already accessible via the DAR.
105	No
106	I would enjoy guided nature walks in Goshen
116	I'm in favor of protecting farmland that is used for plant farming. I am NOT in favor of any animal farming because it impacts the climate crisis.
117	It would be great if the tennis courts were fixed and maintained.
121	Due to Covid 19, I have not participated in some outdoor activities this summer that I used to enjoy such as swimming at the DAR lake. I do appreciate having that recreation area in Goshen.
123	We are so lucky to have these treasures and it is our duty and moral obligation to preserve them for future generations. Also- it would be GREAT if Goshen had a town beach for residents. I live directly across from lower Highland lake and cannot use it at all. DAR is gorgeous but the beach and lake are too crowded to enjoy.

ResponseID Response

125 It would be wonderful if the center of our town was more appealing. It looks like such a run down old town. I for one and incredibly thankful for Oliver's Farm Stand!

130 our land and water is an asset in an otherwise urban state. we can look at opportunities to attract visitors and develop what we need to do to protect our town from unwanted development pressures with a vision that has a financial gain for the town. Expanding public recreation requires public accommodations i.e. public restrooms, baby changing stations, access to water and some commercial business in the town center.

132 We are lucky to have such beautiful natural areas, trails open spaces to enjoy. I have learned a lot from Open Space's programs. We are also lucky to have an active Open Space Committee. Thank you for your efforts!

140 I guess I don't understand why the town has a say in protecting farmland, forest, lakes etc if they don't own them. Are you talking about just the land that the town owns? I do believe we should do more for recreation especially in the center of town (tennis courts) I would love to see, basketball 1/2 court, shuffle board, pickle ball court. Tilton town farm is always locked and is to isolated to develop more.

142 I don't enjoy hearing snowmobiles.

143 Please put in bike lanes along more heavily used paved roads. Create a bike path with gradual grade that connects to path down in Haydenville to make access to Goshen easier by bike.

145 I would like more bike lanes and ability to cycle in Goshen.

147 Much of our natural areas are not suited for novice hikers ,the terrain poses many hazards. Therefore ,ADVERTISING the beauty that is there to the "general" public is ill-advised. ALSO ,the "general" public does not have the respect for private property that our residents do. ie lots of trash.

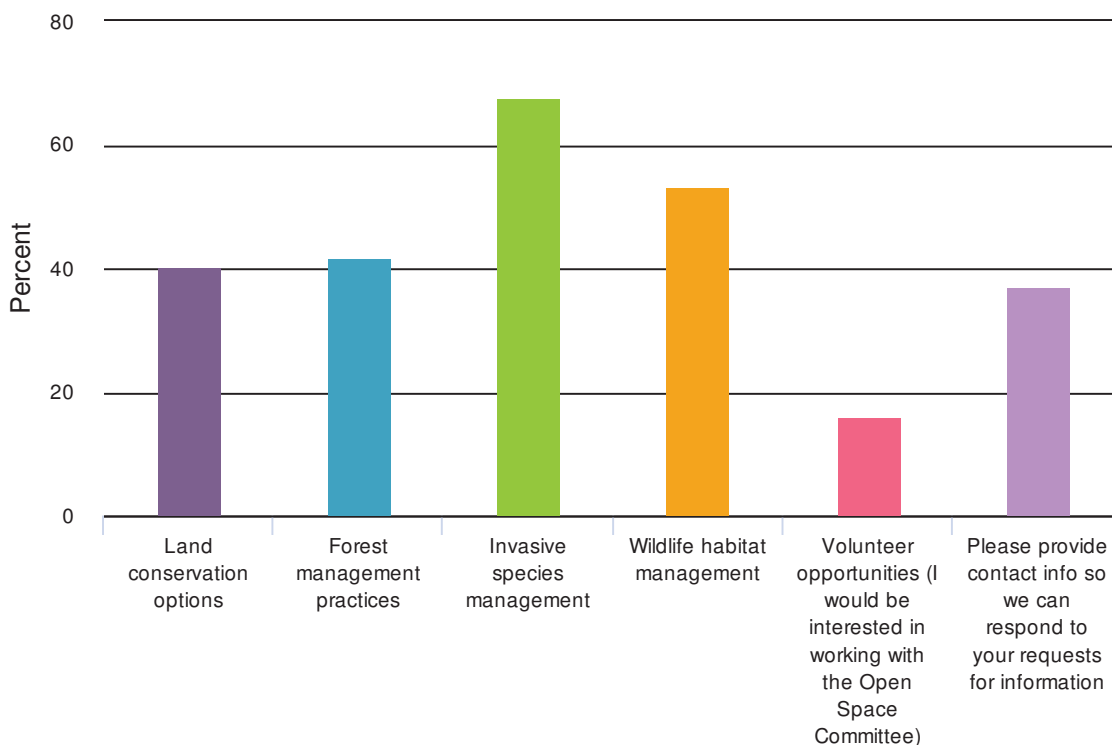
149 I have been a summer resident on Highland Lake since 1947 when my parents purchased the land and built the cottage. The fourth generation of our family is now enjoying our Goshen experience. It is a retreat from their busy, hectic lives and an opportunity to reflect and enjoy the natural beauty of the area, to relax by the lake with no motor boats, to fish, swim and boat, to develop new skills on caring for the land and water, and to live an a more rustic area. .

150 I have been a summer resident of Goshen since 1947 when my parents purchased property on Highland Lake and built a cottage. Four generations of our family have enjoyed retreats here from their busy, hectic lives. With family and friends, they have experienced the joy of fishing, swimming, boating, running, biking, caring for the land and water, and just relaxing in the quiet, natural beauty of the lake without motor boats. We have a small lot with a dirt road. Expanding trails and people are not necessary with the DAR site providing these trails and access to both lakes. We need to be careful with any developments in Goshen and listen to summer and permanent residents' concerns, so that we are protecting and preserving what already exists.

ResponseID Response

154	Have enjoyed Goshen as a summer resident for decades, appreciating is rural beauty, verdant forests, quiet lakes. It is important to preserve these natural resources and prepare for climate change. Please keep us seasonal residents informed of any plans. Thank you.
155	Littering is a problem on Spruce Corner Road. Some kind of public awareness campagne?or patrolling might be helpful. Hard to believe that people still just throw their scratch tickets, bottles, coffee cups out onto the side of the road. I saw 2 teenage girls throw their fast food trash out the window as they drove by!
156	I have been spending summers in Goshen at a family summer cottage on a small lot on a dirt road on Highland Lake since the late 1940's. We have always taken care to protect the area and this small piece of land. Because Highland Lake also connects to the DAR State forest upper lake with large camping/recreational and large hiking areas, I have spent time walking the area over the years. I would hope that in thinking of trails and walkways the preservation of the land and the lakes, streams and dams are a priority and improvement of the areas (such as the DAR and others) already in use are considered before other lands are used. Thank you for your concern.
158	DAR is amazing. With over a dozen miles of trails, Goshen does not need more trails. Do not take private land for trails. Residential areas are not open spaces. Educate people about what is here, and do not focus on getting more here.
161	no
162	The DAR is a wonderful facility and should be maintained. It might be nice to have a special rate for Goshen residents.
164	I do not approve new walking or biking trails. Keep Goshen the way it is....
165	get rid of tennis court and put in pavilion and vwalking trails on both sides of route 9
166	Goshen is beautiful the way it is, we do not want more traffic in our areas.
167	We love Goshen the way it is we do not want people trails or paved roads. We like it quiet with no traffic. Thanks

9. Which subjects you would be interested in learning more about?



Value	Percent	Responses
Land conservation options	40.3%	25
Forest management practices	41.9%	26
Invasive species management	67.7%	42
Wildlife habitat management	53.2%	33
Volunteer opportunities (I would be interested in working with the Open Space Committee)	16.1%	10
Please provide contact info so we can respond to your requests for information	37.1%	23

Please provide contact info so we can respond to your requests for information

	Count
David Sharpe	1
Ehstoneart@gmail.com	1
Lorraine Brisson 268-3660	1
Totals	3

SECTION 11: REFERENCES

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SECTION 12: APPENDICES**Inventory of Land Ownership for Recreational and Protected Open Space****Chapter 61, 61A, and 61B**

CHPTR LNDS	LOT SIZE	SITE ADDR	OWNER1	ZONING
61	2.22	16 ANTIN RD	FRASER DOUGLAS F	RA
61	26.48	0 BALL RD	ALLARD LINDA E	RA
61	26.74	0 BERKSHIRE TRAIL WEST	JUDD FRANCIS D	RA
61	13.77	0 BISSELL RD	ROBERTS, SR. EDWARD & LISA ANN	RA
61	7.27	0 BRIER HILL RD	PIERCE GARY J	RA
61	8.28	0 BRIER HILL RD	PIERCE GARY J	RA
61	9.7	0 BRIER HILL RD	PIERCE GARY J	RA
61	61.15	0 BRIER HILL RD	W.D. COWLS, INC.	RA
61	45.06	106 BRIER HILL RD	CROSS GLORIA I.	RA
61	5	0 CAPE ST	BRENNAN EDWIN J.	RA
61	115.21	181 CAPE ST	WAGGONER MARGARET	RA
61	21.6	20 CORNER RD	BERRENA KATHLEEN M	RA
61	121	61 DRESSER HILL RD	BANAS MICHAEL R.	RA
61	8	0 EAST ST	HULL FORESTLANDS LP	RA
61	12.14	0 EAST ST	HULL FORESTLANDS LP	RA
61	19.58	0 EAST ST	HULL FORESTLANDS LP	RA
61	77.71	0 EAST ST	HULL FORESTLANDS LP	RA
61	40.54	705 EAST ST	LASHWAY DAVID T.	RA
61	8.94	26 HAMMOND CR	KIROUAC ALAN R/TRUSTEE	RA
61	9.42	0 HYDE HILL RD	BERRENA KATHLEEN M	RA
61	10.01	0 HYDE HILL RD	BERRENA KATHLEEN M	RA
61	10.01	0 HYDE HILL RD	BERRENA KATHLEEN M	RA
61	10.01	0 HYDE HILL RD	BERRENA KATHLEEN M	RA
61	33.22	0 HYDE HILL RD	CULVER JANETTE E.	RA
61	50	0 LILY POND LN	MCSWEENEY, JR. JAMES G.	RA

2021 Goshen Open Space and Recreation Plan

CHPTR LNDS	LOT SIZE	SITE ADDR	OWNER1	ZONING
61	47.94	0 LOOMIS RD	JUDD FRANCIS D	RA
61	18.12	27 MAIN ST	MARCINEK PAUL J.	RA
61	175.7	10 MCCONNELL AVE	BRENNAN EDWIN J	RA
61	221.6	40 MOLLISON HILL RD	WARNER GARY M	RA
61	62	0 PHELPS LN	OLEKSAK ANDREW T III	RA
61	43.91	0 POND HILL RD	ROBERTS, SR. EDWARD & LISA ANN	RA
61	74.47	0 POND HILL RD	KIROUAC ALAN R.	RA
61	9.83	0 SEARS RD	JUDD EDGAR R JR	RA
61	12.64	0 SEARS RD	JUDD EDGAR R JR	RA
61	4.69	0 SO CHESTERFIELD RD	BANAS MICHAEL R.	RA
61	27.68	0 SO CHESTERFIELD RD	ROBERTS, SR. EDWARD & LISA ANN	RA
61	47.6	48 SO CHESTERFIELD RD	O`RIORDAN WILLIAM M.	RA
61	11.69	221 SO CHESTERFIELD RD	HAYDEN JACQUELINE	RA
61	2.65	257 SO CHESTERFIELD RD	BANAS MICHAEL R.	RA
61*	79.12	0 SOUTH MAIN ST	MOLLISON DAVID C	RA
61	11.65	0 SPRUCE CORNER RD	ENGLER ROBERT	RA
61	27.44	183 SPRUCE CORNER RD	ENGLER ROBERT	RA
61	15.38	1 SUGAR MAPLE LN	JUDD ALBERT D.	
61	6.37	0 SUNDOWN DR	TERRY HOWARD P	RA
61	42.82	0 WEST ST	PAPUSH SANDRA LUTZ DAVID	RA
61	182.9	0 WING HILL RD	HULL FORESTLANDS LP	RA
61A	128.73	40 BEALS RD	BEALS MARJORIE A.	RA
61A	19.19	0 BERKSHIRE TRAIL EAST	LASHAWAY DAVID T	RA
61A	63.79	170 BERKSHIRE TRAIL EAST	GOSS ROBERT O/TRUSTEE	RA
61A	25.61	0 BERKSHIRE TRAIL WEST	JUDD FRANCIS D.	RA
61A	26.47	0 BERKSHIRE TRAIL WEST	JUDD FRANCIS D.	RA
61A	10.6	165 BERKSHIRE TRAIL WEST	JUDD FRANCIS D.	RA
61A	12.3	99 BISSELL RD	FERRIS STEPHANIE S.	RA
61A	2.32	0 EAST ST	MUNROE INVESTMENT TRUST	RA
61A	4.47	578 EAST ST	MUNROE INVESTMENT TRUST	RA

2021 Goshen Open Space and Recreation Plan

CHPTR LNDS	LOT SIZE	SITE ADDR	OWNER1	ZONING
61A	8.37	0 LOOMIS RD	BARRUS TIMOTHY W	RA
61A	8.72	0 LOOMIS RD	LAFOGG PETER F.	RA
61A	34.75	0 LOOMIS RD	BARRUS TIMOTHY W	RA
61A	67.12	0 LOOMIS RD	LAFOGG PETER F.	RA
61A*	0.27	0 LOOMIS RD	LAFOGG PETER F.	RA
61A	138.71	0 SEARS RD	FRYE LAURIE L	RA
61A	15.36	56 SO CHESTERFIELD RD	MESSECK RANDY	RA
61A	7.85	74 SO CHESTERFIELD RD	MESSECK RANDY	RA
61A	17.51	132 SO CHESTERFIELD RD	ROBERTS RICHARD C.	RA
61A	9.03	0 SOUTH MAIN ST	ELDRED SARA, TRUSTEES	RA
61A	18.56	4 SOUTH MAIN ST	ELDRED SARA, TRUSTEES	RA
61A	2.07	0 SPRUCE CORNER RD	BARRUS TIMOTHY W	RA
61A	7.38	0 SPRUCE CORNER RD	BARRUS TIMOTHY W	RA
61A	13.05	0 SPRUCE CORNER RD	BARRUS TIMOTHY W	RA
61A	26.1	0 SPRUCE CORNER RD	BARRUS TIMOTHY W	RA
61A	30.4	0 SPRUCE CORNER RD	BARRUS TIMOTHY W	RA
61A	55.74	0 SPRUCE CORNER RD	BARRUS TIMOTHY	RA
61A	63.72	0 SPRUCE CORNER RD	BARRUS TIMOTHY W	RA
61A	94.93	0 SPRUCE CORNER RD	BARRUS TIMOTHY W	RA
61A	103.89	0 SPRUCE CORNER RD	BARRUS TIMOTHY W	RA
61A	200.54	0 SPRUCE CORNER RD	BARRUS TIMOTHY W	RA
61A	19.32	12 WHITE RD	GOSS ROBERT O. / TRUSTEE	RA
61B	10.17	0 BALL RD	WARNER GARY M	RA
61B	47.79	140 BALL RD	HAMPSHIRE COUNTY RIDING CLUB	RA
61B	14.74	0 BERKSHIRE TRAIL EAST	LIIMATAINEN MARK R.	RA
61B	10	0 BERKSHIRE TRAIL WEST	WARNER GARY M	RA
61B	31.2	0 BERKSHIRE TRAIL WEST	MERRITT FLOYD S	RA
61B	43.36	0 BERKSHIRE TRAIL WEST	WARNER GARY M	RA
61B	20.51	71 BERKSHIRE TRAIL WEST	WARNER GARY M	RA
61B	7.84	0 BISSELL RD	VALENCIK CHARLES	RA

2021 Goshen Open Space and Recreation Plan

CHPTR LNDS	LOT SIZE	SITE ADDR	OWNER1	ZONING
61B	12.17	0 BISSELL RD	GUZOWSKI RICHARD G	RA
61B	23.3	0 BISSELL RD	GUZOWSKI RICHARD G	RA
61B	48.65	0 BISSELL RD	SCHWAIGER CONSTANCE B	RA
61B	6.45	0 BRIER HILL RD	ANDERSON SUSANNE L.	RA
61B	7.39	0 BRIER HILL RD	ANDERSON SUSANNE L.	RA
61B*	8.14	0 BRIER HILL RD	MAZZOLINI DANIEL E	RA
61B	4.46	42 CAPE ST	SMITH JR HENRY BOYNTON	RA
61B	36.08	46 CAPE ST	SMITH JR HENRY BOYTON	RA
61B	14.96	119 CAPE ST	ROBERTS JOE DONALD	RA
61B	19.11	0 DAMON POND	LAKE DAMON CORP	RA
61B	29.8	0 EAST ST	WILLIAMS PHEBE	RA
61B	46.89	665 EAST ST	WILLIAMS PHEBE	RA
61B	28.3	0 FULLER RD	LAKE DAMON CORP	RA
61B	31.81	23 HYDE HILL RD	LEBEAU JAMES	RA
61B	9.56	144 HYDE HILL RD	BERRERA ROBERT J.	RA
61B	59.78	0 LAKE DR	PARMENTIER NANCY L	RA
61B	14.5	0 LOOMIS RD	MONAGAHAN MARTHA ANN J.	RA
61B	33.68	143 LOOMIS RD	STELLBERGER JOHN D.	RA
61B	12.51	0 OLD GOSHEN RD	LIIMATAINEN MARK R.	RA
61B	1.86	208 OLD GOSHEN RD	PACKARD MARY	RA
61B	22.33	208 OLD GOSHEN RD	PACKARD MARY	RA
61B	54.28	0 SHAW RD	MERRITT FLOYD S	RA
61B	98.72	40 SHAW RD	FROMM MARC	RA
61B	10.71	59 SO CHESTERFIELD RD	ARRUBLA CATALINA	RA
61B	14.84	111 WEST ST	FELD MICHAEL L	RA
61B	59.02	137 WEST ST	GRAHAM WILLIAM R.	RA

"*" indicates property noted as chapter land in tax parcels but not included in assessor's list.

Protected and Recreational Open Space Properties (PROS)

Map Label	Primary Purpose	Site Name	Fee_Owner	Owner Type	Pub Access	Lev Prot	Oli_1_Org	Assess Acres	Att_Date
8-40	Conservation	Lilly Pond WMA	Department of Fish and Game	S	Y	P		45.14*	11/4/2019
8-41	Conservation	Lilly Pond WMA	Department of Fish and Game	S	Y	P		33	11/4/2019
8-50	Conservation	Lilly Pond WMA	Department of Fish and Game	S	Y	P		52.97*	11/4/2019
8-52	Conservation	Lilly Pond WMA	Department of Fish and Game	S	Y	P		27.70*	11/4/2019
8-53	Conservation	Lilly Pond WMA	Department of Fish and Game	S	Y	P		43	11/4/2019
8-8	Conservation	Lilly Pond WMA	Department of Fish and Game	S	Y	P		157.05*	11/4/2019
8-55	Conservation	Merritt CR	MERRITT FLOYD	P	N	P	The Trustees of Reservations	55.29*	8/20/2010
8-58	Conservation	Swift River WMA	Department of Fish and Game	S	Y	P		172.92*	12/31/2014
8-33	Conservation	Tilton Farm	Town of Goshen	M	Y	P		70.9	10/13/1995
8-34	Conservation	Tilton Farm	Town of Goshen	M	Y	P		3.26	10/13/1995
8-61	Conservation	Warner CR	Warner Gary M	P	L	P	Hilltown Land Trust	17.19*	9/27/2016
8-62	Conservation	Warner CR	Warner Gary M	P	L	P	Hilltown Land Trust	149.63*	9/27/2016
8-12	Conservation & Recreation	D.A.R. State Forest	DCR - Division of State Parks and Recreation	S	Y	P		1,356.14	1/1/1901
8-13	Conservation & Recreation	D.A.R. State Forest	DCR - Division of State Parks and Recreation	S	Y	P		89.4	2/13/1998
8-54	Conservation & Recreation	D.A.R. State Forest	B AND N LANDS LLC	P	Y	P	DCR - Division of State Parks	252.93*	4/12/2005

2021 Goshen Open Space and Recreation Plan

Map Label	Primary Purpose	Site Name	Fee_Owner	Owner Type	Pub Access	Lev Prot	Oli_1_Org	Asses Acres	Att_Date
							and Recreation		
8-56	Conservation & Recreation	D.A.R. State Forest	DCR - Division of State Parks and Recreation	S	Y	P		20.58*	2/28/2014
8-15	Conservation & Recreation	Hammond Pond Land	Town of Goshen	M	Y	L		1.67	10/13/1995
8-23	Conservation & Recreation	Main St. Land	Town of Goshen	M	Y	L		1.36	10/13/1995
8-19	Conservation & Recreation	Park	Town of Goshen	M	Y	L		13.76	10/13/1995
8-16	Conservation & Recreation		Town of Goshen	M	Y	L		0.11	10/13/1995
8-18	Conservation & Recreation		Town of Goshen	M	Y	L		0.9	10/13/1995
8-20	Conservation & Recreation		Town of Goshen	M	Y	L		0.17	10/13/1995
8-26	Conservation & Recreation		Town of Goshen	M	Y	L		0.17	10/13/1995
8-35	Conservation & Recreation		Town of Goshen	M	Y	L		73.13	10/13/1995
8-38	Conservation & Recreation		Town of Goshen	M	Y	L		37.56	10/13/1995
8-59	Historical/Cultural	Goshen Center Cemetery	Town of Goshen	M	Y	L		0.70*	6/14/2016
8-60	Historical/Cultural	Goshen Center Cemetery	Town of Goshen	M	Y	L		2.02*	6/14/2016
8-21	Recreation	Community Land	Town of Goshen	M	Y	L		0.56	10/13/1995
8-22	Recreation	Goshen School	Town of Goshen	M	Y	L		2.32	10/13/1995
8-14	Recreation	Camp Father Freel	CAMP FATHER FREEL	N	L	N		32.59	10/13/1995

Map Label	Primary Purpose	Site Name	Fee_Owner	Owner Type	Pub Access	Lev Prot	Oli_1_Org	Assess Acres	Att_Date
8-27	Recreation	Camp Holy Cross	Roman Catholic Bishop of Springfield	N	L	N		91.01	10/13/19 95
8-28	Recreation	Camp Holy Cross	Roman Catholic Bishop of Springfield	N	L	N		3.3	10/13/19 95
8-29	Recreation	Camp Holy Cross	Roman Catholic Bishop of Springfield	N	L	N		20.25	10/13/19 95
8-30	Recreation	Camp Holy Cross	Roman Catholic Bishop of Springfield	N	L	N		25.7	10/13/19 95
8-31	Recreation	Camp Holy Cross	Roman Catholic Bishop of Springfield	N	L	N		77.57	10/13/19 95
8-32	Recreation	Camp Holy Cross	Roman Catholic Bishop of Springfield	N	L	N		56.7	10/13/19 95
8-36	Recreation	Camp Howe	CAMP HOWE INC	N	L	N		32.06	10/13/19 95
8-37	Recreation	Camp Howe	CAMP HOWE INC	N	L	N		21.5	10/13/19 95

*under Assess Acres indicates a parcel where acreage was not available from the assessor's data, so acreage presented is based on GIS spatial analysis.

Recreational and Protected Open Space Map and Table Definitions

Owner Type (OWNER_TYPE)

- F - Federal
 - S - State
 - C - County
 - M - Municipal
 - N - Private Nonprofit
 - P - Private for profit
 - B - Public Nonprofit
 - L - Land Trust
 - G - Conservation Organization
 - O - Other / None of the above (e.g. joint ownership)
 - X - Unknown
 - I - In-holding (a piece of unprotected property surrounded on all sides by a protected property or a recreational facility)
- Unconfirmed:
- 1 - EOEAA or alternate state agencies
 - 2 - EOEAA or non-profit
 - 3 - EOEAA or municipality
 - 4 - EOEAA or private landowner

Primary Purpose (PRIM_PURP)

- R - Recreation (Activities are facility based)
- C - Conservation (activities are non-facility based)
- B - Recreation and Conservation
- H - Historical and Cultural
- A - Agriculture
- W - Water Supply Protection
- S - Scenic (official designation only)
- F - Flood Control
- Q - Habitat Protection
- U - Site is underwater
- O - Other (explain)
- X - Unknown

Public Access (PUB_ACCESS)

- Y – Yes (open to public)
- N – No (not open to public)
- L – Limited (membership only)
- X – Unknown

Level of Protection (LEV_PROT)

In Perpetuity (P) - Legally protected in perpetuity and recorded as such in a deed or other official document. Land is considered protected in perpetuity if it is owned by the town's conservation commission or, sometimes, by the water department; if a town has a conservation restriction on the property in perpetuity; if it is owned by one of the state's conservation agencies (thereby covered by article 97); if it is owned by a non-profit land trust; or if the town received federal or state assistance for the purchase or improvement of the property.

Private land is considered protected if it has a deed restriction in perpetuity, if an Agriculture Preservation Restriction has been placed on it, or a Conservation Restriction has been placed on it.

Temporary (T) - Legally protected for less than perpetuity (e.g. short term conservation restriction or Chap61 lands), or temporarily protected through an existing functional use. For example, some water district lands are only temporarily protected while water resource protection is their primary use. These lands could be developed for other uses at the end of their temporary protection or when their functional use is no longer necessary. These lands will revert to unprotected status at a given date unless protection status is extended.

Limited (L) - Protected by legal mechanisms other than those above, or protected through functional or traditional use. These lands might be protected by a requirement of a majority municipal vote for any change in status. This designation also includes lands that are likely to remain open space for other reasons (e.g. cemeteries and municipal golf courses).

None (N) - Totally unprotected by any legal or functional means. This land is usually privately owned and could be sold without restriction at any time for another use (e.g. scout camps, private golf course, and private woodland). Where the level of protection is unknown, a polygon will be coded as X for this field.

Grant Programs (GRANTPROG1)

LWCF - Land and Water Conservation Fund

GIS_ACRES

Lot size based on a GIS analysis of parcel areas from EEA's PROS layer, modified to conform to tax assessor's parcel layer.

USE_CODE

3: Commercial

380 – Golf Courses

388 – Other outdoor facilities – e.g., driving ranges, miniature golf, baseball batting ranges, etc.

8: Recreational Land

805 – Golfing – areas of land arranged as a golf course

9: Exempt Property

9030 – Municipalities/Districts (removed June 2009)

9033 – Exempt Town Property

9035 – Exempt Town Property

9060 – Religious Organizations (removed 2009)

903A – Exempt Town Property

903V – Exempt Municipal

905V – Exempt Charitable

Property type classification codes as provided in the assessor's parcel data. See MassGIS Level 3 Tax Parcel Land Use Code lookup table and DLS Property Type Classification Codes, DLS MA Department of Revenue, 2019, for detailed descriptions.

Zoning

AG – Agricultural Zone

AGR – Agricultural Zone

RA1 – Residence A-1 Zone

RA2 – Residence A-2 Zone

Maps

- Recreational and Protected Open Space
- Natural Lands – 2005 Land Use
- Soils
- Topography, Flood Plains, and Water Supplies
- Unique Features
- Action Plan

Funding and Technical Assistance Resources

The following are a list of agencies that offer grants and other types of technical assistance for land conservation, land management and recreation.

Massachusetts Department of Conservation and Recreation

<http://www.mass.gov/dcr/grants.htm>

Forest Legacy Program

<http://na.fs.fed.us/legacy/index.shtm>

The Forest Legacy Program is a partnership between States and the USDA Forest Service to identify and help conserve environmentally important forests from conversion to non-forest uses. The main tool used for protecting these important forests is conservation easements. The Federal government may fund up to 75% of program costs, with at least 25% coming from private, state or local sources.

Contact: Deirdre Raimo, Forest Legacy Program Manager
USDA Forest Service; NA, State and Private Forestry
271 Mast Rd., Durham NH 03824

(603) 868-7695 draimo@fs.fed.us

MA Executive Office of Energy and Environmental Affairs

http://www.mass.gov/?pageID=eoeeterminal&L=4&L0=Home&L1=Grants+%26+Technical+Assistance&L2=Grant+%26+Loan+Programs&L3=EEA+Grant+%26+Loan+Guide&sid=Eoeea&b=terminalcontent&f=eea_grants_grants_landandrec&csid=Eoeea

Massachusetts Land Trust Coalition

<http://www.massland.org/category/conservation-practitioners-land-protection-practices/federal-programs>

Pioneer Valley Planning Commission

60 Congress Street, Springfield, MA 01104

(413) 781-6045

Anne Capra, Principal Planner acapra@pvpc.org

Grants Recently Available

The availability of grants changes from year to year. Below is a list of recently available grant programs that may or may not be available in the future depending on budget cycles.

MassTrails Grant

Agency: MA Department of Conservation and Recreation

Estimated Application Deadline: February 1st due date; annually

Contact: Amanda.lewis@state.ma.us or Paul.Jahnige@state.ma.us

Description and Eligible Activities: The Recreational Trails Program provides grants ranging from \$5,000 to \$100,000 on a reimbursement basis for a variety of trail protection, construction, and stewardship projects throughout Massachusetts. Eligible grant activities include project development, design, engineering, permitting, construction, and maintenance of recreational trails, shared use pathways, and the amenities that support trails. MassTrails Grants are funded through two different sources: the state's annual Capital Investment Plan and the national Recreational Trails Program (RTP), which is funded through the Federal Highway Administration (FHWA).

Match: 80% grant / 20% match required (cash or in-kind)

Community Forest Stewardship Grants

Agency: MA Department of Conservation and Recreation

Due twice per year - September 30; May 30th

Contact: Michael Downey, Forest Stewardship Program Service Forester

413-442-8928 x135 michael.downey@state.ma.us

Jennifer Fish, Director, Service Forestry Program

413-545-5753 jennifer.fish@state.ma.us

Description and Eligible Activities: The Massachusetts Forest Stewardship Program is now offering Community Forest Stewardship Grants. These are 50-50 matching reimbursement grants offered to municipalities that have town forest or water supply land enrolled in the Forest Stewardship Program. This grant program seeks to fund projects which will result in sustained improvements in local capacity for excellent forest management in the following five key areas:

- **Buy Local:** We seek to raise awareness of local wood product supply and marketing as well as to encourage the development of value-added local wood products to increase sustainable forest management and to support forest based businesses.
- **Building and Strengthening Citizen Advocacy and Action Organizations:** We seek to fund projects that develop, strengthen or sustain citizen groups or non-profit organizations that advocate and / or act to promote excellent forest management.
- **Implementation of Forest Stewardship Management Plan:** We seek to fund implementation of plans that guide the strategic management of municipal forest resources at the community level including local use of wood products, habitat restoration or investment in forest management.
- **Projects that include high community visibility:** We seek to fund projects that enhance environmental quality, strengthen community involvement, and follow the principles of the Stewardship Program. These projects also result in enhanced public awareness and support for community forestry.
- **Other Projects:** We will consider some well-conceived and executed projects which result in implementing/achieving community forest/forestry-related goals set forth in a town's "Strategic Planning" document.

Conservation Appraisals for Small Communities Grant Program

Agency: Executive Office of Energy and Environmental Affairs (EEA)

Description and Eligible Activities: Reimbursement funding for appraisals completed in order to apply to the LAND grant program. Reimbursement rate is 80%.

Website: www.mass.gov/eea/dcs-grants

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Eligible Applicants: Available to all communities with a population of fewer than 5,000 people. Participants must have an executed state contract prior to getting the appraisal. The Participant must submit a LAND application for the appraised property to receive reimbursement. Reimbursement under this grant is not contingent upon the participant's LAND application being selected for funding.

Estimated Application Deadline: Rolling, no later than Monday, May 30, 2011

Maximum Award \$5,000 per appraisal

Contact: [Celia Riechel](#), 617-626-1187

Drinking Water Supply Protection Grant Program

Agency: Department of Environmental Protection (DEP)

Description and Eligible Activities: Provides grants to assist public water systems and municipalities in acquiring land to protect the quality of public drinking water supplies.

Website: <http://www.mass.gov/dep/water/dwgrant.htm>

Eligible Applicants: Massachusetts municipalities and public water systems

Estimated Application Deadline: September

Average Grant Size: \$170,000

Average # of Grants: 3

FY 2010 Spending: \$510,000

Contact: [Catherine Sarafinas](#), 617-556-1070

Federal Land and Water Conservation Fund

Agency: Executive Office of Energy and Environmental Affairs (EEA)

Description and Eligible Activities: The Federal Land & Water Conservation Fund (P.L. 88-578) provides up to 50% of the total project cost for the acquisition, development and renovation of park, recreation or conservation areas.

Website: <http://www.mass.gov/eea/dcs-grants>

Eligible Applicants: Municipal conservation commissions, park departments, and certain agencies within EEA. Municipalities must have a current open space and recreation plan to apply, and the land must be open to the general public.

Estimated Application Deadline: Rolling

Average Grant Size: Average \$414,000 (Minimum \$250,000, Maximum \$500,000)

Average # of Grants: Typically 5 per year.

FY 2010 Spending: \$2,050,000

Contact: [Melissa Cryan](#), 617-626-1171

LAND - Local Acquisitions for Natural Diversity

Agency: Executive Office of Energy and Environmental Affairs (EEA)

Description and Eligible Activities: Provides grant assistance to city and town conservation commissions for the acquisition of open space for conservation and passive recreation purposes (formerly the Self-Help Program).

Website: <http://www.mass.gov/eea/dcs>

Eligible Applicants: Municipalities must have a current open space and recreation plan to apply, the land must be open to the general public; communities with any outstanding conversion issues ("Article 97") are not eligible.

Estimated Application Deadline: July

Average Grant Size: Average \$350,000 (Maximum \$500,000)

Average # of Grants: 15

FY 2010 Spending: \$3,965,131

Contact: [Celia Riechel](#), 617-626-1187