

TOWN OF HARTFORD

TOWN PLAN

Adopted by the Hartford Selectboard

June 4, 2019

Prepared by the

Hartford Planning Commission

with the assistance from the

Hartford Department of Planning and Development Services

and the

Town Plan Steering Committee

6. Christian Street Rural	2003
7. West Hartford	2004
8. Terraces (White River Junction)	2012
9. Advent Camp Meeting Grounds (White River Junction)	2017

In addition, the Taftsville Historic District is a multi-town district (Woodstock, Hartland, and Hartford) that includes three contributing structures in Quechee.

Scenic Roads

The designation of scenic roads can also aid a town in the preservation of rural environs of its historic structures. There are no scenic roads designated in Hartford at present.

Design Review Districts

Under state law, the most comprehensive preservation tool available to local governments is the creation and administration of a design review district, established through the Planning Commission. According to 24 VSA 4414(E), prior to the establishment of a design review district, the Planning Commission shall prepare a report describing the particular planning and design problems of the area and setting forth the recommended planning and design criteria to guide development. The White River Junction Design Plan and the White River Junction Design Guidelines were completed in 2001. In 2006, a bylaw amendment was enacted establishing a design review district for Downtown White River Junction. This was followed by the establishment of the Downtown White River Junction as a Designated Downtown under the Vermont Downtown Program.

A design review district can be created for any area containing structures of historical, architectural, or cultural merit. Many Vermont communities have specifically applied the design review district concept to protect areas of historical significance. Within such a district, no structure may be erected, altered, restored, moved, demolished or changed in use or type of occupancy without review by the Design Review Committee and the Planning Commission.

Townscape Preservation

State legislation also enables Vermont municipalities to set up local historic districts for the purpose of ensuring the preservation of historically and architecturally significant buildings and areas. By adopting a local historic district ordinance, standards could be applied to judge the appropriateness of proposed changes to buildings and sites within a historic district. A local historic district ordinance could be established for a village or hamlet if sufficient interest is shown by residents. Such an ordinance would recognize individual landmark buildings or sites worth preserving for their architectural, historical or cultural significance.

If a local historic district ordinance is adopted, business owners could be encouraged to make improvements to the exteriors of their buildings through a series of incentives such as low-cost loans, free technical assistance, and tax abatement for such improvements. These incentives have been successfully applied in other Vermont towns.

4. Encourage public off-site, off-street parking in the Village centers to ensure that the landscaped areas around historic structures are conserved to the greatest extent possible.
5. Consider the development of a guide to assist business owners in village center historic districts on creating appropriate signage.
6. Consider the adoption of design review districts for village centers.
7. When new buildings within historic areas are proposed, encourage a design that is compatible and sensitive to the character of the neighborhood.

Goal 2: Balance historic preservation and modern needs: Develop practical guidelines that preserve historic character while allowing for modern upgrades and uses.

Strategy 1: Encourage reuse of historic resources including adaptive reuse.

Actions

1. Provide incentives for reuse of historic structures.
2. Use Community Development Block Grant Funds and other grants to rehabilitate the Town's older housing stock.
3. Utilize the Vermont Barn Grant Program for barn restorations.
4. Assist landowners who wish to evaluate the potential of historic buildings to be used for new uses by applying for "pre-development grants" for architectural plans and specifications, historic structures reports, engineering studies, archaeological testing, and feasibility studies, etc.

Goal 3: Increase visibility and appreciation of local history: Showcase local history through education and stories, programs and tours, signage and interpretation.

Strategy 1: Increase historical interpretation, programming and signage.

Actions:

1. Educate the public and property owners about the location and purpose of historic districts.
2. Develop and promote programming and information that showcases Hartford's rich history.
3. Develop new, visible signage and multimedia content to highlight important historic sites.
4. Develop school curricula and enrichment programs to educate students about local history.
5. Provide village and school libraries with materials on the Town's historic resources. Encourage the public's interest in the Town's historic resources through a variety of methods.
6. Work with the Hartford Historic Preservation Commission, Hartford Historical Society, Preservation Trust of Vermont and the Vermont Division for Historic Preservation to promote the preservation, recognition, enhancement, and appropriate use of the Town's historic resources.

Goal 4: Inventory, protect and maintain historic resources throughout Hartford.

Strategy 4: Continue Participation in the Certified Local Government (CLG) Program.

Hartford Town Plan, including the Flood Resilience chapter and the Hartford Hazard Mitigation Plan meet State requirements.

Steep Slopes

Much of Hartford's natural beauty derives from the Town's hilly terrain. Poorly designed development on highly visible steep-sloped areas could adversely affect a scenic vista and detract from the surrounding beauty.

The slope or steepness of land is defined as a change in elevation over a given distance and is expressed as a percentage. The degree of slope has a clear impact on the suitability of a particular site for development. Generally, as the slope of the land increases, the range of the appropriate land uses diminishes.

Areas having low to moderate slopes (0 - 8%) are considered to have minor limitations for most types of development. Higher density uses such as commercial and industrial development, apartment complexes, and roads and highways are usually best suited for lands that are moderate or low in slope.

Slopes between 8 and 15% may have moderate limitations to certain types of development that require more land clearing and coverage by impervious surface. For example, residential use may be well suited on these slopes, where most commercial and industrial uses would not. Certain site improvements may be required on these lands in order to minimize environmental problems related to erosion, runoff, and drainage.

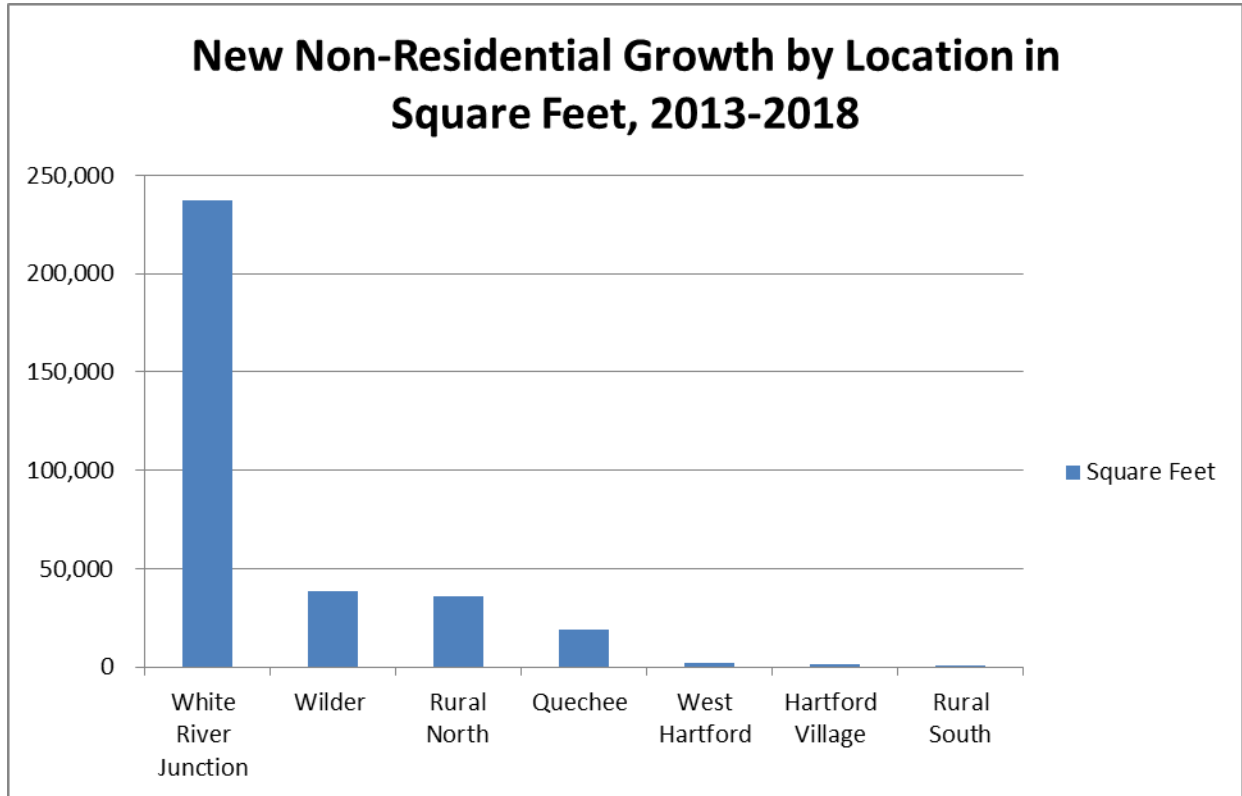
Slopes above 15% have more serious limitations for development. Many of these areas in Hartford also serve as important natural and scenic resources, particularly on those slopes above 20%. Areas of land with grades over 15% equal 10,840 acres in Hartford. This is a little over one-third of the entire Town. Steep slopes are typically characterized by a thinner layer of soil, limited soil absorption capacity, and higher volumes and velocity of surface water runoff. Steeply sloped areas also may be inaccessible to most construction or emergency equipment and often require substantial site improvement costs such as residential sprinkler systems to retard fires, limited removal of vegetation and trees, and underground utility service.

Slopes above 20% should be reserved for open space uses such as wildlife habitat, watershed protection, passive recreation, and other conservation purposes. Where the above uses involve construction on these slopes, adequate site improvements should be made to avoid excessive runoff and erosion, contaminated surface water supplies, and silted streams.

Scenic Areas

The protection of the Town's scenic beauty is not just important to Hartford resident's quality of life but also to visitors who contribute to the sizeable tourism economy. The Town has been successful in maintaining much of its scenic beauty over several decades of residential and commercial growth, due partly to the historic development of Hartford into five villages largely separated by countryside and to the preservation of over 2,600 acres, which include the Quechee Lakes Landowner's Association (QLLA) open space, the Army Corps of Engineers property (Quechee Gorge), National Park Service (Appalachian Trail) lands, land with conservation

Chart II-4 New Non-Residential Growth by Location, 2013-2018



VISION FOR THE FUTURE OF HARTFORD

Through various public participation processes over the past twenty years, the following have repeatedly risen to the top as major themes:

1. Increase density in already developed areas with infrastructure (water & wastewater, close to community facilities & services and served by public transit).
2. Manage density of future development.
3. Protect scenic areas, open space, and wildlife corridors.
4. Preserve Hartford's historic settlement pattern, defined by compact villages surrounded by rural countryside.
5. Maintain the character of Hartford's rural countryside and support agriculture, forestry, and recreational uses in these areas, as well as carefully planned low-density residential uses.
6. Maintain and enhance Hartford's heritage of working farm and forest lands as part of a sustainable, environmentally sound, local resource-based economy.
7. Maintain and enhance the open space and recreational "infrastructure" important for long-term health and quality of life of Hartford residents.

In putting together the land use recommendations, the Town Plan Steering Committee reviewed the following:

- Existing zoning regulations
- Current development patterns and neighborhoods

Residential Lands provide opportunities for newer housing and limited non-residential uses that primarily serve the local neighborhood. Development should be compact with a well-defined streetscape and interconnected network of streets with access to public transit, adequate sidewalks and facilities for bicyclists and transit. Infill development is encouraged. Residential development should have moderate to high densities which allow for some neighborhoods as primarily single-family housing, while others are a mixture of single-family and multi-family housing. Residential densities should range from 3.5 to 11 units per acre. Maximum lot coverage should be 65%, and maximum building height should be 40 feet. Non-residential development should take into consideration compatibility with the existing neighborhood, the residential character and existing development patterns including mass and scale. (Relevant zoning districts: R-1, R-1M, R-2, R-3, VR-1)

Rural Residential Lands

Rural Residential Lands are characterized by low density residential development in rural areas located on open and forested land along the valley floor and along forested hillsides and typically without town water and sewer, with a few areas in Quechee that are served by town water and/or town sewer. In recent decades, these areas have experienced a higher concentration of residential development than other rural areas of Hartford. Residential density ranges from 1-2 dwelling units per acre. Lands in this designation tend to be located in close proximity to traditional village centers such as Quechee and West Hartford. Other Rural Residential Lands are located along Route 14 in the Rural North area and a section along Route 5 in the Rural South area.

Development in Rural Residential Lands should protect sensitive lands, be designed and configured to reinforce the rural character and historic working landscape of these districts, characterized by forested hillsides and hilltops, open fields/agricultural lands, and low-density residential development taking into consideration opportunities for agricultural use and forestry, and connectivity of undeveloped land. Non-residential uses are limited to those that complement the rural nature of the area, such as small scale farms, recreational agriculture, agri-tourism, farm stands, home businesses, and recreational and public facilities. (Relevant zoning districts: VR-2, RL-1)

Rural Lands

During the last century, hillside farming in Hartford and throughout Vermont declined and much of farmland transitioned to forest land. Rural Lands represent the traditional working landscape that makes up much of rural Hartford, characterized by open, agricultural and forested land along the valley floor, forested hillsides and hilltops, hillside farming, and low-density residential development. Some areas are more isolated with further distances from traditional village centers, while other areas border Rural Residential Lands.

Development may be difficult and/or limited due to natural resource constraints, and lack of public water and sewer services. Residential densities range from one lot per three acres to one lot per ten acres and nonresidential uses are very limited. Development should be designed and configured to protect sensitive lands, reinforce the rural character and historic working landscape of these lands, with residential and nonresidential development taking into consideration opportunities for agricultural use, including farms, recreational agriculture, agri-tourism, and farm stands, and forestry. Development should be clustered and designed to minimize

- a. Allow a density bonus of up to 25% for affordable housing projects in areas served by Town water and wastewater.
- b. Ensure that development does not detract from the historic character of Hartford's villages and the downtown.
- c. Review the regulations, policies, and procedures for amending the Quechee Lakes Master Plan in recognition of changing roles, technologies, and community attitudes.

Goals, Strategies and Actions for Rural Areas

Goal 1: Maintain the character of Hartford's rural countryside and support agriculture, forestry, and recreational uses in these areas as well as carefully planned low-density residential uses.

Strategy 1: Maintain and enhance Hartford's heritage of working farm and forest lands as part of a sustainable, environmentally sound, local resource-based economy.

Actions:

- a. Cluster residential development on the most suitable sites that minimize impact on natural resources and fragile features: These include prime agricultural soils, wetlands, streams, steep slopes, scenic views, ridgelines, and important wildlife habitat.
- b. Consider utilizing zoning and subdivision regulations to limit development on slopes exceeding 20%, on ridgelines and hilltops and on open meadows/agricultural land.

Goals, Strategies and Actions that Affect Both Rural and Village Areas

Goal 1: Maintain and enhance open space and recreational "infrastructure" important for long-term health and quality of life for Hartford residents.

Strategy 1: Carefully plan and design new residential development in rural lands districts to protect important agricultural land and other scenic and natural resources.

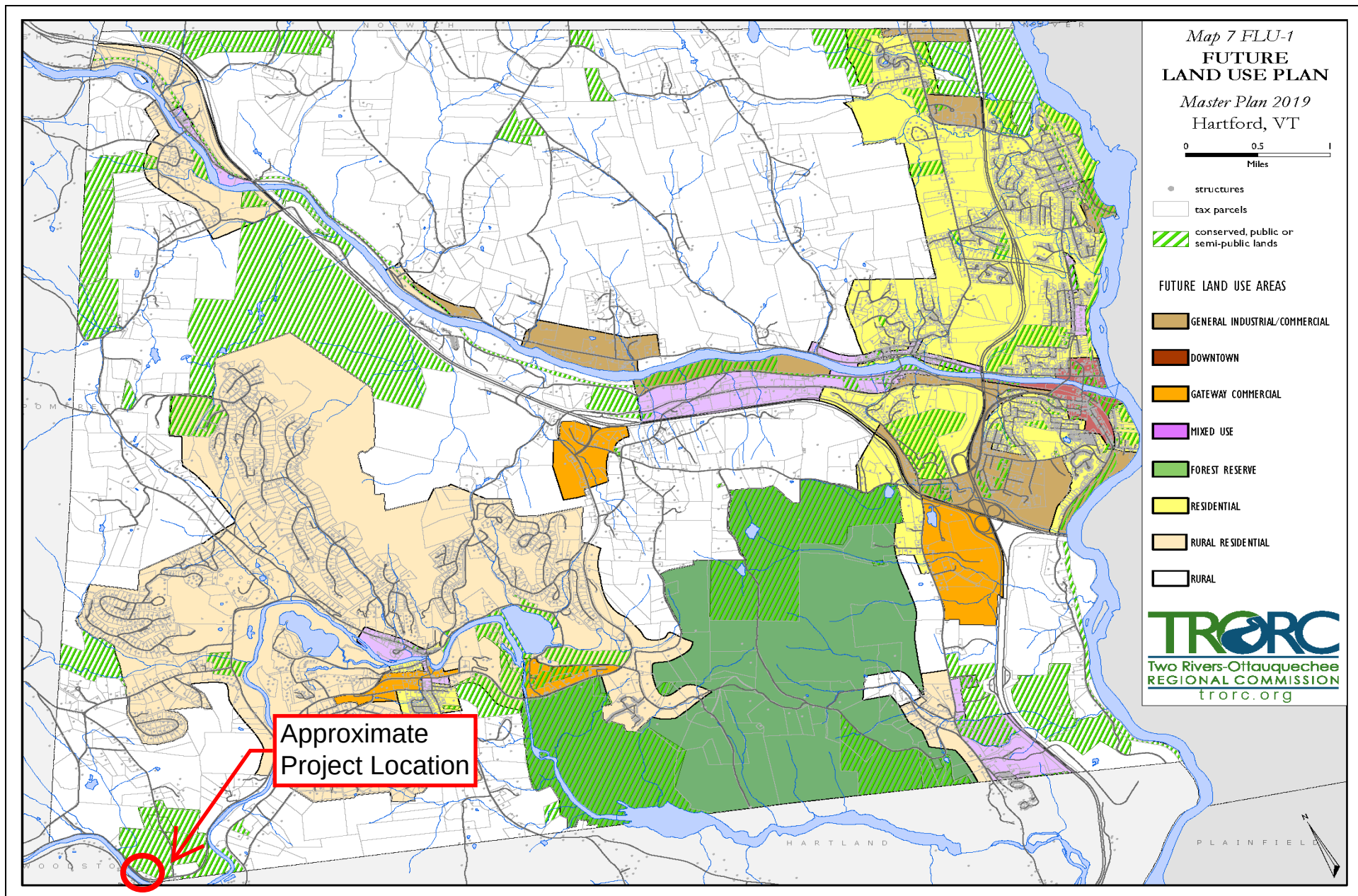
Actions:

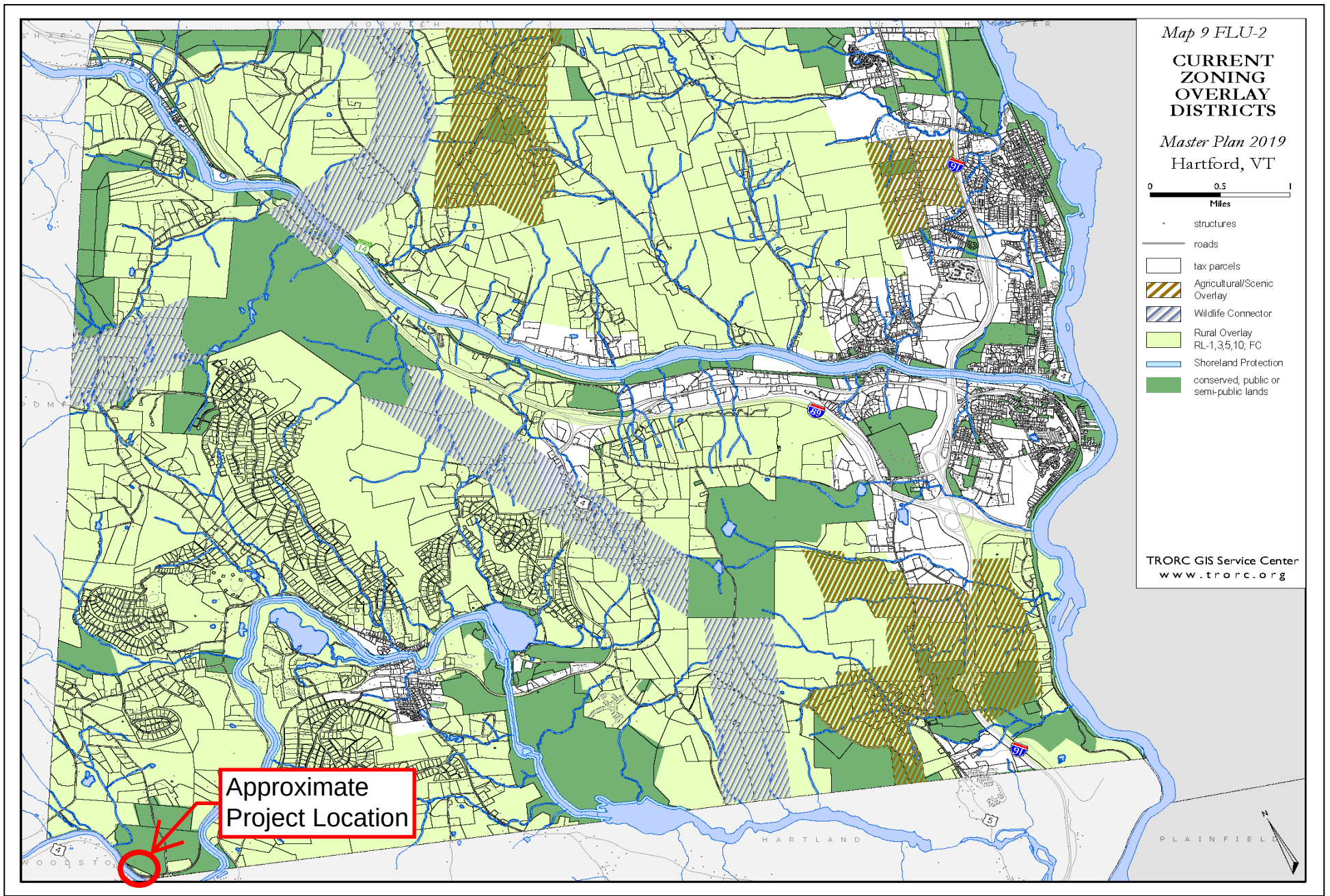
- a. Maintain wooded buffer areas between the I-89/I-91 Interstate Highways and surrounding properties.
- b. Adopt standards to protect natural resources and fragile features: These areas include prime agricultural soils, wetlands, streams, steep slopes, scenic views, ridgelines and important wildlife habitat.
- c. Encourage appropriate uses such as agriculture, forestry, wildlife habitat conservation, and hunting and other recreational activities through incentive programs, land conservation as part of planned unit developments, purchase of development rights, and conservation easements and education.

Goal 2: Preserve Hartford's historic settlement pattern, defined by compact villages surrounded by rural countryside.

Strategy 1: Try to achieve a population balance between rural Hartford (25%) and the areas served by Town water and wastewater service (75%).

Actions:





structures to withstand 25-year storm events, considering hydraulic and sediment transport capacities, and preserving the environment surrounding the improved area.

BICYCLE TRANSPORTATION

Bicycles are used both for transportation and recreation. Many bicyclists can be seen riding throughout Hartford and the Upper Valley region. Bicycle transportation is used for work, school, or conducting errands. Recreational users include residents who see the health benefits of the sport and visitors who come to Vermont to experience the outstanding scenery.

Hartford receives many benefits promoting bicycle use, ranging from tourism opportunities to mitigating vehicle congestion. Bicyclists do not create air pollution, produce little noise, add diversity to an automobile-dominated road system, and rarely cause traffic congestion. Bicyclists contribute to a better-functioning transportation system and render a community more attractive to all residential and commercial uses.

Bicycle facilities fall under three general categories: road improvements, such as the addition of bicycle shoulders, bicycle path networks, and designated bike lanes; transportation service improvements, such as bus bike racks; and land use development accommodations, such as commercial-center bike-storage facilities. All these improvements encourage more citizens to bicycle.

Hartford depends on the planning and design guidance provided by the Vermont Agency of Transportation (VTrans) through the 2008 Vermont Bicycle and Pedestrian Plan and the 2002 Vermont Pedestrian and Bicycle Facility Planning and Design Manual. VTrans requires that all road and intersection design/redesign consider the accommodation of bicycles. However, flexibility in design standards is needed if it proves unreasonable to install bicycle facilities as part of a public or private development. These standards include providing bicycle facilities on principal arterials, on roads with high speed and traffic volumes, in town/village centers, around schools, and sections that have significant obstacles or deterrents to local and/or regional bicycle routes (e.g., U.S. Routes 4 and 5). The priority is accommodating bicyclists along the existing roadway network, rather than providing separate facilities that are more costly. The State also stresses accommodation of bicyclists with on-street or off-street facilities, connecting bicycle paths to adjacent developments, and providing areas for bicycle parking and/or storage.

Valley roads with gentle grades and lower traffic volumes include Old River Road, Quechee Main Street and Connecticut River Road. Other more challenging rides on roads with scenic views and relatively low traffic volumes include Jericho Street, Jericho Road, Dothan Road, Old Quechee Road, Quechee/West Hartford Road and Quechee/Hartland Road. The Town also has many Class IV roads that are well-suited for mountain biking.

In Hartford, there are many challenges to bicycling. The steep grades in many of the Town's roads deter all but the hardiest of bicyclists, while many of the roads with gentle grades tend to be narrow, with high traffic volumes. These conditions deter all but the most experienced bicyclists. Parents often are reluctant to allow their children to ride their bicycles beyond their own immediate neighborhood. As a result, a significant amount of bicycling occurs along

CHAPTER IX NATURAL RESOURCES

INTRODUCTION

One of the Town of Hartford's greatest assets is the abundance and quality of its existing natural resources. Although Hartford has grown to a population of 10,000, the Town has retained much of its rural character, scenic beauty and ecosystem functions. An understanding of the Town's natural resources is basic to the formulation of a plan to guide Hartford's growth and development. Natural resources provide opportunities and constraints to development. They also support and include a biodiverse, resilient, functioning ecosystem which stretches far beyond town boundaries and provides essential ecosystem services such as vegetation that converts sunshine into essential atmospheric oxygen. Natural Resources must be carefully evaluated to ensure resource and ecosystem protection. This chapter defines the unique blend of natural resources that have helped shape Hartford's character, recognizing the threats to those resources, and identifies strategies for their protection. Careful planning and a vision for a well-balanced town will ensure that Hartford can grow while simultaneously preserving our precious natural resources and quality of life.

RESULTS FROM THE TOWN PLAN COMMUNITY FORUMS

The Community Forums in the summer of 2018 provided a wealth of information and public input. In many instances, these are reflective of current activities and aspirations. In other instances, new directions and approaches are suggested. We recognize the community forums were the beginning of a process to further explore these new ideas within the Hartford community, and would take more time than available for the current update of the Town Plan. A summary of the outcomes of the community forums is included in this update as an appendix to recognize their importance and the commitment to further discussion.

SETTING

Like many Vermont communities, Hartford has a diverse landscape: three major rivers, narrow river valleys with hillsides rising above with a mixture of farmland and forests. Scenic views abound. Hartford is home of one of Vermont's most scenic and highly visited natural attractions, Quechee Gorge, a 165-foot canyon of the Ottauquechee River. Elevations in Town range from approximately 340' along the Connecticut River at the Hartland town line to approximately 1,575' along the Pomfret town line west of Old Town Farm Road in Quechee. Historically, natural resources have had a significant influence in the initial settlement and later development of Hartford. All five villages were established along one of the three rivers. Besides serving as transportation corridors, the rivers served as a source of hydropower to support the development of mills and factories in Hartford Village, Wilder, and Quechee. Today, hydropower exists on the Connecticut and Ottauquechee Rivers and all three rivers play an important role in the recreation and tourism industry.

Septic-System Suitability

Except for the four villages that are served by Town sewer, the vast majority of land in Hartford relies on-site septic systems. Soils play an important role in determining the capability of an area to accommodate septic systems.

A substantial portion of the Town is comprised of soils that are marginally suited for septic systems, while several areas have soils that are not suited for septic systems. The Town of Hartford does not regulate septic systems. However, a state permit is required for all new, repaired, or expanded systems.

Agricultural Soils

The Natural Resources Conservation Service has developed a system of evaluating the most productive agricultural soils in the nation and throughout each state. Soils best suited for farming are classified as prime agricultural soils and statewide agricultural soils. Soils in the prime category are the highest level of agricultural soils and have the greatest productivity potential and the fewest limitations for farming. Prime agricultural soils in Vermont are a valuable resource and rate as high as prime agricultural soils in the farm belt states. Soils of statewide significance are the next highest category. Soils of statewide significance are similar to prime agricultural (nationally significant) soils but because of slope or other mitigating factors may not be as productive as prime agricultural soils. Contiguous parcels of both soil categories are often essential to produce a tract of suitable size to be economically cultivated.

According to the Natural Resources Conservation Service, in Hartford, there are 1,683 acres of prime agricultural soils and 4,500 acres of statewide agricultural soils. Both prime and statewide agricultural soils have been designated as a state resource for Act 250 purposes. It should be noted that the same conditions that are well-suited for farming, such as level terrain, deep topsoil, no bedrock, and good drainage also are ideal for development. A discussion of agricultural lands follows later in this chapter under Agricultural Resources.

Hillsides and Ridges

Hartford's forested hillsides and ridgelines are largely undeveloped and are important assets. They define our Village Centers, bestow scenic vistas, provide open space, and play an important role in maintaining Hartford's rural character. Besides their aesthetic appeal, these forested areas also provide high-quality water, oxygen, wildlife habitat, and recreational opportunities. Typically, these areas have had limited development potential due to their rugged character, shallow soils, and limited accessibility. In recent years however, the Town has experienced considerable development on hillsides, which has had an impact on these features and have raised citizen concern for their protection. Hartford has several ridges throughout Town that rise above 1,000' in elevation. See Map 18. The following is a list of the high elevation areas.

Invasive Plants

Invasive plants can reproduce quickly, they are not controlled locally by natural predators or diseases, and once established run rampant, out-competing our native plants. They can monopolize light, water and nutrients and degrade soil and water quality. Addressing the problem of invasive plants and restoring native vegetation in Hartford is a challenging task. The following is a list of strategies:

- Prevent New Introductions: The most cost-effective way of control is to prevent the arrival of any new exotics. The State of Vermont has a list of banned invasive plants. More plants which are not banned, but may prove to be invasive, are on state and provincial “Watch Lists”. Hartford must prohibit invasives and plants on neighboring watch lists from landscape plans.
- Eradication of New Infestations: Small populations of invasive exotics can be attacked while their density and range are limited. The prospect of total elimination saves not only money, but also our ecological systems. The Department of Public Works should have a policy for controlling invasive plants in road rights-of-way.
- Managing Established Populations: Control efforts are numerous but must be tailored to fit the situation. When fighting invasive plants around endangered species and their habitats, we must be careful to not cause further damage to these fragile ecosystems. (Several aquatic invasive plants are threatening the recreation values of Dewey’s Mill Pond and Lake Pinneo. Hartford should cooperate in controlling aquatic invasives with methods that do not endanger human health.)
- Restore Native Vegetation: We must restore our native vegetation to areas where invasive plants are being controlled. If we do not replant or otherwise support native plants, the exotics will re-colonize.

Invasive Insects

Several invasive insect populations are threatening Hartford’s trees. When/if they arrive, these invasive insects will have a devastating effect on our forests and landscape trees. The costs of cleaning up hazardous roadside and urban street trees alone will be expensive. Three nearby invasive species, Emerald Ash Borer, Hemlock Woolly Adelgid, and Asian Longhorned Beetle warrant special attention. Of them, Emerald Ash Borer is an imminent threat.

Emerald Ash Borer (EAB) is devastating to all North American ash species, killing trees in two or three years after infestations are visible. Hartford has an EAB plan for public ash trees which should be started because EAB populations have been confirmed as close as the far edges of neighboring Orange County, VT and Grafton County, NH.

SCENIC RESOURCES AND RURAL CHARACTER

With a population of 10,000 people, Hartford is fortunate that it has grown while retaining much of its rural character and scenic beauty. The historic settlement pattern of five villages largely separated by countryside continues today. The protection of the Town's scenic beauty and rural character is an important attribute, not just for Hartford residents, but for visitors to Hartford as

well. Indeed, a large part of the Town's economy depends on the tourism attracted by the beauty of the landscape. In 2008, the Zoning Regulations were amended to designate a Rural Lands Overlay District throughout the rural areas of Hartford to ensure that new development is done in such a way that it protects rural character, scenic views and natural resources. The Town should ensure the enforcement of the overlay district standards.

Scenic Byways

The National Scenic Byway Program was established in 1991. It provides the opportunity to promote the scenic and historical nature of the communities that the byway passes through. There are currently ten scenic byways in Vermont of which two pass through the Town of Hartford; the Connecticut River Scenic Byway (Route 5) and the Crossroad of Vermont Byway (Route 4).

Scenic Areas

A scenic area can be one with views of farmsteads surrounded by pasture land, of compact villages nestled among the hills and mountains, and of forest tunnels cut by splashing brooks. It also can be views of mountain ridgelines, river valleys, and other traditional New England scenes. In the early 1990s, the Hartford Conservation Commission identified the following list of important scenic areas in Hartford:

1. The Hillside Road area in Quechee, that is, the area bounded by:
 - a. the Pomfret town line to the west;
 - b. the Woodstock and Hartland town lines to the south;
 - c. the Ottauquechee River to the east; and
 - d. Wheelock Road and the northern end of Quechee Lakes Greenbelt #7-GB02-001 to the north.
2. Route 4 from Lakeland Drive southwest to the Hartland Town Line and bordered on the northwest by the Ottauquechee River and on the southeast by a line running 500 feet parallel to Route 4.
3. The open lands along the Ottauquechee River from Wheelock Road down river to the Quechee Covered Bridge, including, for example, the Quechee Village Green (Lot 12-QLLA-016), the two Quechee golf courses (Lots 7-QLLA-002 and 7-QLLA-003), and the Quechee Ski Area (Lot 7-QLLA-010).
4. The open lands and waters adjacent to Deweys Mills Road such as the Ottauquechee River, Dewey's Pond, the pasture surrounding Marshland Farm, and the Polo Field.
5. Quechee Gorge, including all land owned by the United States of America along the Ottauquechee River.

role in the Section 248a permitting process to ensure that telecommunication facilities are properly sited.

Solar Energy Facilities

Over the last decade, there has been tremendous growth in solar energy in Vermont. This started with roof top solar panels and in recent years has resulted in commercial solar arrays in Hartford and throughout the state. Solar energy facilities should be carefully sited.

Wind Energy Facilities

Commercial wind energy facilities are not commercially viable in Hartford due to the lower elevations of ridges and therefore are not an issue currently. Small scale individual towers are possible. Therefore, the siting of wind energy facilities must be carefully evaluated to mitigate visual impacts.

Lighting

Dark skies and bright stars are resources that greatly contribute to our rural quality of life. However, our ability to enjoy the night sky can be hampered by excessive and unshielded lighting. Public safety and welfare require adequate illumination, but inappropriate lighting can produce unsafe or unpleasant conditions. Unshielded lights can glare into the eyes of motorists and into neighboring homes. Excessive lighting also wastes energy and leads to sky glow. Additionally, excessive and misdirected lighting can negatively impact wildlife, especially species undergoing local and long-distance migrations (e.g., birds, amphibians).

In most cases, the careful placement, shielding, and selection of the proper type of lighting can lead to improved lighting, lower utility cost and reduced impacts. The use of down light fixtures and motion-detector lights can also reduce the negative effects of lighting. The Town should continue to ensure that down light fixtures are utilized. The Town also should consider amending the Zoning Regulations to establish specific lighting standards. The Town should provide educational material to property owners and businesses regarding appropriate lighting.

OPEN SPACE AND GREENWAYS

Hartford is blessed with an important natural resource: open space. Open space is defined as any publicly or privately held, unimproved area of land, water course, or water body that may be used for agriculture, forestry, or outdoor recreation, or remain in a natural state. The character of an open space is often informed by its local context, such as whether it is in an urban/village, suburban, or rural setting. Greenways provide connections between isolated habitat areas to maintain bio-diversity, provide access to larger habitats, and allow for refuge from predators, fire or other disturbances. The interdependence of open space therefore underscores the importance of the Town's greenways as well.

The Value of Open Space to the Public

Hartford's open space provides several benefits to the public including a sense of place and regional identity. Open space also promotes local and traditional industries such as agriculture, forestry and tourism. Traditional village centers and country sides are delineated by open space which in turn contribute to the beauty of the scenery and provide opportunities for recreation. Large tracts of open space tend to include areas of significant wildlife habitat and a capacity to maintain high-quality surface waters. Most of Hartford is forested and much of it is conserved from future development. Additionally, open spaces are undeveloped and experience some pressure to develop.

**TABLE IX-3
TOWN OF HARTFORD OPEN SPACE**

<u>Name/Description</u>	<u>Location</u>	<u>No. Acres</u>
<u>Undeveloped Open Space</u>		
Hartford Town Forest	Reservoir Road	423
Hurricane Forest Wildlife Refuge Park	Wright Reservoir Road	142
Maanawaka Conservation Area	Route 5 North	21
David Chang Conservation Area	Route 4	6.5
Town VA Cutoff Road Property	Behind Fire Station	50
Town-owned former Computac Property	Old River Road	15
Dewey's Mills Property	Dewey's Mills Road	5.3
	Subtotal	662.8
<u>Developed Open Space</u>		<u>Acres</u>
Maxfield Property	Route 5 South	50.6
Lyman Point Park	Bridge Street	1
Frost Park	Wilder	2
Ratcliffe Park	North Elm Street	9
Watson Memorial Field	Main Street, Hartford	8
Quechee Green	Quechee	1.1
Clifford Park	Quechee/West Hartford Road	12
Fred Briggs Park	Main Street	<u>.2</u>
	Subtotal	<u>83.9</u>
	Total	746.7

Source: Town of Hartford, Dept. of Planning and Development Services, Recreation Dept. and Listers Office, 2018

Table IX-5 on the following page illustrates all lands held for natural and open space conservation. Total conserved land in Hartford, including parks and recreation areas totals

6,052.9 acres. This accounts for 20.6% of the Town. Consequently, a substantial portion of existing open space in Hartford is within private properties and is not being actively conserved. The Hartford Conservation Fund may be used to conserve open space. Hartford also enjoys the benefit of significant State and Federal open space lands, as well as lands owned by semi-public concerns, such as the Quechee Lakes Landowners Association (QLLA).

The Current Use Program began in Vermont in 1980. The Program allows forest and agricultural lands to be appraised at a lower rate set by the State. This property tax and land management program was developed in response to rising property taxes. Property enrolled in Current Use Program has a lien on the property for as long as the property participates in the Program. Land taken out of the Current Use Program must pay a land use change tax of 20%. Although the Current Use Program provides an economic incentive for land to remain in forestry and agricultural use, unlike a conservation easement, it is not a method of permanent protection. Land in Hartford that is enrolled in the Current Use Program in 2018 accounts for 5,942 acres, or 20.2% of the Town. Of that, 4,776 acres are forest lands, and 1,166 acres are agricultural lands. Since 2006, land enrolled in current use has increased 30%. Forest lands in current use have increased 36% while agricultural lands in current use have increased 11%.

Present Threats to Open Space and Greenways

The majority of open spaces in Hartford are private, undeveloped lands with secondary-growth forest cover. The chief threat to maintain open spaces in their present form is the pressure of new development. Development alters the physical state and basic character of the land and space and can result in fragmentation of natural habitats, greenways, and open spaces. Strategic placement of cell towers, fiber optic cable and other utility structures requires a sensitive balancing of the facilities required to support steady, sustainable growth with the need to preserve and protect the essential functioning of natural habitats, open spaces, and greenways that are integral to the Town's rural identity and character.

To address these concerns, the 2007 Town Plan developed several recommendations to encourage development in-town where the infrastructure is in place and simultaneously reduce density in the rural areas of Hartford. In addition, the Plan recommended three overlay districts (Rural Lands, Agriculture and Wildlife Connector) to carefully review development proposals to protect natural resources and rural character. These recommendations were implemented in 2008 with amendments to the Zoning Regulations and in 2016 with the updated Subdivision Regulations.

**TABLE IX-4
NON-TOWN-OWNED SIGNIFICANT OPEN SPACE HOLDINGS**

<u>Owner/Name</u>	<u>Location</u>	<u>Acreage</u>
North Hartland Reservoir (U.S. ACOE)	Quechee Gorge/Ottauquechee Floodplain	760
Quechee Gorge State Park (VT)	Quechee	76
Wilder Dam Lands	Wilder	89
Quechee Lakes Landowners Association	Quechee	1,939

(QLLA) Greenbelt and wildlife areas

QLLA Lake Pinneo	Quechee	55
QLLA Deweys Mills Pond and surrounding Marshland, Murphy Farm	Quechee	321
QLLA, Golf Courses/Nordic Center	Quechee	263.8
QLLA, Polo Field	Quechee	54
QLLA, Downhill Ski Area	Quechee	73
QLLA Deeryard	Quechee	780
Sterling Springs Deeryard	Rural South	30
Hemlock Ridge Deeryard	Rural North	93.8
Brookside Farm Conservation Easement	Wilder	174
Taylor Conservation Easement	Quechee	251
Wilson Conservation Easement	Jericho	6
Copeland Conservation Easement	Quechee	25
QL Resorts Conservation Easement	Quechee	34.6
QL Resorts Conservation Easement	Quechee	10
Bray Conservation Easement	Jericho	20
Appalachian Trail	West Hartford	<u>251</u>
Total		5,306.2
COMBINED TOWN AND OTHER HOLDINGS TOTAL OPEN SPACE ACRES:		6,052.9

Source: Town of Hartford Listers Office 2018

GOALS, STRATEGIES AND ACTIONS

Goal 1: Preserve and enhance Hartford's natural resources and environmental features and protect these features from the impacts of development.

Strategy 1: Encourage preservation and restoration of wildlife corridors, wetlands, riparian areas, large intact contiguous forest blocks and agricultural resources.

Actions:

- a. Ensure that any permitted alterations to wetlands do not significantly diminish their functional, ecological, or aesthetic values; comment on applications submitted to the Vermont Wetlands Office as necessary to ensure the above.
- b. Continue to encourage urban infill in established settlement areas and discourage development in outlying areas.