



Tighe & Bond

Winchendon, MA

2015 Open Space and Recreation Plan

Prepared For:

Town of Winchendon

DRAFT October 2015



Tigher & Bond

CONTENTS

Section 1 Plan Summary

Section 2 Introduction

2.1	Statement of Purpose	2-1
2.2	Planning Process and Public Participation	2-1

Section 3 Community Setting

3.1	Regional Context.....	3-1
3.2	History of the Community.....	3-2
3.3	Population Characteristics.....	3-3
3.4	Growth and Development Patterns.....	3-5
3.4.1	Pattern and Trends	3-5
3.4.2	Infrastructure	3-7
3.4.3	Long-Term Development Patterns	3-9
3.4.4	Build-Out Analysis	3-11

Section 4 Environmental Inventory and Analysis

4.1	Geology, Soils and Topography	4-1
4.2	Landscape Character	4-1
4.3	Water Resources	4-3
4.3.1	Surface Water.....	4-3
4.3.2	Groundwater.....	4-4
4.4	Vegetation	4-7
4.5	Fisheries and Wildlife	4-8
4.6	Scenic Resources and Unique Environments	4-10
4.6.1	Scenic Landscapes.....	4-10
4.6.2	Major Characteristic or Unusual Geologic Features.....	4-10
4.6.3	Cultural, Archaeological and Historic Areas	4-10
4.6.4	Areas of Critical Environmental Concern.....	4-11
4.7	Environmental Challenges.....	4-11
4.7.1	Hazardous Waste Sites.....	4-11
4.7.2	Landfills	4-11
4.7.3	Erosion	4-11
4.7.4	Chronic Flooding.....	4-12
4.7.5	Sedimentation.....	4-12
4.7.6	Development Impact.....	4-12
4.7.7	Ground and Surface Water Pollution: Point and Non-Point	4-12

Section 5 Inventory of Lands of Conservation and Recreation Interest

5.1	Protected Parcels: Public	5-1
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5.2	Unprotected Parcels	5-3
5.3	Implications.....	5-9

Section 6 Community Vision

6.1	Description of Process	6-1
6.2	Statement of Open Space and Recreation Goals.....	6-1

Section 7 Analysis of Needs

7.1	Summary of Resource Protection Needs.....	7-1
7.2	Summary of Recreation Needs	7-1
7.3	Management Needs, Potential Change of Use	7-3

Section 8 Goals and Objectives**Section 9 Seven-Year Action Plan****Section 10 Public Comments****Section 11 References****Appendix A Meeting Agendas and Minutes****Appendix B OSRP Survey and Results****Appendix C ADA Self-Assessment**

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SECTION 1

Section 1

Plan Summary

This Open Space and Recreation Plan (OSRP) Update is an essential part of Winchendon's planning efforts. This OSRP updates the May 2007 OSRP and complements other ongoing planning processes including the current Master Plan Update and the work of the Winchendon Enhancement Sub-Committee of the Toy Town Partnership. Winchendon is actively identifying goals and actions to realize the community vision for the future. Open space and recreation resources are essential to Winchendon's quality of life and also to attracting the visitors and new businesses that will bring new vitality to the local economy. In addition, reasons for open space planning include protection of biodiversity and prevention of habitat fragmentation, protection of future water supplies and to help prevent global warming.

Winchendon's current patterns of open space and development reflect the historical periods of agriculture, industrial production based on forestry resources, industrial decline, and suburbanization. These historic waves of development were shaped by a landscape rich in water and forestry resources. Now Winchendon's scenic rural landscape and relative affordability is attracting housing development to serve people who work in the greater Worcester and Boston areas. At present housing development occurs along roadways on Approval Not Required (ANR) parcels. Large interior parcels await subdivision when the potential for ANR lots is consumed. At build-out, Winchendon will look more suburban, with homes developed in areas that are now forest or open field. Through Winchendon's land use regulations, the community hopes that this residential growth will be balanced with more industrial development northwest of the Town Center and more business growth along major roadways. Recently approved zoning revisions encourage more responsible development. Recent zoning amendments provide incentives for flexible residential developments, where public open space is protected. Zoning revisions include requirements for landscaped buffers for new businesses on scenic corridors. Moderate to severe soil limitations will limit development to some extent, but there will still be a significant change in the landscape. Hundreds of acres previously unprotected under the Chapters 61, 61A, and 61B programs have been permanently protected through a combination of acquisitions and preservation restrictions. These newly protected lands provide open space, recreational and agricultural value to the Town.

With more residents and less available open land, there will be increased demand for recreation facilities, and conserved land will be needed to maintain Winchendon's traditional access to forests, lakes, streams, and open spaces. Already townspeople have noted the lack of public access to the River and the ponds in Town. The lack of public access to formerly undeveloped lands will grow even more acute as the Town becomes more suburban. Since Winchendon intends and expects to remain a town of working families and others with modest means, residents will have few alternatives to lands and facilities that are open to the public. The significant conservation and park lands owned by the Commonwealth of Massachusetts and the Federal Government will be even more valued by residents and visitors, but there will also need to be an increase in locally owned facilities in order to keep pace with residents' and visitors' other recreational needs.

Like Winchendon's neighbors, there is a growing population of seniors. Our teens are a group of special concern; they need choices for healthy activities in addition to organized sports.

In response to this situation, the Town of Winchendon's OSRP stresses:

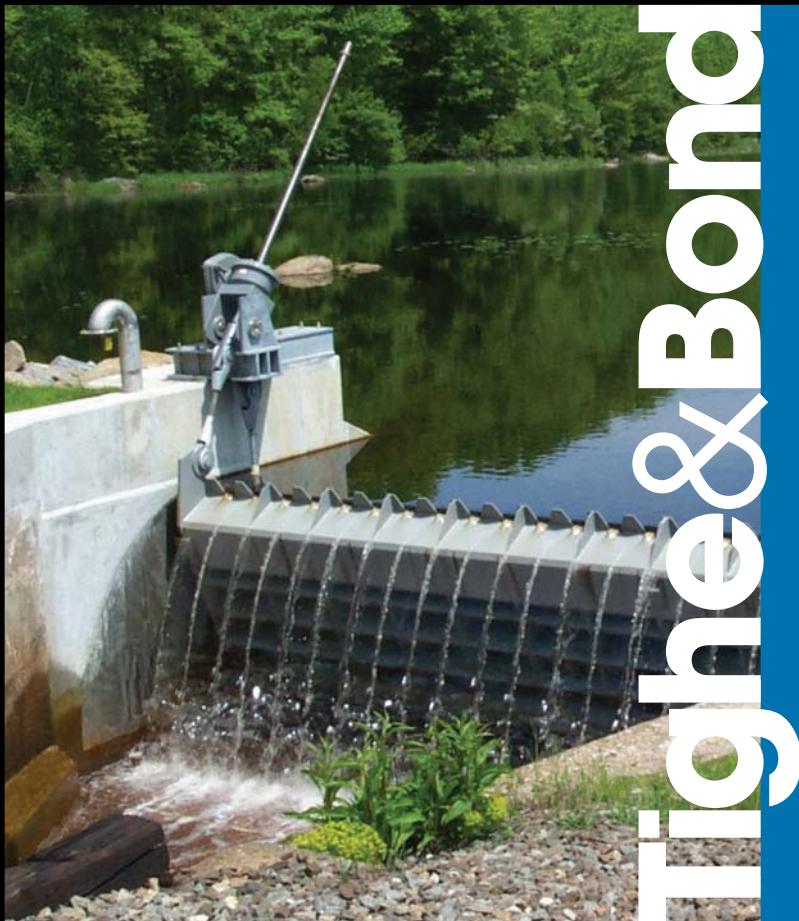
1. Protecting the quality and quantity of both ground and surface water resources
2. Increasing the public's ability to gain access to and enjoy the Town's surface water resources
3. Conserving open space resources, increasing townspeople's and visitors' access to and enjoyment of them, and connecting them with recreation facilities
4. Increasing the Town's programs and capacity for management

Key objectives in the Seven-Year Action Plan include:

- Continued upgrading or replacing of failed on-site septic systems or extending the sewer system
- Continuing to improve land use regulations and their enforcement
- Identifying and targeting future land acquisitions and easements to accomplish the Plan's goals
- Acquiring and developing the Ingleside property as a multi-use facility to include open space and recreational resources
- Extending the North Central Pathway to New Hampshire
- Developing trails on Town-owned properties and develop trail maps
- Publicizing the Town's open space and recreational resources and programs
- Using recreational resources to attract tourists, residents and businesses to Winchendon
- Continuing to develop a recreational and agricultural opportunities, especially in the downtown area

To accomplish this action plan the community will need to mount a continuous, coordinated volunteer effort and call on the expertise and assistance of regional allies. Funding is needed from the grant programs whose doors are opened through adoption and approval of this OSRP Update. Eventually Winchendon may need to increase the paid staff support for Town boards who administer and implement the programs and regulations desired by the community.

The action plan will be worth the effort, because it is essential to the future health and well-being. Children will benefit from a cleaner environment and healthier activities. Teens are currently at particular risk, as the options for a variety of healthy activities are limited. The natural enhancement of the town as a whole will increase property values. Working on this plan and enjoying the improvements and programs gained will help bring people together. Current and future residents and visitors will know and enjoy Winchendon's resources and special character.



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Section 2

Introduction

2.1 Statement of Purpose

The OSRP Update is comprehensive current version of the Town's 2007 OSRP. Growing out of the community's shared vision of the desired future for Winchendon, the Plan is an essential part of Winchendon's overall planning and growth management efforts. Townspeople see open space and recreation resources as essential both to the quality of life and also to attracting the visitors and new businesses that will bring new vitality to the local economy.

This OSRP is intended to be a realistic, action-oriented document that reflects the needs, hopes, resources, and priorities of the Town of Winchendon and provides the direction for achieving those priorities.

2.2 Planning Process and Public Participation

Funded by the Town of Winchendon, the OSRP update was spearheaded by the Open Space and Recreation Committee:

Gerry White Director of Development	David Koonce Conservation Agent
Tracy Murphy Planning Agent	Guy Corbosiero Planning Board
Dave Romanowski	Ken LaBrack
Gregory Vine (alternate) Planning Board	Lionel Cloutier Conservation Commission
John Walker	

The OSRP Update was initiated in December 2014. Tracy Adamski, AICP, of Tighe & Bond facilitated the plan development with invaluable assistance from Tracy Murphy, Planning Agent for the Town of Winchendon.

The Committee began by reviewing the goals and objectives of the 2007 OSRP, noting where progress had been made and where refinements might be needed in light of recent changes. The OSRP was updated with information available through local, regional and state sources and public input as noted below.

The Open Space and Recreation Committee met several times in 2015 to discuss the aspects of the OSRP Update, including: February 19th, March 5th, March 26th, and May 7th. All of the Committee's working meetings were advertised public meetings and were open to participation by interested citizens and members of other town boards. Appendix A

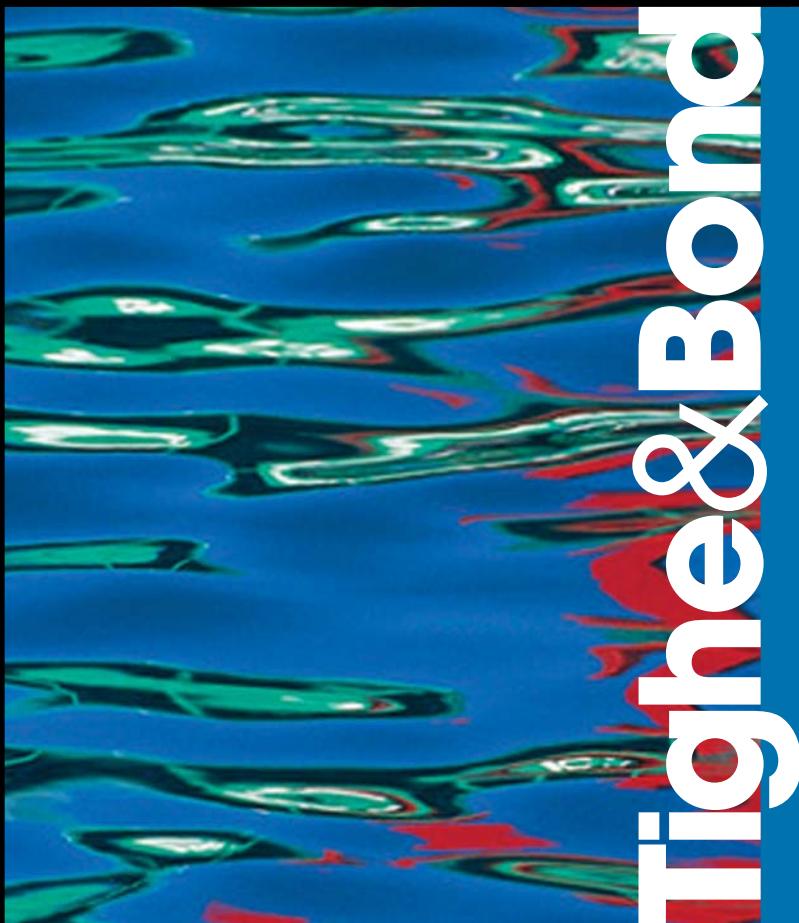
includes meeting notices and minutes. Copies of the Draft Plan were circulated among Town boards and made available at the Town Library.

A joint public forum was held on April 28, 2015 by the Open Space and Recreation Committee, the Master Plan Committee and the Winchendon Enhancement Sub-Committee. Residents worked in groups to discuss seven discrete topics, including Open Space and Recreation. The small group that discussed Open Space and Recreation provided input on overarching goals for this topic. Attendees reconvened to present the results of the individual discussion groups. There was considerable overlap among goals from each group.

In the spring of 2014, townspeople were surveyed to understand the vision the Town has for itself through a Master Plan Survey, which included questions pertaining to open space and recreation. Building on the results of the Master Plan survey, more specific questions were asked in a spring 2015 Open Space and Recreation Survey. The OSRP survey asked respondents to identify the Town's most important natural resources and what recreational resources were needed. In addition, the survey asked where public monies for open space and recreation should be spent.

The results from the public forum and survey were incorporated into Sections 6, 7, 8, and 9 of the OSRP Update. The survey and a summary of its results are provided in Appendix B.

The OSRP Update reflects the consensus reached through this inclusive participatory process.



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Section 3

Community Setting

3.1 Regional Context

Winchendon is located in north central Massachusetts in Worcester County, one of three towns in the county that border New Hampshire. Ashburnham lies to the east and Royalston to the west. This location offers forest and water resources and relatively gentle topography. Native Americans enjoyed Winchendon's resources, especially a spring that was believed to have healing properties. During colonial times small numbers of European Americans came to form small farming communities. The Industrial Revolution brought major changes as nineteenth century manufacturers were drawn to Winchendon by the local water power resources. The railroad was also constructed, connecting Winchendon with business and tourist travel. The earlier farming based settlement pattern gave way to mill villages. In recent decades Winchendon has become more suburban, as an increasing number of residents live in Winchendon but commute to work in employment centers located in central and eastern Massachusetts.

As detailed below, over the years these settlement trends have brought to Winchendon successive waves of hard working people seeking to build a productive life for themselves and their children. An affordable community, Winchendon has traditionally been home to residents with average or lower income and less educational attainment than Worcester County and the state. Public recreational resources and facilities that are free or of low cost remain important resources for townspeople.

The Millers River is the dominant water body, flowing southwesterly from the outlet of Sunset Lake in Ashburnham. The North Branch, flowing from Lake Monomonac, and Main Stem of the Millers River converge at Whitney Pond in Winchendon center. The river continues in a southwesterly course into the Connecticut River in Montague, Massachusetts. Hurricanes in the 1930s produced significant flooding down river in the Athol area and prompted federal officials to institute impoundment strategies along the Millers River system. Subsequent flood control efforts by the Army Corps of Engineers resulted in construction of the Birch Hill Flood Control Reservoir. Lake Denison Recreational Area, a very large conservation holding on the town's western border, was created as a watershed protection measure.

Winchendon is served by the Montachusett Regional Planning Commission (MRPC) and is actively involved in the region's planning efforts. Winchendon works with MRPC in areas of Community, Economic Development, Planning, Pre-Disaster Mitigation Planning, GIS, environmental assessments, and traffic studies. Town leaders look forward to participating actively in ongoing regional efforts.

Winchendon's four Massachusetts neighbors are the City of Gardner and the Towns of Royalston, Templeton and Ashburnham. Gardner has developed a recent draft OSRP dated January 2015. Like Winchendon, Gardner is a community with both a vibrant industrial heritage and vital natural resource systems. More than half of the northern boundary of the city's Water Supply Protection District lies along the Winchendon/Gardner border. This district protects surface water resources in Gardner that include Cowee Pond, Perley Brook Reservoir, and Crystal Lake. Similar to Winchendon, Gardner's Open Space and Recreation Goals included protecting, improving and selectively expanding open

spaces, parks and recreational opportunities; protecting and improving water resources; accommodating new growth where the environment can best support it; and increasing public awareness and stewardship¹.

Ashburnham updated their plan in 2014. The goals include protecting natural resources, increasing and maintaining recreational opportunities, preserving the Town's rural and historic character, managing future development in an environmentally sensitive manner, expanding partnerships to preserve conservation and recreation land, and involving residents in the management of open space.² Royalston's OSRP, which expires October of 2016, includes goals of preserving and maintaining open fields and working landscapes, selectively targeting lands for acquisition for conservation or recreation, enhancing and maintaining recreational facilities, protecting clean air and water, protecting small-town character, scenic views, wildlife habitat, and endangered species, and manage development.³ Templeton also has a current Open Space and Recreation Plan that expires in August of 2015.

3.2 History of the Community

The earliest known people to live in and around Winchendon were Pennacooks who hunted and fished here and are believed to have regarded "Yellow Spring" as having special healing capacities. More than 300 years ago the Pennacooks moved to Canada, and the Nipmucs came to regard this as their territory. It is believed that during this time the glacially deposited formation known as "King Philip's Rock" in the Birch Hill area was a meeting place of these people, who continued to seek out the healing Yellow Spring.

In 1735, a six square mile grant was allocated to 60 veterans and descendants of veterans of the Colonial army's 1690 expedition to Canada during the French and Indian Wars. Many of the veterans were from the Town of Ipswich in eastern Massachusetts, so the grant-created place was named Ipswich, Canada until 1764, when it was incorporated as Winchendon. Colonization was slow due to the risks posed by frontier warfare, so the first permanent settlement in town was not until 1752. Old Centre was originally the center of this settlement, and this quiet area still contains physical vestiges of this period: The Day House, the Moses Hale house, Reverend Brown's parsonage, the First Congregational Church, the Burying Ground, and the Training Field on Hall Road where local militia trained before, during and after the Revolutionary War.

Birch Hill near Lake Denison was the site of the second permanent settlement. Sparked by the Baptist Church's establishment of the "Society House," the community of New Boston became a flourishing agricultural community whose form evolved with economic times through the nineteenth and early twentieth centuries. In the 1930s, New Boston was designated as a flood control reservoir by the United States government. The community was bought out and dispossessed. Now little besides the cemetery is left of this once thriving community.

During the nineteenth century, the Industrial Revolution brought both manufacturing and the railroad to Winchendon. In 1816, textile manufacturing began drawing power from

¹ Draft Gardner Open Space Plan, January 2015, Section 8.

² Ashburnham Open Space and Recreation Plan, 2014 Draft Update, Section 8.

³ Town of Royalston Open Space & Recreation Plan, 2010-2016, Section 8.

the Millers River and, as the years passed, the town's forests provided materials for a series of specialty wood products and woodworking technologies. Early on, Winchendon became so large a manufacturer of shingles that it became known as "shingletown." As the century progressed, mills proliferated specializing in wooden tubs, pails, chairs, barrels, and clothes pins. Following the Civil War, twelve local wooden-ware factories produced 90% of the state's wooden-ware. Winchendon also became known as "Toy Town" due to the Converse Company's world reputation for quality wooden toys.

The Cheshire Branch of the Boston and Maine Railroad was opened for business into Winchendon in 1847. This easier means of transporting materials and finished goods accelerated the expansion of Winchendon's industrial base. Between 1870 and 1875 three other railroads entered Winchendon, further improving shipping conditions. Essential to the growth of local manufacturing were the waves of Irish, French Canadian, and Italian immigrants who came by rail to work in the mills. Winchendon's vibrant industrial period superimposed a mill village pattern of development over the agricultural pattern. This period also saw the population shift to one dominated by mill workers and mill owners. Leading families who gained wealth through the millworks left their mark by donating civic facilities such as schools, libraries, the Town Hall, and Clark Memorial. The Toy Town Tavern, now the main building of The Winchendon School, was also constructed by a local mill owner.

Meanwhile, with the railroad arrived tourists. Since pre-colonial times people had traveled to the area to visit the healing Yellow Spring. During the nineteenth century "Spring Village" housed facilities to serve visitors to the healing spring until the spring was interrupted by an artesian well. The railroad shifted the center of tourism. The Monadnock House (later known as the Tremont House) was built in 1860 to serve visitors arriving at the nearby train station. Carriage rides were also arranged from the hotel to visit scenic Mount Wachusett. Town leaders see the now-abandoned railroad bed as the site of a new regional bicycle path that will again bring visitors to town. The North Central Pathway, which is partially completed, will connect downtown Gardner with downtown Winchendon, and provide views of natural resource areas and connections to other scenic and recreational lands along the way. Winchendon also looks to serve as a hub for bike paths, with potential extensions to connect to paths in New Hampshire.

During the twentieth century Winchendon experienced a long decline of local industry as did many other New England mill towns. By the 1980s and 1990s townspeople saw suburban housing development for exurbanites from Greater Boston become the new wave of change to be reflected in the landscape. In the early 2000s, Winchendon's relative affordability attracted new residents who came to the region for employment at such emerging employment centers as Devens. Overall growth in recent years has slowed with the economy.

3.3 Population Characteristics

The Town of Winchendon has seen a significant increase in several population groups over the last decade. The population as a whole has grown just over 7% between 2000 (9,611) and 2010 (10,300). According to the Massachusetts Department of Revenue Division of Local Services, the population was estimated at 10,542 in 2013.

As noted in Table 3-1, there has been a decline in children under the age of 15 and an increase in the population for ages 15 through 24. There was also an increase in each age bracket over the age of 45. This corresponds to an increasing median age.

These population percentages highlight that a number of open space and recreation needs will garner attention in the near future. Not only are there the needs of school children, but also of an increasingly older population. Organized adult sports, walking and jogging trails, playgrounds, parks, sports facilities (tennis courts, basketball courts), playing fields, a swimming facility, an active senior center at Old Murdock and other activities are typical kinds of recreation opportunities that municipalities try to offer to their residents.

Denser residential development remains concentrated in the Town Center, located at the confluence of Routes 12, 140 and 202. The remainder of the population is divided among the more rural northwest, the northeast and the south.

The 2010 census demonstrates the percentage of residents below the poverty level of 10.2% in Winchendon has remained consistently at approximately 10% since 1980. The percentage of the residents below the poverty level has increased in Worcester County (11.2%) and in the State (11.4%). The percentage of low and moderate-income persons in Winchendon was also significant (44.3%).

Winchendon residents remain behind the state and region in educational attainment among Winchendon residents over the age of 25. As of 2010, 12.5% of Winchendon residents over the age of 18 had not completed their high school diploma, compared to 10.6% for the county and state. Of this same age group in Winchendon, 19.1% had received a bachelor's or graduate degree, compared to 33.8% for the county and 39.4% for the state.

Based on the 2010 Census, the highest ranked occupation field for Winchendon residents is the "management, business, science, and arts" occupation field which grew from 27% in 2000 to 30% in 2010. Other high employment sectors for Winchendon residents include the "production, transportation, and material moving" trade at 18.6% and "sales and office occupations" and 19.3%. The 2010 census data indicates that more residents are using college degrees to find employment

Unemployment levels in Winchendon have traditionally been higher than state unemployment levels, but were approximately 2.5% less than state unemployment levels in 2010. In Winchendon, the manufacturing industry for example has consistently diminished, taking away some of the highest paying jobs. Winchendon in the past has been heavily manufacturing job reliant and experienced a job loss during the 1980s of about 5.7%.⁴ Because it is a smaller town, the loss of even a few plants in the 1980s made a significant impact on the job base that was not made up elsewhere. Communities in this area, like Winchendon, continue to struggle to find employment for local residents.

Approximately 5.2% (approximately 3% less than Worcester County and the State), of families in Winchendon are living below the poverty level. The adjacent towns of Templeton (10.2%), Royalston (9.0%), Ashburnham (9.0%), and the City of Gardner (11.6%) have a higher number of families living below poverty. Winchendon's median

⁴ Montachusett Regional Planning Commission

household income of \$58,288 was 87% of the state median household income and 89% of Worcester County's. The median single-family home value in Winchendon fell approximately 28% from \$214,000 in 2005, to \$154,000 in 2014.⁵ Furthermore, home sales have decreased by approximately 26% in this same time period. This reflects the downturn in the economy and the slow economic recovery in the region.

Since 2000, Winchendon's median age went up from 35 to 38.7, which is slightly younger than the state average of 39.1. This is consistent with Winchendon's attractiveness to people seeking affordable starter homes with a greater proportion of children. Although there are fewer children under age 15, since 1990, the proportion of pre-school and school-aged children has remained at approximately 30% of Winchendon's overall population.

TABLE 3-1
Age Group Comparison

Age Group	1990	2000	2010	% Change (2000 to 2010)	Massachusetts	United States
					% Change (2000 to 2010)	% Change (2000 to 2010)
Under 5	876	690	561	-18.70%	-7.60%	5.35%
Age 5-9	815	803	655	-18.43%	-10.48%	-0.98%
Age 10-14	628	903	770	-14.73%	-5.94%	0.73%
Age 15-19	490	755	977	29.40%	11.31%	9.00%
Age 20-24	580	391	609	55.75%	17.66%	13.83%
Age 25-34	1,697	1,264	1,083	-14.32%	-8.81%	2.94%
Age 35-44	1,285	1,809	1,480	-18.19%	-16.54%	-9.03%
Age 45-54	774	1,215	1,799	48.07%	15.93%	19.45%
Age 55-59	327	429	636	48.25%	39.62%	46.00%
Age 60-64	304	345	527	52.75%	56.74%	55.64%
Age 65-74	602	539	673	24.86%	6.69%	18.07%
Age 75-84	301	356	404	13.48%	-4.62%	5.66%
85 years +	126	112	126	12.50%	24.43%	29.57%

Source: U.S. Census 2000, 2010

The decade between 2000 and 2010 has seen a demographic shift to an older population, with fewer children under the age of 15 and more residents at each age category over 45. The goals that have developed through this plan is to continue to address the needs of all ages, abilities and income levels.

3.4 Growth and Development Patterns

3.4.1 Pattern and Trends

Old Centre was the center of Winchendon during its agricultural period of the first 50 years following settlement by European Americans. Now regulated as a Historic District, Old Centre is still intact. Old Centre is the only one of Winchendon's villages with a traditional New England Common. The second major agricultural community at New Boston flourished during the nineteenth century but has now virtually disappeared as the result of the watershed protection efforts that led to the establishment of the large Lake Denison Recreational Area along Winchendon's western boundary. Winchendon's other villages

⁵ The Warren Group

sprang from and were shaped by the industrial revolution, so they center around water features rather than a traditional New England green.

The early nineteenth century saw outlying villages appear near water features. Spring Village began as the site of the healing spring, but later a mill village grew up here, and the name was changed to Winchendon Springs. Bullardville is believed to have been named after a resident who had a small mill site in the early 1800s, and Waterville was named after the feature that made it a center of wooden tub and pail manufacturing.

"The City" (or "The Village") was another small cluster of buildings that sprang up around a tannery constructed on the Millers River (down the hill from what is now Front Street) during the second decade of the nineteenth century. Commerce and civic life began to shift toward this area during the decades that followed, and when the railroad station was opened there in 1847, the center of town life had permanently left the Old Centre and moved here.

Mill villages, forests, and a few farm fields still comprise the prevailing pattern of development in Winchendon. Because of its relatively isolated location, Winchendon has only recently experienced the arrival of suburban development. Much of this residential development has occurred outside of the traditional villages and has sprawled along rural roads. Between 1985 and the early 1990s the town's growth rate far outstripped the state, county, and immediate region. In the period from January 1, 1980, through June 30, 1988, the Town issued 583 new housing starts. Of these 2/3 (407 permits) were issued during 1985 - 1988.⁶ The 1990 Census revealed that Winchendon's population had grown by 25.4% over the previous decade to a total of 8,805. This paralleled the trend seen throughout the Montachusett region: during the 1980s the population of very rural towns such as Phillipston and Hubbardston grew by more than 50%, while the more settled rural communities of Ashburnham, Winchendon, and Groton shifted from rural toward suburban, with respective population increases of 33.3%, 25.4%, and 22.1%. The average percent increase for the Montachusett Region during the 1980s was 10.5%.⁷ The predominant land use changes were the conversion of agricultural, open space and forest to residential use. The real estate slump of the early 1990s, however, removed the pressure of exurbanites seeking affordable homes, and the Town Census of 1995 recorded a drop in population to 8,326⁸. By the 2000 Census, the population was 9,611 in 3,660 housing units and in 2010, Winchendon's population increased to 10,300 in 3,810 housing units.

Residential development continues in Winchendon, although at a much slower pace. Rather than subdivisions, however, the pattern of development is to avoid the costs of creating a new road and instead to build houses along outlying roadways through the creation of ANR lots. Seeking affordable starter homes, new residents come from outside the region and from outside Massachusetts because they have found jobs in the greater Boston region. The local housing market is showing the impact of new employment opportunities at Devens. The growth rate of the late 1990s exceeded that of the 1980s. In the early 2000s, ANR development was at an average of 60 lots per year. More recently

⁶ Town of Winchendon, *Massachusetts Small Cities Program Special Fund Application*, 1989, page 3.

⁷ Montachusett Regional Planning Commission, *1990 Regional & Community Statistics*, August 1993.

⁸ Toy Town Partnership Committee, *Toy Town Partnership Economic Development Strategy*, 1996, Analysis page 1.

(from 2008 through 2013), building permits for new dwelling units has averaged fewer than 10 per year and new ANR lot approvals have averaged 6 per year. No new subdivisions have been reviewed or approved since 2008.

Efforts have been made to better develop and protect lands. Large parcels of land have been protected through state and private acquisitions and development restrictions (Wildlife Conservation Easements (WCE), Conservation Restrictions (CR) and Agricultural Preservation Restrictions (APR)). The zoning by-law was revised to allow for flexible residential development that includes protection of open space.

3.4.2 Infrastructure

3.4.2.1 Transportation System

Winchendon is located on States Routes 12, 140 and 202, which provide access north to New Hampshire and south to Route 2. Route 2 serves as the major east-west route for the northern region of Massachusetts. There is no major north-south highway in this section of the state.

Due to the rural nature of the community, the major form of transportation is the private auto. Approximately 125 miles of town-maintained roads traverse the Town.

There is limited public transportation service for Winchendon by way of the Montachusett Regional Transit Authority (MART), which operates GLink connecting points in Winchendon to Gardner and the Fitchburg Intermodal Transportation Center. MART also provides shuttle services to the general public to medical facilities in Boston and Worcester. MART, through the Council on Aging provides transportation services for seniors and disabled residents.

These limitations on transportation options make it difficult for some residents to reach and enjoy the community's open space and recreation resources. Limited transportation options also deter visitors and thus are a constraint to the community's effort to increase tourism.

3.4.2.2 Water Supply System

Since the 1987 OSRP, water supply has been identified as a critical issue facing the town. Winchendon has no existing active municipal groundwater supplies, relying solely on a surface water reservoir in Ashburnham [Upper Naukeag Lake] for its drinking water supply. The Town had recognized the need to delineate aquifers and identify areas favorable for high yield well development. In 1986 a *Test Well Exploration and Hydrogeologic Mapping Study* was conducted. Test well explorations and seismic surveys were performed, and additional measures were recommended to further characterize aquifers in order to establish protection measures and to identify well sites to develop a local water source. In addition, the Town continues to pursue development of viable alternative sources of drinking water that will serve the needs of projected population increases and to serve as insurance against possible loss of existing water supplies. Aquifer supplies represent the only future source of additional drinking water supply and must be identified and protected (see Figure 5, Water Resources).

Since they could be used to augment that source, however, Winchendon is protecting them as a reserve. Winchendon and Ashburnham jointly constructed a \$6 million treatment plant for the surface water reservoir, which the two towns share for their water

source. A safe yield analysis was performed, and this determined a 1.7 million gallon per day average safe yield. At present Winchendon uses an average of 0.67 million gallons per day, and Ashburnham uses an average of 0.35 million gallons per day.

The Town's water system serves approximately 2,100 customers in the town. These include both homes and businesses. The existing water distribution system includes water mains that are 80 to 100 years old. Under certain conditions water is discolored from sediments in the pipes. The Department of Public Works estimates that approximately 5,600 residents are served by the system, leaving approximately 4,700 residents in outlying areas who depend upon private wells for their water. Clearly the quantity and quality of groundwater resources is extremely important to these well-dependent residents.

3.4.2.3 Sewer Service

Extension of the current sewer system to serve areas with inadequate septic systems has been identified as a need since the 1987 OSRP. Although the village center in Winchendon is served by sewer facilities, several areas of moderately dense development outside of the center are not sewerized. In addition, the October 21, 2004 *Winchendon, MA Opportunity Abounds* Technical Advisory Panel Report prepared by Urban Land Institute and the *Toy Town Partnership Economic Development Strategy Plan* both identified infrastructure improvement, including extension of the present sewer system, as an attraction for new businesses and industries.

Winchendon completed a \$15.5 million upgrade of its wastewater treatment plant in 2004. This project upgraded the plant's capacity to 1.1 million gallons per day. The projects included improvements to the sewer collection system including replacement of the Town's undersized interceptor sewer to eliminate overflows of untreated sewage to the Millers River and rehabilitation of portions of the Town's sewer system to reduce infiltration/inflow (I/I), where cost effective, and separation of 25 combined sewer/stormwater manholes.

In addition to these improvements, the Town has taken other measures to reduce extraneous flows to its sewerage system. Over the 1998 - 1999 winter months, the Town conducted a house to house survey for illegal connections into the sewer system. The Town then started a volunteer program to remove these connections by offering cash incentive to assist property owners with the costs of cutting off the connections. After a few months the Town shifted to a more enforcement-oriented approach. Illegal connections were removed from over 1,200 properties.

The combination of upgrading the treatment plant, improving the collection system, and moving assertively to eliminate illegal connections has brought the sewer system into compliance and also created a reserve of capacity for future demand.

Historically, pollution of Whitney Pond from upstream septic systems and stormwater discharges combined with the overflow of untreated sewage to the Millers River, have negatively impacted the use of these waterbodies for recreational purposes. Elimination of the sewage overflows has dramatically improved the recreational opportunities below the Town center; however, pollution of Whitney Pond remains a concern. In response to concerns regarding Whitney Pond, Town officials have identified the Maple Street/Spring Village area as places where extending the sewer system could address the problems posed by failures of residential septic systems. Sewer extensions to the Waterville section of Town is also a possible future project.

3.4.3 Long-Term Development Patterns

3.4.3.1 Local Land Use Controls

In May 2006, Winchendon revised the town Zoning Bylaw as recommended in the Master Plan and to incorporate principles of sustainable development. The Zoning Bylaw has since been amended through April 14, 2014. The zoning map and bylaw amendments encourage mixed uses within the village centers and seek to discourage development in more rural areas. The Zoning Bylaw divides the town into seven zoning districts, with several overlay districts. There are three residential districts: Rural, Rural Suburban, and Neighborhood. Three non-residential districts distinguish between Highway Commercial, Neighborhood Business, and Industrial (see Figure 1: Zoning). The Planned Development District allows for flexible mixed use design in areas served by public water and sewer. Developments are required to incorporate common open space. The overlay districts are superimposed over portions of other districts in order to protect key areas and allow for key developments and include The Ice Race District, Mill Conversion Overlay District, Groundwater Protection Overlay District, Golf/Residential Overlay District, Gateway Overlay District and the Wetlands and Flood Conservancy District. The Zoning Bylaw's dimensional and density regulations are summarized in the following table.

TABLE 3-2

Table of Dimensional & Density Regulations of the Winchendon Zoning Bylaw

District	Min. Lot Area (sf)	Frontage (ft)	Front Setback (ft)	Side Setback (ft)	Rear Setback (ft)	Max. Bldg. Stories	Max. Bldg. Height (ft)	Max. Bldg. % of Lot (1)
R80	80,000	200	40	25	50	2 ½	35	10
Rural Residential								
R40	40,000	150	40	25	50	2 ½	35	15
Rural Suburban								
Residential								
R10	10,000	75	20	10	20	2 ½	35	25
Neighborhood Residential								
C1	75,000	250	75	25	25	3	45	45
Highway Commercial								
C2	20,000	100	30	15	30	3	45	45
Neighborhood Business								
I	43,560	150	40	25	50	none	50	none
Industrial								
PD	5,000	75	5	0	0	3	45	70
Planned Development (except residential, includes mixed use developments)								
PD	10,000	75	20	20	20	2 ½	35	25
Planned Development (1&2 family residential)								
PD	10,000	75	20	Combined 30	50	3	45	70
Planned Development (other residential)								
WF								
Wetlands & Flood Conservancy (2)								

Source: Section 7.2, Table of Dimensional & Density Regulations (Amended Nov. 8, 2007), Town of Winchendon Zoning Bylaw, adopted May 22, 2006 last amended April 14, 2014.

- (1) Includes all buildings, structures, and paved surfaces
- (2) As per special use regulations of Section 4.3 and 4.4, lots partially within the Wetlands and Flood Plain Conservancy Districts may be governed by dimensional and density requirements of the underlying district as determined by the Board of Appeals, provided that more than 50% of the lot area and all non-sewered sanitary facilities, lie outside the WF District.

Zoning allows for reduced frontage lots in residential zoning districts for lots that have been in existence for more than 10 years and meet certain criteria defined in Section 7.3 of the Zoning Bylaws.

The Zoning code also develops seven overlay districts for various purposes as described below:

- **Ice Racing District** – to allow racing of motorized vehicles on frozen water bodies through a special permit process.
- **Mill Conversion Overlay District** – to allow for the redevelopment of Winchendon's historic mills for mixed uses.
- **Wetlands Conservancy District** – to preserve and protect wetlands, waterbodies, watercourses and flood plain areas.
- **Flood Plain Conservancy District** – to protect human life and property from the hazards of periodic flooding, to preserve the natural flood control characteristics and flood storage capacity of the flood plain and to preserve and maintain the ground water table and water recharge areas within the flood plain.
- **Groundwater Protection Overlay District** – to protect public health by preventing the contamination of existing and potential public and private water supplies and preserve limited water supplies.
- **Golf/Residential Overlay District (GROD)** - to allow for a planned golf course and residential development through a special permit procedure.
- **Gateway Overlay District (GAOD)** – to promote responsible, sustainable development in a commercially advantageous setting through site plan review for commercial developments.

The Zoning Bylaws and map also include language with respect to a Historic District. The Historic District includes the limits of the Old Centre Historic District, which is listed in the State Register of Historic Places. This district is protected under the following Town Bylaws: Article 15 Historic District, which establishes the Winchendon Centre Historic District and an Historic District Commission under the provisions of MGL Chapter 40C, and Article 16 Preservation of Historically Significant Buildings.

Winchendon's residential zoning districts correlate density with proximity to the Town Center and to infrastructure. The R10 Neighborhood Residential (10,000 sf minimum lot size) includes traditional higher density neighborhood areas and adjacent properties areas nearest the Town Center and existing municipal infrastructure. The R40 - Suburban Residential (40,000 sf minimum) lies further out of the Town Center and in the Lake

Monomonac but is still relatively well served by roadways and some municipal infrastructure. The R-80 - Rural Residential (80,000 sf minimum) is in the rural outlying areas.

Commercial districts correlate with Route 140 extending from the Nineteenth Hill area northwest to the Town Center, along Route 12 from the Town Center northwesterly to the New Hampshire border and along Route 202 from the Templeton town line northerly to the Town Center. These districts seek to take advantage of potential markets offered by roadway access along the main routes into town.

Industry has been the mainstay of Winchendon's economy and society since the Industrial Revolution, and the Industrial District designates two areas to encourage continued industrial development. Located north of the Town Center, the district provides adequate roadway access and is partially served by the municipal sewer and water systems. The second Industrial District is located in the southeastern corner of town with good access to Gardner and Ashburnham.

The Planned Development District correlates with Winchendon's traditional village settlement pattern and extends to areas served by public infrastructure where flexible mixed use development is encouraged. The areas within the Planned Development District are characterized as complex areas of traditional village development and natural resource systems. In keeping with the downtown character, mixed use and open space are important components for new developments in this district.

Article 11 of the Zoning Bylaw includes provisions to allow for greater flexibility in residential development, by allowing for more compact development by increasing density in exchange for permanently protected open space.

3.4.3.2 Scheduled and Proposed Subdivisions

As noted above, current development consists primarily of ANR residential lots.

The Town revised its residential zoning requirements in 2011 to remove special permit requirements by establishing performance standards to allow for denser developments with protected open space. No subdivisions have been reviewed or approved under this provision.

3.4.4 Build-Out Analysis

The Massachusetts EOEA office, in response to municipalities wishing to change and enhance their development and growth patterns sponsored build-out studies for all 351 cities and towns in the Commonwealth. The purpose of the data and maps created is to visually demonstrate current developed and undeveloped land in each town under zoning regulations, and then to illustrate what the landscape would look like if all the remaining undeveloped land were completely "built-out" under existing local zoning.

The Town of Winchendon's build-out analysis was completed in 2001. Using minimum lot sizes for each zoning district, projections for housing and commercial/industrial uses were made for as of right development only. The projections combined with 2000 Census data provide the basis for the build-out. Using zoning and other regulations enacted at the time of the build-out, the analysis concluded that Winchendon has approximately 17,700 acres of developable land resulting in a population increase from 9,611 people in 2000 to

34,415, with a corresponding increase in residential units from 3,660 to over 13,000 at build-out.

It is important to note that these numbers will not be realized for a number of reasons, including economic and market reasons. Furthermore, the town conducted a major overhaul of its zoning in 2006. An updated build-out analysis incorporating the new zoning requirements has not been completed.

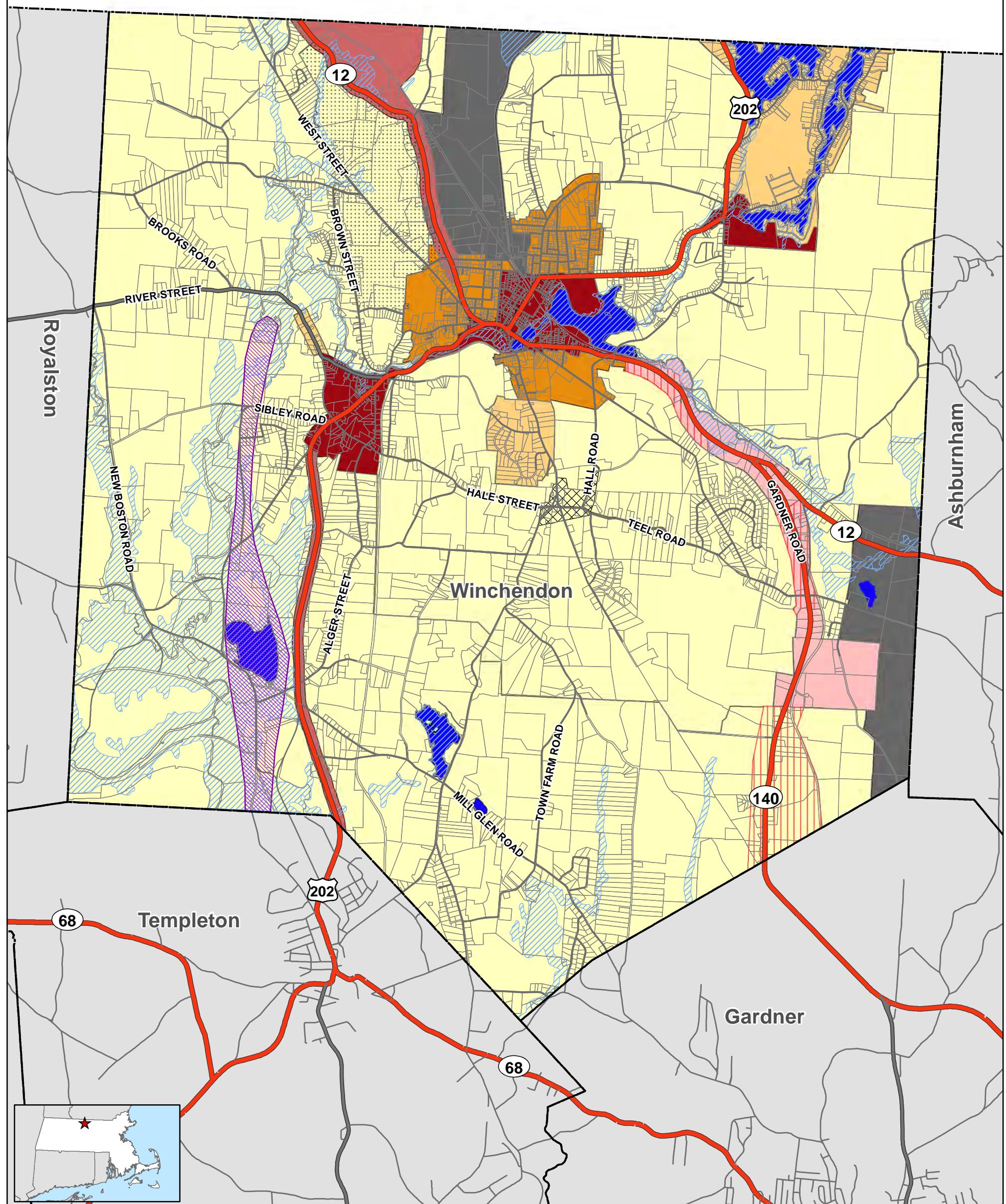
At build-out Winchendon will look more suburban, with homes developed in areas that are now forest or open field. Through Winchendon's land use regulations, the community hopes that this residential growth will be balanced with more industrial development northwest of the Town Center and more business growth along major roadways. Current land use as depicted in Figure 2 is predominantly forested lands with most development along the major roads and downtown core, with low density residential uses along roadways throughout Town. The moderate to severe soil limitations, described in Section 4, will limit development to some extent, but there will still be a significant change in the landscape. With more residents and less available open land, there will be increased demand for recreation facilities, and conserved land will be needed to maintain Winchendon's traditional access to forests, streams, and open spaces. Already townspeople have noted the lack of public access to the River and the ponds in Town. Providing better access to the Town's water resources and open spaces through established access locations, trail systems, and signage has been identified by the public as a need. Access that is open to the public free or charge is also important to provide opportunities for residents at all income levels. The significant conservation and park lands owned by the Commonwealth of Massachusetts and the Federal Government (see Figure 7 in Section 5) will be even more valued by residents and visitors, but there will also need to be an increase in locally owned facilities in order to keep pace with residents' and visitors' other recreational needs.

The community's cultural and historic heritage were considered in listing three historic districts (Old Centre, Winchendon Center and Winchendon Village), Old Murdock High School, Town Hall, Fire Station and Beals Memorial Library on the State Register of Historic Places. This listing recognizes the contribution that these areas have on the history and character of the Town. However, without assertive efforts, Winchendon will likely lose at least some of the cultural, historical, and archeological resources identified on Figure 3, Unique Landscape Features.

3.4.4.1 Expansions to Infrastructure

The improvements to the water and sewer systems described above have improved the capacity of those two systems. The potential need to extend sewer service has been noted above, however, there is a significant expense related to infrastructure expansion.

New Hampshire



Legend

Zoning District

C1 - Large Scale Commercial	R10 - Neighborhood Residential
C2 - Neighborhood Commercial	R40 - Suburban Residential
Industrial	R80 - Rural Residential
Planned Development	
Pond	



Data Provided by MassGIS
& The Town of Winchendon

Zoning Overlays

Floodplain
Historic
Aquifer Protection
Gateway Overlay
Golf Residential Overlay

1:48,000

0 4,000 8,000 Feet

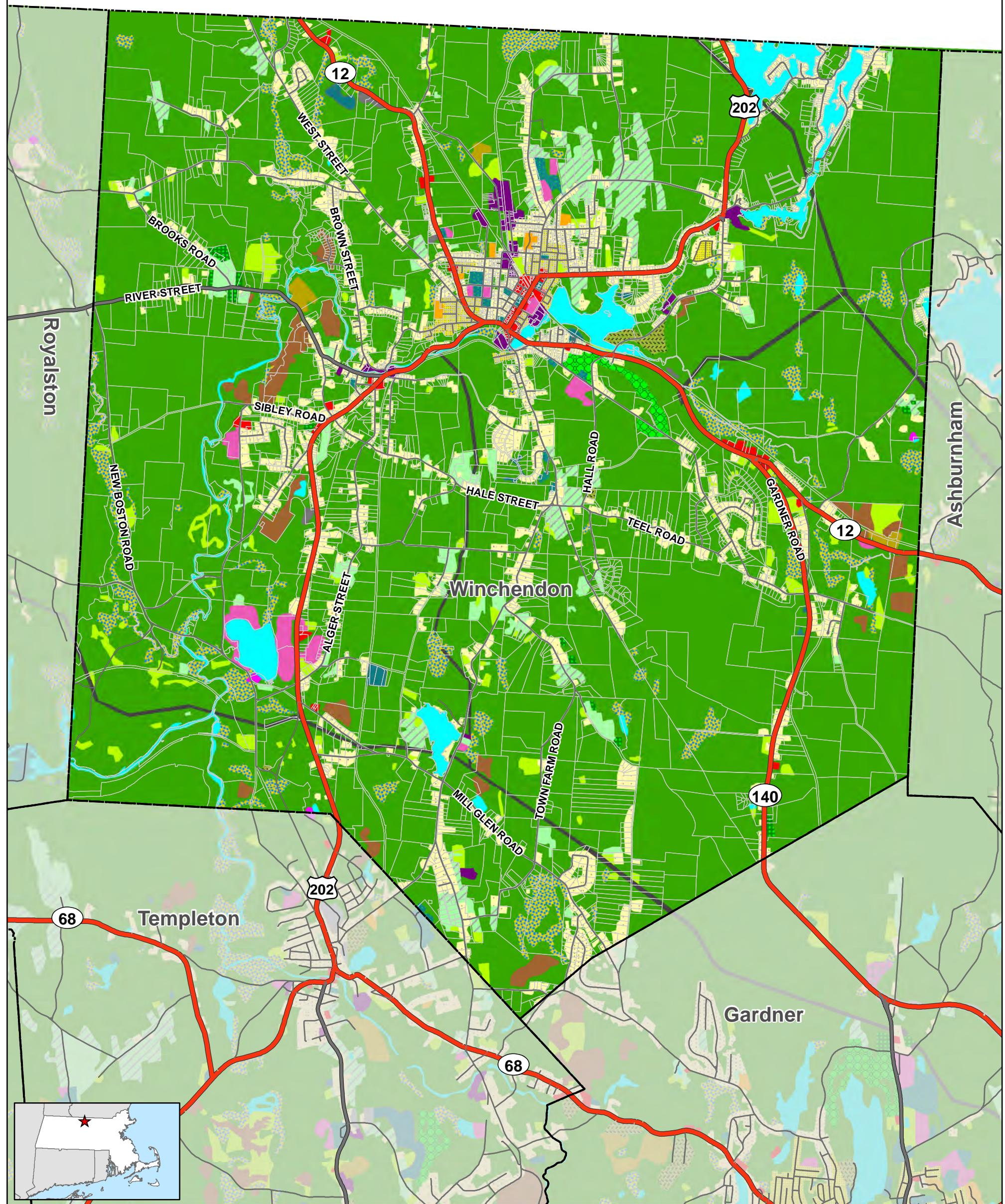


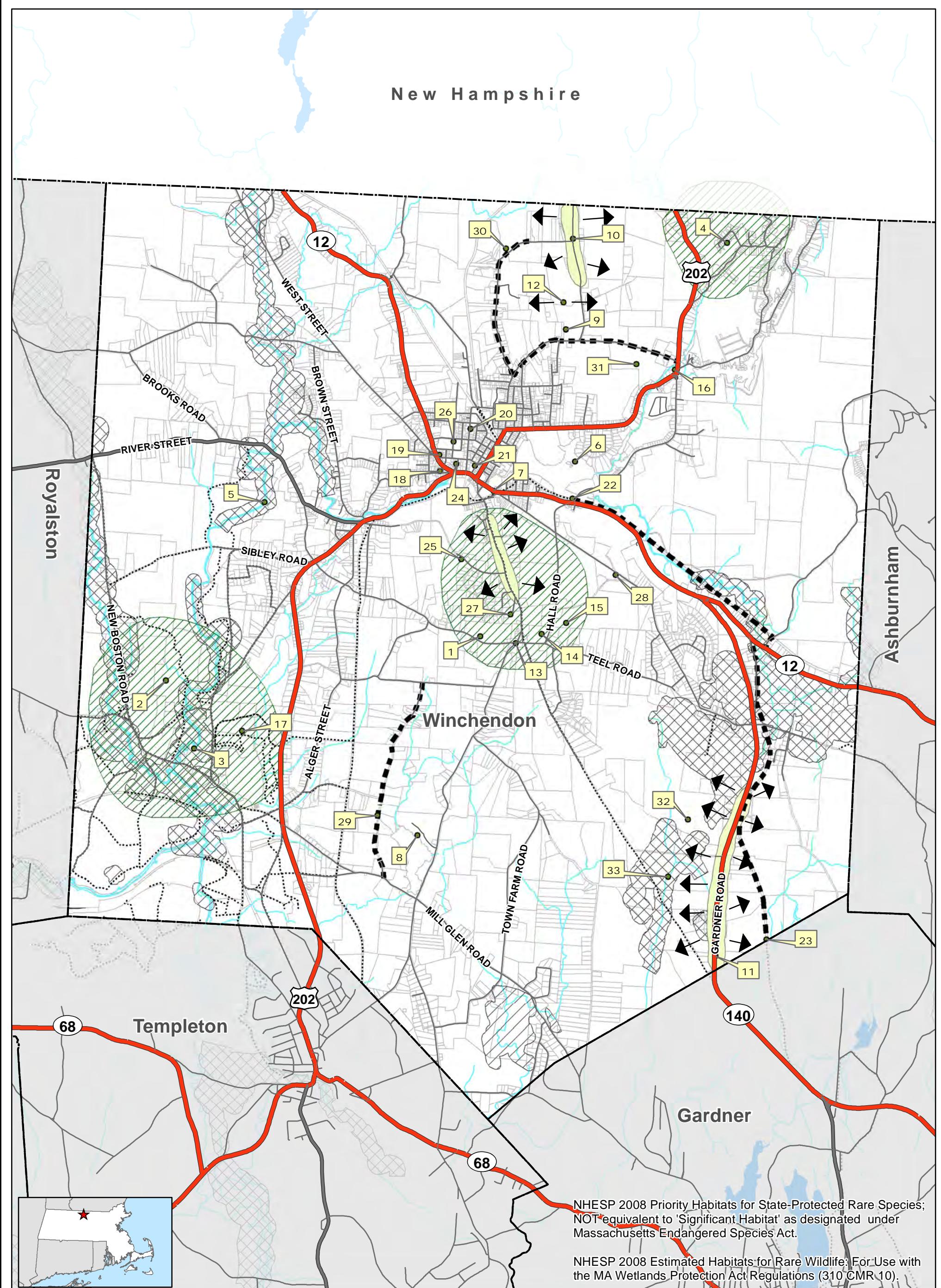
FIGURE 1
ZONING

Town of Winchendon
Open Space & Recreation Plan
Winchendon, Massachusetts

May 2015

New Hampshire





Legend

Tighe & Bond
Consulting Engineers
Environmental Specialists

Data Provided by MassGIS
& The Town of Winchendon

1:48,000 

FIGURE 3 UNIQUE LANDSCAPE FEATURES

May 2015



Tighe&Bond

Section 4

Environmental Inventory and Analysis

4.1 Geology, Soils and Topography

In general, Winchendon's land area of 43.3 square miles (27,712 acres) feature a topography of gently rolling slopes of less than 10%. Elevations range from about 800 feet in the lowlands to 1,350 feet, with an average roughly of 1,000 feet. Water resources comprise approximately 0.8 square miles (512 acres).

Most Winchendon soils are direct results of glacial action. They consist of deposits of glacial till (unsorted mixtures of materials such as clay, sand, gravel, and boulders) or thin soils developed from exposed bedrock following the glaciers' retreat. In the river valleys there are bedded layers of soil material resulting in major groundwater aquifers, good drainage, and fertile conditions. In most other areas the soils are stony, relatively poorly drained, and shallow to bedrock or hard pan layers. As the result of this pattern of glacial action and deposition, Winchendon's soil base is a complex mix of soil types, featuring a range of composition and slope. Soil series found in Winchendon are largely made up of Becket-Skerry and Colton, but also include Ridgebury-Whitman, Hinckley, Merrimac, Sudbury, Walpole, Scarboro, Paxton, Adams, Allagash, Becket, Becket-Monadnock, Berkshire-Marlow, Bucksport and Wonsqueak, Croghaan, Greenwood and Chocorua, Lyman-Tunbridge-Berkshire, Marlow, Naumburg, Peru, Peru-Marlow, Pillsbury-Peacham, Searsport, Skerry, Tunbridge-Lyman-Berkshire, and Udorthents⁹.

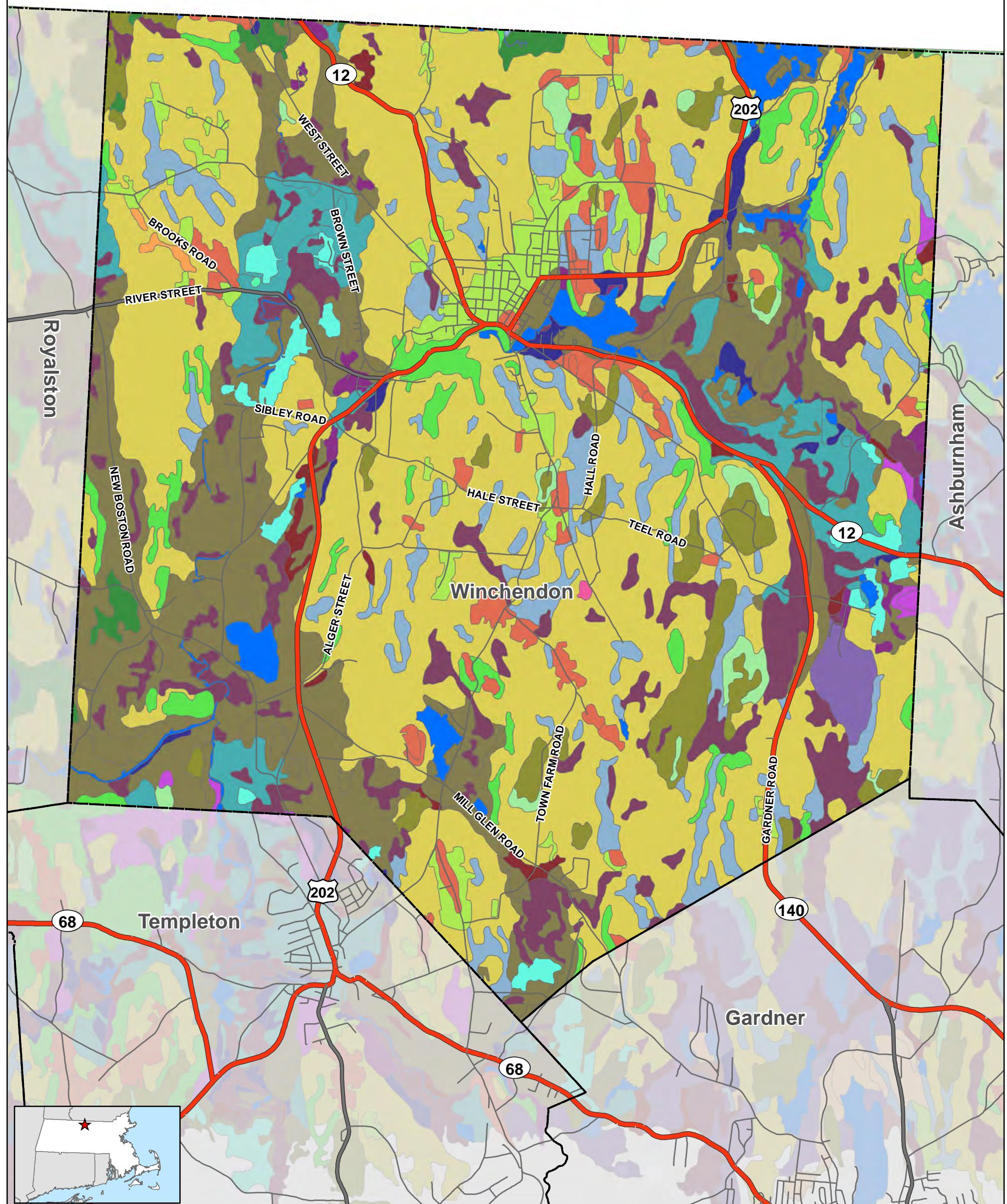
As is shown in Figure 4, Soil Suitability, Winchendon's combined soil types feature moderate to severe limitations to development because of poor capacity for on-site septic disposal. A 2001 study determined that about 20% of the septic systems failed or required major repairs. Without sewer service, even moderate sized developments are likely to be constrained by this soil base. Small scale development, however, is able to find a site that perks on most properties, so the future pattern of development in Winchendon will most likely continue to be scattered along roadsides, on fields, and in wooded areas.

4.2 Landscape Character

Winchendon's physical landscape base and cultural history have resulted in a beautiful New England landscape of wooded hills, open fields, flowing water, serene ponds, and village centers. As shown on Figure 3 and Table 4-1 Unique Landscape Features, when townspeople are asked to list the features that make Winchendon special, they think of this combination of natural and cultural features. Key geologic features include Mt. Pleasant and Birch Hill, the sites of Winchendon's two early settlements: Old Centre and New Boston. King Philip's Rock is unique because of its association with the area's pre-Columbian past. Hydrologic features are also key, as is discussed below. Scenic resources include Murdock Farm, the rural entryways of Route 140 and Middle Winchendon Road, and the Water Tower Overlook. Because hills and water resources historically determined the sites of Winchendon's major settlements, the community's

⁹ MassGIS soils data, valid for 2015

New Hampshire



Legend

Adams loamy sand	Hinckley loamy sand
Allagash fine sandy loam	Lyman-Tunbridge-Berkshire association, Very rocky
Becket fine sandy loam	Marlow fine sandy loam
Becket-Monadnock association, Extremely stony	Merimac fine sandy loam
Becket-Skerry association, Extremely stony	Naumburg fine sandy loam
Berkshire-Marlow association, Extremely stony	Paxton fine sandy loam
Buckport and Wonsqueak mucks	Peru fine sandy loam
Colton gravelly loamy sand	Peru-Marlow association, Extremely stony
Croghan loamy fine sand	Pillsbury-Peacham association, Extremely stony
Greenwood and Chocorua mucks	Pits, gravel

Ridgebury-Whitman association, Extremely stony
Scarboro mucky loamy sand
Searsport loamy sand
Skerry fine sandy loam
Sudbury fine sandy loam
Tunbridge-Lyman-Berkshire association, Extremely stony
Udorthents, refuse substratum
Udorthents, smooth (earthen dam)
Walpole fine sandy loam
Water

1:48,000

0 4,000 8,000 Feet



FIGURE 4
SOIL SUITABILITY
Town of Winchendon
Open Space & Recreation Plan
Winchendon, Massachusetts

May 2015

Data Provided by MassGIS
& The Town of Winchendon

cultural and historic resources cluster on Mt. Pleasant (Old Centre) and in the Town Center where the Millers River broadens into Whitney Pond.

TABLE 4-1

Unique Landscape Features

<u>Geologic Features</u>	<u>Cultural, Historic, and Archeological Resources</u>
1. Mt Pleasant	13. Old Centre
2. Birch Hill	14. Militia Training Ground
3. King Philip's Rock	15. Old Centre Militia Cemetery
<u>Hydrologic Features</u>	16. Spring Village
4. Lake Monomonac	17. Lake Denison Recreational Area
5. Millers River and Watershed	18. Veterans Park
6. Whitney Pond	19. Toy Town Horse
7. Hunt Pond	20. Old Murdock
8. Stoddard Pond (Mill Glen Pond)	21. Town Hall
33. Bailey's Brook	
<u>Scenic Resources</u>	22. North Central Pathway (Northern Stretch)
9. Murdock Farm	23. North Central Pathway (Southern Stretch)
10. Middle Winchendon Road	24. Converse Gardens
11. Route 140 Entryway	25. Benjamin Hill Trail
12. View from the Water Tower on Murdock Farm	26. Poland School
29. Joslin Road	27. Medical Center
30. Beaman Farm on North Central	28. Winchendon School Hiking & Ski Trail
31. Joseph White Estate on Elmwood	
32. Nineteenth Hill	

Source: 1999 OSRP, September 10, 2005 Public Forum and March 22, 2006 OSRP Committee Meeting

Use with Figure 3 in Section 3

4.3 Water Resources

4.3.1 Surface Water

Winchendon lies in the watershed of the Millers River, which flows through the town on its way west into the Connecticut River. The Millers River flows westward into Winchendon from Sunset Lake in Ashburnham. The North Branch originates at Lake Monomonac, flows southwest through Winchendon Springs (formerly "Spring Village") and on to join the Millers River at Whitney Pond, just east of the Town Center. Before the river continues on its meandering course westward, it flows through a complex of ponds in the Town Center area created by this confluence, historic ponding for mills, and the railroad bed. West of the Town Center, Tarbell Brook flows into the River, having followed a course south from New Hampshire through Bullardville. As the Millers River approaches Winchendon's southwest corner, it is joined by the Otter River, which flows north from Templeton. Water resources are depicted on Figure 5.

Winchendon is abundantly endowed with water resources including lakes, rivers, aquifers, and wetlands. The Millers River, Lake Monomonac, Lake Denison, Bailey's Brook, Whitney Pond, White's Mill Pond and Stoddard Pond are among the major local water bodies. Bio-Core habitat areas covering 6,695 acres of Winchendon have been identified by the Natural Heritage and Endangered Species Program (NHESP). Wetland systems border many of the

water systems, serving important buffers which provide wildlife, pollutant uptake, and opportunities for nature viewing. Winchendon is enforcing the state wetlands regulations regarding replication by square footage, so as to achieve no net loss of wetlands. In order to further protection wetland resources, Winchendon enacted Article 29 Wetlands Protection Bylaw in May of 2007. The Wetlands Bylaw extends protection to vernal pools. Wetlands, along with the waterways and waterbodies they border on, are critical to protect for the important roles they play in protecting water quantity and quality, providing wildlife habitat, and as recreational resources.

Lake Denison is the only major water body in Town with formal public access through the State Park facilities. The lakes and rivers provide beautiful views; however, Lake Denison provides the only public swimming access in Town. With success of continued efforts to mitigate pollution problems, the water quality of the Millers River and associated ponds will continue to improve, and townspeople will feel even more acutely the lack of public access to these natural resources.

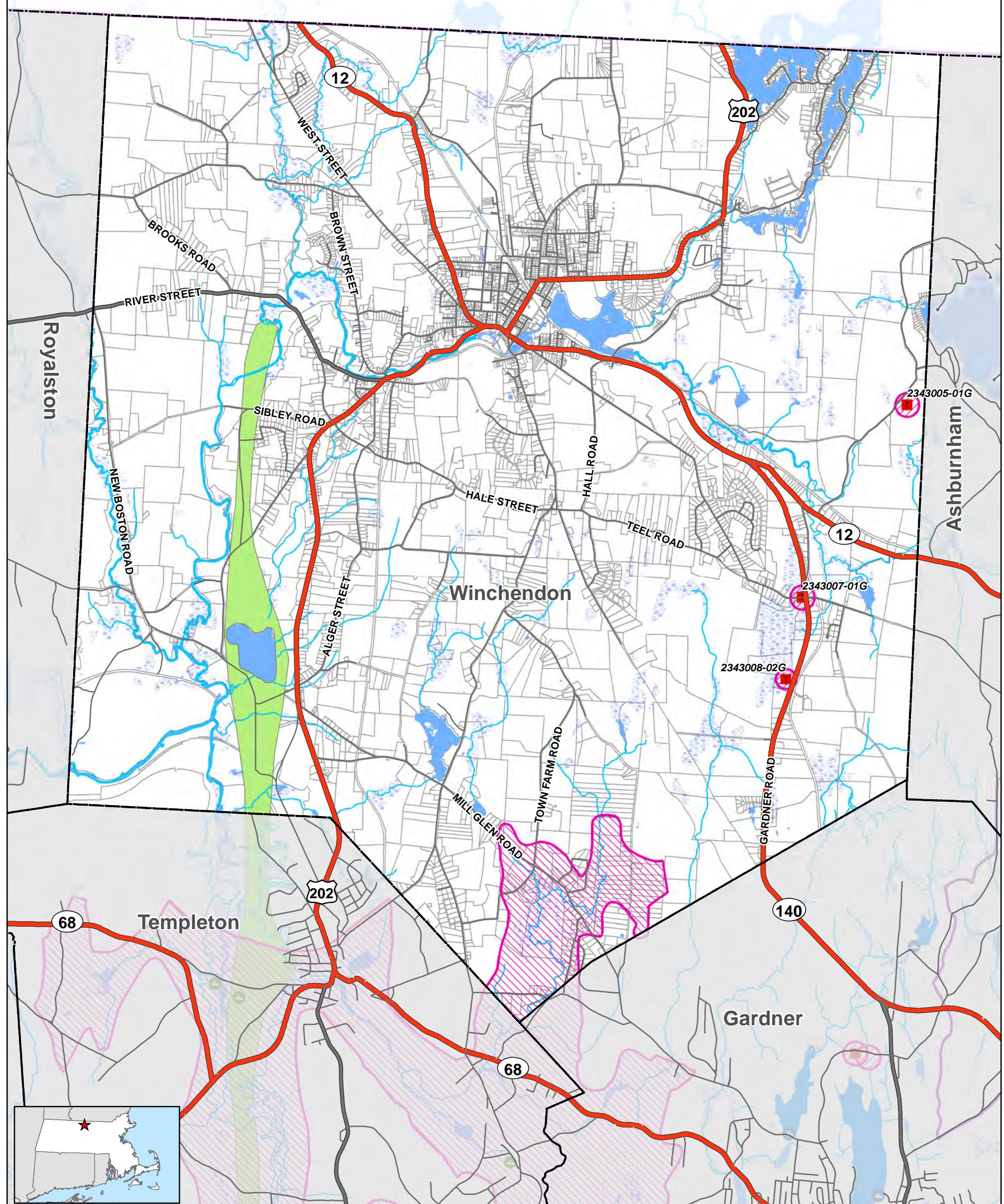
As is shown by Figure 6, FEMA Flood Zones, areas prone to flooding are closely associated with the Millers River and its tributaries. Other than flood plains within the complex hydrologic system of Lake Dennison Recreational Area, the width of flood plains tends to be relatively constrained by Winchendon's hilly topography. Townspeople report that recent experience with flooding has been limited to briefly flooded areas in the Town Center that result from unusually intense downpours of rain. Generally, hydrology is altered by new development, including single-family residences. This can result in creation of new wetlands or flood-prone areas. It is difficult to request reliable computation of increase in peak flows from applicants for individual house lots.

The Town adopted a Low Impact Development (LID) Bylaw on May 18, 2009. The purpose of this Bylaw is to establish requirements and procedures to manage stormwater runoff, promote groundwater recharge, and prevent water pollution from new development and redevelopment. LID Regulations were adopted on November 17, 2009 and outline required permits and fees, LID design criteria, and inspection and maintenance procedures.

4.3.2 Groundwater

Groundwater resources in Winchendon are also depicted on Figure 5. A potentially productive medium yield aquifer extends in a narrow north-south band from River Street running south over Lake Denison and into the Town of Templeton. Winchendon has been analyzing options for establishing a groundwater supply within the Town boundaries, however, the identified potential sources of drinking water have been judged to be of insufficient volume to replace the Town's surface source in Ashburnham. Other groundwater resources within Winchendon include a Zone II which extends into the south central tip of Winchendon. The Zone II is the area of an aquifer that contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated. The Zone II in Winchendon is for a drinking water supply located within the neighboring town of Templeton. Three Interim Wellhead Protection Areas (IWPA) are also mapped for groundwater wells serving transient non-community water systems. Two of the wells are along Route 140/Gardner Road and the third is on North Ashburnham Road, near the Town line. These wells serve restaurants and a camp. The IWPA is a protective radius provided for groundwater supply wells that lack a MassDEP approved Zone II delineation.

New Hampshire



Legend

- MA Towns
- Community Public Water Supply - Surface Water
- Community Public Water Supply - Groundwater
- Non-Community Non-Transient Public Water Supply
- Non-Community Transient Public Water Supply
- Public Surface Water Supply (PSWS)

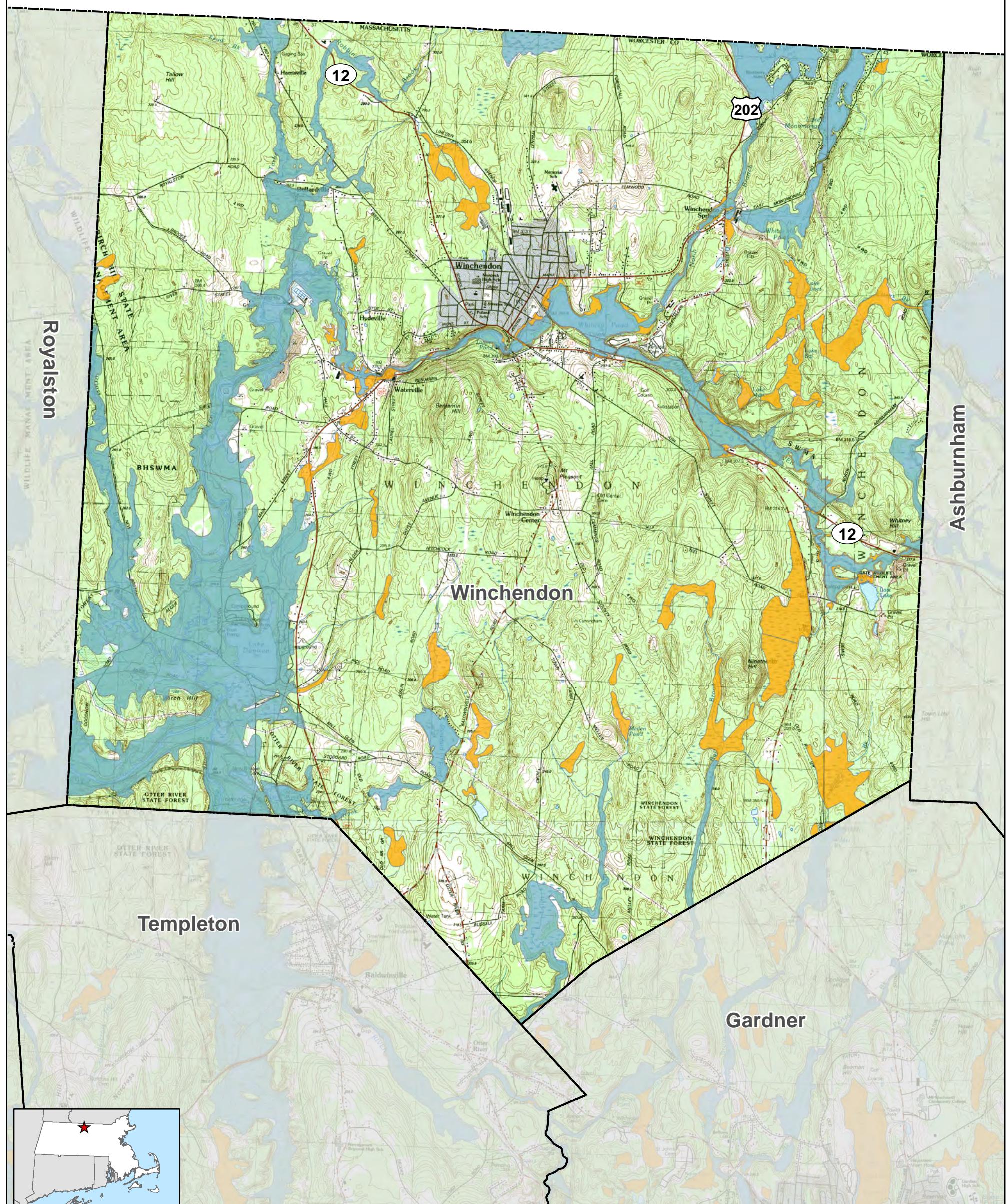
- DEP Approved Wellhead Protection Area (Zone II)
- DEP Interim Wellhead Protection Area (IWPA)
- Non Potential Drinking Water Source Area - High Yield
- Non Potential Drinking Water Source Area - Medium Yield
- Major Drainage Basin
- Rivers & Streams

- Potentially Productive Medium Yield Aquifer
- Potentially Productive High Yield Aquifer
- Lake, Pond, Stream or other Fresh Water Feature
- Wetlands L&P
- Land Use Wetlands
- Parcel Boundary

1:48,000

0 4,000 8,000 Feet

New Hampshire



4.4 Vegetation

Winchendon's predominant vegetation is characterized by mixed hardwood-softwood forest. The forested areas are second growth stands because of agricultural and lumbering activities in the region. Where softwood stands are dominant, vegetation is primarily white and red pine. Many of these stands are the result of reforestation efforts on state-owned lands. The mixed stands include beech, oak, maple, white birch, white pine, spruce, and hemlock.

The streams and rivers often have sandy flats along their banks which support pine woods that are dominated by white pine with occasional red pine and red oak. Younger communities on these sites are generally composed of hardwood species such as aspen and birch. Occasionally hemlock, yellow birch, and beech are found in the flats which typify the original northern hardwood forest type found on these sites.

The upland areas of the region support coniferous species, such as hemlock, on the moist sites. On the drier sites, hardwood communities, including oak, maple, and birch, dominate the landscape.

Understory vegetation includes mountain laurel, high bush blueberry and some rhododendron. In the Birch Hill Wildlife Management Area specifically, management practices have transformed the flora from mature stands of hardwood and pine to meadows, fields, and brush, greatly enhancing the diversity of wildlife populations.

Within town limits there is much tree cover, and the landscape is fairly evenly forested. The only marked trails through these woods, however, are the ones at Lake Denison Recreation Area and Birch Hill Wildlife Management Area, the Winchendon School's cross country running and cross country ski trail, trails at the New England Wild Flower Society's Arbutus Sanctuary and the Fern Glenn Trail at the Nineteenth Hill Wildlife Conservation Easement. Although a private institution, the Winchendon School allows the community to enjoy its cross country trail.

According to the Massachusetts Natural Heritage and Endangered Species Program (NHESP), there are 19 rare species that have been observed in Winchendon. These species and their designation under the Massachusetts Endangered Species Act (MESA) are listed in Table 4-2. In a letter dated September 21, 1998, Cindy Campbell, Environmental Review Assistant of the Natural Heritage & Endangered Species Program notes:

The vegetation of Winchendon reflects the cool, wet conditions that prevail in northern Worcester County. The plant communities are typical of more northern areas than are found in much of Massachusetts. There are some very good examples of cool wetland communities including bogs, cold conifer forests, and mixed conifer hardwood forests. Targeting areas with good examples of these types of natural communities for protection will help maintain the biodiversity of the town and state....Management and monitoring of conservation lands become important as acquisition and protection are accomplished...We strongly recommend monitoring conservation land, and removing non-native species before they become a problem and impact native species.

TABLE 4-2
Rare and Endangered Species in Winchendon

Taxonomic Group	Scientific Name	Common Name	MESA Status*	Most Recent Observation
Vascular Plant	<i>Amelanchier bartramiana</i>	Bartram's Shadbush	T	2014
Vascular Plant	<i>Arceuthobium pusillum</i>	Dwarf Mistletoe	SC	2009
Vascular Plant	<i>Calystegia spithamea</i>	Low Bindweed	E	2007
Vascular Plant	<i>Lycopodiella alopecuroides</i>	Foxtail Clubmoss	E	2000
Vascular Plant	<i>Ranunculus pensylvanicus</i>	Bristly Buttercup	SC	2005
Vascular Plant	<i>Viola adunca</i>	Sand Violet	SC	2006
Bird	<i>Ammodramus henslowii</i>	Henslow's Sparrow	E	1888
Bird	<i>Ammodramus savannarum</i>	Grasshopper Sparrow	T	2009
Bird	<i>Asio otus</i>	Long-eared Owl	SC	2009
Bird	<i>Bartramia longicauda</i>	Upland Sandpiper	E	Historic
Bird	<i>Botaurus lentiginosus</i>	American Bittern	E	2009
Bird	<i>Gavia immer</i>	Common Loon	SC	1889
Bird	<i>Haliaeetus leucocephalus</i>	Bald Eagle	T	1887
Beetle	<i>Cicindela purpurea</i>	Cow Path Tiger Beetle	SC	1915
Reptile	<i>Emydoidea blandingii</i>	Blanding's Turtle	T	2005
Reptile	<i>Glyptemys insculpta</i>	Wood Turtle	SC	2007
Butterfly/Moth	<i>Callophrys hesseli</i>	Hessel's Hairstreak	SC	2012
Dragonfly/Damselfly	<i>Ophiogomphus aspersus</i>	Brook Snaketail	SC	2004
Dragonfly/Damselfly	<i>Somatochlora elongata</i>	Ski-tipped Emerald	SC	2005

* SC = Species of Special Concern; T = Threatened; E = Endangered

Source: NHESP Town Species Viewer <http://www.mass.gov/eea/scripts/dfg/species-viewer.html>

An important reference available to the Town as preservation and management efforts proceed is the *Massachusetts Natural Heritage Atlas* which identified Estimated Habitats of Rare, State-listed Wetlands Wildlife and Certified Vernal Pools and Priority Habitat of Rare Species. Regulations under MESA were last revised in October 2010, and provide for a review process with NHESP for projects proposed in mapped Priority Habitat areas. These regulations will work to further protect rare and endangered species habitats.

4.5 Fisheries and Wildlife

Winchendon has a rich and diverse wildlife population. Many common mammals, birds, amphibians, reptiles, fish, and insects of central Massachusetts are found in the wooded areas and along the lakes, rivers, and streams. These include: beaver, black bear, moose, river otter, bobcat, fox, turkey, muskrat, raccoon, kingfisher, deer, rabbit, grouse, woodcock, pheasant, and many species of duck and fish. The Division of Fisheries and Wildlife stocks the Millers River, Tarbell Brook, Lake Dennison and Priest Brook and other tributaries with trout. Birch Hill Management Area is intensively managed for the recreational enjoyment of wildlife including bird watching, nature studies, photography,

hunting, and fishing. The river, streams, and water bodies in Winchendon provide corridors for wildlife migrations for effective population dispersal and replenishment.

In the above-referenced letter from Cindy Campbell of the NHESP, she observed that:

Winchendon contains a great deal of appropriate native biodiversity within its varied topography and provides important habitat for many common species as well as the rare species discussed above. Vernal pools provide critical habitat for some specialized species, and indicate the likely existence of others (and since hundreds of vernal pools have been identified and certified in a nearby town, the entire area appears to be rich in this wetland habitat). Protecting additional area around estimated habitats is one way of improving wildlife populations: size and continuity of open space is particularly important for supporting wildlife populations. Preventing habitat fragmentation is vital in protecting the ecosystem.

NHESP has also certified eleven vernal pools within the Town. Vernal pools are special habitat areas, which certain species rely on for their survival. Vernal pools are located off Teel Road, Hithcock Road, Mill Glen Road, Alger Street, and around Lake Monomonac. They are protected through the Conservation Commission's authority and associated state and local regulations.

NHESP, through the "*BioMap2 Conserving the Biodiversity of Massachusetts in a Changing World*" produced in 2012,¹⁰ has mapped areas of Winchendon as BioMap Core Habitats in the Worcester Plateau Ecoregion. Core Habitats are "areas necessary to promote the long-term persistence of rare species, other Species of Special Concern, exemplary natural communities, and intact ecosystems." Critical Natural Landscapes are intact landscapes "that are better able to support ecological processes and disturbance regimes, and a wide array of species and habitats over long time frames." Core Habitats and Critical Natural Landscapes include much of the undeveloped areas along the western boundary, northeastern corner of Town and the southeastern corner of Town. A brief summary of the Core Habitats and Critical Natural Landscapes follows:

- Core Habitat
 - 4 Exemplary or Priority Natural Community totaling 6,695 acres
 - 15 Wetland Cores
 - 5 Aquatic Cores
 - 12 Species of Conservation Concern Cores
 - 3 birds, 1 reptile, 1 amphibian, 3 insects, 1 mussel, 5 plants
- Critical Natural Landscape
 - 4 Landscape Blocks totaling 3,902 acres
 - 14 Wetland Core Buffers
 - 6 Aquatic Core Buffers

¹⁰ Massachusetts Department of Fish & Game, Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program and The Nature Conservancy's Massachusetts Program, *BioMap2 Conserving the Biodiversity in a Changing World, Winchendon*, 2012,.

4.6 Scenic Resources and Unique Environments

4.6.1 Scenic Landscapes

In a 1981 assessment, the Department of Conservation and Recreation (DCR, then known as the Department of Environmental Management) identified no distinctive landscapes in Winchendon¹¹. In 2006, DCR worked with the Freedom's Way Heritage Commission to identify important heritage landscapes in Town. The Heritage Landscape Inventory program focuses on identifying and documenting landscapes that are vital to a community's history, character, and quality of life, as well as providing communities with strategies for preserving heritage landscapes. These landscapes can range from cemeteries, farms, and formal gardens, to industrial complexes, mill sites, and village centers. The Town of Winchendon Freedom's Way Heritage Committee met on March 9, 2006, and identified approximately 80 areas and sites of interest, many of which are identified on Figure 3, Unique Landscape Features. The areas and sites of interest included agricultural, archaeological, burial grounds and cemeteries, civic, commercial, industrial, institutional, open space and parks, residential, transportation, and water bodies.

A Reconnaissance Report was completed as a part of the Massachusetts Heritage Landscape Inventory program. It was the culmination of the Committee meeting, and outlined eight priority heritage landscapes in Town, as well as recommendations to preserve them. The priority landscapes are Captain's Farm and View, Day House, Fairbanks House and Joseph's Variety Store Streetscape, Millers River, Murdock Farm, Old Centre, Sanborn Mill, and Whitney Pond and Dam.¹²

4.6.2 Major Characteristic or Unusual Geologic Features

Noteworthy geologic features in Winchendon include Mt. Pleasant, Birch Hill, and King Philip's Rock. Mt. Pleasant and Birch Hill are the sites of Winchendon's two early settlements: Old Centre and New Boston. King Philip's Rock is unique because of its association with the area's pre-Columbian past.

4.6.3 Cultural, Archaeological and Historic Areas

Cultural and historic resources include Old Centre, the Militia Training Ground, the Old Centre Cemetery, Spring Village, Lake Denison Recreational Area, Veterans Park, the Toy Town Visitors' Center, Old Murdock School, Town Hall, Front Street, the North Central Pathway, Converse Gardens, the Medical Center Fireplace, Winchendon School Hiking and Ski Trail, Benjamin Hill Trail, and Poland School. Winchendon has six documented ancient Native American sites dating back to the Late Woodland Period (1,000-450 B.P.) and Contact Period (1500-1620) and 24 documented historic archaeological sites.

¹¹ Massachusetts Department of Environmental Management, *The Massachusetts Landscape Inventory*, 1981, Pub.# 16,666-270-25-5-91-C.R., pg. 118.

¹² Massachusetts Department of Conservation and Recreation and Freedom's Way Heritage Association, *Winchendon Reconnaissance Report Freedom's Way Landscape Inventory Massachusetts Heritage Landscape Inventory Program*, June 2006.

4.6.4 Areas of Critical Environmental Concern

At present there are no known listed or proposed areas of critical environmental concern (ACECs) in Winchendon.

4.7 Environmental Challenges

4.7.1 Hazardous Waste Sites

As of January 16, 2015, there are 71 sites in Winchendon where spills or other releases of petroleum products or hazardous materials have been listed with the Massachusetts Department of Environmental Protection¹³. Of the 71 total sites, a Response Action Outcome (RAO) has been issued for 60 sites. An RAO statement indicates that response actions and cleanup activities have achieved a level of "no significant risk" or that the site does not present a "substantial hazard" as defined by the Massachusetts Contingency Plan. The sites are scattered in the more developed parts of Town and along the major roadway networks. Typical substances involved are oil and hazardous material. There is one closed site which has an Activity Use Limitation (AUL): Sure Oil Old Colony No. 6 (RTN 2-0000217) at 230 West Central Street.

As the first call agency, Winchendon's Fire Department gets involved with the issue of hazardous spills at the front end when the urgent need is to capture and contain the problem. Most of local fire fighters have had hazardous materials training to the first responder level and operational level. Some of the senior officers' training has gone on to the mitigation level, although they are not hazardous materials technicians. Recognizing their limitations as first responders, local fire fighters concentrate on isolating, protecting, evacuating, and containing. Then they call in support. The Winchendon Fire Department approaches local mitigation very proactively and immediately involves the district's "Haz Mat" truck. The Department also has regional supervisory resources available through the Fire Marshall's Office. Standard local practice is to address hazardous release problems as they occur.

4.7.2 Landfills

The Town's landfill was closed and capped in 1999 in accordance with plans submitted to the Department of Environmental Protection under the Solid Waste Regulations. Environmental monitoring is ongoing as part of the closure requirements. The landfill is closed and has not accepted any waste since that time. The Town created a transfer station that became operational as of November 1, 1999 at the site of the former landfill. Mandatory recycling was commenced at that point.

4.7.3 Erosion

The most frequent type of development in Winchendon is residential, and most orders of conditions for individual house lots call for the addition of top soil, seeding, and mulching to immediately stabilize slopes in order to avoid erosion.

¹³ Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup, Waste Site/Reportable Releases Look Up website, www.mass.gov/dep/cleanup/sites/report.htm (<http://public.dep.state.ma.us/SearchableSites2/Search.aspx>), current as of January 13, 2015.

The Town has developed a Wetlands Protection Bylaw and an LID Bylaw that help address stormwater management in new developments.

4.7.4 Chronic Flooding

Winchendon is not troubled by chronic flooding as frequently as it is by seasonal high water tables that interfere with on-site septic disposal systems. Similarly, high water tables contribute to the inflow/infiltration problems addressed by recent improvements to the sewer system.

The Town Center is the area of Winchendon that has experienced the most recent problems relating to flooding. Periodically sewer surcharging occurs in the business area. Recently severe thunderstorms have precipitated serious but brief flooding in the downtown area. Materials have been washed into businesses and the cellars of residences. The pattern of these occurrences has been for water to overflow briefly, and then be gone by the next day.

The Town is enforcing the provision of the Massachusetts Wetlands Act that requires the replacement of flood plain volume to compensate for any loss created by building in the flood plain. Consequently, Winchendon is experiencing no new net loss of flood plain. Flood insurance regulations and reviews related to the sale of property add to the sensitivity to the problems created by building in flood plains.

4.7.5 Sedimentation

Avoiding sedimentation is one of the main considerations of the Conservation Commission during its review processes. Mitigation measures to avoid erosion and sedimentation are a regular component of Orders of Conditions.

4.7.6 Development Impact

New development in Winchendon is mainly residential, where the issue of on-site septic systems poses the largest potential cumulative impact upon natural resource systems. Title 5 regulations provide the requirements for siting and design of new septic systems. Much of the land in Winchendon does perc despite a seasonably high water table. As a consequence the Town frequently sees the installation of septic systems with mounded leach fields, which required importing significant amounts of appropriate fill to allow mounding systems of one to three feet.

Winchendon remains an affordable place to live, and much of the residential development continues to be on ANR lots. As more residential development occurs along the edges of Winchendon's outlying roads, the community experiences a steady loss of the town's rural scenic character.

4.7.7 Ground and Surface Water Pollution: Point and Non-Point

Existing industrial buildings are generally located in the downtown area where they are served by sewer. Winchendon's ground and surface water pollution problems arise from past residential construction. For a relatively small town with a relatively small population, Winchendon has seen a large number of septic system repairs resulting from the new Title 5 septic system inspections in conjunction with the selling of homes. Problems with septic system failure can be traced back prior to implementation of Title 5. In many cases the high groundwater level was not correctly established. Other systems exhibit problems of inferior materials. Winchendon is getting this situation under control through the

combination of inflow and infiltration (I&I) improvements and Title 5 enforcement for new construction and resale of houses.

In the late 1990s, Winchendon received and managed a \$200,000 Betterment Program of low (5%) interest loans to assist property owners in resolving waste water problems on their properties. The Town had specified its priority areas to be along the Millers River, and also the Maple Street/Route 202 area in Winchendon Springs. The Health Department continues to looks into funding sources to address septic-related issues.

Around Lake Monomonac there are difficulties with meeting the distance requirements between private wells and septic systems. It is very difficult to address these problems, because they arise from a long history of lots that are too small, difficult soils, and challenging topography. The Board of Health tries to be fair to all parties, and they have allowed local upgrade requirements (of septic systems being within 50 to 100 feet of a well) but only after having checked for a number of substances in the well to be sure that there are no negative impacts. Lake Monomonac itself has been minimally impacted by the nearby development. Since there is no public beach on the Lake, the water quality is not tested weekly, but periodic testing indicates good background quality.



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Section 5

Inventory of Lands of Conservation and Recreation Interest

This section provides information about Winchendon's current open space. The inventory matrices and maps include parks, forests, wildlife management areas, conservation lands, and significant other open space parcels drawn from data provided by the Town and MassGIS. As mentioned in Section 1, protection of open space and recreation is an integral part of Winchendon's planning efforts, as it essential to Winchendon's quality of life, protection of biodiversity, prevention of habitat fragmentation, protection of future water supplies and to help prevent global warming. This inventory guides Winchendon by identifying particular lands of recreational and open space interest for future needs.

The Open Space inventory includes protected parcels owned by local, state and federal government entities as well as lands under non-profit and private ownership. Unprotected municipal properties and Chapter lands are also noted in the tables and figures in this section.

Definition of Open Space

In this plan, the term "open space" was defined as all parks, forests, trails, playgrounds, and fields of significant size owned and managed for recreation, agriculture or conservation uses.

5.1 Protected Parcels

Protected parcels are those parcels that are considered permanently protected from development. Protected lands include land owned by the federal and state government specifically for conservation and open space purposes, lands owned by the Town and acquired for conservation and recreation purposes and held by the Town Conservation Commission or Recreation Commission, as well as private land owned by a conservation organization or that has been permanently protected through Conservation Restrictions (CRs), Agricultural Preservation Restrictions (APRs), or Wildlife Conservation Easements (WCEs). Since the 2007 OSRP, hundreds of acres have been permanently protected through a combination of state acquisitions, CRs, APRs, and WCEs.

The Commonwealth of Massachusetts also owns and maintains recreational and open space lands in Winchendon. These parcels are primarily associated with the Birch Hill Wildlife Management Area, the Otter River State Forest, Lake Denison Recreation Area, the Winchendon State Forest and the Wildlife Management Area. These resources are managed by the Department of Conservation and Recreation and the Division of Fisheries and Wildlife and are considered to be permanently protected.

The federal government, under the U.S. Army Corps of Engineers, also holds significant conservation and recreation areas in Town associated with the Lake Denison Recreation Area. These lands were established as part of flood control efforts and are also considered to be permanently protected.

Table 5-1 and Figure 7 include the permanently protection open space lands in Winchendon.

TABLE 5-1

Protected Open Space Lands of Conservation and Recreation Interest

Site Name	Owner	Owner Type	Grants	Public Access	Size (Acres)
Lake Dennison Recreation Area	Army Corps of Engineers	Public (Federal)		Y	2546.6
Massachusetts Veterans' Memorial Cemetery	Commonwealth of MA	Public (State)		Y	105.3
Otter River State Forest	DCR - Division of State Parks and Recreation	Public (State)		Y	371.8
Winchendon State Forest	DCR - Division of State Parks and Recreation	Public (State)		Y	171.8
Birch Hill WMA	Department of Fish and Game	Public (State)		Y	1623.7
Winchendon Springs WMA	Department of Fish and Game	Public (State)		Y	843.2
Monument Park	Town of Winchendon	Public (Municipal)		Y	3.4
Nineteenth Hill WCE	Town of Winchendon	Public (Municipal)		Y	493.9
North Central Pathway	Town of Winchendon	Public (Municipal)	USH	Y	1.3
Old Centre Common Conservation Commission Parcel (Map 3C1/11)	Town of Winchendon	Public (Municipal)		Y	1.0
Conservation Commission Parcel (Map 12/48)	Town of Winchendon	Public (Municipal)		Y	0.4
Ashburnham State Forest	Town of Ashburnham	Public (Municipal)	FLA, LWCF	Y	10.5
Gardner Water Supply	City of Gardner	Public (Municipal)		N	61.0
Benjamin Hill WCE	Mount Grace Land Conservation Trust	Private		Y	93.5
Nineteenth Hill WCE	Mount Grace Land Conservation Trust	Private		Y	127.3
Arbutus Sanctuary / New England Wildflower Reservation	New England Wildflower Society	Private		Y	84.7
New England Forestry Foundation	New England Forestry Foundation	Private		Y	121.3
Wendall P. Clark Memorial	Clark Memorial Foundation	Private		Limited	8.7
Murdock Farm Dairy APR	Girouard Family	Private		N	121.3
Murdock Farm CR	Girouard Family	Private		N	73.0
Girouard CR	Girouard Family	Private		N	35.0
Marchmont CR	Marchmont RT	Private		Limited	377.7

Site Name	Owner	Owner Type	Grants	Public Access	Size (Acres)
Noonday Farm CR	Noonday Farm Inc.	Private		N	11.5
Watsons Lot and Captains Farm CR	Eric & Joseph White	Private		N	80.0
Total: 7,369.8					

Grants: FLA - Forest Legacy Area; LWCF - Land and Water Conservation Fund; SH - State Self-help (now LAND - Local Acquisitions for Natural Diversity); USH - Urban Self-help (now PARC - Parkland Acquisitions and Renovations for Communities)

Source: MassGIS and Town

5.2 Unprotected Parcels

The following figures list properties whose current use and appearance contribute to Winchendon's rural character and recreation opportunities, but whose uses or ownership could change according to the needs of their owners.

Municipal Lands

A number of municipal properties, including the Town Forest, are held by the Town and are considered by the public as protected for open space and recreation benefits, but are not permanently protected. These properties are summarized in Section 5.2 and Figure 8. One goal of this OSRP is to protect newly acquired town lands by placing them under the control of the Conservation Commission. By acquiring properties for conservation or recreational purposes under control of the Conservation or Recreation Commissions, the parcels then receive added protection under Article 97 of the Constitution of the Commonwealth of Massachusetts, which requires significant scrutiny to convert conservation land to other inconsistent uses.

TABLE 5-2

Municipal – Unprotected Properties

Map ID	Size (Acres)	Address	Public Access	Current Use
1/39	16.55	North Royalston Rd.		Conservation
2/135	0.92	Off Elmwood Rd.		
2/139	0.02	School St.		
2/77	54.24	Lincoln Ave.		
3D-1/40	0.11	Maple Place		Undeveloped
4/25	22.14	Off River St.	Walking Path	Undeveloped
4/26	13.3	Off River St.	Walking Path	Undeveloped
4/27	23.8	Off River St.	Walking Path	Undeveloped
4/28	3.02	Off River St.	Walking Path	Undeveloped
4/29	5.79	River St.	Walking Path	Undeveloped
4/33	53.3	637 River St		
4/8	0.58	Brooks Rd.	Brooks Rd.	Undeveloped
4D4/1	1.65	Hale St		Undeveloped
5A2/109	0.56	Rear School St.		Undeveloped
5A2/21	0.98	Rear Pearl St.		Undeveloped

Map ID	Size (Acres)	Address	Public Access	Current Use
5A2/24	1.89	Pearl St.		Undeveloped
5A3/163	1.33	405 Central St.		
5A3/185	6.02	Webster St.		Undeveloped
5A3/359	0	Jackson Ave.		
5B1/35	3.2	Hyde St.		
5B2/270	1.98	Front St.	Front St.	
5B2/271	0.58	Front St.	Front St.	
5B2/272	0.95	Front St.	Front St.	
5B2/283	0.41	50 Pleasant St.		
5B2/284	1.57	Pleasant St.	Pleasant St. & Front St.	
5B2/289	0.13	Front St.		
5B2/290	1.64	Front St.		
5B2/295	0.53	109 Front St.	Front St.	Town Hall
5B2/30	7	52 Murdock Ave.		
5B2/31	0.12	Grove St.	Grove St.	Municipal
5B2/321	0.06	Front St.	Front St.	Town Horse
5B3/19	0.02	Central St.		No designated use
5B3/93	0.45	Off Summer Dr.		Undeveloped
5B3/99	0.03	Off Summer Dr.		Undeveloped
5C3/32	0.26	Spring Pl.		Undeveloped
5C4/21	0.36	Spring St.		Undeveloped
6/19	0.17	West Shore Dr.		Undeveloped
6/46	0.65	29 West Shore Dr.		
6/67	53.26	North Ashburnham Rd.		
6/68	33.17	North Ashburnham Rd.		
6/73	28.4	Spring St.		Undeveloped
6/76	3.5	Spring St.		
6/80	1.5	North Ashburnham Rd.		Undeveloped
6/82	34.79	North Ashburnham Rd.		Undeveloped
7A4/46	0.28	290 Main St		Undeveloped
8B3/5	1.49	Old Center		Common
9/126	9.01	Teel Rd.		
9/352	0.51	Toy Town Lane		
9/363	35	Off Gardner Rd.		
9/369	1.7	Gardner Rd.		
9/61	2.6	54 Gardner Rd.		
11/39	56	Town Farm Rd.	Town Farm Rd.	Undeveloped
11/99	50	Town Farm Rd.	Town Farm Rd.	Undeveloped
12/80	6.1	Off Gardner Rd.		
M14/111	0.15	Lakeview Dr.		

Map ID	Size (Acres)	Address	Public Access	Current Use
M14/113	0.3	Lakeview Dr.		
M15/59	0.17	Beachview Dr.		
M16/11	1.2	Lakeview Dr.		
M17/10	0.3	Shady Glen Tr.		Undeveloped
M17/11	0.33	Shady Glen Tr.		Undeveloped
M17/12	0.33	Shady Glen Tr.		Undeveloped
M17/13	0.28	Shady Glen Tr.		
M17/14	0.32	Shady Glen Tr.		
M17/3	0.29	Lakeview Dr.		Undeveloped
M17/43	0.26	Lakeview Dr.		
M17/46	0.32	Lakeview Dr.		
M9/73	0.75	West Monomonac Rd.		

Total Acres: 548.62

Source: MassGIS and Town

Chapter Lands

Chapter 61, 61A and 61B provide an option for tax abatements for private properties that are used for forestry, agriculture or recreation uses. These programs provide the Town with the right of first refusal to acquire the property should the owner seek to sell it. These lands provide open space values, but could be developed if the land owner is ready to sell the property and the Town does not choose to exercise its right to acquire. Chapter lands are described below and are depicted on Figure 9.

Chapter 61 forest lands require a minimum of ten contiguous acres under a minimum 10-year management plan certified by the State Forester. Properties under the Chapter are granted tax abatements for remaining under forestry use. The Town has the right of first refusal should the properties be put on the market for another use. Following is a list of Chapter 61 parcels in Winchendon.

TABLE 5-3

Parcels Under Chapter 61

Property Owner	Map ID	Size (Acres)	Access	Zoning
Bingham, David R. & Donald E.	8A-1/15	24.86	Laurel St.	R80
Boucher, Craig S.	1/44	48.76	North Royalston Rd.	R80
Boucher, Craig S.	4/18	18	Rear Brooks Rd.	R80
Fletcher, Ernest P. Jr.	8/33	5.4	Hall Rd.	R80
Galat, David S. & Karen Jane	8/55	56.2	Rear Town Farm Rd.	
Galat, Rebecca J.	11/101	28	Mellen Rd.	R80
Galat, Richard E.	11/102	13.5	Mellen Rd.	R80
Gendron, Jeannie A.	13/28	15.99	Russell Farm Rd.	R80
Greenberg, Blu	3/4	112.85	Rear North Ashburnham Rd.	R80
Gustavson, Leif E.	11/127	12.87	Baldwinville Rd.	R80
Hallquist, Laurie A.	1/54	59.22	Bosworth Rd.	R80
Hill, James G.	3a-1/1	55.16	Crosby Rd.	R80
Jonas Damon Realty Co.	2/93	7.14	School St.	C2
Jonas Damon Realty Co.	1/25	6.73	School St.	C2
Jonas Damon Realty Co.	2/1	147.7	School St.	C2
Klockars, William E.	8/48	36	Teel Rd.	R80
Kostick, Glenn	2/15	74.05	Rear Lincoln Ave.	I
Kostick, Glenn C.	2/65	42.59	Lincoln Ave.	I
Kostick, Glenn C.	2/74	1.18	Lincoln Ave.	I
Kostick, Glenn C.	2/12	83.44	Rear Robbins Rd.	I
Lafortune, Diane J.	13/257	16.85	Russell Farm Rd.	R80
Mount Grace Land Conservation	5C2/36	9.2	Rear River St.	R80
Mroz, Elaine P.	12/50	47.6	Gardner Rd.	C1
New England Power Company	11/14	27	Joslin Rd	PD
New England Power Company	11/152	7.19	Joslin Rd.	R80
Pearson, J.M. & Miller, J.C. Jr.	7/118	12.35	Baldwinville State Rd.	R80

Section 5 Inventory of Lands of Conservation and Recreation Interest

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Renaud, Gretchen J.	11/27	22.97	Town Farm Rd.	R80
Rice, Kendall D. Sr.	11/1	55.33	Rice Rd.	R80
Rice, Kendall D. Sr.	11/3	10.31	Rice Rd.	R80
Skey, Kevin M.	11/38	9.75	Mellen Rd.	R80
Skey, Kevin M.	11/100	4.2	Off Mellen Rd.	R80
St. Pierre, Roland J.	13/29	39.01	Mill Glen Rd.	R80
Winch Timberlands LLC	5D-4/7	87	Hall Rd	R80
Winch Timberlands LLC	12/4	88.9	Raymond Rd.	R80
Winchendon Forest LLC	12/14	38.3	Gardner Rd	C1
Winchendon Forest LLC	12/13	13.3	Gardner Rd.	C1
Winchendon Forest LLC	8A-3/8	68.5	Hall Rd	R80
Winchendon Forest LLC	9/26	203.58	North Ashburnham Rd.	R80
Winchendon Forest LLC	6/18	26	North Ashburnham Rd.	R80
Winchendon Forest LLC	6/33	36.6	North Ashburnham Rd.	R80
Winchendon Forest LLC	6/79	22.5	North Ashburnham Rd.	R80
Winchendon Forest LLC	6/88	199.3	North Ashburnham Rd.	R80
Winchendon Forest LLC	3/7	388	Off North Ashburnham Rd.	R80
Winchendon Forest LLC	6/10	22	Off North Ashburnham Rd.	R80
Winchendon Forest LLC	6/85	91.5	Off North Ashburnham Rd.	R80
Winchendon Forest LLC	12/56	53.6	Teel Rd.	R80/I
Winchendon Forest LLC	12/57	64.7	Teel Rd.	R80/I
Winchendon Forest LLC	12/58	19.52	Teel Rd.	R80
Wood, Jeffrey K.	11/202	65.04	112 Baldwinville Rd.	R80

Total Acres: 2,599.74

Source: MassGIS and Town

Chapter 61A agriculture lands require a minimum of five contiguous acres to be "actively devoted" to agriculture or horticultural use. To qualify as "actively devoted," a minimum of \$500 in gross sales income during the prior two year period is required. Properties under the Chapter 61A program are granted tax abatements for remaining in agricultural use. The Town has the right of first refusal should the properties be put on the market for another use. Following is a list of Chapter 61A parcels in Winchendon.

TABLE 5-4
Parcels Under Chapter 61A

Property Owner	Map ID	Size (Acres)	Access	Zoning
Byrne, James P.	1/173	15.07	Bosworth Rd.	R80
Byrne, James P.	1/7	38.8	Harrisville Rd.	R80
Byrne, James P.	1/8	7.32	Harrisville Rd.	R80
Charlie's Redhouse Farm, LLC	4/158	22.84	River St.	R80
Charlie's Redhouse Farm, LLC	4/77	28.00	River St.	R80
Cook, Ann Marie	10A-4/10	0.50	Rice & Alger Rds.	R80
Dokulh, Jason R.	11/21	5	Baldwinville Rd.	R80
Doody, Henry L.	8/67	3.5	Joslin Rd.	R80
Doody, Henry L.	8/68	68	Joslin Rd.	R80
Eglington, Glenn R.	8/156	2.27	Hall Rd.	
Girouard, K.J. & R.E.	2/27	4.21	Forristall Rd.	R80
Girouard, K.J. & R.E.	3B-1/1	5.13	Elmwood Rd.	
Parks, Martin A.	2/18	66.67	Central St.	R80
Jonas Damon Realty Co.	1/9	8.16	Harris Rd. & West St.	R80
Total Acres:		275.47		

Source: MassGIS and Town

Chapter 61B recreation lands require a minimum of five contiguous acres that is left wild and /or maintained for wildlife habitat or used for recreational purposes by the public or by private non-profit groups. Properties under Chapter 61B are granted tax abatements for remaining in this use. The Town has the right of first refusal should the properties be put on the market for another use. Following is a list of Chapter 61B parcels in Winchendon.

TABLE 5-5
Parcels Under Chapter 61B

Property Owner	Map ID	Size (Acres)	Access	Zoning
Harding, Karen L.	8/193	18	Teel Road	R80
Olson, Eric M. & Elaine V.	2/10	27	Rear Robbins Road	I
Renaud, Gretchen J.	8/87	7.4	Town Farm Rd.	R80
Total Acres:		52.4		

Source: MassGIS and Town

Table 5.6 summarizes the key parcels of conservation and recreational interests throughout the Town of Winchendon.

TABLE 5-6
Inventory of Lands of Conservation and Recreation Interest
Summary of Acres by Category

Inventory Category	Acreage	Percent of Total Inventoried Acres
Town-Owned	501.9	4.6%
State-Owned	3,115.8	28.7%
Federally-Owned	2,546.6	23.5%
Other Public, Private, & Non-Profit Properties	1,205.5	11.1%
Town-Owned – Unprotected	548.6	5.1%
Chapter 61 Parcels	2,599.7	24.0%
Chapter 61A Parcels	275.5	2.5%
Chapter 61B Parcels	52.4	0.5%
Total	10,846.0	100%

5.3 Implications

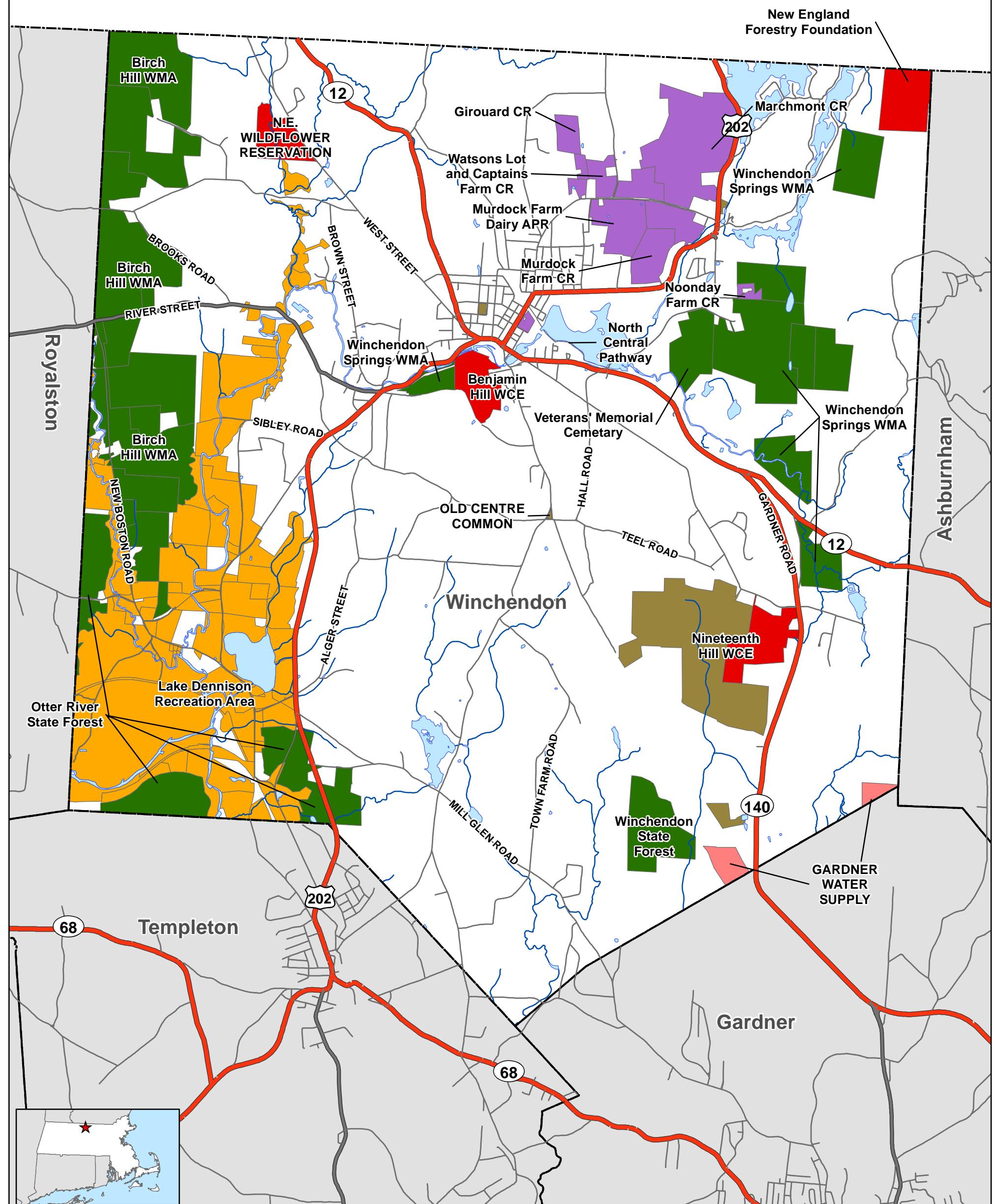
Approximately 20% of Winchendon's land mass is conserved through State or Federal ownership. As Table 5-6 shows, State and Federal holdings comprise approximately 52% of the acres included in the inventory of lands of conservation and recreation interest. The Federal lands and the great majority of the State lands are focused at the western edge of town around the Lake Denison Recreational Area, the Birch Hill Wildlife Management Area and Otter River State Forest. The remaining State holdings are found in the Winchendon Springs Wildlife Management Area along the Millers River and within the northeast corner of Town and the Winchendon State Forest in the southeast corner of Town. The Town's holdings comprise only approximately 4.6% of protected open space.

The acreage of land in Winchendon classified as Chapter 61, 61A, or 61B has decreased from approximately 25% of the overall land mass in 2007 to approximately 10%. This decrease is largely attributed to the permanent protection of several large Chapter parcels through acquisitions by the Town and State governments, and by the acquisition of

preservation restrictions. As Figure 9 shows, there are still a large number of Chapter lands distributed in large blocks throughout Winchendon. These lands comprise open fields and green forests that townspeople associate with Winchendon's rural environment. As property owners' needs change, and as the market for developable land strengthens, townspeople must be aware that large blocks of forests and fields could be placed on the market for development. In fact, some of these lands lie in areas that the town has planned for industrial or suburban residential development. There may be other lands that the community wishes to maintain as open space and/or recreational sites. Chapter lands provide a window of opportunity for the Town to exercise its right of first refusal to purchase property being removed from Chapter status. This window is brief, however, so the community needs to be clear about its priorities for acquisition of open lands and to be ready, including having funds or access to funds, to move quickly when opportunities arise.

Many recreational facilities enjoyed by townspeople are made available through Clark Memorial, the American Legion, and the Winchendon School. The generosity of these members of the community has enabled the Town of Winchendon to offer limited recreation facilities on municipal land. New municipal open space and recreation lands are anticipated as a result of the new Residential Development requirements in the zoning regulations, which encourage developers to construct denser subdivisions and set aside public lands. In addition, other organizations such as the Mount Grace Land Trust have acquired lands and have made them available for public access. The Arbutus Sanctuary, an 84 acre parcel located off of West Street and owned by the New England Wild Flower Society, Inc., provides opportunities for hiking and enjoying nature. These resources add to the open space and community character of the Winchendon.

New Hampshire



Legend

Legend	United States of America	City of Gardner	Public Surface Water Supply (PSWS)
	Commonwealth Of Massachusetts	Town of Winchendon	Lake, Pond, River or Impoundment (6)
	Private Owner	Non-Profit	Stream/Intermittent Stream

1:48,000

4,000 8,000 Feet

FIGURE 7 PROTECTED OPEN SPACE

May 2015

New Hampshire

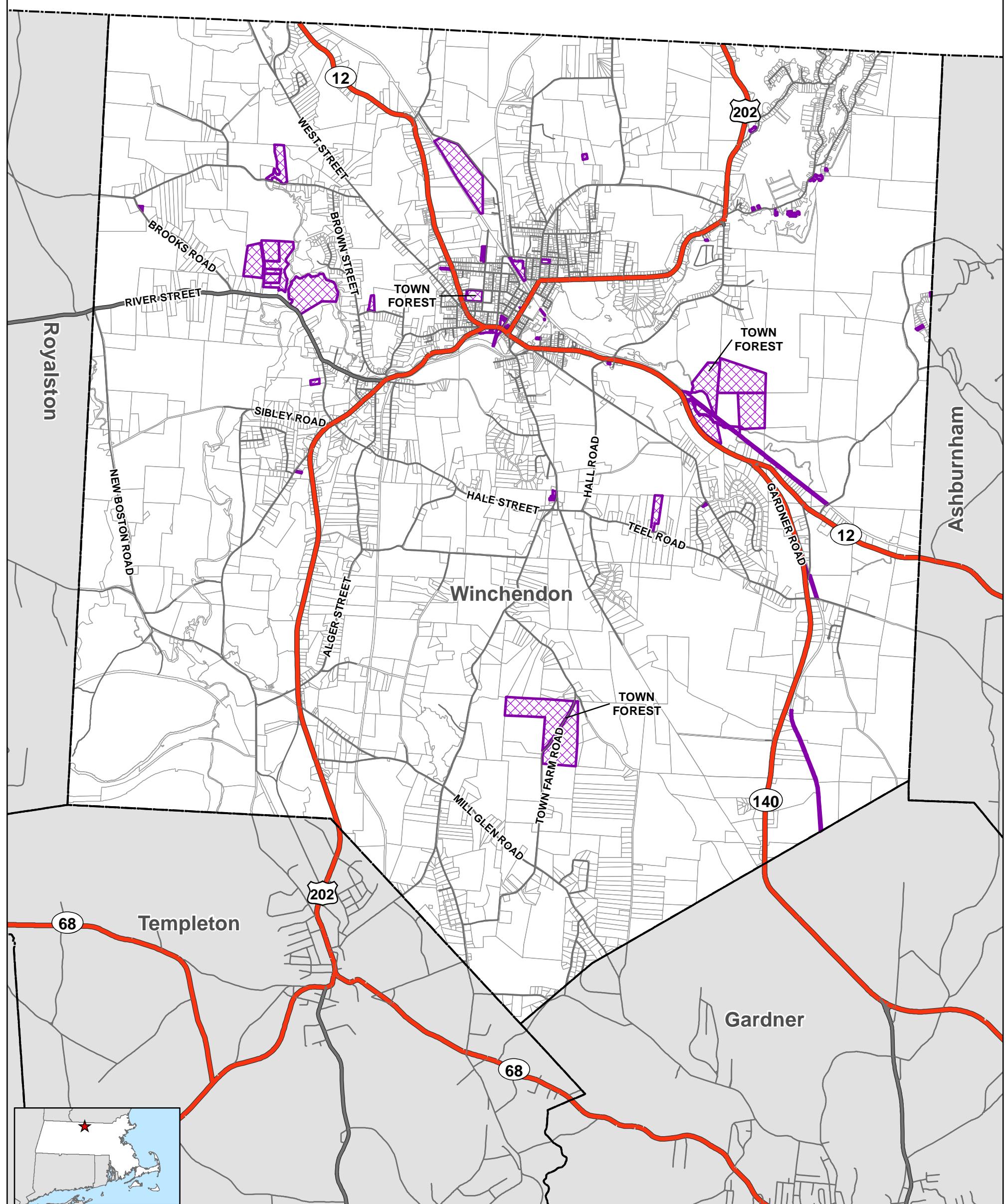
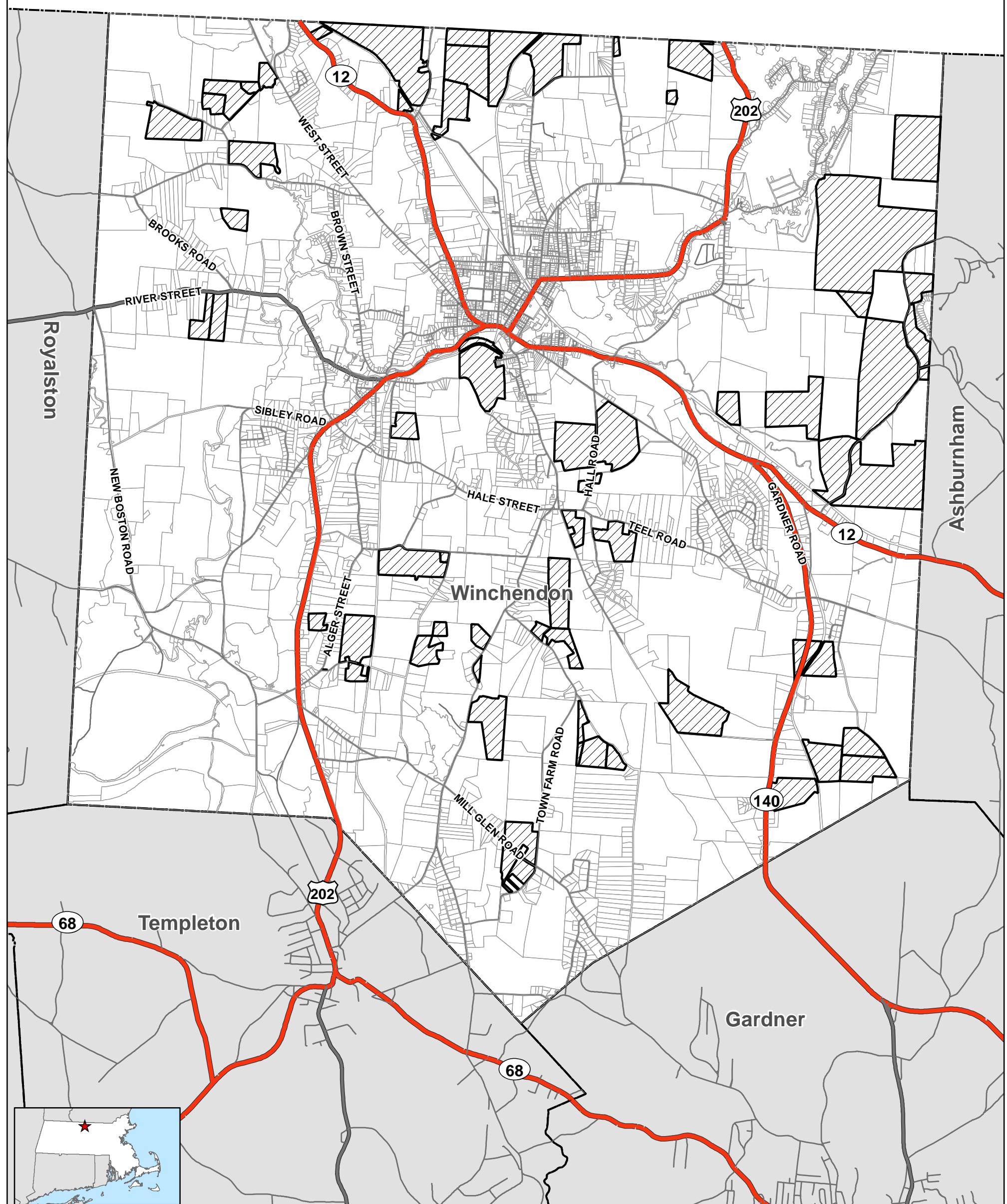


FIGURE 8
UNPROTECTED
MUNICIPAL OWNED LAND
 Town of Winchendon
 Open Space & Recreation Plan
 Winchendon, Massachusetts

May 2015

New Hampshire



Legend

- Chapter 61, 61A & 61B
- Parcel Boundary

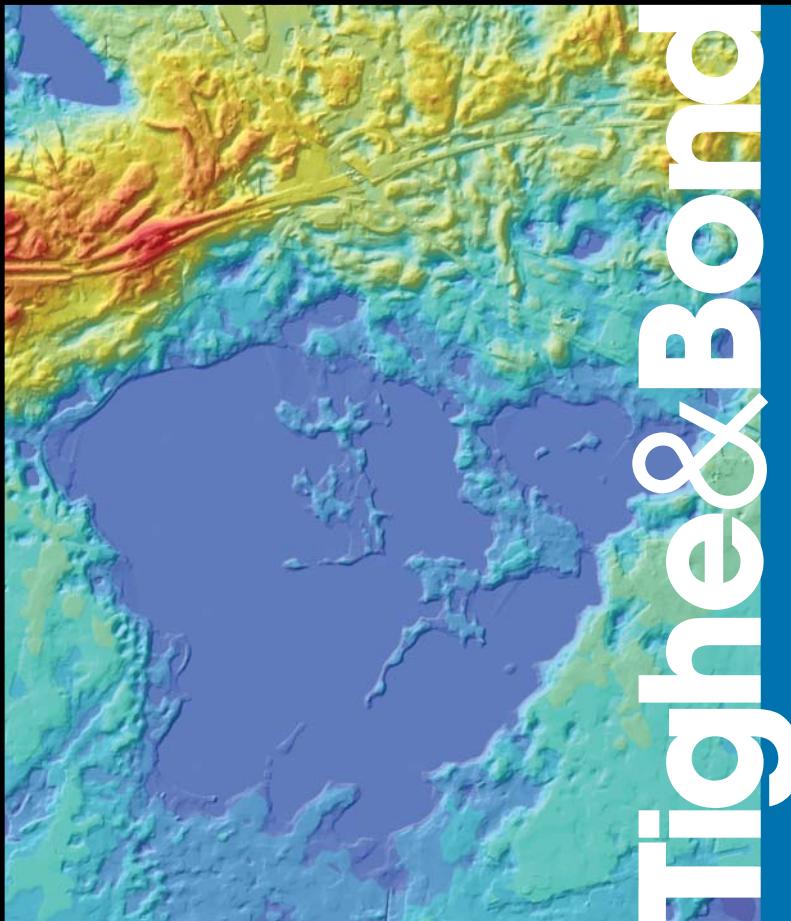
1:48,000

0 4,000 8,000 Feet

FIGURE 9
CHAPTER PROPERTIES

Town of Winchendon
Open Space & Recreation Plan
Winchendon, Massachusetts

May 2015



Tighe & Bond

Section 6

Community Vision

6.1 Description of Process

The OSRP Update project began with the Steering Committee reviewing the goals and objectives of the 2007 Plan. While the Committee found that progress had been made on a number of the objectives and others needed adjustment to take into account new information, Committee members felt that the overall goals still reflected the overall vision Community Vision related to Open Space and Recreation. These goals were confirmed and refined through the results of the Open Space Survey and the Visioning Forum.

At the April 28, 2015 Visioning Forum residents provided input on their vision for open space and recreation. Input from the Visioning Forum, Master Plan Survey, Open Space and Recreation Survey, and the OSRP Committee was consolidated into the following statement of Community Goals. Recommendations from these public forums are further reflected in Section 8 (Goals and Objectives) and Section 9 (Action Plan).

6.2 Statement of Open Space and Recreation Goals

After considering the characteristics and resources that make Winchendon a desirable place to live, work, and visit, and after discussing what residents want Winchendon to be like in the future, the community of Winchendon wishes to accomplish the following overarching goals through Winchendon's planning and actions relating to open space and recreation.

Goal One

Water resources have always been a major reason people have come to Winchendon. In precolonial times people came to fish, camp near drinking water, and to seek out the healing Yellow Spring. Later settlers also relied on water to drink, irrigate crops, provide fish, and meet household needs. Then the potential for water power spawned a flourishing industrial base that reshaped the community. Now the scenic qualities of Winchendon's water resources contribute to the quality of life and will be critical to a revitalized tourist base. Many households in town still rely on tapping clean groundwater with private wells.

For all these reasons, a major goal of Winchendon's open space and recreation planning is to continue to protect the quality and quantity of water resources, and to increase where appropriate the public's ability to gain access to and enjoy these resources. Specific areas of concern include:

- the quality of surface and subsurface resources for both enjoyment and drinking water
- wetlands
- increased recreation potential
- regulation of inappropriate land uses to avoid or mitigate loss of water quality.

Goal Two

Being a town comprised predominantly of mill villages clustered around streams and rivers, Winchendon has been able to take for granted the surrounding forested hills, open fields, and scenic views. With the bursts of suburban development since the 1980s, Winchendon Open Space and Recreation Plan

townspeople have begun to realize that open space resources can indeed be lost to development.

A second major goal of the community is to conserve open space resources, increase townspeople's and visitors' access to and enjoyment of them, and to connect them with recreation facilities. Specific areas of concern include:

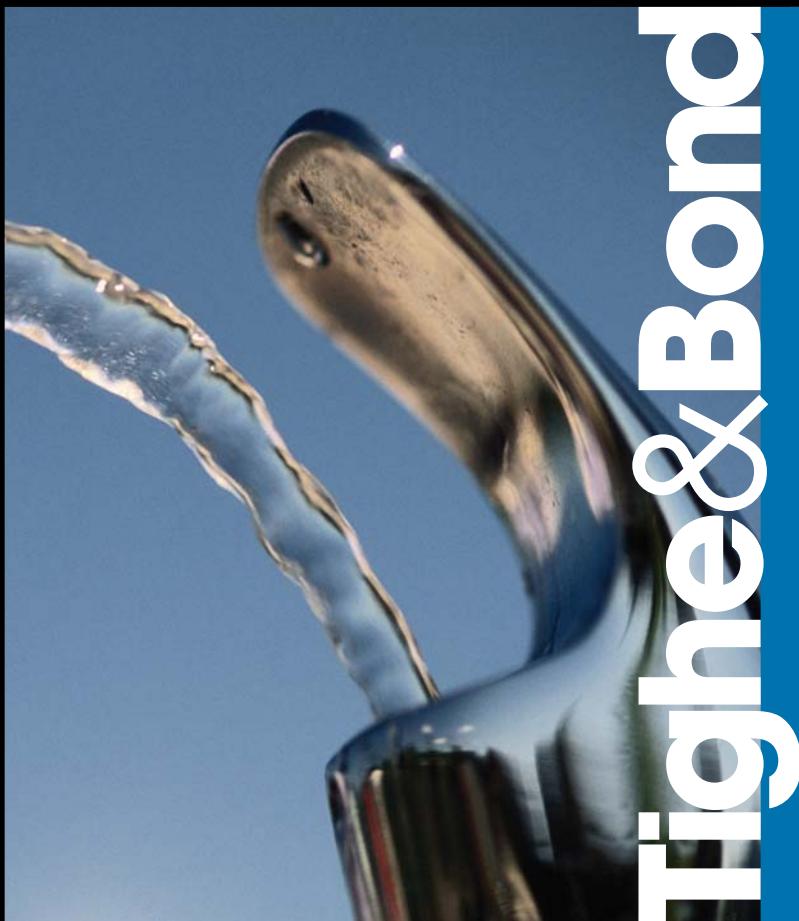
- Preservation of open spaces that especially contribute to Winchendon's character as a scenic historic town
- Developing a linked system of open spaces and recreation, integrating activities where appropriate
- Preserving wildlife habitat and rare plant habitats

Goal Three

Winchendon is a small New England town with a traditional form of government that relies on citizen volunteer officials. While the Town has in recent years increased the level of support staff, nevertheless townspeople are concerned about how the Town can manage and administer the implementation of their open space and recreation goals. In recent years Town Meeting has adopted a number of provisions for local regulations aimed to protect key resources; but whether and how to improve the Town's capacity for growth management is also a matter of concern.

Thus a third major goal addresses the improvement of Town programs and capacities. Issues to address include:

- maintain and improve municipal recreation facilities
- research funding sources and alternative, low-cost means for protection of environmentally sensitive areas
- expand the scope of Town recreational programs, facilities, and personnel
- expand agricultural uses and opportunities, including working farms, farmers markets and community farms



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Section 7

Analysis of Needs

Through the public process, Winchendon residents have identified the need to capitalize on Winchendon's open space and recreation resources to spur economic development by attracting tourists, businesses and the arts into Town. While many residents know key open space and recreational areas and resources, there is still an identified need to better mark and publicize the resources open to the public. Many resources exist in the vicinity of the downtown, and there is momentum is developing additional resources including: connection of the North Central Pathway to downtown resources; formalization of a path connecting Waterville, Converse Gardens and downtown; and acquisition and development of the Ingleside Parcel (currently owned by the Winchendon School). These open space and recreational resources could spur economic interest in Winchendon from rental (such as bike, canoe and kayak) operations, restaurants and small retail shops.

7.1 Summary of Resource Protection Needs

- Winchendon's most pressing concern relating to the protection of natural resources is continued efforts to protect and improve the water quality and quantity. This will involve a continued effort to resolve the problem of substandard or non-existent on-site septic disposal systems, with first priority going to areas in closest proximity to the Millers River, Lake Monomonac, and Whitney Pond. Next priority should be given to areas of failed or non-existent on-site septic disposal systems affecting other major water bodies in town.
- Closely related to this need is the continued effort to improve sewer and water systems as needed to avoid pollution into surface and ground water resources. Over time the community needs to work to extend the systems as needed to mitigate problems in other resource areas.
- A third set of efforts relating to water quality are those to prevent the release of hazardous wastes and to deal promptly and effectively with releases that occur.
- Protection and improvement of water quality and quantity will also contribute in the longer term toward the conservation of wildlife habitat and ecosystems. Conversely, the protection of large tracts of land for wildlife habitat and ecosystems will also contribute significantly to the protection of water quality and quantity.
- The Town also needs to continue efforts to achieve revegetation of former sand and gravel operations. Using the regulations already in effect, Town officials can specify and enforce extraction permit requirements for protection of natural resources during sand and gravel operations and revegetation as operations are completed.

7.2 Summary of Recreation Needs

- Capitalize and expand on the North Central Pathway. The Pathway opens the way for regional access to Winchendon's scenic resources, provide a major new recreation amenity for townspeople, and can spark an effort to extend a system of marked paths throughout the community. The current northern end of the North Central Pathway can be used as the hub to connect downtown Winchendon

to the recreational resources in outlying areas of Town and to connect north to New Hampshire resources. The top recreational resource areas that residents would support expending public funds on are trails and greenways, hiking trails and bike paths.

- Gaining public access to water resources is a major need of the community, one which will take years to accomplish. That access needs to be designed so as to avoid detracting from the quality and appearance of the resources. The Town will need to consider adequate parking, restroom facilities, sitting areas, and other services and amenities appropriate to each site. Townspeople put special priority on creating a town beach. A system of marked and maintained trails should be part of the access to water resources.
- Facilities for active recreation as needed to augment the facilities currently available and to keep pace with the growing population. There is need for a combination of recreation opportunities and programs for families with children and for seniors, beginning with improvements to what Winchendon already has. Especially pressing is the need for teens to have opportunities for active recreation other than organized sports, for example paved areas for biking, skate boarding, and roller blading.
- Creating recreational and agricultural opportunities in the downtown area.
- The inventory described in Section 5 shows how vulnerable to change is the rural landscape that is often taken for granted. There is a pressing need to prioritize lands for acquisition for recreation and conservation purposes, and for rural landscape preservation. Since the community cannot afford to buy all property that may be of particular concern, the effort needs to consider other strategies such as scenic easements and acquisition of development rights. Recently approved revisions to the zoning bylaws will also help protect the landscape.

Winchendon's recreational needs were also compared to identified regional needs. The Commonwealth's Executive Office of Energy and Environmental Affairs Division of Conservation Services spearheads the state's consideration of open space and outdoor recreation needs, policies, and programs. A major planning tool is the Statewide Comprehensive Outdoor Recreation Plan, called the SCORP. The most recent SCORP, entitled *Massachusetts Statewide Comprehensive Outdoor Recreation Plan 2012*, was published for the years 2012-2017¹⁴. The primary priorities for Central Massachusetts were related to water resources and trails and greenways. These are consistent with Winchendon's priorities for protection and access to water resources, protection of agricultural lands and development of trails and greenways. The SCORP describes that people in central Massachusetts would like there to be more trails, greenways, agricultural lands and wildlife conservation areas. Winchendon is fortunate to have the Otter River State Forest and Lake Denison Recreation Area so close by, but residents would still like to have more trails linking residential areas to local scenic areas. Winchendon's goals of greenway linkages and future extensions of the North Central Pathway address these concerns. Protection of agricultural lands is also of significant importance in Winchendon, as Chapter 61 lands are converted for development. Since the 2007 OSRP, Winchendon has made progress in protection of the agricultural lands through the APR program, but additional Chapter 61 lands exist in key areas target areas. Winchendon residents would like to have a town beach, and also to at least be able to access water resources such as

¹⁴ EOEA, *Massachusetts Statewide Comprehensive Outdoor Recreation Plan 2012*, Boston, 2012.

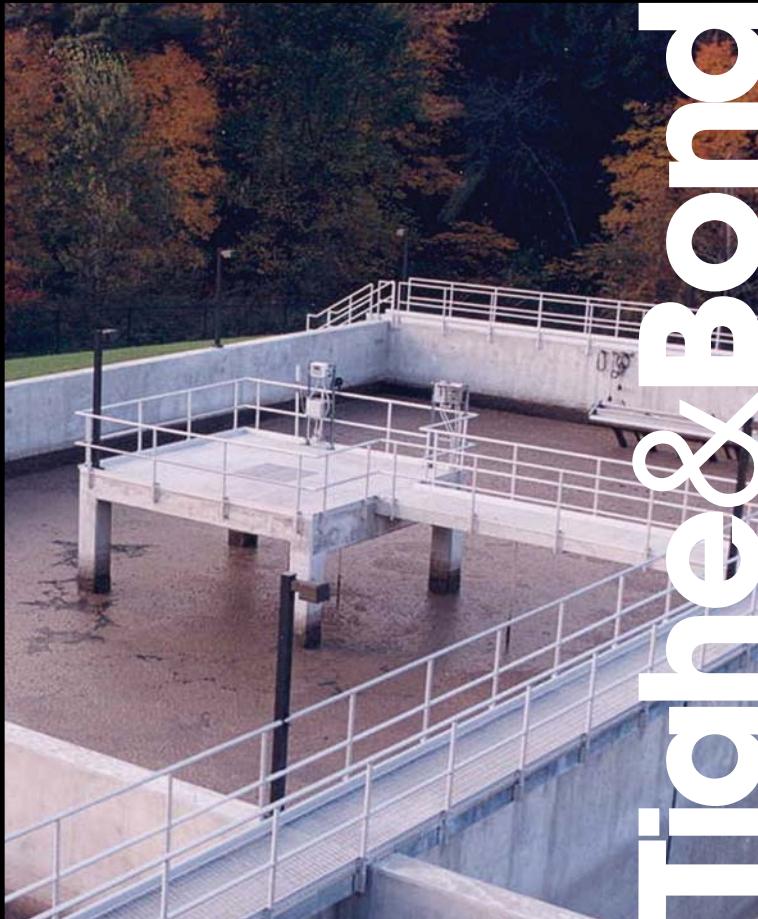
Lake Monomonac for canoeing and kayaking. Winchendon's needs analysis has also identified the need for more recreational facilities, especially in proximity to neighborhoods. Winchendon is targeting the Ingleside Parcel, currently owned by The Winchendon School, as a multi-use facility to include a variety of recreational uses and access to Whitney Pond.

7.3 Management Needs, Potential Change of Use

Winchendon continues to be proactive in its planning process. Winchendon is in the midst of updating its 2001 Master Plan. The Town has also reviewed its Town bylaws and developed a wetland protection bylaw, a Low Impact Development bylaw, and flexible residential development provisions in the Zoning bylaws. These on-going efforts, along with the OSRP Update, will together serve as guides for future growth.

The Town also needs to consider how to gain more effective administration and enforcement of existing regulations. The boards responsible for land use management will need more staff to assist them as the Town continues to grow and as development pressures increase. Without adequate enforcement, Winchendon will suffer the loss of natural and cultural resources during the development process.

Winchendon is fortunate to enjoy the recreational programs and facilities of Clark Memorial. There are also volunteer-run sports leagues who provide organized sports. There is, however, a need for a board or commission who formally represents the Town to assist with cooperation and communication among the groups active in recreation, some of whom rely on the use of Town property and facilities. Such a group could lead the planning, management, oversight and publicity of conservation and recreation properties.



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Section 8

Goals and Objectives

Goals form the basis of the overall direction for the OSRP, as they represent the ultimate purposes. The goals from the 2007 OSRP were reviewed and prioritized by the OSRP Committee for the Update. The objectives identify more focused goals, and serve as the basis for more specific recommendations in the Action Plan.

Goal #1: Continue to protect the quality and quantity of the Town's water resources.

Objectives:

1. *Continue to improve existing water quality of lakes and ponds through such strategies as upgrading or replacing failed septic systems, expansion of the sewer system, and incorporating this objective into municipal and regional plans.*
2. *Continue to protect the quality and quantity of the Town's wetland resources by continuing to improve enforcement of regulations that pertain to wetlands.*
3. *Protect current and future drinking water supplies.*

Goal #2: Enhance the recreational potential of the Town's water resources, including Lake Monomonac, Whitney Pond, and the Millers River.

Objectives:

1. *Provide public access to major water bodies in town.*
2. *Clean up Whitney Pond and pursue efforts to develop recreational opportunities at the Pond.*

Goal #3: Preserve wildlife habitats and natural resources, including rare plant habitats, and protect environmentally sensitive areas.

Objectives:

1. *Identify and prioritize currently undeveloped focus areas and parcels for protection based on size, connectivity to existing protected lands, and bio-diversity. Examine the implications of the large acreage of lands in Winchendon that are classified under the agricultural and forestry property tax programs, and consider the community's options relating to these parcels in the context of the Town's open space and recreation goals.*
2. *Promote and institute land management practices to protect rare species and encourage a diversity and abundance of plant and animal populations (confer Bio-Core Habitat).*
3. *Educate the community to increase awareness of the value of the Town's natural resources.*

Goal #4: Preserve open space throughout the Town which protects and enhances the visual quality and historic character of the Town.**Objectives:**

1. *Identify necessary maintenance and site improvements as appropriate to enhance the visual quality of existing Town open space, such as the Town Commons, Heritage Mills, or Militia Training Field.*
2. *Identify any key parcels for future acquisition to preserve visual quality and historic resources and educate the community to increase their understanding of the value of historic preservation.*

Goal #5: Develop a linked system of open space and recreation facilities.**Objectives:**

1. *Identify areas for trail and open space linkages, including connecting routes to New Hampshire, Templeton, Ashburnham and Gardner.*
2. *Establish trail systems on Town land.*
3. *Educate the community in regard to the availability, location, and appropriate use of natural resource areas.*
4. *Finish the Winchendon portion of the North Central Pathway.*

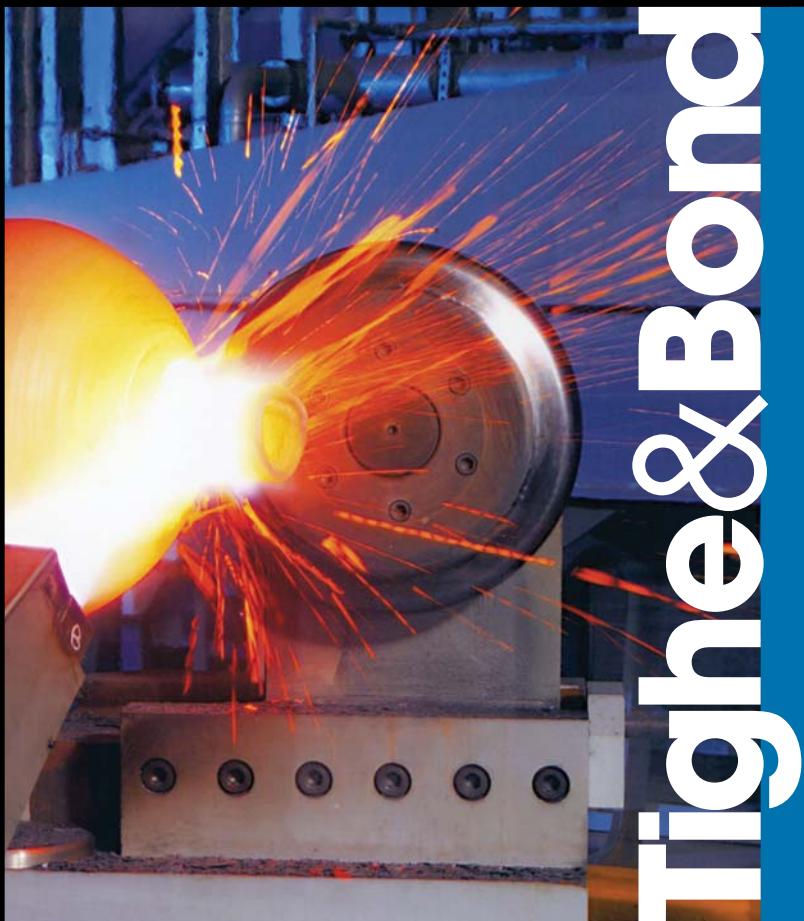
Goal #6: Improve and expand the scope of recreational facilities and programs for all Winchendon residents and use recreation as a catalyst for economic development/arts.**Objectives:**

1. *Seek to acquire properties to improve downtown open space and recreational opportunities, such as pocket parks and highly visible locations for public concerts and movies.*
2. *Continue to develop a neighborhood playground system to improve availability and access for users, especially children.*
3. *Continue to expand the availability of athletic fields and other facilities, including a fitness course, while keeping maintenance within a limited budget.*
4. *Continue to reassess needs of residents (including elderly persons and persons with handicaps) for additional activities and resources, and develop specific programs to meet these needs.*
5. *Publicize existing recreational resources and events.*

Goal #7: Coordinate efforts for the acquisition, protection and maintenance of open space and recreation lands.

Objectives:

1. *Prioritize acquisitions needs.*
2. *Develop long-range maintenance and funding programs.*



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Section 9

Seven-Year Action Plan

The action plan sets specific steps, responsible parties and timeframes for meeting the goals and objectives of the OSRP. A visual depiction of the Action Plan is provided on Figure 10. Table 9-1 provides a list of acronyms used to denote the responsible parties in the Action Plan.

Table 9-1
Action Plan - Acronyms

Acronym	Organization
BI	Building Inspector
BOH	Board of Health
BOS	Board of Selectmen
ConCom	Conservation Commission
DPD	Department of Planning & Development
DPW	Department of Public Works
MassDOT	Massachusetts Department of Transportation
MRWC	Millers River Watershed Council
PB	Planning Board
RC	Recreation Committee
TPP	Toy Town Partnership
WEF	Winchendon Enrichment Foundation
WRDA	Winchendon Redevelopment Authority
ZBA	Zoning Board of Appeals
ZTF	Zoning Task Force

Many of the action items listed below will require financial resources. There are a variety of funding options available to the Town through local, state and federal funding sources. Winchendon is also an eligible recipient of funds from the Robinson-Broadhurst Foundation, Inc., which has helped to fund many important Town projects. In addition, the Town created an Open Space Fund in 2004. These funds can also be used for land acquisition. The responsible parties will seek funding from these various sources, and other appropriate sources, for their assigned action items. Potential funding sources are identified below.

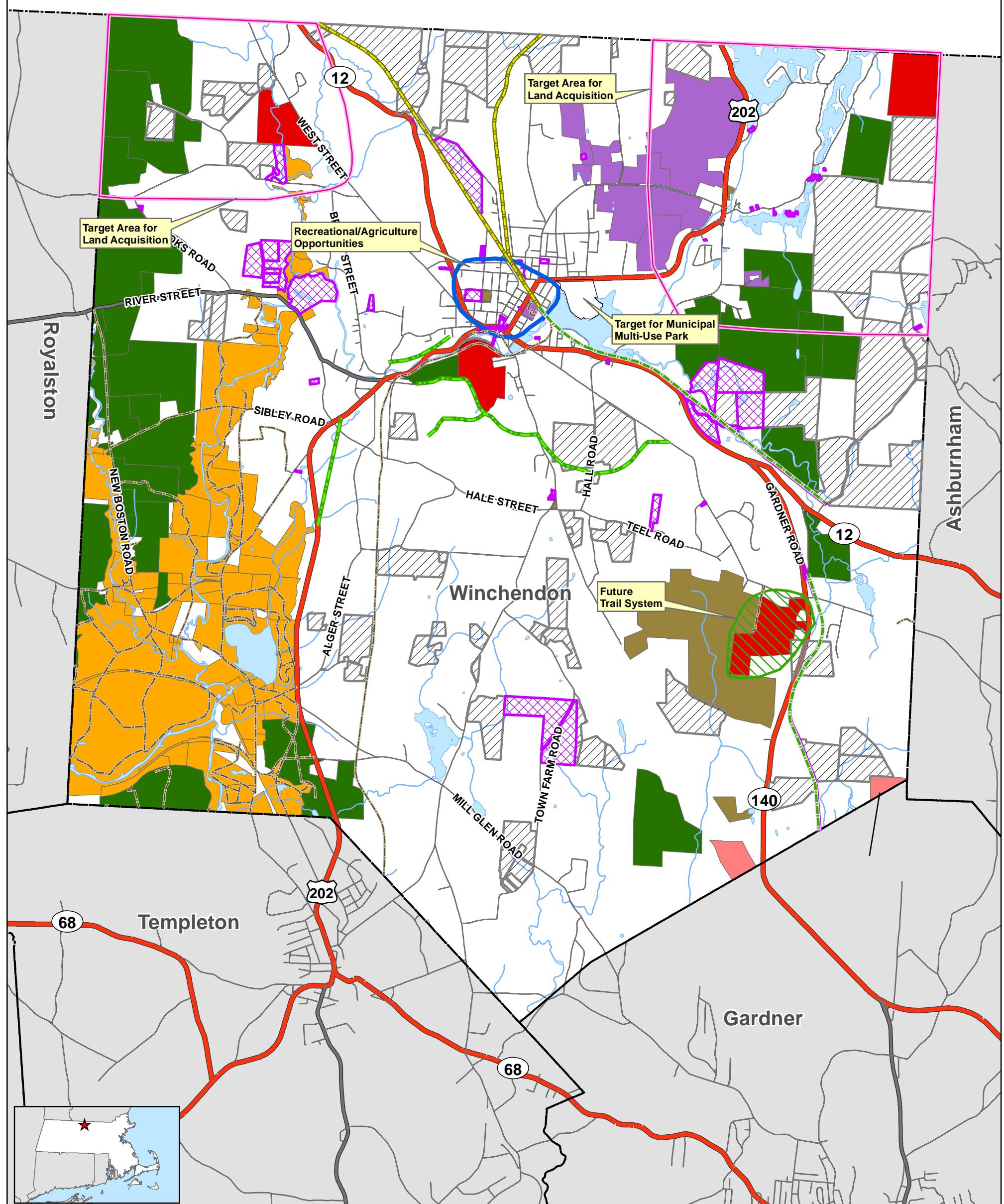
Goal #1: Continue to protect the quality and quantity of the Town's water resources.

Objectives:

1. *Continue to improve existing water quality of lakes and ponds through such strategies as upgrading or replacing failed septic systems, expansion of the sewer system, and incorporating this objective into municipal and regional plans.*

Action Items	Responsible Party	Timeframe	Funding
1 Extend sewer system to serve Maple Street, Elmwood Road and Glenallen Street to eliminate sewage discharges to the Millers River from private residences.	DPW, BOS as Sewer Commissioners, Town Manager	On-going	State Revolving Loan (SRF)

New Hampshire



Legend

United States of America	Existing North Central Pathway	Passive Recreation Opportunities
Commonwealth Of Massachusetts	Potential North Central Pathway	Land Aquisition
Private Owner	Existing Trails	Recreational/Agricultural Opportunities
City of Gardner	Potential New Trails	Unprotected Parcels Owned by Town of Winchendon
Town of Winchendon		Chapter 61, 61A & 61B
Non-Profit		

FIGURE 10
ACTION PLAN
Town of Winchendon
Open Space & Recreation Plan
Winchendon, Massachusetts

2	Remove infiltration and inflow from sewer system.	DPW	On-going	SRF
3	Seek funds to assist homeowners with Title 5 upgrades.	BOH	On-going	SRF, Betterment Loans
4	Provide secure storage of salt stockpiles to prevent leaching.	ConCom, DPW	On-going	SRF

2. *Continue to protect the quality and quantity of the Town's wetland resources by continuing to improve enforcement of regulations that pertain to wetlands.*

Action Items	Responsible Party	Timeframe	Funding
1 Consider developing regulations and an application fee structure under the Wetlands Protection Bylaw.	ConCom	2019	Town
2 Consider costs and advantages of hiring support staff for better enforcement of regulations.	ConCom, BOS	2022	Town
3 Develop an erosion control bylaw to prevent unnecessary loss and improper movement of soil and include a process for enforcement and fines.	PB, BI	2018	Town
4 Identify priority areas, including High Street, Spring Street, Glenallen Street and River Street, for increased catchbasin and street sweeping activities.	ConCom, DPD, DPW	2017	Town
5 Reduce nonpoint source pollution by reducing the amount of impermeable surfaces in town, limiting the use of fertilizers by educating public on fertilizer use.	PB, ZBA, DPW, ConCom	2022	319 Grants

3. *Protect current and future drinking water supplies.*

Action Items	Responsible Party	Timeframe	Funding
1 Continue to work with the Town of Ashburnham to protect the quality of shared surface water resources.	DPD, DPW	On-going	Town, DEP Drinking Water Supply Protection Grants
2 Support Ashburnham's efforts to protect the watershed of the water source.	DPD, BOS as Water Commissioners	On-going	Town, DEP Drinking Water Supply Protection Grants

3	Develop a comprehensive water resources plan which will maintain a balanced "water budget", so that water is withdrawn from and returned to the same watershed.	BOS	On-going	Town, DEP Drinking Water Supply Protection Grants
4	Continue to educate public on water conservation efforts. Replace water meters and enforce water bans as needed.	DPW	On-going	Town, DEP Drinking Water Supply Protection Grants
5	Identify and protect areas which serve as water supplies in the future – particularly land overlying potentially productive aquifers – through acquisition or zoning, and other regulations which restrict incompatible uses.	PB, BOH	On-going	Town, DEP Drinking Water Supply Protection Grants
6	Finish groundwater mapping, providing a complete picture of the Town's aquifers.	DPW	2022	Town, DEP Drinking Water Supply Protection Grants
7	Ensure proper disposal of waste oils at all local maintenance facilities.	BOH, DPW	2018	Town
8	Continue Hazardous Household Waste collection efforts.	DPW	On-going	Town
9	Continue to improve the recycling and reuse efforts.	BOS, DPD	On-going	Town

Goal #2: Enhance the recreational potential of the Town's water resources, including Lake Monomonac, Whitney Pond, and the Millers River.

Objectives:

1. *Provide public access to major water bodies in town.*

Action Items	Responsible Party	Timeframe	Funding
1 Identify and target future land acquisitions or easements to accomplish this goal.	DPD, ConCom, RC	On-going	DCS Grants, Town Open Space Fund, Local Land Trusts
2 Acquire/develop public access for canoeing / kayaking on Lake Monomonac and other Town waterbodies.	BOS	2018	DCS Grants, Town Open Space Fund, Local Land Trusts

3	Tie water access into regional initiatives such as the development of Blue Trails by the Millers River Watershed Council	RC, ConCom	2020	MRWC
4	Inventory promising parcels and talk with owners about easements, donations, use of friendly eminent domain proceedings.	PB, DPD, RC	Ongoing	DCS Grants, Town Open Space Fund, Local Land Trusts
5	Seek to acquire important tax title properties with water access.	BOS	On-going	Town
6	Develop and maintain recreational improvements, such as a Town beach.			
7	Develop low impact, environmentally sensitive recreational facilities on Town owned parcels at Whites Mill Pond.	RC, DPD	2020	DCS Grants, Community Development Block Grants (CDBG)

2. *Clean up Whitney Pond and pursue efforts to develop recreational opportunities at the Pond.*

Action Items	Responsible Party	Timeframe	Funding
1 Work with MRWC to pursue funding to address pollution issues at Whitney Pond.	BOS as Water Commissioners	On-going	319 Grants, SRF
2 Strategize sequence of steps to achieve water quality suitable for contact recreation.	ConCom, BOS, DPD	On-going	Town
3 Redevelop mill sites into sustainable economic centers taking into account the historic, environmental, social and economic capabilities as a nexus for recreation, tourism, business and rediscovery of the waterfront and historic dam and bridges.	DPD	2020	Economic Development Grants, CDBG

Goal #3: Preserve wildlife habitats and natural resources, including rare plant habitats, and protect environmentally sensitive areas.

Objectives:

1. *Identify and prioritize currently undeveloped focus areas and parcels for protection based on size, connectivity to existing protected lands, and bio-diversity. Examine the implications of the large acreage of lands in Winchendon that are classified under the agricultural and forestry property tax programs, and consider the community's options relating to these parcels in the context of the Town's open space and recreation goals.*

Action Items	Responsible Party	Timeframe	Funding
1 Support local, State and Federal programs and funding which will encourage landowners to retain managed forestlands.	PB, ConCom	On-going	Forest Stewardship Program
2 Promote measures that encourage owners of large forested tracts to avoid fragmentation or subdivision of forested areas.	PB, ConCom	On-going	Town, Forest Stewardship Program
3 Inventory prime agricultural areas and work with a local land trust to preserve important farmlands.	DPD, TTP	On-going	Town, APR, Local Land Trusts
4 Support efforts to create and promote "agri-tourism" and a "buy-local" campaign, such as support for farmer's market.	TTP, WEF, DPD	On-going	Town
5 Encourage environmentally responsible, sustainable agricultural-related operations in Town.	DPD, TTP, PB	On-going	APR
6 Encourage compatible uses of forestlands for recreation, tourism and economic benefit where such uses will not impair forest quality or wildlife and/or forest habitat.	DPD, PB, ConCom, RC	On-going	Town, Forest Stewardship Program
7 Partner with State agencies, local/regional land trusts, and/or adjacent towns to pursue land conservation projects with grant funding from EEA/DCS to acquire properties within environmentally sensitive areas.	ConCom, BOS		LAND Grants, Landscape Partnership Grants

2. Promote and institute land management practices to protect rare species and encourage a diversity and abundance of plant and animal populations.

Action Items	Responsible Party	Timeframe	Funding
1 Work with the New England Wildflower Society to establish a program to control invasive species on municipal lands and throughout the Town.	ConCom, DPD	2019	Town
2 Encourage the community to participate in Earth Day.	ConCom	2018	Town
3 Work to preserve, protect, enhance, or rehabilitate the biodiversity of local ecosystems.	DCD, ConCom	On-going	Town, Town Open Space Fund
4 Promote subdivision designs, which reduce habitat fragmentation.	PB, ConCom	On-going	Town
5 Promote healthy habitats through appropriate land uses, sound waste management practices, and environmental awareness.	PB, ZBA, ConCom, BOH	On-going	Town
6 Promote use of native drought resistant plant species in new developments and Town landscaping projects.	PB, DPW, ConCom	On-going	Town
7 Ensure sustainable management through replanting whenever cutting occurs for development. Require Best Management Practices in all development requiring tree cutting.	PB, ConCom	On-going	Town
8 Ensure timely reclamation of extraction sites, for uses which are in harmony with the surrounding land uses.	ZBA, BI	On-going	Town
9 Restore existing unreclaimed sites to safe, environmentally sound and aesthetically pleasing uses.	ZBA, BI, WRDA	2018	Town

3. Educate the community to increase awareness of the value of the Town's natural resources.

Action Items	Responsible Party	Timeframe	Funding
1 Promote public awareness of wetlands values.	ConCom, School Dept.	On-going	Town
2 Encourage schools to incorporate the environment through fundraising and other extra-curricular activities.	ConCom, School Dept.	On-going	Town
3 Implement environmental education and outreach, including forest education and vernal pool certification.	ConCom, School Dept.	2019	Town

4	Encourage awareness of the Town's urban trees through an "adopt-a-tree" program.	ConCom, School Dept., DPW	On-going	Town, Urban Forest
5	Promote agricultural education in the school system, raising the level of awareness of food sources and production techniques.	ConCom, School Dept.	2017	Town
6	Promote a tree-planting program through the Conservation Commission.	ConCom, School Dept., DPW	2018	Town
7	Encourage the Winchendon School system to become involved with the Nature's Classroom program.	School Com.	2017	Town
8	Work with local non-profits to promote awareness of local sanctuaries, town and memorial forests, and historic landmarks throughout town.	ConCom, RC	2020	Town

Goal #4: Preserve open space throughout the Town which protects and enhances the visual quality and historic character of the Town.

Objectives:

1. *Identify necessary maintenance and site improvements as appropriate to enhance the visual quality of existing Town open space, such as the Town Commons or Militia Training Field.*

Action Items	Responsible Party	Timeframe	Funding
1 Produce and distribute a new town map showing key sites and amenities, including scenic roads and historic resources.	TPP	2018	TPP
2 Create and install a system of directional signs and site identification signs.	DPD	2022	Chamber of Commerce / TPP
3 Establish gateway criteria.	PB, DPD	2017	CDBG
4 Improve appearance of the Town's gateways.	PB, DPW	2022	CDBG

2. *Identify any key parcels for future acquisition to preserve visual quality and historic resources and educate the community to increase their understanding of the value of historic preservation.*

Action Items	Responsible Party	Timeframe	Funding
1 Identify scenic roadways and corridors, including Elmwood Road and North Central Street, that will aid in the protection of open spaces.	PB, DPD	2017	Town, MRPC

2	Adopt a local corridor district in the general bylaws and a scenic roadway bylaw in the zoning bylaws to regulate development along these declared scenic roadways and corridors and to protect heritage trees.	PB	2018	Town
3	Encourage historic recognition and preservation through Freedom's Way Committee and inventory.	TPP	On-going	Town, MA Historical Commission
4	Apply for Preserve America Community designation.	TPP	2022	Town

Goal #5: Develop a linked system of open space and recreation facilities.**Objectives:**

- 1. Identify areas for trail and open space linkages, including connecting routes to New Hampshire, Templeton, Ashburnham and Gardner.*

Action Items	Responsible Party	Timeframe	Funding
1 Identify important linkages and land for potential acquisition or other control.	DPD, ConCom	2016	Town
2 Identify and implement non-acquisition means of linkage such as conservation easements.	DPD, BOS, ConCom	2017	Town, Local Land Trusts
3 Initiate discussions with Mt. Grace Conservation Trust regarding how they might assist with implementation.	DPD	2017	Town, Local Land Trusts
4 Create cross-road linkages and greenways.	DPD	2020	DCS Grant, Town Open Space fund, Local Land Trusts
5 Continue reconstruction of the Historic Converse Gardens and Riverwalk.	DPD	On-going	CDBG, private investment
6 Identify parcels for land acquisition or other protection so that they may continue to provide important linkages.	DPD	On-going	Town

2. Establish trail systems on Town land.

Action Items	Responsible Party	Timeframe	Funding
1 Encourage as an outgrowth of volunteer efforts related to the North Central Pathway.	Pathway Coordinator, RC	2020	Town
2 Create trail system in the Nineteenth Hill WCE			
3 Create trail system in Ingleside Property			
4 Develop trail maps			
5 Publicize trail systems through signage and maps			

3. Educate the community in regard to the availability, location, and appropriate use of natural resource areas.

Action Items	Responsible Party	Timeframe	Funding
1 Disseminate materials through sports clubs.	Snow Bound Club, Winchendon Rod & Gun Club, MRWC, Millers River Trout Unlimited	2018	Town, Snow Bound Club, Winchendon Rod & Gun Club, MRWC, Millers River Trout Unlimited
2 Provide educational materials through the Winchendon Visitors Center		2018	
3 Incorporate into self-guided walks along North Central Pathway	Winchendon's Pathway Coordinator	2019	MAP-21, MassDOT funding

4. Expand the North Central Pathway.

Action Items	Responsible Party	Timeframe	Funding
1 Construct Phase 5, including parking lot at the intersection of Spring & Glenallen and extend paved bath to connect with existing 3.5 mile leg to Gardner	MassDOT, DPD, Winchendon's Pathway Coordinator	2015-2016	MassDOT, Federal Hwy Program, Robinson-Broadhurst
2 Continue to pursue funding to design and construct subsequent phases of North Central Pathway, including extensions north to Rindge, NH and west to Fitzwilliam, NH	MassDOT, DPD, Winchendon's Pathway Coordinator	2016-2022	MassDOT, Federal Hwy Program, Robinson-Broadhurst

3 Integrate bike path with the downtown	MassDOT, DPD, 2017 Winchendon's Pathway Coordinator	MassDOT, Federal Hwy Program, Robinson- Broadhurst
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Goal #6: Improve and expand the scope of recreational facilities and programs for all Winchendon residents and use recreation as a catalyst for economic development/arts.

Objectives:

1. *Seek to acquire properties to improve downtown open space and recreational opportunities, such as pocket parks and highly visible locations for public concerts and movies.*

Action Items	Responsible Party	Timeframe	Funding
1 Identify properties appropriate for open space, recreation and agricultural uses in proximity to the downtown.	DPD, RC	2017	Town
2 Identify property appropriate for public concerts, movies.	DPD, RC	2018	Town
3 Seek funds for acquisition	DPD, RC	2019	DCS, Town Open Space Fund, Local Land Trusts
4 Pursue acquisition of Ingleside Property to provide multiple uses including open space and recreation.			
5 Provide trail access to Ingleside Property			

2. *Continue to develop a neighborhood playground system to improve availability and access for users, especially children.*

Action Items	Responsible Party	Timeframe	Funding
1 Create Neighborhood Task Forces to help determine needs and plan for playgrounds.	DPD, RC	2017	Town
2 Seek funds for creating and maintaining playgrounds.	DPD, RC	2018	DCS
3 Seek sites for skateboarding and also seek sites for non-motorized bikes and inline skating between the bike trail and the Clark.	Clark Memorial, RC	2019	Town
4 Seek support and funding for design and construction.	DPD, RC	2020	DCS

3. *Continue to expand the availability of athletic fields and other facilities, including a fitness course, while keeping maintenance within a limited budget.*

Action Items	Responsible Party	Timeframe	Funding
1 Work with the Clark Memorial to improve existing recreational facilities.	RC	On-going	Town, Clark Memorial
2 Mobilize community efforts on specific recreation projects.	RC, Clark Memorial	On-going	Town, Clark Memorial
3 Publicize efforts to gain and maintain public interest and support.	RC	On-going	Town, Clark Memorial

4. *Continue to reassess needs of residents (including elderly persons and persons with handicaps) for additional activities and resources, and develop specific programs to meet these needs.*

Action Items	Responsible Party	Timeframe	Funding
1 Seek funds for acquisition and development of the Ingleside Property to include recreational and open space resources	DPD, TTP, WEC	On-going	Town
2 Support cultural facilities such as museums, heritage areas, and Converse Gardens.	BOS, Historic Society, DPD	On-going	Town
3 Improve town-wide sidewalk system.	DPW	On-going	Town

5. *Publicize existing recreational resources and events*

Action Items	Responsible Party	Timeframe	Funding
1 Promote Winchendon's resources and events.	TTP	On-going	TTP
2 Map trails systems and old roads that can be used for mountain biking, hiking and running.	TTP, MWRC	On-going	TTP, MWRC
3 Use local media, including the local access cable, to promote events and resources.	School Dept.		TTP, School Dept.

Goal #7: Coordinate efforts for the acquisition, protection and maintenance of open space and recreation lands.

Objectives:

1. *Prioritize acquisitions needs.*

Action Items	Responsible Party	Timeframe	Funding
1 Prioritize open spaces considered for preservation. Criteria should be based on level of contribution to environmental sensitivity; aesthetics; recreational potential; community character; and agricultural lands.	ConCom	On-going	Town
2 Any new lands that the Town acquires for protected open space or recreation should be transferred to the Conservation Commission.	BOS, ConCom	On-going	Town
3 Consider establishing a local land bank or community land trust as authorized under the Community Preservation Act.	DPD, ConCom, TTP	2022	Town Open Space Fund, Local Land Trusts

2. *Develop long-range maintenance and funding programs.*

Action Items	Responsible Party	Timeframe	Funding
1 Initiate communication and coordination among Conservation Commission, Planning Board, Clark Memorial, Department of Public Works, Director of Community Development, local civic groups.	RC	On-going	Town
2 Utilize all available funding sources to preserve, protect, enhance, and/or rehabilitate the Town's natural resources.	DPD	On-going	DCS Grants (LAND, Landscape Partnership Program, Land & Water Conserv. Fund) APR, CRs
3 Establish a fund for purchase of (a) tax title lands and (b) development rights on parcels that meet the criteria for open space preservation.	BOS	On-going	Town Open Space Fund

Conclusion

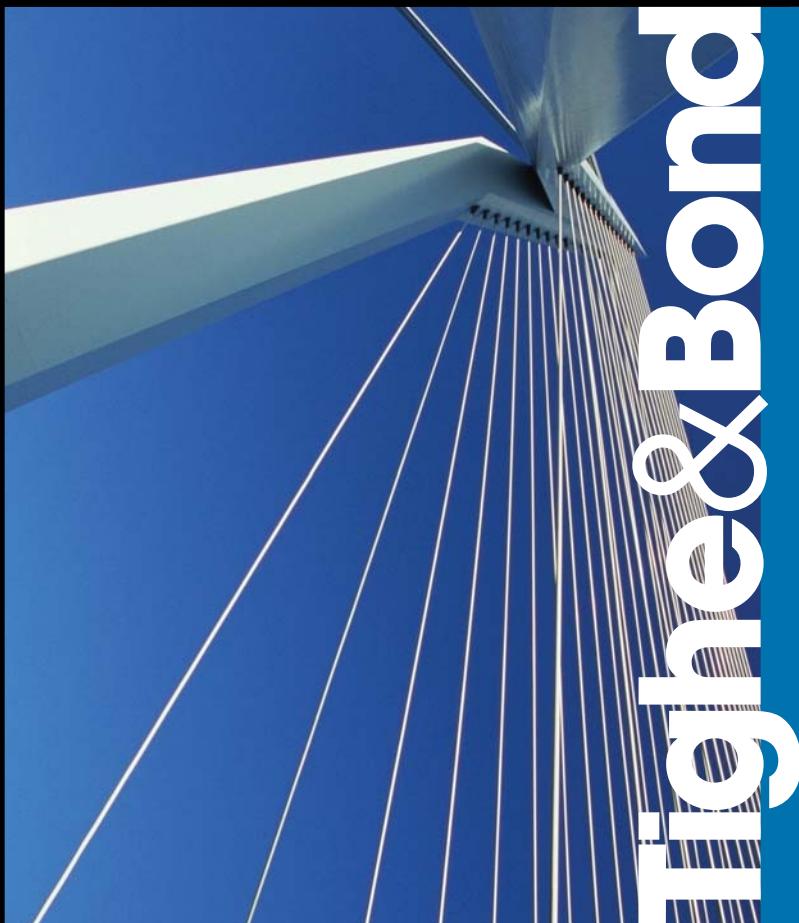
Participants involved in the OSRP Update agreed on the following:

What it will take to accomplish this action plan

There is momentum in the Town to protect important properties that provide open space and recreational value. Since the 2007 OSRP, several large parcels have been permanently protected through a variety of methods and funding sources. The Town, specifically the Winchendon Enhancement Committee, is spearheading efforts to acquire and develop the Ingleside Property, a large parcel owned by The Winchendon School that is located within proximity to the downtown and adjacent to Whitney Pond. This parcel could provide multiple important uses for the Town, including open space, recreation and economic development. The Town should continue to support the volunteer effort and call on the expertise and assistance of federal, state and regional allies such as the Mt. Grace Conservation Trust and the Montachusett Regional Planning Commission. Funding is needed from the grant programs whose doors are opened through adoption and approval of this OSRP. Eventually Winchendon will need to increase the paid staff support for Town boards that administer and implement the programs and regulations desired by the community.

Why it will be worth the effort

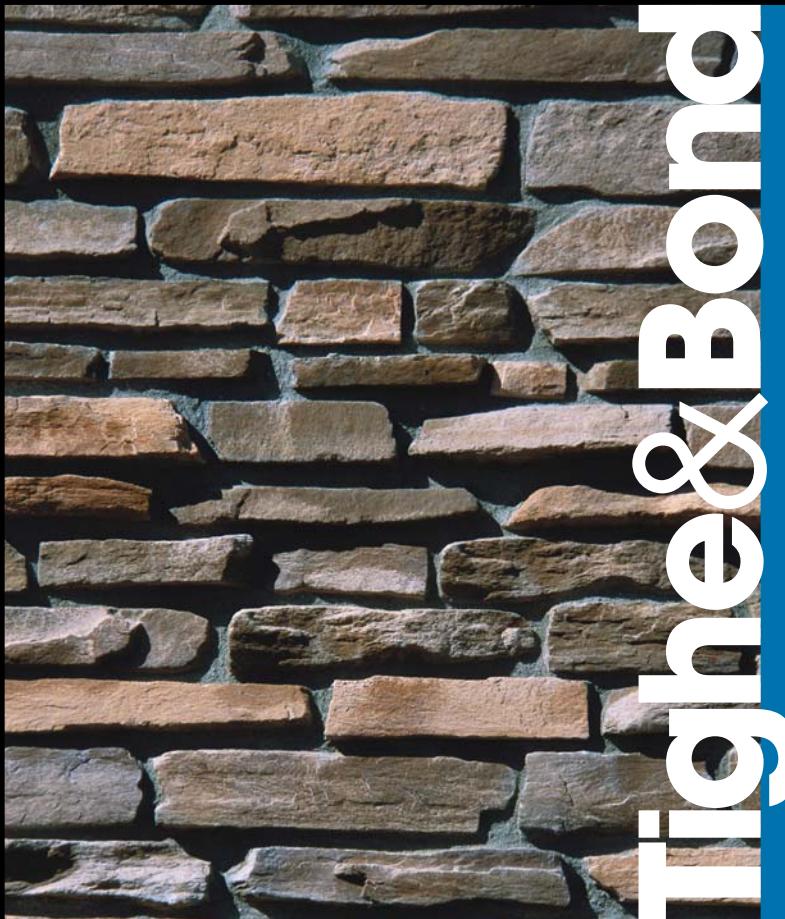
This action plan is essential to maintaining the character of Winchendon and preserving future health and well-being. As noted in the Open Space survey and the public forum, the Town's recreational and open space resources can be used as a catalyst for economic development. Having facilities that meet the needs of residents of all ages, abilities and income levels will enhance the quality of life in Winchendon, and attract families and businesses to the community. Maintaining the natural community will help maintain the current community character. Working on implementing this plan and enjoying the improvements and programs gained will help bring people together. Current and future residents and visitors will know and enjoy Winchendon's resources and special character.



Tighe & Bond

Section 10

Public Comments



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Section 11

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