



MONKTON TOWN PLAN 2020-2028

MONKTON, VERMONT

PLANNING COMMISSION HEARING:	11/21/2019
ADOPTED BY PLANNING COMMISSION:	11/21/2019
SELECTBOARD HEARING:	1/6/2020
ADOPTED BY SELECTBOARD:	1/13/2020
APPROVED BY TOWN VOTE:	

ACKNOWLEDGEMENTS

The Monkton Planning Commission would like to acknowledge the support and efforts of those people and entities that have made this plan update possible. This project was supported with town funds and a 2018-2019 Municipal Planning Grant from the Vermont Department of Housing and Community Development. Addison County Regional Planning Commission provided technical assistance throughout the planning process. Grant funding for the Enhanced Energy Plan came from the Department of Public Service. Thank you to all committee members and residents who have participated, donated time and/or local food, crafts, ideas for the following studies and events:

2013 Complete Streets Study
2016 Geologic and Hydrologic Study
2016 Planning and Zoning survey
2016 Viewshed Study
2016 Energy Report
2018 Pizza and Planning Open House

Special thanks to John (Buzz) Kuhns, whose wonderful photos illustrate the plan.

In celebration of our Town and Community,

The Monkton Planning Commission:

Peter Close
Wendy Sue Harper
Lee Mahony
John Brace Sr.
Gayle Grim
Marilyn Cargill
Ivor Hughes

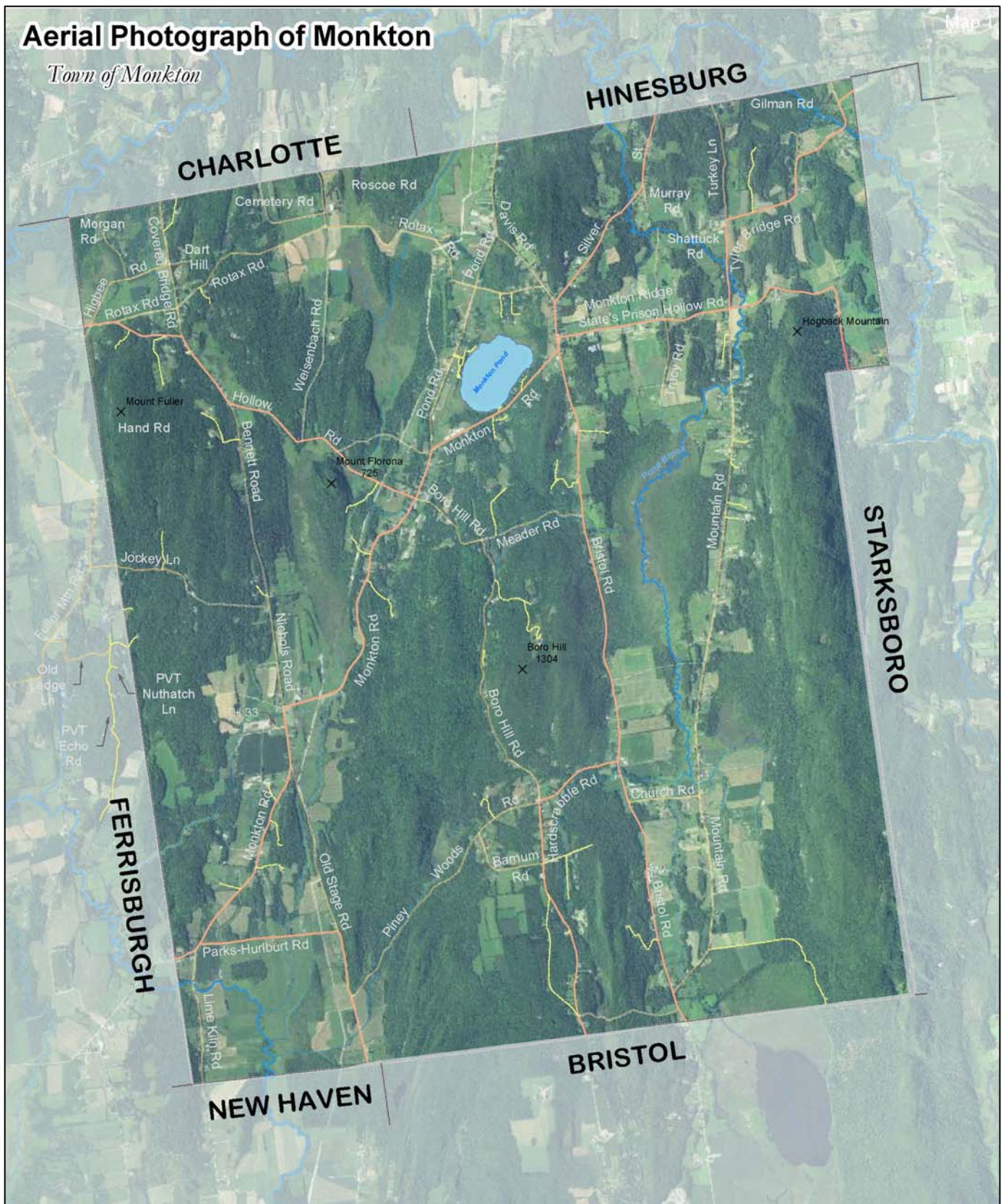


*The 2018 Monkton Planning Commission at the 2018 Pizza and Planning Open House.
Photo credit: Claire Tebbs*

Cover image: The Monkton Flag, designed by Monkton resident, Linda Reynolds.

Aerial Photograph of Monkton

Town of Monkton



Source:
Vermont State imagery, 2012

0 0.5 1 2 Miles



Addison County
REGIONAL PLANNING COMMISSION

ACRPC 9/2018

Map 1 Aerial Ortho

Monkton Town Plan 2020 – 2028

TABLE OF CONTENTS

TABLE OF CONTENTS	4
PURPOSE	6
INTRODUCTION	8
GUIDING PRINCIPLES	10
TOWN HISTORY	11
POPULATION	12
HOUSING	15
EDUCATION AND CHILDCARE	21
UTILITIES AND FACILITIES	25
TRANSPORTATION	35
ECONOMIC DEVELOPMENT	41
NATURAL RESOURCES	47
LAND USE	77
PLAN IMPLEMENTATION	88
COMPATABILITY	91
APPENDIX A ENHANCED ENERGY PLAN	93

MAPS

Aerial Ortho.....	3
Population Density.....	20
Utilities/Facilities.....	34
Crash Sites.....	39
Road Names and Volume.....	40
Commute Shed.....	45
Labor Shed	46
Septic Suitability.....	49
Earth Resources	51
Forest Cover 1992.....	56
Forest Cover 2006.....	57
Important Resource Areas	59
Land Cover	60
Public, Conserved and Inst.....	63
Potential Aquifer Resources	68
Water Resources.....	69
Land Use Planning Regions	83
Zoning Conservation / Prohibited.....	84
Elevation	85
Slope	86
Zoning Overlay Districts	87



PURPOSE

The purpose of this Plan is to set forth the community's land use and planning goals for the next eight years and to establish a framework for accomplishing these goals. The goals, policies and recommended actions are based on opportunities and challenges associated with Monkton and the values expressed by Monkton residents. Policies in the Plan are considered in Act 250 and Section 248 hearings. The Town Plan directs Monkton's regulatory policies set forth in the town zoning and subdivision bylaws, town ordinances, and in the day-to-day operation of the Town Planning Commission and the Development Review Board. The elements addressed in the plan adhere to those required in the State Planning and Development Act (Title 24 V.S.A., Chapter 117).

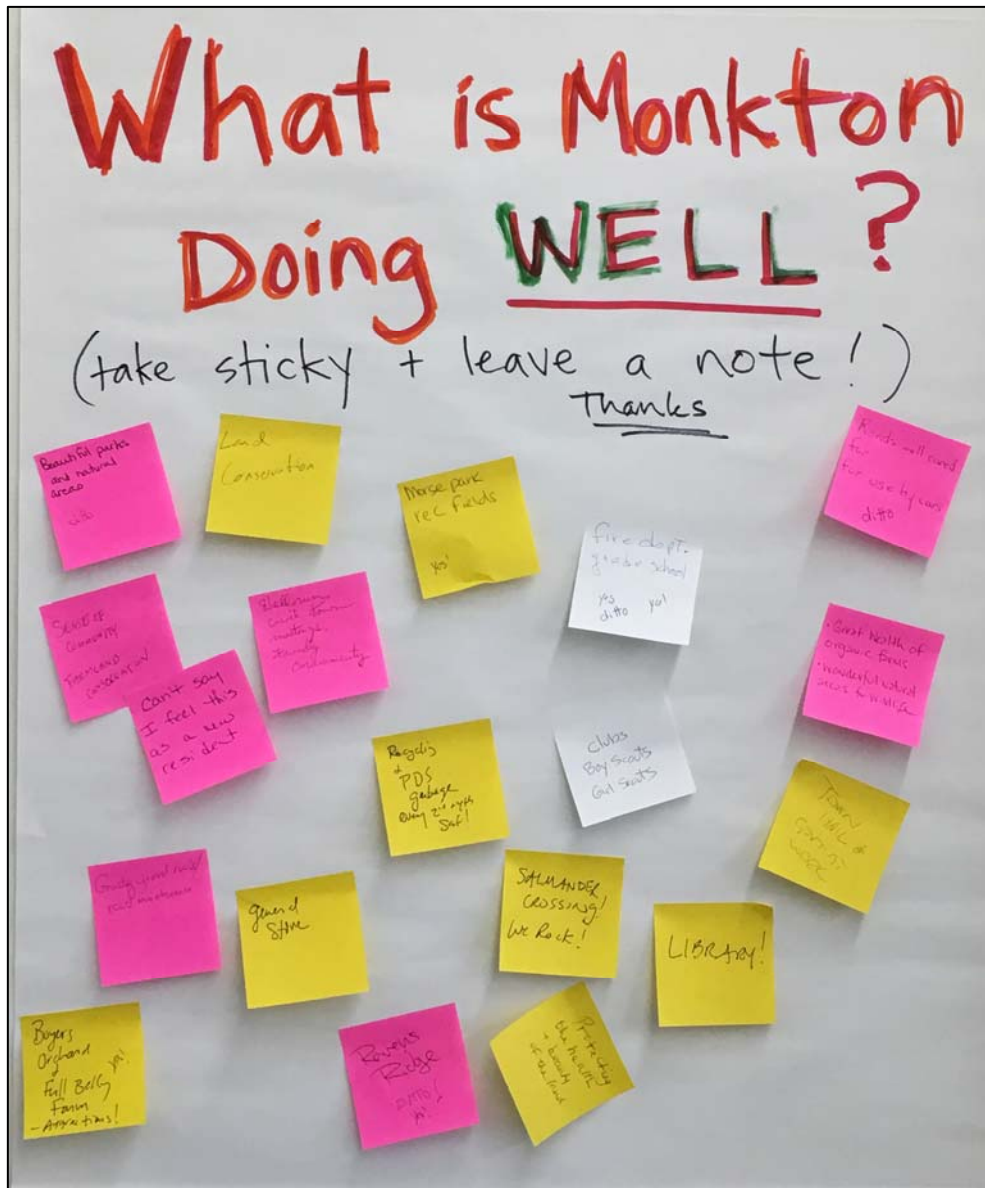


Raising of the Monkton Flag. Photo credit: Buzz Kuhns

A Town Plan is not a static document to be revised every eight years and set aside; it is instead the reference for all planning and zoning decisions. As the town works to interpret existing regulations and develop new ones, they will refer to the Plan to see how their actions further these goals. A Town Plan also exists to inform the regional and state government, neighboring towns and regions, and private companies and groups what Monkton requires of them. All private or governmental activity affecting Monkton should take note of the Town Plan and, where appropriate, be reviewed in light of the Plan's goals. Likewise, it is the responsibility of the town as it writes its Plan to take note of the obligations placed upon us by our neighboring towns. For this reason, the Town of Monkton has attempted wherever possible to look to its abutting towns for guidance and information regarding their goals. We

have also attempted, wherever possible, to acknowledge these goals, such as where conservation zones abut adjoining communities, and to address these goals and draft policy accordingly.

The Town Plan serves a role in State regulatory proceedings. Act 250 requires development projects to conform to the Town Plan. Other State proceedings for utility and road projects, under section 248, consider goals of the Town Plan and impacts to issues addressed in the Town Plan.



A post-it comment board at the 2018 Pizza and Planning Open House. Photo credit: Claire Tebbs

INTRODUCTION

Until early in the 1970's, Monkton was a rural community largely unchanged from the early days of the century. Farming, primarily dairy farming, was the major economic and social force in the town and was responsible for the land-use pattern seen today -- two village regions with some commercial development surrounded by a mixture of open farmland, working woodlands, and dispersed commercial activities.

Beginning in the 1970's, Monkton began to feel the influence of Chittenden County's urban growth as a regional employment center. More families with jobs in surrounding towns began to move into Monkton, seeking a rural living environment even though their job, shopping and leisure activities were oriented toward urban areas to the north. Throughout the decade of the 1970's, land-use impacts of this change were slight. Farming continued as a strong industry and continued to dominate the land-use patterns. Homes for these new ex-urbanites were built on land split off from farms, generally on large-acreage tracts dispersed throughout the town.

In the early 1980's, changes in the Vermont and national economy began to be felt in Monkton. First, the national farm economy declined to the point where most dairy farmers were operating below the break-even point. Many farmers in Monkton, as well as across Vermont, left farming. In 1973, Monkton had 37 active dairy farms; in 1990 that number stood at 15, by 1997 there were six, and by 2013 the number had decreased to three (the number of dairy farms in business today). As the decade of the 1990's progressed, despite government efforts at price control, milk prices remained generally below the cost of production.

Despite continued contraction of the dairy industry, farms continue to be a major economic activity in the town of Monkton. The town now hosts a more diverse agricultural base including fruit and vegetable farms, orchards, nursery operations, livestock and artisan cheese makers. Consolidation in the dairy industry has taken place as well as contraction, which has led to large fields farmed by landowners who live in adjacent towns.

At the same time the agricultural industry that shaped Monkton was on the decline, the demand for residential land increased. Throughout the 1980s, Burlington enjoyed a period of unprecedented economic growth. People from across the United States came to the area not only for jobs, but also to enjoy a rural lifestyle. The suburban and ex-urban growth confined to Chittenden County began to move further away from Burlington and into Addison County as both the demand and price for land in Chittenden County rose.

Today, as can be seen in the Economic Development chapter, most Monkton residents work outside of town. Many farmers, faced with declining incomes from their agricultural operations and increasing land values and property taxes, find selling some or all of their land for residential development an attractive and often necessary alternative. The dominant land-use pattern is changing from farmland to low-density, single family homes. Woodland, especially on hillsides with picturesque views, has also been sold for residential use. Monkton Pond, once a rural vacation area, is now being converted to year-round housing. Roads, the town hall, library, school and other public facilities are feeling the

pressure of increased demand by residents and by ever increasing non-resident commuter traffic.

As the Town faces new development pressures many new questions remain unanswered. Key among them is how will Monkton maintain the critical balance between ecological functions and water resource quality and development while sustaining the working landscape?

Monkton is committed to protecting and revitalizing the working landscape that defines Monkton, while managing on growth and activities which would encourage a vibrant town center. This Plan establishes the following *guiding principles* in accordance with the community's goals as set forth in the document.



Monkton Pond Photo credit: Buzz Kuhns

GUIDING PRINCIPLES

The following are the guiding principles of the Monkton Town Plan, which lay the ground work for the goals and recommendations found in each section. All town policies and regulations should resonate with these guiding principles, and further the goals of this plan.

- ❖ Encourage a diverse social and economic population and the ability for families to move into, grow, and stay in Monkton.
- ❖ Retain and steward Monkton's unique historic, natural and scenic characteristics.
- ❖ Ensure the preservation of the working landscape for future generations.
- ❖ Maintain the proper function of our ecological resources in order to protect air and water quality, soil health and wildlife habitat.
- ❖ Direct growth to reflect historic settlement patterns of denser village regions and hamlets, surrounded by agricultural fields, forests and other natural features.
- ❖ Promote a viable, diverse and creative local economy fitting with Monkton's rural character.
- ❖ Foster places and programs where residents can feel a part of a cohesive community.
- ❖ Support opportunities for high quality education and educational opportunities for Monkton residents of all ages.
- ❖ Ensure a safe, well-maintained transportation network that considers the needs of a diversity of users, including pedestrians and cyclists.
- ❖ Strengthen the opportunities for the Town and residents to conserve energy and use renewable energy sources.
- ❖ Promote recycling, efficient trash disposal and composting.

TOWN HISTORY

Monkton was chartered by Governor Wentworth of New Hampshire in 1762 and was organized as a town in 1786. The history of the town closely follows that of neighboring towns in Addison County. Settlement of the town was sporadic before the Revolutionary War, and many of the early settlers left their homes during the course of the war, seeking safety elsewhere. The overall settlement of the town began after the war.

While many of the early settlers were farmers, there was also early exploitation of mineral deposits found in the town. Monkton's iron provided metal to the American fleet built at Vergennes during the War of 1812. Yellow ochre was also found, but the most abundant mineral was high-grade kaolin, used primarily in ceramics.

With the gradual rise and predominance of agriculture, greater settlement and development of farms took place. During the 19th century the sheep industry led, and in 1840, there were approximately 6200 head of sheep in town, as compared to only 1200 cattle.

By the middle of the 19th century, Monkton was established as a self-sufficient, agrarian community. In 1880, for example Monkton had (6) manufacturers, (8) blacksmiths and wheelwrights, (3) physicians, (12) carpenters (architects), (3) dressmakers, (10) teachers, (3) butchers as well as farmers, ministers, cattle dealers, and farm machinery dealers.

In the latter part of the 19th century, however, Monkton's population began to decline. The lure of free land and the promise of better fortunes in the west attracted many, especially as the sheep industry in Vermont began to decline. Whole families from Monkton moved westward across the northern tip of New York State and into the Ohio Valley and beyond. Many of the old-name families in Monkton trace ancestors to many western population centers.

The population decline continued steadily throughout the first half of the 20th century, reaching its lowest point in over 150 years during the 1950s. As indicated by census data, however, there has been a steady increase in Monkton's population from the late 1960's. This increase has followed the increases in Chittenden and Addison Counties and has been facilitated by the modernization of the road system during this period.

Monkton has changed substantially as a result of the population increases. It is no longer a self-sufficient community, as it was during the 19th century. Although the town has retained its agrarian character, the majority of residents are now commuters who are dependent upon other communities for employment as well as most goods and services. Since 1985, development in Monkton has been almost exclusively residential, with a steady increase in telecommuting and home-based small businesses. The residential development that has occurred has been predominately single-family homes scattered randomly throughout the town.

POPULATION

GOALS

1. Monkton will be multi-generational with an active youth and senior population.
2. Monkton's population will be diverse.

POLICIES

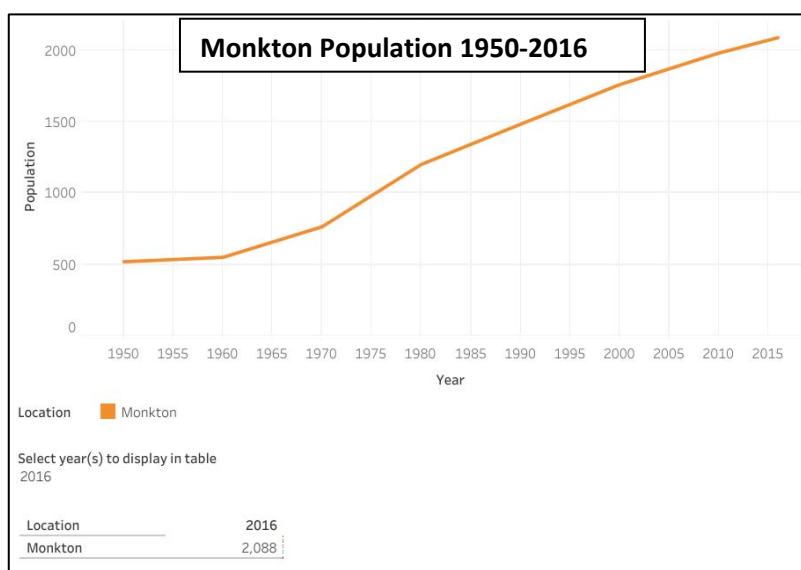
1. Encourage a diversity of housing types, including affordable options for young families and seniors.
2. Support a high-quality school system and infrastructure (see Education section).
3. Encourage opportunities for local business in keeping with our Economic Development Plan.
4. Provide opportunities for local recreation and civic engagement.
5. Support cohesive Village regions development that increases the safety of pedestrians and cyclists.
6. Preserve and cultivate agricultural land and the local economy (also see Agriculture in Natural Resources and the Economic Development section).

RECOMMENDED ACTIONS

1. Survey the needs of the senior population in Monkton to identify their needs and concerns.
2. Seek opportunities for local economic development (see Economic Development section).
3. Research grant funding for recreation, pedestrian and/or cycling infrastructure planning and implementation.
4. Conduct a study to better understand Monkton's growth rate and population demographics as it relates to housing needs, labor force, commuting patterns and land use patterns.

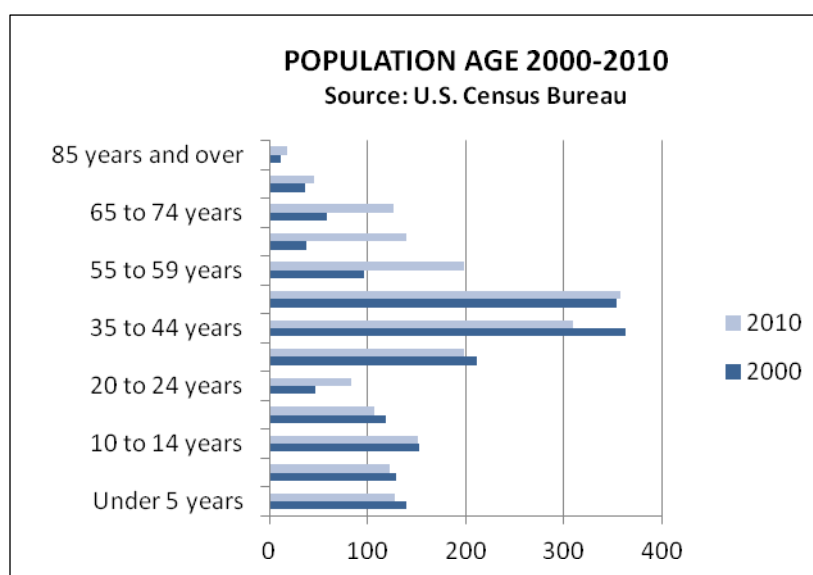
POPULATION GROWTH

Monkton had a consistent growth rate of about 1.25percent over the past 20 years. In 2000, the Census reported that Monkton had a population of 1,759. In 2010 the population had grown to 1,980 and in 2016, 2,088. Much of Monkton's growth can be attributed to its proximity to employment centers in Chittenden County and surrounding towns. Since the 1960's growth rates in Monkton have correlated with growth rates in Chittenden County. As Middlebury grows as an economic hub, growth pressures and commuter traffic through Monkton comes from all directions.



AGE OF POPULATION

In 2010, the median age of Monkton residents was 41, up from 37 in 2000. As can be seen in the graph, the population of 55 and older dramatically increased from 2000 to 2010, as baby boomers of the 1940



Source: Vermont Housing Data www.housingdata.org/profile/


and 1950's entered retirement age. In the next 5-20 years trends indicate there will be more of a demand for facilities and services for a growing senior population. Services needed include specialized housing, health care, social opportunities, and public transportation.

Other age groups have maintained similar numbers over the past 10 years, except the population of residents aged 20-24, which increased but has not necessarily stabilized. In order to attract young families to Monkton, it is important that properties in Monkton are affordable to first time home buyers most likely in this age bracket.

The rapid growth in the number of school age children seen in the 80's and 90's has slowed as baby boomers have exited childbearing years and the trend towards fewer children per family has continued. Monkton, like much of Vermont, has become less affordable for young families and there is currently a dearth of childcare options. *See also housing needs by age group data in the Housing Section.*

EDUCATION AND INCOME

Monkton's population has attained a level of education similar to other towns in Addison County. Ninety three percent of Monkton's population, 25 and older, obtained a high-school diploma compared to ninety percent, regionally. Thirty seven percent received a bachelor's degree, compared to thirty four percent regionally. Twelve percent have attained a graduate or professional degree compared to 13.9 percent for the County. Median individual income does correlate with education level. For Monkton, median income for those with a high-school diploma in 2010 was \$33,797. It was \$44,688 for those with a bachelor's degree and \$47,500 for those with a graduate or professional degree during that same year.



HOUSING

GOALS

1. Offer a diversity of safe, affordable, housing options for a diversity of residents.
2. Increase housing opportunities in walking or cycling proximity to amenities and services.
3. Develop housing in a way which preserves the natural, cultural and scenic features of Monkton.
4. Minimize undue infrastructure cost and maintenance for the municipality.
5. Increase energy efficiency and energy conservation in Monkton homes.

POLICIES

1. Encourage residential development in the village regions.
2. Encourage shared utilities and driveways for any new developments.
3. Encourage on-site storm water management following green infrastructure models of management.
4. Support the preservation and adaptive re-use of our historic buildings.
5. Encourage the use of Planned Unit Developments (PUD's).
6. Encourage better building practices and maintenance to prevent loss or degradation of existing housing.
7. Encourage development which minimizes impact to environmentally significant areas.
8. Encourage energy efficiency and energy conservation in new homes and home maintenance and upgrades.

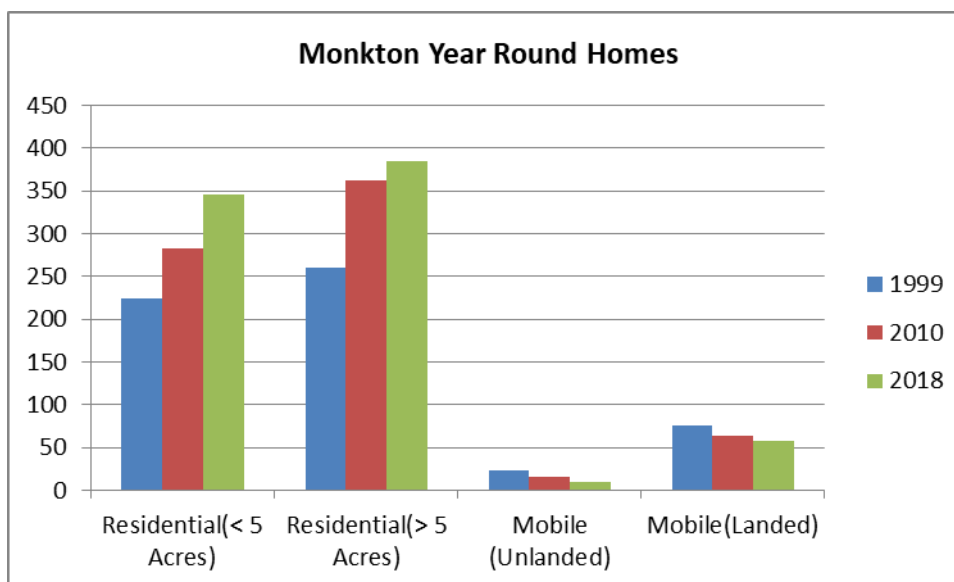
RECOMMENDED ACTIONS

1. Incentivize the development of affordable homes.
2. Offer educational seminars/workshops for home owners regarding grants and programs supporting energy efficiency/weatherizing, and land-use best practices related to residential development and the protection of natural resources.
3. Identify substandard sewage disposal systems.
4. Support fire department efforts for chimney and wood-burning safety.
5. Review Monkton's PUD and other housing-related regulations for needed updates in order to achieve these goals.

HOUSING STOCK

New housing units should adapt to meet the needs of the changing demographic of families moving to Monkton and Monkton's aging population, both in need of smaller, efficient homes. Monkton will embrace this challenge by continuing to adapt zoning to meet the need for more diverse housing options for young families, singles and seniors who may be looking for smaller, more affordable units and/or living units with shared common in-door and/or outdoor space.

Monkton Year Round Homes			
Home Type	1999	2010	2018
Residential(< 5 Acres)	224	283	346
Residential(> 5 Acres)	260	362	385
Mobile (Unlanded)	23	16	10
Mobile(Landed)	75	64	58



Monkton Seasonal Homes			
Homes \ Year	1999	2010	2018
Seasonal(< 5 Acres)	32	24	26
Seasonal(> 5 Acres)	5	6	4

Commercial Parcels			
Year	1999	2010	2018
	18	24	7

Residency of Home Owners (Based on Homestead Declaration)		
Monkton Resident	674	70.6%
Non-Resident	281	29.4%

Property Usage	
Rental Use	9
Covenant Restricted	12
Multi-Unit	10
Accessory Dwellings	20
Vacant	2

Data courtesy of the Monkton Town Listers.

While housing in Monkton continues to grow steadily the types of housing needs to be recognized for both needs and uses.

AFFORDABLE HOUSING

Most of Monkton's homes are currently single family/owner occupied units. Prior to the 2012 zoning update, Monkton's zoning regulations did not allow housing units larger than two family structures. This severely limited the type of housing available and potential affordable living situations for those not owning their own home. In-law apartments, housing cooperatives, boarding rooms, duplexes and multi-unit buildings are examples of smaller, more efficient, affordable housing. Farm worker housing also needs to be considered.

Affordability of Housing in Addison County Towns 2016



Source: Vermont Housing Data 2016/Us Census Bureau ACS 5-year estimates

Historically, Monkton has attracted families earning a wide spectrum of incomes. However, since the mid-nineties, housing prices in Monkton have steadily increased to above both Addison County and Vermont median prices. In 2010, the median selling price for a single-family home in Monkton was \$247,000 in 2018 it had risen to \$261,000. Currently, the number of existing homes in Monkton that qualify for Vermont Housing Authority (VHFA)’s reduced interest rate financing, by virtue of meeting the affordable home test, is severely limited. In light of this, creating avenues for the development of affordable housing in Monkton is the first and foremost priority. Monkton’s affordable housing options should address the needs of people who are elderly and disabled, and attract and maintain young families in the area.

Monkton planning goals support ways to diversify Monkton’s housing stock, including multi-family structures, cluster housing for single family housing units or rentals, “tiny homes”¹, or farm worker housing.

Annual Average Change by Age Group in Addison County 2010-2016 Estimates



Source: Vermont Housing Data 2018. US Census Bureau ACS 5-year estimates 2010-2016

The rate of growth by age group in Addison County determines current and future needs for housing and services in our communities.

¹ A tiny home is a standalone structure, typically between 100 and 400 square feet. Most tiny homes are built on wheels, but they aren’t necessarily meant to be mobile. Tiny homes are associated with a nationwide movement of simplified living in smaller homes. Tiny homes in Vermont typically must adhere to town zoning regulations.

HEATING AND WEATHERIZATION

For many, affordable living is determined by maintenance and heating costs of the home, this is especially true in Vermont's northern climate (please see the Energy section for how Monkton residents heat their homes). In the interest of encouraging energy efficiency, and also increasing affordability of Monkton homes, educational material on minimizing the costs of weatherization and on alternative energy choices should be made available at the Monkton town office. The Monkton wood bank, through HOPE, continues successfully, offering local wood to those most in need. There is growing community support for this program which is wholly dependent on wood donations from residents.

For more information on ways to implement affordable housing options, go to the following websites:

http://www.orton.org/resources/heart_soul_implementation_guides

<http://www.vtaffordablehousing.org/>

<http://www.vhfa.org/partners/initiatives/vhfa-publications>

<https://www.planning.org/planning/2016/feb/tinyhouses.htm>

HOUSING AND THE WORKING LANDSCAPE

As Monkton grows and develops the Town must ensure that housing adjoining agricultural areas, whether they be working farms or managed forests, be sited in an unobtrusive manner and be limited in number. The town encourages the incorporation of right-to-farm covenants in deeds. Another way in which to preserve our open space, agricultural lands, and forests is to create flexible land use codes that allow for placement of new homes in a manner that does not unnecessarily infringe on the continuity of natural features and prime agricultural soils.

While conservation subdivisions work to protect the rural landscape, it is advantageous to promote growth in existing residential areas before developing the more rural areas of a town. Encouraging development in/near historically dense areas, where public amenities and services are available, better protects our land base while serving the needs of residents.

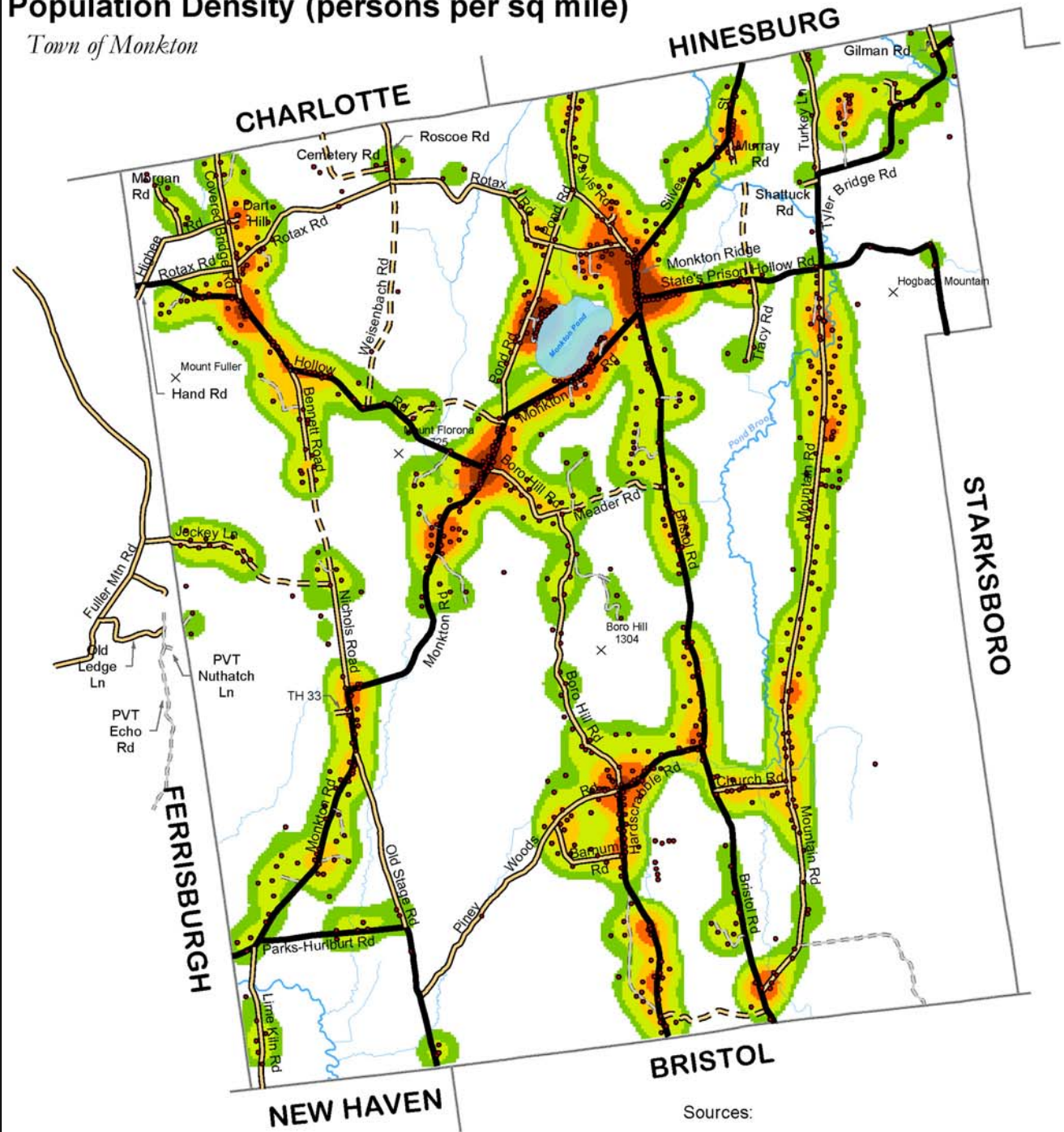


Monkton Residents think about housing options in Monkton at the 2018 Pizza and Planning Open House

Photo Credit: Claire Tebbbs

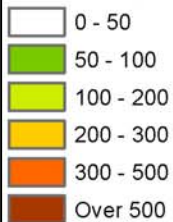
Population Density (persons per sq mile)

Town of Monkton



● Residential Structures (2018)

Persons per Square Mile

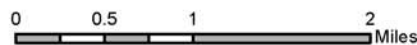


Sources:

Each single family residence is multiplied by the Monkton median household size, 2.67 persons in 2010. (includes homes, mobile homes, other residential and seasonal dwellings)

Each multi-family residence is multiplied by 3 times the median household size, or 8.01 persons.

Density interpolated over a 1/4 mile radius.



ACRPC 9/2018

Map 2 Population Density

EDUCATION AND CHILDCARE

GOALS

1. Support high quality education for all elementary aged and high school students residing here.
2. Support Monkton Central School as a vital community service.
3. Provide access to educational services and opportunities for all Monkton residents.
4. Support safe, affordable, high quality childcare in Monkton for Monkton residents.

POLICIES

1. Participate in long-term planning for the Monkton Central School.
2. Encourage summer use of existing educational facilities.
3. Support long-range plans to improve our village regions that provides services such as a new library facility and public transportation routes to surrounding towns.
4. Permit childcare facilities as a home occupation in residential zones.

RECOMMENDED ACTIONS

1. Facilitate a relationship between school administrators and town officials to ensure a shared vision for Monkton Central School.
2. Discuss with school administrators the summer use of existing educational facilities
3. Provide information on on-going regional educational opportunities at the Town Office and Library.
4. Provide adequate high-speed internet to support online learning opportunities for post-secondary education, home schooled students, and elementary, middle and high school students.
5. Encourage childcare facilities as a home occupation.

MONKTON CENTRAL SCHOOL

Monkton Central School was built in 1960 and currently serves approximately 145 students. Monkton Central School provides public education for grades kindergarten through the sixth grade. In the fall of 2018, the staff and faculty consisted of a principal, a secretary, 27 staff comprised of teachers, professional staff, and support staff including regular program assistants, special education assistants, custodians and food service personnel. The capacity of the school is 225 students.

Prior to 2018, the school board for the elementary school consisted of a chairperson and four directors. Members elected by Australian ballot on Town Meeting Day, had terms of service that varied from one to three years. Today Monkton is represented on the Mount Abraham Unified School District (MAUSD) School Board by two elected members. They are part of a 13-member board representing the 5 towns of Monkton, Starksboro, Bristol, Lincoln, and New Haven.

The school, located between Monkton Ridge and Monkton Boro, was expanded in 1986. In 1997 there were major renovations to expand the number of classrooms from 10 to 12. It is a one-story building

encompassing approximate 15,000 square feet. The gymnasium continues to double as a cafeteria and classroom. It includes a kitchen and administrative office; and serves as a public meeting space for public meetings and other town events. In the most recent renovations, the heating system was upgraded to two oil-fired furnaces, which provide forced hot water heating. Water for the school is pumped from a drilled well. A mound septic system adjacent to the school building handles sewage.

In 1993, the State of Vermont granted the school a variance to permit the installation of a new septic system. In granting this variance, the state set a cap of 200 students and staff in the school. This upper limit has been exceeded, with a student population of 216 at the end of the 1994/95 school year. The town and the state implemented a plan that allowed for continued use of the present school by allowing an off-site septic system. In 1997 the off-site septic system was completed on the Morse Park property. With this new septic addition, the school has adequate sewage disposal.

Monkton Central School provides local bus transportation. Four buses are used to transport all students to the elementary school, two of them are used to transport the middle and high school students to Mount Abraham Union High School in Bristol. Though this practice economically utilizes four buses to transport students to two locations 13 miles apart, it results in long school days and bus rides of up to one hour for some students.

MOUNT ABRAHAM UNIFIED SCHOOL DISTRICT (MAUSD)

Monkton Central School is part of the Mount Abraham Unified School District (MAUSD). The supervisory union headquarters located in Bristol represents five towns; Bristol, Lincoln, Monkton, New Haven and Starksboro, each with its own elementary school (kindergarten to 6th grade). Mount Abraham Union High School (MAUHS) in Bristol provides middle school (grades 7 -8) and high school (grades 9-12) for the five district towns.

Within the school district, each individual town elects representatives to the MAUSD School Board based on the population of the town but not less than two. The same 13-member board oversees the high school, middle school and grade school. An administrative group made up of the principals of the schools, the Superintendent, and the business office develop a budget based on the MAUSD Board policy and direction set by the Board. The budget includes all costs for operation of all six school districts and the Supervisory Union, including central office expenses and consolidated functions and services.

The MAUSD Board reviews and adopts the budget, to present to the voters. The budget is ultimately funded by a combination of local property taxes and state aid. A single tax rate is set for all 5 towns based on the amount of money needed to support the budget approved by voters. Basically, once all VT towns have approved their budgets the state sets a yield which indicates how much money needs to be generated from a tax rate of \$1 per \$100 of assessed value based on the grand list for the state. That yield is then applied to the amount of money required to fund the budget which is used to set a single education tax rate for all five towns. Each town then has their own Common Level of Appraisal (CLA) which is applied to the single education tax rate to produce the actual education tax rate in that town. Each property tax payer in the five towns then pays taxes on their property at that established rate.

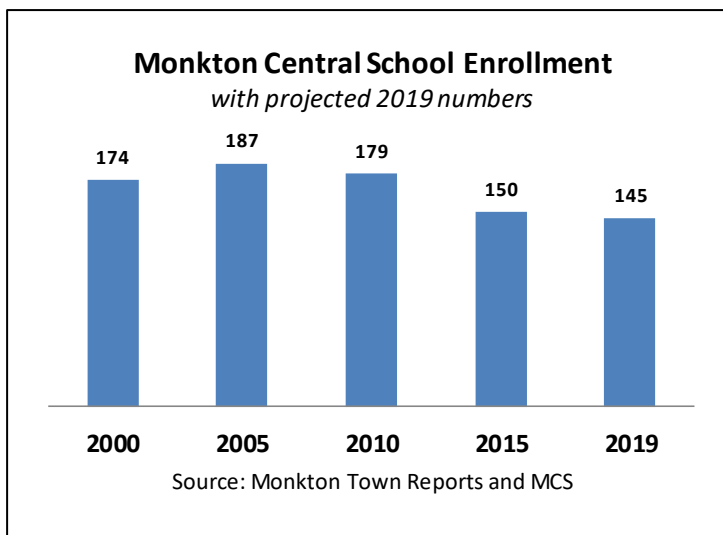
OTHER EDUCATIONAL SERVICES

Technical and vocational educational opportunities are available to Monkton students at the Patricia Hannaford Career Center in Middlebury. Brick and mortar post-secondary adult education is available from a number of colleges within 25 miles of Monkton, including the University of Vermont, St. Michaels College, the Community College of Vermont, Middlebury College, and Champlain College. Students at Mount Abraham High School can also take advantage of State funded dual enrollment courses and Early College. Students of all ages can also take advantage of the many online courses and programs offered both within and outside of Vermont. The Willowell Foundation, based in Monkton, is an educational nonprofit center offering environmental, agricultural and art-related programs for children while serving as a resource for area students, teachers and community members in programs that integrate the sciences, arts and humanities into place-based and outdoors education.

TOWN GROWTH AND SCHOOL ENROLLMENT

This Plan expects development and population growth at rates and in locations that fall within the capacity limits of Town services, with particular interest in education. A considerable amount of town taxes are committed to education and as such, attention needs to be given to how land use decisions, regulations and population trends impact school enrollment, and in turn effect costs and benefits to Monkton residents.

This Plan recognizes the importance of the Central School and the adjacent Morse Park, as a vibrant civic center. Not only does it provide a hub of activity for many families in Monkton, the school and park are physically situated in the center of Monkton. Any new pedestrian and cycling infrastructure should incorporate the needs of those travelling to and from the school on a daily basis, including safe walking routes for children.



CHILDCARE AND EARLY EDUCATION SERVICES

The Town of Monkton recognizes the need for more affordable and locally available childcare services. These services may range from informal unregistered or unlicensed day care facilities serving 6 or less children to state registered/licensed daycare facilities serving 6 or more children, as well as early education preschools with a more formalized curriculum. The Town encourages all childcare providers to receive State certification. Currently Monkton residents are served by home day care operations and licensed daycare centers in surrounding towns. Larger licensed daycare and preschool centers exist in Middlebury and Hinesburg. Monkton's pre-school aged children are encouraged to attend pre-school. MAUSD pays for up to 10 hours per week of preschool at any licensed pre-school including MAUSD's Early Essential Education program located in Bristol. Monkton Central School offers an afterschool program for K-6th grade.

The Mary Johnson Children's Center in Middlebury administers a child care referral program for Addison County; *Addison County Childcare Services*: 388-4304 or e-mail referral@mjcvt.org.



Monkton Central School. Photo Credit Buzz Kuhns

UTILITIES and FACILITIES

Also see the Enhanced Energy Plan, Appendix A of this plan regarding energy development policies and siting standards within Monkton.

GOALS

1. Provide updated efficient technologies, telecommunications services, and infrastructure without undue environmental and/or economic impact to our residents.
2. Protect our environmental and cultural assets when planning for the future.
3. Follow policies in the Enhanced Energy plan when considering any new energy project.
4. Provide the needed services to create a safe, healthy community in which to live, work and play.

POLICIES

1. Encourage hearings on proposed utility projects in order to catalog the concerns and sentiments of the neighboring landowners and other residents towards the construction of such projects.
2. Participate to the fullest extent possible in hearings before the Vermont Public Utility Commission on projects located in Monkton or neighboring towns.
3. Encourage conservation and renewable energy sources with localized distribution as an alternative to wide scale transmission and distribution projects.
4. Support small and home-based businesses by encouraging the most current telecommunication infrastructure.
5. Support public access to public land.
6. Support the work of the Monkton Recreation Committee.

RECOMMENDED ACTIONS

1. Survey the needs of telecommuters and other business owners in Monkton.
2. Work with town and regional agencies and boards to ensure public access to public lands.
3. Encourage the telecommunication providers to expand high speed service.



Monkton Fire Station. Photo Credit Buzz Kuhns

TELECOMMUNICATIONS

Good communication (cell service and high speed internet) have become vital for business and social interaction. Monkton, like many towns in Vermont, suffers from spotty cell phone service and limited high-speed internet availability. Cell service is currently available from six carriers and cell reception varies between each ranging from no service though adequate service to good service depending on the location. Good service is characterized as 5 to 10 megabits per second (mbps) voice, text, and email with web browsing, however streaming may or may not be possible. Internet service is available from a number of cable and satellite companies. High speed internet via fiber optic cables is starting to be introduced by Green Mountain Access (Waitsfield & Champlain Valley Telecom).

Monkton encourages providers to continue to improve their services and cell coverage by making use of existing communication tower located on Boro Hill, existing structures, and the use of microcells. Should any additional sites be sought or modifications to the existing tower, they shall not have an undue adverse effect on the aesthetics, scenic beauty, historic sites, and/or water quality, the natural environment or public health and safety. The 2016 *Monkton Viewshed Study* should be taken into consideration for any proposed communication facilities.

UTILITY SERVICES

The following utilities presently serve the Town of Monkton:

Utility	Description
Electric	Green Mountain Power
Telephone	Champlain Valley Telecom, Consolidated Communication
Cable TV	Comcast
Satellite	Direct TV/Dish
Cellular Telephone	Local service available through regional providers.
Internet Access	Local access available through regional providers, including DSL, cable and satellite.

SOLID WASTE MANAGEMENT

Monkton is a member of Addison County Solid Waste Management District. The Town provides a recycling facility at the Town Garage twice a month for mandatory household recycling. The District collects hazardous wastes generated by households, metal waste and plastic bags at the Middlebury Transfer Station. Hazardous wastes include items such as paints, cleansers, poisons, contaminated fuel, and antifreeze. Residents can also take advantage of commercial curbside pickup. All businesses in town generating hazardous wastes make individual arrangements for their disposal.

TOWN PROPERTIES

The Town has the following facilities:

- Town Hall
- Town Garage
- Monkton Fire Station
- Monkton Central School
- Monkton Recreation Field
- Morse Park

TOWN ADMINISTRATION

The Town Clerk, Assistant Town Clerk, Treasurer and Assistant Treasurer provide Town administrative services. A five member Select Board elected by Australian ballot governs the Town. The Planning Commission is also elected by Australian ballot as is the school treasurer, the delinquent tax collector, town and school moderators, the constable, listers, auditors, justices of the peace, and school board members. The Select Board appoints members of the Development Review Board, and hires a zoning administrator. The Town is also served by numerous volunteer committees.

TOWN OPERATING BUDGET

The Town budget has two sections, the school budget and the town operating budget. The town operating budget including administration, road improvement and maintenance has increased over time at a normal rate of inflation. This cost trend is likely to continue, as well as follow the changes in the cost of energy. Maintenance and improvements to the highway system is vital to maintaining safe roads and maintaining property values for the citizens of Monkton. Goals within this plan seeks to improve the efficiency of the highway system via redirecting traffic to state highways and optimizing the road system as suggested in the Transportation section of this plan.

TOWN HALL

The Town Hall was originally built in 1859. In 1978, the Monkton Town Hall was listed in the National Register of Historic Places by the National Park Service of the U.S. Department of the Interior (Record Number 373933, Item Number 78000225). The town continues to explore the feasibility of building a new Town Hall facility on a Town-owned property just north of its current location, with plans to house a new library space.

RUSSELL MEMORIAL LIBRARY

The Russell Memorial Library, named in honor of Albert P. Russell, (one of the first and most significant benefactors of the library) is located on Monkton Ridge directly across from the Town Hall. Hours can be found on the Russell Memorial website or at the library.

The Library's staff is comprised of two librarians and the assistance of volunteers. The primary function of the library is to serve children and adult popular reading. The facility, which contains approximately 3,000 volumes and periodicals also offers a collection of books on tape and CD. The Library also offers a number of children's programs including story hours and internet access.

There are a small number of reference documents including town reports from over a hundred years ago and the Russell collection of old Vermont history books. The Russell Memorial Library participates in the Vermont Interlibrary Loan Program and is open to all county residents without charge.

The building and land for the library were provided by a trust established by Dr. George Russell, in honor of his father, Albert Russell. A board of trustees, elected by the town, oversees the operations of the library.

POST OFFICE

Monkton's post office is currently housed in the Monkton Fire Station. It does not provide rural route services. These are provided by Bristol, New Haven, Charlotte, Hinesburg and North Ferrisburgh USPS operations. Due to this, there is a diversity of postal codes used by Monkton residents, depending on which rural route their physical address has been designated within. Only those residents who have a post office box at the Monkton post office have a Monkton mailing address.



East Monkton Cemetery Photo credit: Buzz Kuhns

CEMETERIES

There are currently three in-use cemeteries in Monkton. Monkton Ridge Cemetery sits next to the Town Hall and dates back to 1804. The Monkton Borough Cemetery, on Pond Road dates back to 1816 and the Morgan Cemetery, on Church Street in East Monkton dates back to 1812. There is also the Hurlburt cemetery and the Carter cemetery.

The cemeteries are maintained by the Town. According to historic records there are six other cemeteries in Monkton, the earliest of which dates to 1793.

HEALTH AND SAFETY

Monkton has a privately-run volunteer fire department and is part of a mutual aid network providing and receiving auxiliary support as required by surrounding towns. The fire department is situated in a town-owned building, but is a private operation. The building is also used for town meetings and is the designated FEMA Shelter for the town.

The Fire Department has one boat and five trucks, including a brush truck, equipment truck, one tanker, a mini-pumper and a mainline pumper. The Fire Department is supported by private donations and an allocation voted by the town at town meeting. Monkton First Response, Bristol Rescue and Vergennes

Area Rescue Association provide emergency medical services.

Regional health care service providers serve the Town of Monkton. University of Vermont (UVM) Health Network Porter Medical Center in Middlebury and UVM Medical Center in Burlington serve as major medical providers.

The Town of Monkton has no police department. Law enforcement is provided by the Vermont State Police and contracted as needed through the Addison County Sheriff's Department.

Presently no extended care facilities are located within the Town of Monkton. Various county and regional organizations provide in-house and community services. The Town recognizes the importance of these services and provides support through its annual budget. Future growth within the town, and particularly among older members of the community, will lead to the need for the promotion of such facilities within the town.

Among the many organizations providing additional community services identified in the town's annual report are:

- Addison County Community Action Group
- Addison County Hospice
- Addison County Home Health Care Agency
- Community Health Services
- Elderly Services
- Have A Heart Food Shelf
- Champlain Office of Economic Opportunity (CVOEO)
- Women Safe
- Age Well

Additional regional services, such as Addison County Community Action Group, Social Services, and Courthouses etc. are located in Middlebury.

RECREATION

The town of Monkton has two public park areas, and a number of popular walking, cycling and hiking loops. Privately owned open land, suitable for Nordic skiing, equestrian and camping facilities are also abundant. The 'Recreation Field', on Hollow Road is 6.2 acres and contains multi-use facilities including parking, a playground, athletic fields, open areas and a covered pavilion.

Morse Park is located between Monkton Ridge and Monkton Boro and borders both Monkton and Pond Roads. It is adjacent to the Monkton Central School and the State of Vermont Fish and Game Access Area on Monkton Pond. This parcel was acquired by the Town in 1996, and consists of 37.1 acres of open fields, wetlands and woods. The park contains several playing fields, a parking area, pavilion and a walking trail that is over a mile long. The recreation committee has more plans in the future for this site and is committed to making sure the area is available for the people of Monkton to enjoy. The State of Vermont maintains an access area on Monkton Pond. The area is comprised of 1.8 acres and is located on Access Road and has facilities for boat and canoe access to the pond. Raven Ridge, a privately-owned conservation property administered by The Nature Conservancy and accessed from Rotax Road, is also a popular place for hiking.

Special consideration should be given to wildlife habitat areas and areas of significant bio-diversity. Fishing and hunting in these areas should be managed for the continual protection of these lands and for the recreational value that these open spaces provide to the community. The identification of such places is critical to their protection. Please see the Natural Resource section for more information.



Monkton Recreational Facilities Photo credit: Buzz Kuhns

The Monkton Central School has outdoor and indoor recreation facilities used by the community. Playgrounds, playing fields, as well as a multipurpose room are available.

Monkton has an active recreation committee which plans recreational activities and maintains current recreational facilities. The committee and this plan support the up-keep and creation of new outdoor recreational facilities, such as multi-use trails, hiking and biking paths when opportunities arise, including the use of class 4 roads no longer used for motor vehicles. The neighboring towns of Bristol and Hinesburg have active recreation committees and programs open to Monkton residents.

CULTURAL RESOURCES

Early cultural activities revolved around the various church groups in Monkton. Earliest were the Baptists and Congregationalists, followed shortly by the Methodists and later by the Friends Society, all organized in the late 1790's or shortly after 1800. Over the years, these groups built and sold to one another various church buildings in Monkton Boro and Monkton Ridge. The church built in 1879 by The Society of Friends on Monkton Ridge is still currently in use by the Methodists. It replaces a

meetinghouse built by the Quakers in 1798. In 1866, the Methodists built the church still standing in East Monkton. At that time, it was part of a thriving settlement of many homes and shops that are now gone.

In addition to these Church organizations, Monkton was host to Modern Woodmen of America whose chapter was founded around 1900 but was inactive by 1960. The Florona Grange, founded in the late 1800's, was an active part of Monkton's community fabric and was located in the Baptist Church in Monkton Boro. The grange building has been sold into private ownership. This federal style church was built in 1811 and modified with changes to its steeple in 1854. It shares with the 1806 Congregational Church in Middlebury the distinction of being the two oldest churches in Addison County to retain their nearly original appearances².

MONKTON MUSEUM and HISTORIC SOCIETY

The Monkton Museum and Historical Society (MM&HS) was first incorporated in 1976, the year of the nation's bicentennial. In 1994, the Society became inactive. MM&HS was reorganized in 2004. The Society is a non-profit, tax-exempt organization incorporated under the laws of the State of Vermont. The purpose of the Society is to collect and preserve historical Monkton artifacts, to serve as a resource of reliable information for those interested in Monkton's history, and to organize educational opportunities for the community at large and area students of all ages. The Society is working to create an inventory and database of historical artifacts in its possession as well as a directory and database on Monkton cemeteries and individual gravestone information to facilitate genealogical research. Monthly meetings provide an opportunity to discuss topics related to Monkton history and to host guest presentations on various historical topics. A long-term goal of the Society is the preservation and restoration of the Monkton Boro schoolhouse.

The efforts of these early residents have left a heritage that today accounts for several beautiful and architecturally significant structures. A publication of the Vermont Division for Historic Preservation, *The Historic Architecture of Addison County* devotes a section to Monkton's early architecture. The Region has defined several other regional and supra-regional cultural resources, such as the Addison County Field Days, dairy co-ops, local newspapers, radio stations, and offices of public works. Through the increased and continued support of these institutions, the town can aid in the creation of a stronger community.

Cultural resources reflect the dedication and involvement of both past and present residents within a community. Monkton encourages the preservation and cultivation of its cultural resources in order to encourage a vibrant, unique and engaged community.

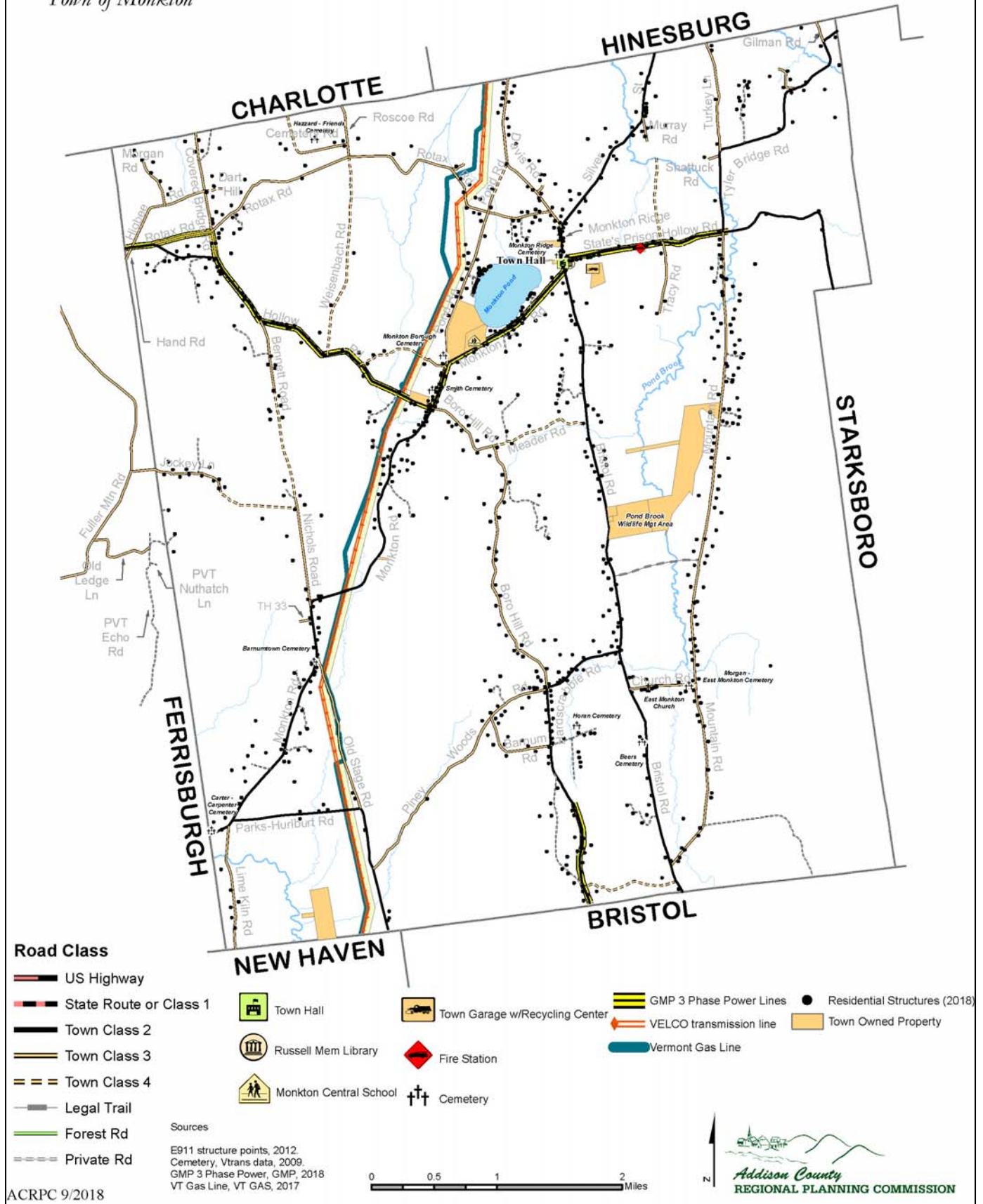
2 Vermont Division for Historic Preservation - The Historic Architecture of Addison County



Sun setting on the Monkton Town Hall. Photo credit: Buzz Kuhns

Utilities, Facilities and Education

Town of Monkton



Map 3 Utilities/Facilities

TRANSPORTATION

GOALS

1. Provide a safe, accessible, multi-modal transportation network that meets the needs of all stakeholders and reduces reliance on personal automobiles.
2. Encourage the preservation of existing unpaved gravel roads in their present state. These roads are a part of the rural character and heritage of the town
3. Preserve the scenic character of Monkton's roads and landscape features.
4. Decrease and slow traffic in the Village regions Planning Area.
5. Reduce the number of automobile crashes in the Town of Monkton.
6. Improve walking and cycling infrastructure throughout town, especially connections between Monkton Boro and Monkton Ridge.
7. Minimize impacts from stormwater runoff.

POLICIES

1. Maintain or improve the current conditions on all roads in Town to meet community demand.
2. Direct commuting and truck traffic to state highways.
3. Consult residents along any road being considered for paving or tree removal before proceeding.
4. Ensure road maintenance and design/retrofitting meets Act 64 criteria for impacts to water quality Municipal Road General Permit.
5. Consult Monkton's Complete Streets document for traffic calming techniques prior to road maintenance and improvement.
6. Development proposals must determine and present impacts and opportunities to Monkton's transportation network and its users.
7. Consider repaving projects to be opportunities to incorporate infrastructure for pedestrians and cyclists.
8. Direct development of amenities and services to locations in the Village regions Planning Area.
9. Consult the Vermont Department of Environmental Conservation (DEC) to meet best management practices for stormwater and run-off
10. Support the use of Green Stormwater Infrastructure (GSI) techniques on both public and private roads and driveways.
11. Support [Safe Routes to School](#) or similar initiatives.

RECOMMENDED ACTIONS

1. Promote energy conservation, public transportation, and ride sharing programs such as promoted by [GoVermont](#), including car, van-pooling and ACTR's *Dial-A-Ride* opportunities.
2. Continue to work with Addison County Transit Resources (ACTR) to discuss a future bus stop in Monkton.
3. Work to implement the recommendations of Monkton's Complete Streets document, specifically reworking of the intersection of State's Prison Hollow Road and Monkton Ridge Road.
4. Nominate a Monkton representative to sit on the [Walk-Bike Council of Addison County](#).

5. Review Municipal Road General Permit with road foreman and Select Board.
6. Add signage – Shared Road – on those roads frequented by walkers and cyclists.
7. Encourage carpooling and switching to electric and hybrid vehicles.

EXISTING CONDITIONS

Being a rural community, Monkton residents are almost entirely dependent on the automobile. The majority of Monkton residents commute north, south or west for work, amenities and services. Most services, such as groceries, hardware, medical, and dental are located more than ten miles away. Monkton does have a general store with a gas pumps.

In 2016, a *Park and Ride* was constructed near the Monkton Central School. It is used, but not to capacity. According to Addison County Transit Resources (ACTR), Monkton has over 200 residents who are physically disabled, relying on others to transport them to amenities and services. Some of these residents use ACTR's Dial-a-ride service, otherwise access to public transportation is only directly available in the neighboring towns of Starksboro, Hinesburg and Bristol. There are currently no sidewalks or on-street cycling allocations in Monkton.

Detailed road and traffic data for Monkton can be found at the Vermont Agency of Transportation: <http://vtrans.vermont.gov/vtransparency>



Monkton Ridge from above. Photo credit: Buzz Kuhns

PRIORITY CONCERNS

REGIONAL COMMUTING IMPACTS

Monkton Road and Silver Street in the ‘Ridge’ area and the intersections of Bristol Road and Monkton Road, Monkton Road and State Prison Hollow Road, and Silver Street and Davis Road continue to be discussed at the local and regional level for safety concerns. Regionally, Bristol Road, Monkton Road and Silver Street are used daily by thousands commuting north and south. This has a dramatic impact on Monkton as these roads pass directly through Monkton’s historic village area providing little room for safe pedestrian movement where it is most needed and desired.

The 2013 Complete Street Feasibility Study, which can be found on the Monkton Town website, provided alternative street and intersection concepts for the Ridge area. This study considered numerous street design techniques and intersection reconfiguring to slow village traffic, allow for safer use by pedestrians and cyclists, and bring a sense of place to this civic area.

What the 2018 open house surveys told us:

88% of participants agreed they would like to see safer pedestrian connections in the Monkton Ridge area.

84% supported regional efforts for safer walk-bike connections between towns.

77% agreed they would like to see more off-road connection in Monkton for walking and cycling.

69% agreed they would like to see walk-bike connections between the Boro and Monkton Ridge.

75% of participants agreed on the importance of tree-lined gravel roads to ensure the rural character of Monkton.

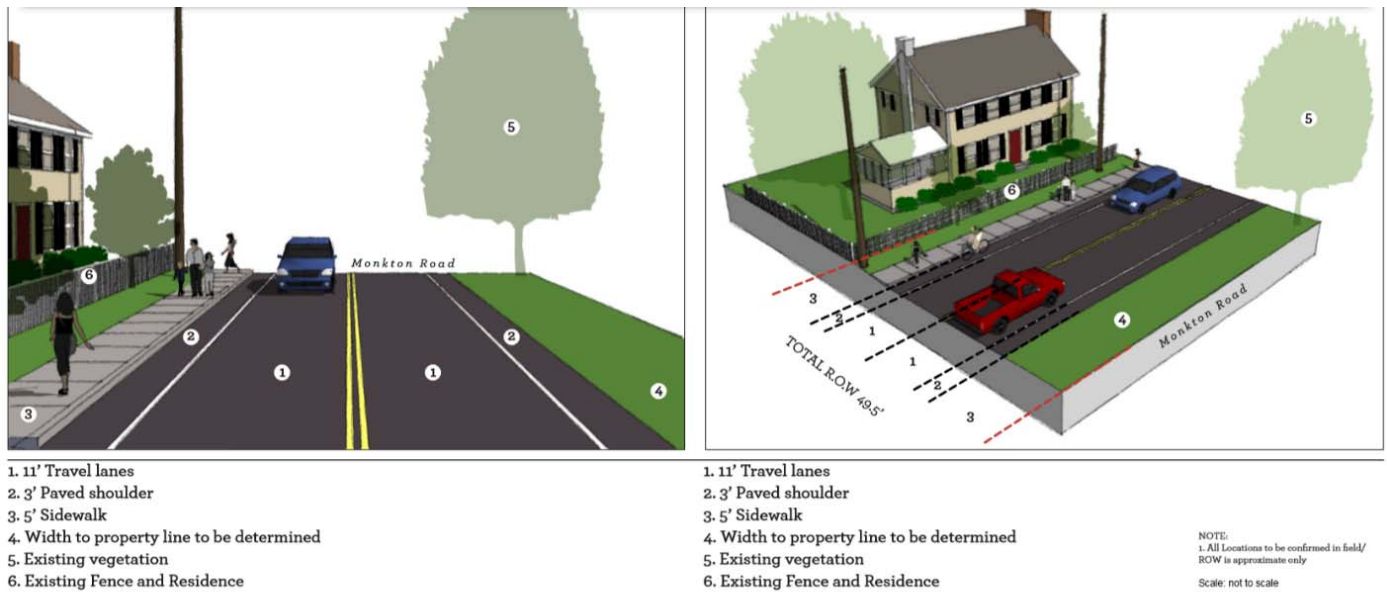
PUBLIC TRANSPORTATION

There is genuine interest from Monkton residents for improved access to public transportation. Currently ACTR provides regional route connections in neighboring Bristol and Starksboro. Hinesburg provides connection to Burlington. Residents would like to see a Monkton bus stop, but ACTR is unable to provide this service at this time.

SCENIC AND RECREATIONAL VALUE

The Town of Monkton's unique rural character is in part due to its scenic landscape and unpaved gravel roads. The 33 miles of unpaved gravel roads reflect the town's agricultural heritage. Today these unpaved rural roads, often tree lined with historical stone walls and old foundations, are recognized by many residents as a fundamental asset that should be preserved. Unpaved rural roads have a natural traffic calming effect that permits shared use for horseback riding, bicycling, and walking that contribute to the quality of life sought by rural residents. The beauty of the landscape with its gravel roads is recognized as a natural resource that visitors seek, which stimulates the economy. Some unpaved gravel roads are still used for moving agricultural equipment.

The Town of Monkton encourages the preservation of existing scenic unpaved gravel roads in their present state with the exception of enhancements for essential safety upgrades; these roads are a part of the rural character, cultural and historical heritage of the town. Transportation systems are encouraged that respect and protect local environmental, cultural, and historical resources.



Graphics from Monkton Complete Street Study showing alternative street designs for safer streets.

STORMWATER MANAGEMENT

Essential to flood resiliency tactics, Monkton must maintain, design and retrofit roads to minimize wash out and flooding from stormwater. As roads are impermeable, run-off from roads accelerates soil erosion and impacts the volume and speed of toxic run-off into ponds, creeks and rivers. Vermont's Municipal Roads General Permit is the most recent State effort to stabilize road drainage systems. The permit is required by Act 64, the Vermont Clean Water Act, and the Lake Champlain Phase I, Total Maximum Daily Load (TMDL).

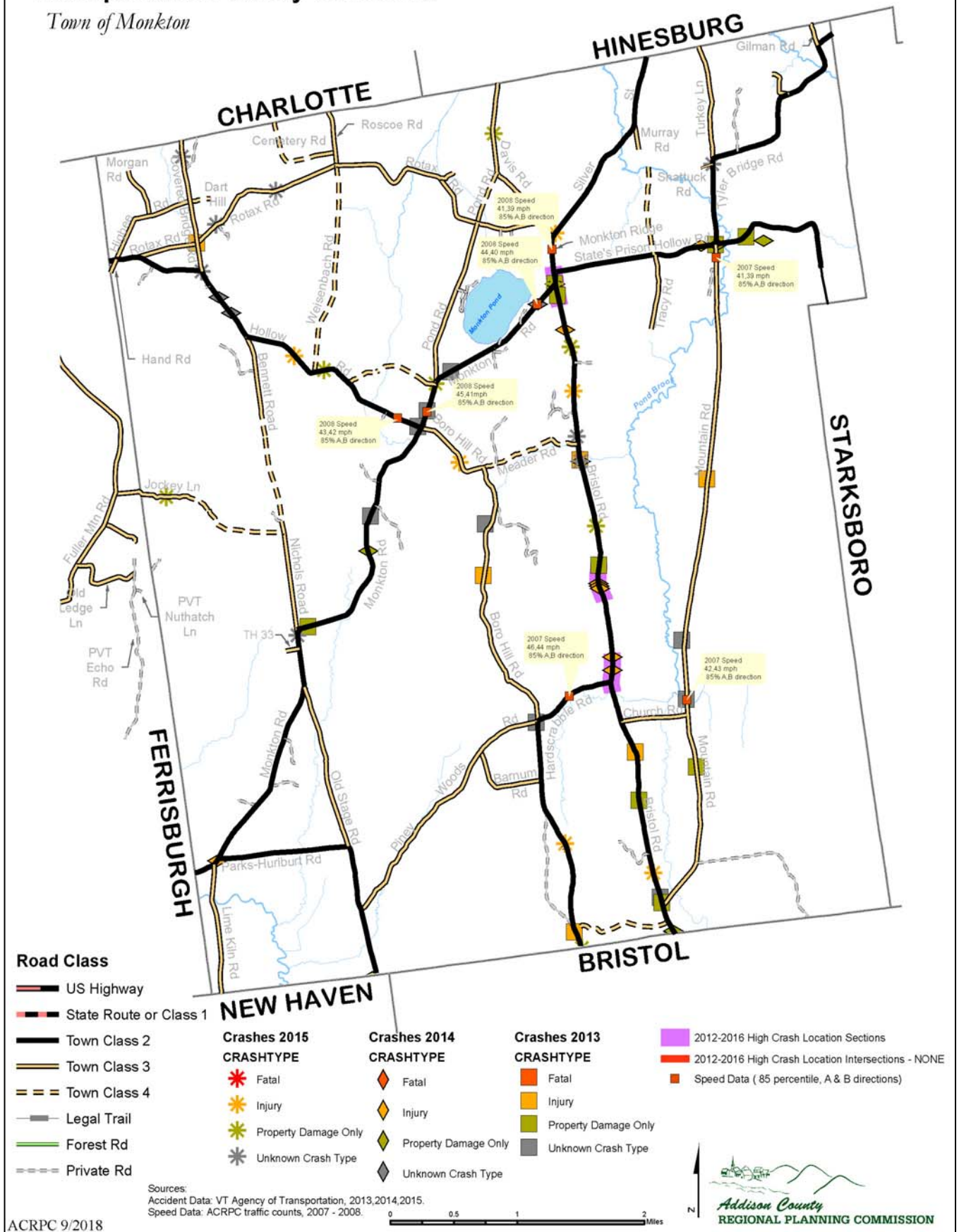
VISION FOR THE FUTURE

Monkton residents show interest in moving toward a multi-modal transportation model, as outlined in the [2018 Addison County Regional Transportation Plan](#). This includes interest in public transit access within the Village Planning Area, and access to safe walking and cycling infrastructure, especially to and from the Ridge to the Boro (and Monkton Central School).

Besides needing essential transportation routes, Monkton residents value slower, rural roads for both scenic and recreational purposes. As studies and discussion have shown, views from the public rights-of-way are significant elements in the familiarity and character of Monkton that are held dear by residents.

Transportation Safety Concerns

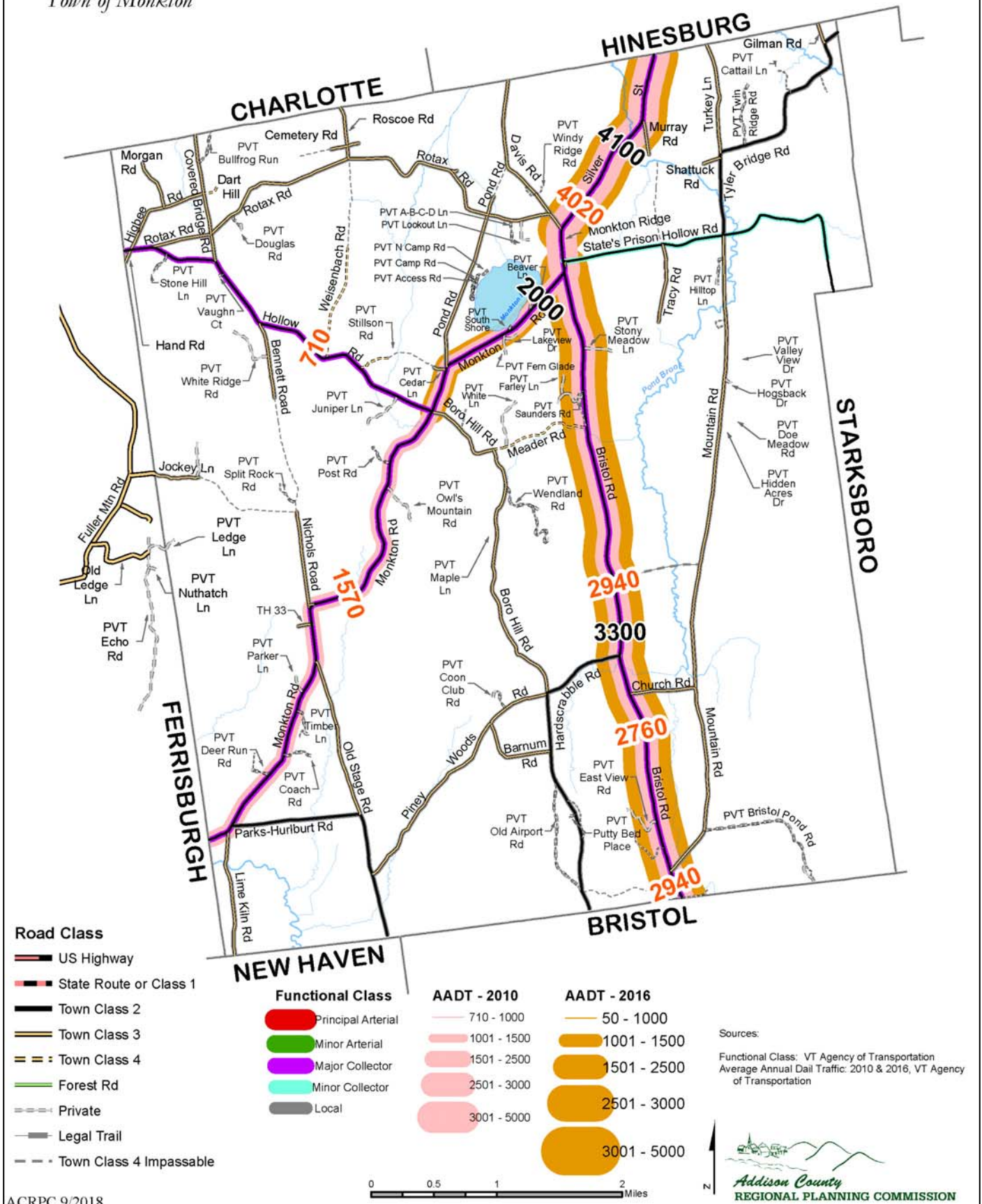
Town of Monkton



Map 4 Crash Sites

Road Names and Transportation Volume

Town of Monkton



ECONOMIC DEVELOPMENT

GOALS

1. Sustain Monkton-based employment, businesses and entrepreneurs in-keeping with the unique, rural character of Monkton and the values of Monkton residents.
2. Support opportunities for Monkton residents to access employment and educational opportunities.
3. Engage and support a robust regional economy.

POLICIES

1. Support the Use Value Appraisal program (Current Use; enrollment, retention, etc.).
2. Prioritize agricultural-related endeavors.
3. Encourage development of local food based commercial businesses.
4. Encourage and support local forestry businesses in-keeping with the Natural Resource section.
5. Support public and private development of recreational trails, sidewalks and safe bike routes for both recreation and enjoyment by residents.
6. Ensure telecommunications infrastructure and regulations are in place for telecommuting and home-based businesses.
7. Support affordable living for a diverse population in Monkton.
8. Support local communication infrastructure, both on-line and social events, for networking and collaboration between residents.
9. Prioritize the economic and civic vibrancy of Monkton's village regions.

RECOMMENDED ACTIONS

1. Request that town officials create a capital budget for future town facility additions and/or improvements.
2. Engage business owners within the town to learn about the problems imposed by local regulations and what could be done to create a climate that welcomes the development of new business.
3. Provide residents with programs for cutting housing costs associated with heating and maintenance.
4. Encourage agricultural businesses, including investigating the feasibility of a Monkton Farmers Market.
5. Work with ACTR to improve transportation options and ride-sharing opportunities to employment centers such as Burlington and Middlebury.
6. Discuss opportunities for local networking, skills and resource exchange opportunities.

WORK FORCE AND INCOME TRENDS

According to the 2018 Vermont Department of Labor, out of its approximate 2,031 population, Monkton has 1,353 residents in the workforce, with 1.7 percent unemployment rate, down from 6 percent in 2010. Addison County unemployment rate is 3.1 percent.

According to the 2015 LEHD³ statistics, out of 915 jobs represented, 143 (16 percent) of the working population in Monkton worked in the Education Services industry and 79 individuals (8.6 percent) worked in the construction industry. Other leading industries of employment for Monkton residents include manufacturing, health care services, and retail. The comparison of the 2010 U.S. Census and 2015 estimates, show a continued decline for those residents working in Agriculture and Forestry. In 2010, 4 percent of residents worked in the agricultural industry.

In 2017, Monkton's median adjusted income was \$50,900, the third highest in the County, trailing behind Weybridge and Cornwall, and compared to a State median adjusted income of \$36,931. The neighboring town of Bristol has a median adjusted income of \$37,103 and Ferrisburgh, \$45,859. The proximity to higher paying jobs in surrounding areas may influence these outcomes.

According to 2010⁴ U.S. Census data, the majority of two-parent families in Monkton are such that both parents are working outside of the home. Out of 192 families with children under the age of 6, 130 have both parents in the work force (approximately 70 percent). Out of 315 families with children between the ages of 6 and 17, 273 families include both parents in the work force (approximately 86 percent).

PLACE OF WORK

Once a farming community, Monkton is now largely a satellite community to Chittenden, Addison and Rutland County. According to the 2015 Census Bureau, 52 percent of working residents commute to Chittenden County and 28 percent work in Addison County. Approximately, ninety-eight percent work within Vermont, some traveling as far as Bennington County. Approximately 4 percent of the working population both live and work in Monkton. The latter may or may not include all those working from home, having a home-based business, or e-commuting as this is harder to track through U.S. Census data.

Places of employment in Monkton include the Monkton Central School, Monkton Town Offices, Monkton Library, Monkton General Store, Post Office, and Town Garage. Types of home-based businesses include commercial agricultural operations, professional services, e-commuters such as college instructors and professors, construction companies and woodworking studios to name a few. According to Vermont Department of Labor, in 2017 at least 23 residents owned their own business, an increase from 2010.

³ LEHD stands for Longitudinal Employer-Household Dynamics and is a statistical tool used by the U.S. Census Bureau that specifies commuting and household data of towns and regions.

⁴ At the time of the 2019-2020 Town Plan Update, 2010 Census Data provided the most recent data for these statistics.

COST OF HOUSING

The cost of living in Monkton continues to increase. The cost of home ownership and housing rentals, heating and maintaining a home, food costs, costs of commuting to work and driving to goods and services are common factors in determining the affordability of living. Having a diversity of housing options, access to public transportation, steady income, and being able to afford heating and maintaining homes are topics addressed throughout this plan.

See the Housing, Energy and Transportation sections for more information.

ECONOMIC STRENGTHS AND WEAKNESSES

PROXIMITY

Being a half hour drive, on scenic roads, to Burlington, Middlebury, Hinesburg and/or Vergennes, makes Monkton an attractive place for working families. Proximity to employment hubs does put a strain on Monkton's infrastructure and has accelerated the rate in which Monkton transitioned from an agricultural economy to a bedroom community.

Without a strong base of farmers or others working within town, volunteer operations such as local fire and rescue groups decline and agricultural land is bought for home construction. Commuters going both north and south travel directly through town, making roads busy and less safe for walking and cycling.

NATURAL AND AGRICULTURAL ASSETS

With clear and distinguishable land use districts, Monkton can provide a rural agricultural buffer to Chittenden County and produce dependable local food sources, clean water, wildlife habitat as well as tourism and recreation opportunities.

According to the *2018 Champlain Valley, Local Farm and Food Guide*, there are over 200 diversified food producers in the Addison Region. Nine Monkton farms are listed in this guide offering berries, vegetables, eggs, beef, poultry, cheese, and mushrooms. Establishments include wholesale, retail and pick-your-own. There are also three dairy farms operating in Monkton. *See Agriculture section in Natural Resources for more information on farms and working lands.*

LOCAL BUSINESSES

Like much of Vermont, Monkton has a diversity of small businesses including contractors, auto repair service technicians, farmers, consultants and other creative entrepreneurs. Small businesses strengthen Monkton as a place to live and work and decrease dependency on commuting out of town to a reliable income. Telecommunication access, such as high-speed internet and cell phone reception must be available to all residents in order to offer increased opportunity to work and study from home/and or from public buildings.

VILLAGE REGIONS

Monkton's Town Plan emphasizes the need to bolster the existing civic center, Monkton Central School, Monkton Pond and the historic village areas of the Boro and Monkton Ridge. These areas are home to cultural and civic amenities and services and provide the backbone of central gathering places - essential to maintaining a unique sense of place. Evolving these spaces into successful places to walk, bike,

gather the community, and provide local networking and business opportunities will bolster Monkton's local economy. A 2016 town-wide survey demonstrated the desire for a central meeting place to compliment the village regions.

TOURISM

According to a study done for the Vermont Department of Tourism and Marketing in 2013, visitor spending in Vermont supported an estimated 30,000 jobs for Vermonters (approximately 8 percent of all Vermont jobs). The agricultural, forestry, outdoor recreation and art sectors can attract tourists as a way to increase business in town. Vermont branded arts and food sell well directly from local farm-stands and studios and also on-line to those dedicated to supporting Vermont's local economy. Recreational attractions in Monkton include walking, hiking, cross country skiing/snow shoeing and cycling. Raven Ridge Natural Area, owned by the Nature Conservancy, has trails for walking and bird watching (see the Facilities section for more on recreation in Monkton). Monkton can take advantage of being centrally located between larger commuter and visitor destinations.

For the full report on Vermont Tourism Economics go to the following link:

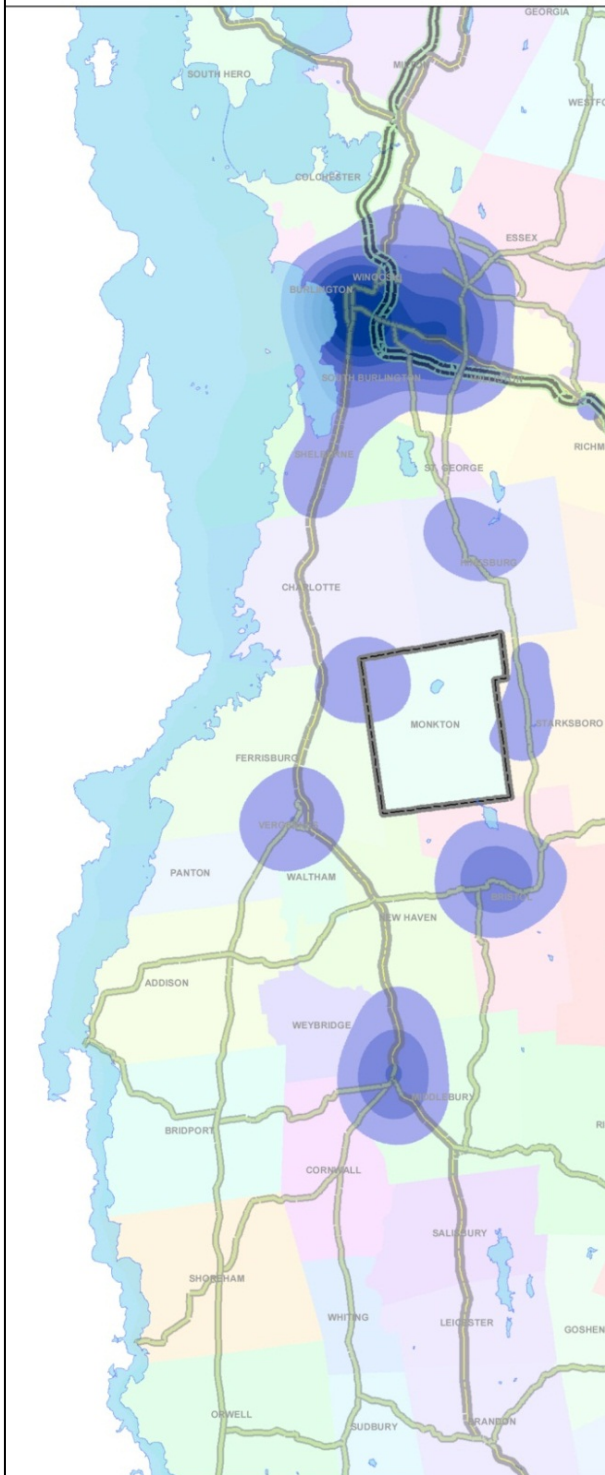
<http://accd.vermont.gov/tourism/research/economic-impact>

For Monkton's 2017 Labor and Workforce Profile go to:

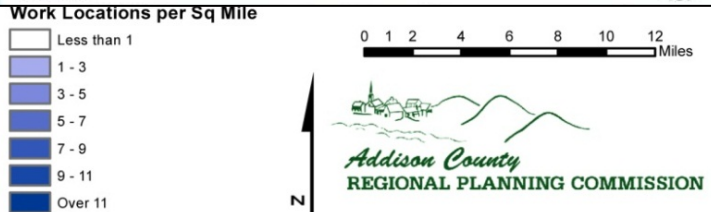
<http://www.vtlmi.info/profile2017.pdf>

Town of Monkton

Commute Shed - where people work who live in Monkton (904 jobs)
(only employment covered by insurance)



Total All Jobs 2010		
	Count	Share
Total All Jobs	904	100.0%
Jobs by Worker Age		
Age 29 or younger	175	19.4%
Age 30 to 54	539	59.6%
Age 55 or older	190	21.0%
Jobs by Earnings		
\$1,250 per month or less	198	21.9%
\$1,251 to \$3,333 per month	298	33.0%
More than \$3,333 per month	408	45.1%
Jobs by NAICS Industry Sector		
Agriculture, Forestry, Fishing and Hunting	17	1.9%
Mining, Quarrying, and Oil and Gas Extraction	0	0.0%
Utilities	2	0.2%
Construction	67	7.4%
Manufacturing	104	11.5%
Wholesale Trade	21	2.3%
Retail Trade	113	12.5%
Transportation and Warehousing	22	2.4%
Information	21	2.3%
Finance and Insurance	27	3.0%
Real Estate and Rental and Leasing	10	1.1%
Professional, Scientific, and Technical Services	55	6.1%
Management of Companies and Enterprises	2	0.2%
Administration & Support, Waste Management and Remediation	30	3.3%
Educational Services	153	16.9%
Health Care and Social Assistance	123	13.6%
Arts, Entertainment, and Recreation	12	1.3%
Accommodation and Food Services	68	7.5%
Other Services (excluding Public Administration)	18	2.0%
Public Administration	39	4.3%
Jobs by Worker Race		
White Alone	886	98.0%
Black or African American Alone	5	0.6%
American Indian or Alaska Native Alone	4	0.4%
Asian Alone	3	0.3%
Native Hawaiian or Other Pacific Islander Alone	0	0.0%
Two or More Race Groups	6	0.7%
Jobs by Worker Educational Attainment		
Less than high school	40	4.4%
High school or equivalent, no college	231	25.6%
Some college or Associate degree	227	25.1%
Bachelor's degree or advanced degree	231	25.6%
Educational attainment not available (workers aged 29 or younger)	175	19.4%
Jobs by Worker Sex		
Male	467	51.7%
Female	437	48.3%



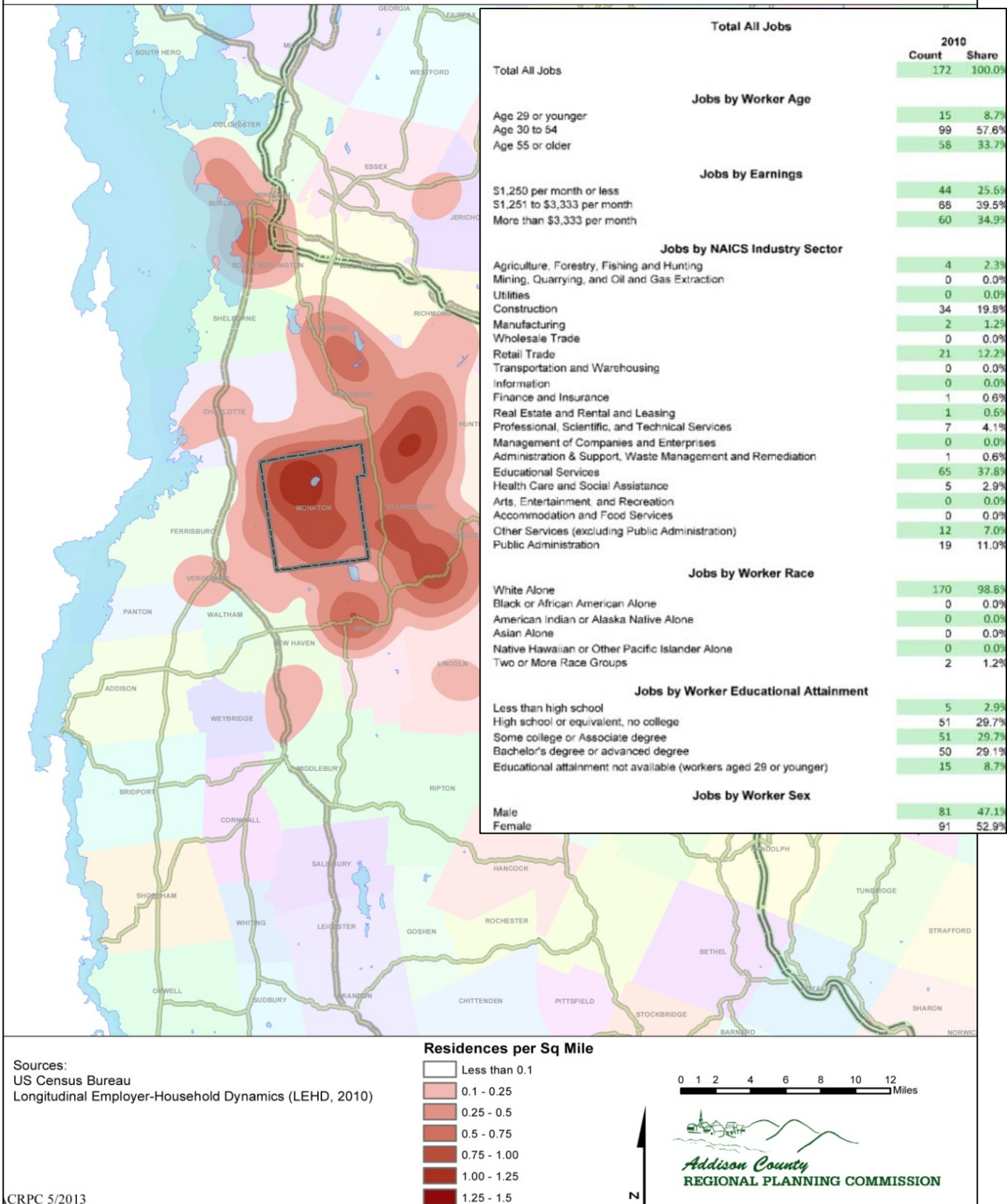
Sources:
US Census Bureau
Longitudinal Employer-Household Dynamics (LEHD, 2010)

CRPC 5/2013

Map 6 Commute Shed

Town of Monkton

Labor Shed - where people live who work in Monkton (172 jobs)
(only employment covered by insurance)



Map 7 Labor Shed

NATURAL RESOURCES

The Natural Resources section is the heart of the Monkton Town Plan because it underlies Monkton's economy and quality of life. To facilitate a better understanding of this section guiding principles are listed below. The goals, policies and recommendations described in each sub-section have their foundation in these guiding principles:

- ❖ To promote land use development, practices and techniques which protect Monkton's natural and scenic resources.
- ❖ To support public education, knowledge and involvement regarding the town's natural resources, and their maintenance and enjoyment.
- ❖ To encourage measures that protect, maintain or regain the health of the water, air, land, plants and wildlife and their habitats; these resource systems underpin Monkton's economy and quality of life through the ecological services and resilience they provide, use as the working lands, and scenic and recreational value.
- ❖ To foster the growth of Monkton's agricultural and forest economies to support the working landscape.
- ❖ To support, develop and maintain techniques to encourage natural and scenic resource conservation, including the work of Monkton's Agricultural and Natural Areas Committee, and the use of conservation easements, proper zoning, tax incentives and voluntary measures such as enrollment in the State's Use Value Appraisal Program.

SOILS AND MINERALS

GOALS

1. Identify and protect primary agricultural soils.
2. Identify and protect wetland soils.
3. Identify and develop sand and gravel resources for the town fitting with the natural resource and land use policies of this plan.

POLICIES

1. Development is restricted in Monkton's forestland and wetlands and prohibited in ridgelines and in those areas identified by the state as State Natural Heritage Sites and shown on the **Important Resources and Habitat Map** of this plan.
2. Housing developments must have adequate topsoil to absorb water, grow plants and prevent erosion.
3. Housing developments should manage stormwater on-site to limit soil erosion.
4. The conservation of natural areas and farmland in Monkton is encouraged.
5. Development in any overlay district is required to meet the associated standards of that district, as stated in the Land Use section of this Plan.

RECOMMENDED ACTIONS

1. Work with ACRPC and the Development Review Board (DRB) to develop electronic tools and maps

that identify primary agricultural soils and wetland soils to support deliberations.

2. Conduct a detailed study to identify sources of sand and gravel for maintaining gravel roads and for sanding winter roads.

SOIL AND MINERAL DISCUSSION

SOIL AND MINERAL TYPE

Monkton sits at the interface between soils formed in the Green Mountains to the east and those formed in the Champlain Valley to the west. The Town's soil resources include significant areas of silty and clayey valley soils that have primary agricultural classification, and forested ridge-lines with shallow-to-bedrock soils and soils formed on deep sandy deposits, which are important for groundwater recharge. Wetland soils provide surface water renovation, minimize flood damage, and plant communities growing there provide food and habitat for wildlife. Monkton also has some deep well-drained soils suitable for septic systems and development.

Monkton's rural character is influenced by its forested ridgelines and working landscape. The forested foothills of the Green Mountains in Monkton have soil that is shallow to fractured bedrock. There are also sandy deposits in these areas and at lower elevations in Town. All are important groundwater recharge areas as it is in those areas that rainwater can percolate through over-lying materials into the bedrock for groundwater storage.

All soils that have an important farmland rating by the Natural Resource Conservation Service (NRCS) are categorized as either prime and/or state-wide and are called out in any Act 250 (Criteria 9B) hearing. Large tracts of primary agricultural soil are found in Monkton and synonymous with Monkton's rural character.

Monkton's mineral resources include the past production of crushed stone at the Wofford Red Marble Quarry, kaolin clay at the Vermont Kaolin Corporation, aluminum at Monkton Kaolin, iron, at the Monkton Ore Bed and Boston Iron Company Mine. These are all historical operations; no commercial mines exist in town.

SEPTIC SUITABILITY

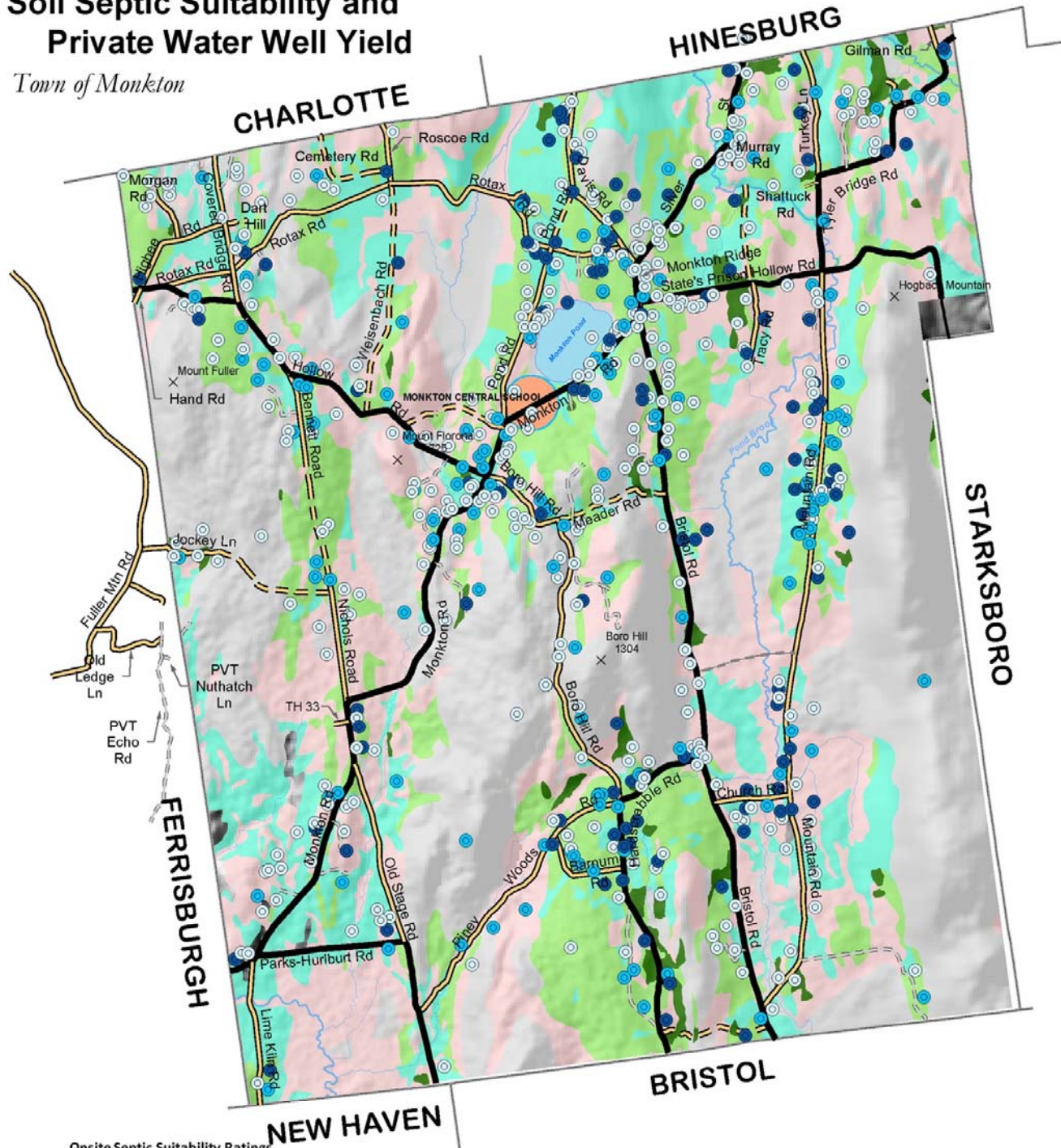
Monkton has limited large tracts of soil suitable for conventional in-ground or mound septic systems. However, within unsuitable soil tracts are suitable soil inclusions that allow for septic systems and development. State regulations determine soil properties that make a soil acceptable for the treatment of septic system wastewater. Vermont's Environment Protection Rules that govern septic system placement are designed to prevent health hazards and pollution, and contamination of drinking water supplies to ensure adequate supplies of potable water.

EXTRACTION

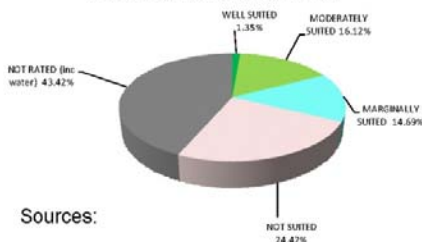
No commercial gravel or sand pits are permitted in town. The town would like to develop a minor gravel/sand pit to supply it with materials to maintain roads and provide sand in winter. A study will help Monkton identify a sand /gravel pit to minimize the impact on town residents.

Soil Septic Suitability and Private Water Well Yield

Town of Monkton



Onsite Septic Suitability Ratings



Sources:

Septic Suitability: Soil Suitability Ratings for On-Site Septic; NRCS, USDA, 2008.

Water Supply Source Protection Area: VT ANR, 2011.

Monkton Central School

Private Water Wells: VT ANR, 2016

Private Water Well Yield (GPM) Soil Septic Suitability



Water Source Protection Area

0 0.5 1 2 Miles

Addison County
REGIONAL PLANNING COMMISSION

ACRPC 9/2018

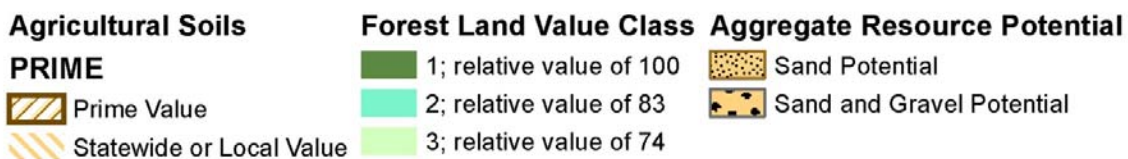
Map 8 Septic Suitability

Topsoil extraction is not allowed in Monkton unless it is incidental to constructions. Housing should have adequate topsoil on developed land to provide for the adsorption of water and adequate plant growth.



*Welcome board at the 2018 Pizza and Planning Open House.
Photo credit: Claire Tebbs*

Town of Monkton



ACRPC 9/2018



Monkton Town Plan 2020 – 2028

FORESTS

GOALS

1. Maintain an integral east-to-west forest corridor and connectivity to north south forest corridors for animal movement.
2. Encourage for wildlife travel.
3. Provide essential habitat and foraging corridors to threatened and endangered species.
4. Support a successful local forestry economy which prioritizes stewardship and ecosystem health.
5. Steward our forests for social, economic and environmental gain.
6. Increase public knowledge and involvement in stewarding our forests.
7. Improve the quality of our forest ecosystems.
8. Ensure long-term protection of lands with conservation value.

POLICIES

1. Site plans and larger development plans must work in accordance with Vermont's Act 171 to minimize forest fragmentation.
2. Restrict development in Monkton's forestland and wetlands and prohibit in ridgelines (and in areas identified by the state as State Natural Heritage Sites and shown the *Important Resource Areas* map in this plan).
3. Require development in any overlay district meet the associated standards of that district, as stated in Monkton's Unified Zoning document.
4. Promote various methods of sustainable forest stewardship and ownership.
5. Support the conservation of land containing rare threatened and endangered species and/or unique natural communities
6. Support development that promotes east-west corridors and connectivity to north south corridors for animal movement.
7. Encourage the sustainable use of forests for local energy and heat production.
8. Encourage local processing and marketing of a diversity of forestry products.
9. Encourage management of invasive species.
10. Neighbors must respect adjacent landowner's right to manage their forestlands.
11. Encourage the conservation of primary forestlands.
12. Promote forest buffers along streams and rivers for a connected network of natural cover.

RECOMMENDED ACTIONS

1. Develop land use and zoning regulations to prevent forest fragmentation and parcelization in accordance with Act 171 guidelines.
2. Conduct a natural resource inventory to identify essential forested habitat blocks and linkages, with emphasis on threatened and endangered species.
3. Create a town forest that can serve education and recreation needs of residents.
4. Research future funding and feasibility of a Monkton trail system for recreation and enhanced quality of life that also protects native, rare threatened and endangered species and maintains ecosystem quality.

5. Encourage the compilation of a comprehensive wildlife and significant habitat inventory by the Monkton Conservation Committee and other interested citizens, placing emphasis on threatened/endangered/rare species and significant natural communities, such as Meader White Cedar Swamp, the Clay Plain forests of the Pond Brook valley and the Pond Brook Wetlands conservation area that protects rare species, a portion of an expansive emergent marsh, and a wildlife travel corridor, and Huizenga's swamp road crossings.

FOREST RESOURCE DISCUSSION

FOREST COVER AND HABITAT

Forestland has made a remarkable comeback from the 1800's when much of the state was clear cut and converted to other uses. With that comeback came the return of forestry as a major industry within Monkton and the State of Vermont. Wise use and management of forested lands can enhance its long-term economic and ecological value. In 2012, it was estimated that 6589 acres in Monkton, which is 28.3percent of the land, are in commercial forestry operations.

Forests provide many essential services to town's people. Ecological services forests provide include, soil and hillside stabilization, erosion and flood control, wildlife habitat, groundwater purification and recharge, surface water recharge, and air pollution remediation as they remove pollutants from the air and act as carbon storage. Economically they are a source of raw materials for hardwood veneer, lumber, pulpwood, fuel wood, chip wood and maple syrup. They provide for a scenic working landscape. Forests provide educational opportunities and offer recreational opportunities like hiking, horseback riding, cross country skiing, hunting and snowmobiling.

WILDLIFE

Monkton encourages the protection of significant wildlife habitat and the maintenance of the full array of native species, while considering community development, agricultural and forestry needs. Responding to a congressional mandate, the State of Vermont in conjunction with many partners has generated a Vermont list of *Species of Greatest Conservation Need* (SGCN), and has suggested strategies for their maintenance. Many species mentioned in this Town Plan are SGCN and, when appropriate, Monkton should act in concert with the State and conservation groups to conserve its wildlife heritage.

Upland deer wintering areas, bear, bobcat, bat, and (song) bird habitat are the most prominent concerns in this category, but a diversity of plants and animals are also part of an upland forest system. South facing coniferous wintering areas are a crucial element in defining the health of the deer population.

Deer wintering areas need to be available every year in the event that stressful winter conditions require their use for health and survival. Wintering areas not only affect the deer population, but also the quality of recreational activities such as hunting. It should be a priority to encourage private landowners to evaluate their land, recognize wintering areas, and protect them.

Black bear and bobcat are two species that require large territory for habitat and their seasonal and foraging movements. These species are sometimes referred to as "umbrella" species, indicating the belief that if sufficient habitat is maintained for them, many smaller species will also benefit. Maintaining large tracts of connected forest land can be accomplished through regulatory and non-

regulatory means. Cluster development (PUDs), which use conservation development criteria, and use of the town conservation fund, available through the Agricultural and Natural Areas Committee, are tools to help protect large blocks of habitat and avoid fragmentation and perforation of significant habitat areas.

Monkton is a satellite area for bears. The eastern-most portion of Monkton, especially the Hogback Range area adjacent to Starksboro and the Western Green Mountains, serves as a travel corridor from the Green Mountains to early spring food sources located in the Pond Brook wetlands. Bears are now denning for the winter in Monkton. It is illegal in the State of Vermont to feed bears, and important not to feed them for their health and longevity.

Bobcat habitat and travel corridors exist throughout a large portion of the town, ranging from the Vergennes Watershed region extends into Bristol, on the high elevations of Boro Hill, Mt. Florona and Mt. Fuller, and north to the Charlotte and Hinesburg town lines. Higher elevation rocky outcrops are significant features of bobcat habitat. Bobcat travel corridors include numerous road crossings. These intersecting roads need to be maintained such that they minimize interference to wildlife corridors. Landowners are also encouraged to take wildlife habitat and travel corridors into consideration in their land management practices.

RARE, THREATENED, AND ENDANGERED (RTE) SPECIES

The town supports the protection of rare species, significant natural communities, important habitat areas, and other natural/fragile area, based on, but not limited to, state and regionally determined definitions. Additionally, conservation efforts such as maintaining wildlife corridors, connectivity and buffer zones as later described in the wildlife habitat section are also encouraged. Some Monkton landowners participate in the Landowner Incentive Program (LIP). This US Fish and Wildlife program provides federal grant funds to protect and restore habitats on private lands, to benefit Federally listed, proposed or candidate species or other species determined to be at-risk.

In Monkton, several of these species and areas are currently known and mapped. Three areas of rare/endangered plant species are known, as well as three areas of rare/threatened/endangered animal species. Additionally, a portion of the marsh/bog vegetation surrounding Bristol Pond, (Lake Winona) defined by the Region as an area of special value, extends into the southeast corner of Monkton. Clayplain forest communities, particularly in the Pond Brook wetlands, have state significance.

The Eastern Rat Snake, federally endangered Indiana Bat, the Wood Turtle, Upland Sandpiper and other grassland birds are either federally or state listed as endangered or threatened. All of the latter species are found in Monkton.

A population of the RTE harsh sunflower, *Helianthus strumosus*, was recently disturbed between Cedar Lane and Hollow Road when the Vermont Gas pipeline was put in the ground.

A planning map for wildlife habitat within the Town shows patterns of winter wildlife travel corridors for wide ranging species (L CA, VT FWD 2004). Species in the study included bobcat, bear, moose, white-tailed deer, mink and otter. This is reflected in the *Important Resource Areas and Habitat* map within this chapter.

SIGNIFICANT NATURAL AREAS

Monkton has one forest community that has state significance: the clay plain forest communities, which can be found in the Pond Brook Valley. The clay plain forest has been fragmented in many places, but this forest is a unique community and hosts diverse species because of its high calcium clay soil. This community should be protected and conserved where possible.

INVASIVE SPECIES

Common invasive species found in Monkton include those found along roads or in fields: wild parsnip aka “poison parsnip,” multiflora rose, and spotted knap weed; and those found on edges or in woods: shrub and vine honeysuckle, barberry, burning bush or winged euonymus, common and glossy buckthorn, and Norway maple. The Planning Commission encourages town residents to safely remove these plants from their private property, and acknowledges the essential work of the roadcrew in mowing a wider swath on the road side to help control the plants that grow there. It also appreciates town residents that work to remove them from town roadsides.

FOREST FRAGMENTATION

Parcelization, the breaking of contiguous forestland blocks into smaller and smaller units, causes the loss of habitat through fragmentation; negatively impacts wildlife diversity, disrupts the movement, migration and behavior of wildlife, introduces exotic invasive species, and can degrade water quality. Monkton is one of the last towns in the Champlain Valley of Addison County with significant forestland cover that provides an east west corridor for wildlife from the Green Mountains in the east toward Lake Champlain in the west with connectivity to north south corridors. Conservation of forestland should be supported whether it is through the Vermont Land Trust or federal forestland aggregation opportunities. These efforts will support wildlife conservation.

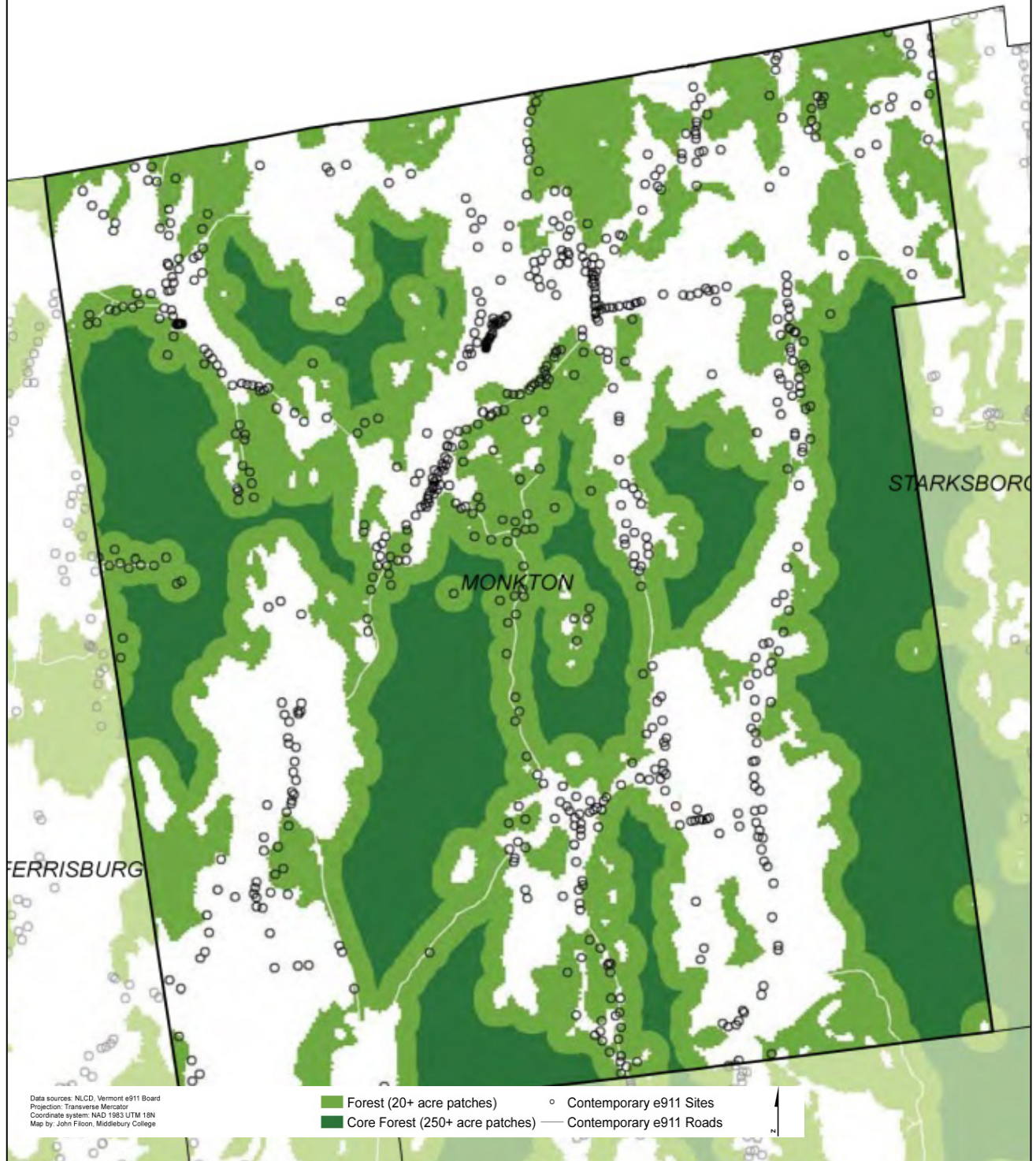
FOREST CONSERVATION

The large majority of eastern Addison County forests are well stocked, and therefore the continued proper management of these areas should prove economically, environmental and recreationally beneficial.

There are several measures that can be taken to encourage economic viability of forest operations together with the preservation of the valuable resource of good quality forestland. These include taxing forestland at a lower tax rate based on their actual use, the purchase of development rights or the outright purchase by the State or Town, and zoning and subdivision regulations that minimize the impact of development on forest land.

The state and various land trusts use easements to acquire or protect lands determined to have high ecological value as natural or fragile areas, as well as those with recreational use potential. Management plans are encouraged for areas of high public value. On the local level, habitats or areas that are important to the town should be identified and protected for future generations. Community planners at the Department of Fish and Wildlife can assist with habitat planning for Monkton wildlife.

1992 National Landcover Dataset



Map 10 Forest Cover 1992

2006 National Landcover Dataset



Map 11 Forest Cover 2006

FOREST CONSERVATION CONT.

The Agricultural and Natural Areas Committee (ANAC) in Monkton continues to work with the Vermont Land Trust to conserve agricultural and forest land through protective easements, including Raven Ridge Natural Area, Pond Brook Wildlife Management Area, Hogback Heaven, and Hogback Community Forest.

The Vermont Land Trust, with other partners, will buy development rights to forest lands, thus providing land owners with a monetary benefit while using conservation easements to preserve the land for agricultural uses.

Providing tax relief for forestland owners is a priority. The State's Use Value Appraisal Program (Current Use) provides tax relief by taxing land based on its actual current use. The Use Value Appraisal Program is an example of how the State allows farms and forestlands to be taxed at use value rather than development value. The State Use Value Appraisal Program is important to forestry in Monkton.

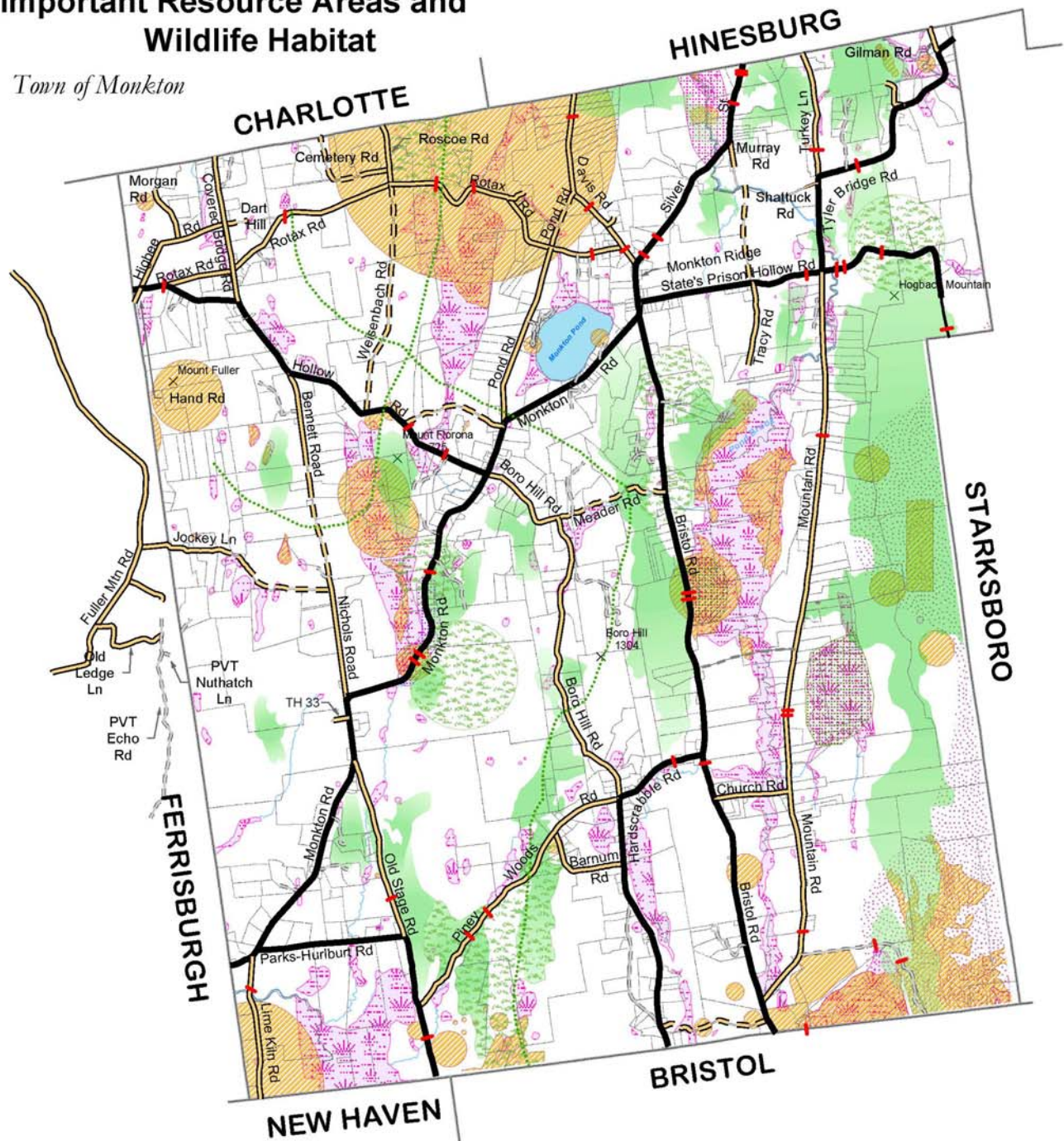
The 115 acres Little Hogback Community Forests Inc. is Monkton's only community forest. Vermont Family Forest's innovative model of forest ownership conserves forestland and gives residents affordable access to firewood, timber and forest recreational opportunities and a return on their investment over time through community ownership. The Town should support innovative models of forest ownership and conservation.

As with agricultural resources, the use of best practices within forest lands, including Forest Management Plans, are strongly encouraged. Forest management plans support the economy by contributing to forest related industries in the Town and region, providing recreational activities, as well as the importance conservation and maintenance of habitat, ridgelines, riparian areas, shorelines, vernal pools, and seeps.

A town forest would provide educational opportunities for the school and recreational opportunities for residents. The town could manage timber on the land to offset a loss in property taxes. The town forest could be connected to a town wide trail system that would allow for recreational opportunities and improved quality of life.

Important Resource Areas and Wildlife Habitat

Town of Monkton



- Rare, Threatened and Endangered Species and Significant Communities (Natural Heritage)
- Vermont Significant Wetlands
- Bear Habitat
- Deer Wintering Areas

Sources:
 Rare, Threatened and Endangered and Significant Communities, VT ANR, 2017.
 Deer Wintering Areas, VT ANR, 2017.
 Vermont Significant Wetlands, VT ANR, 2011.
 Bear Habitat, VT ANR undated.

Local Habitat Identification

- Wildlife Crossing
- Bobcat Migration Corridor
- Bobcat, Bear, Moose or Bird Habitat
- White Cedar Community
- Reptile Migration Area
- Turtle Habitat

All local resource data mapped in 2007 and reviewed in 2018.

0 0.5 1 2 Miles

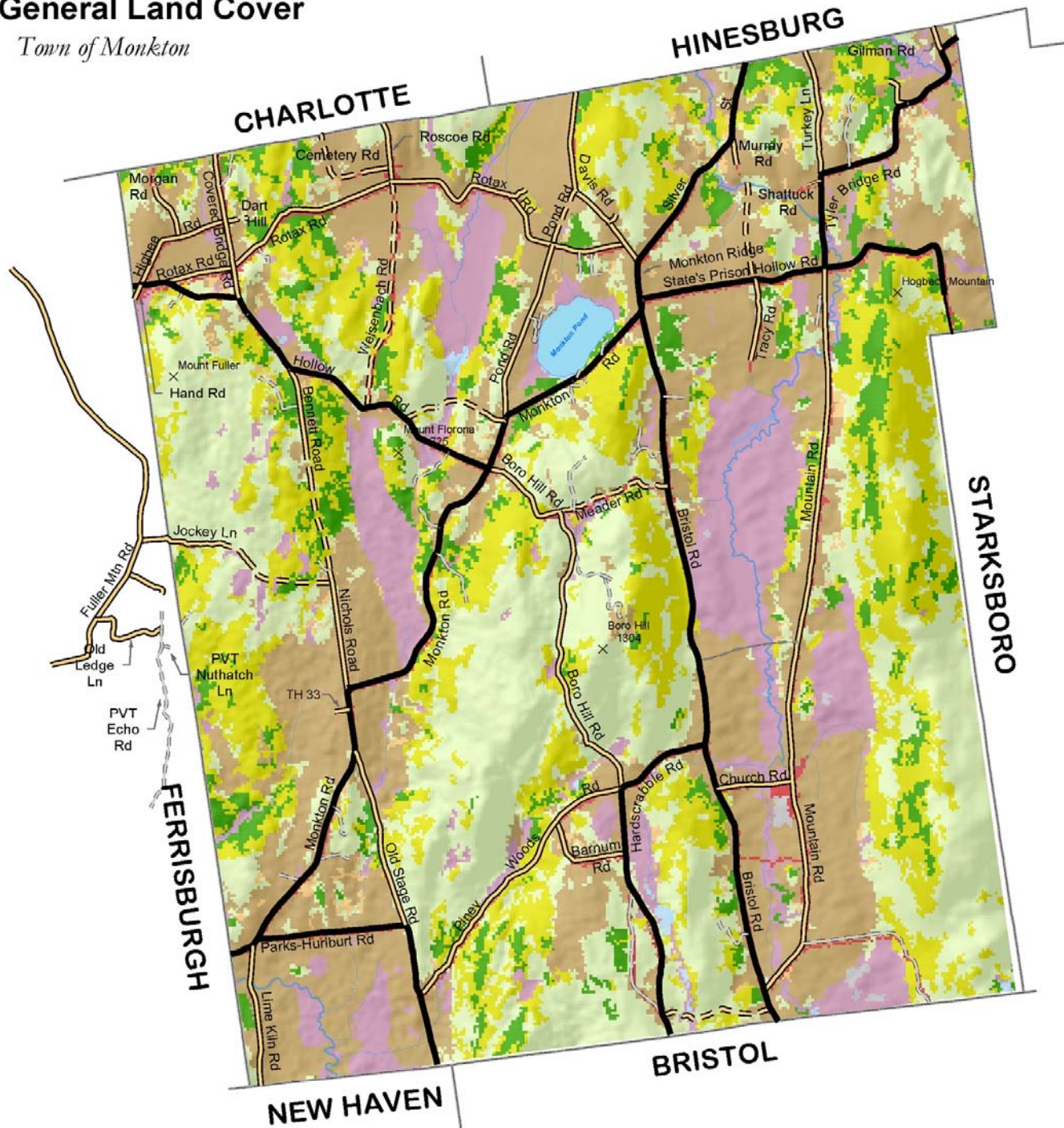


ACRPC 9/2018

Map 12 Important Resource Areas

General Land Cover

Town of Monkton



Land Cover (2011)

	Open Water		Deciduous Forest		Shrub/Scrub
	Built-up		Evergreen Forest		Cropland, Pasture, Open
	Barren, Ice		Mixed Forest		Wetlands

Sources:

Land Cover, 2011: National Land Cover Database, USGS. Interpreted from Satellite data .

ACRPC 9/2018



Addison County
REGIONAL PLANNING COMMISSION

Map 13 Land Cover

Monkton Town Plan 2020 – 2028

AGRICULTURAL LAND

GOALS

1. Support a thriving agricultural economy.
2. Preserve contiguous working lands for future generations.
3. Manage agricultural lands in harmony with environmental integrity.

POLICIES

1. Primary farmland must be protected in any development process.
2. New development should cluster homes and buildings, protecting contiguous agricultural land from fragmentation (see land use chapter policies for associated policies).
3. Renewable energy projects should be sited in association with existing structures and rooftops.
4. Protect the farmer's right to farm (see energy chapter policies for associated policies).
5. Encourage the stewardship and protection of agricultural land through agricultural easements and land conservation.
6. Encourage Vermont's Agricultural Best Management Practices and Required Agricultural Practices to protect water and soil quality.
7. Support new farmer initiatives and diverse agricultural enterprises.
8. Foster the growth of agricultural support services, food processor and value-added production on local farms.
9. Support the use of local products in our schools.

RECOMMENDED ACTIONS

1. Work with groups and organizations fostering the growth of markets for agricultural products in Town and the region.
2. Encourage active participation in a five-town regional farmer's market.
3. Encourage participation in NRCS/USDA and State programs to promote soil conservation and water quality protection.

AGRICULTURE DISCUSSION

DAIRY FARMS

Dairy farms continue to use the bulk of the cropland in Monkton to raise corn and forages for their cows. Consolidation into large farms has meant fewer farms milking cows and shipping bulk, wholesale milk. In 2018 there were only three such farms in Monkton. Several large dairy farms located outside of Monkton own or lease large tracts of farmland in Monkton. Four Hills Farm in Bristol, and Allandra Farm in Vergennes are two examples of large farms with satellite operations in Monkton. State-wide, in 2018, there were 340 fewer dairy farms than there were in 2009, a loss of 32percent. At the same time, milk production increased from 2.46 billion pounds to 2.73 billion pounds and the price of milk has been in a slump forcing many farms to sell milk for below the cost of production.

Another pressure on dairy farms is to make the necessary improvements and changes in their

operations to conform with the new rules on *Required Agricultural Practices*. These changes can be very expensive and have a devastating effect on a farm. Monkton supports providing farmers with the assistance and resources necessary to perform these required agricultural practices. Dairy farms are the backbone of Vermont, Addison County, and Monkton agriculture, producing over 70percent of the farm income in Vermont. Monkton supports efforts to reform the federal milk pricing system so dairy farmers get a fair price for their product. Dairy farmers support infrastructure such as equipment dealers, feed stores, veterinarians, and processors. Not only are these businesses important to the economy, they are critical to other farm sectors as well.

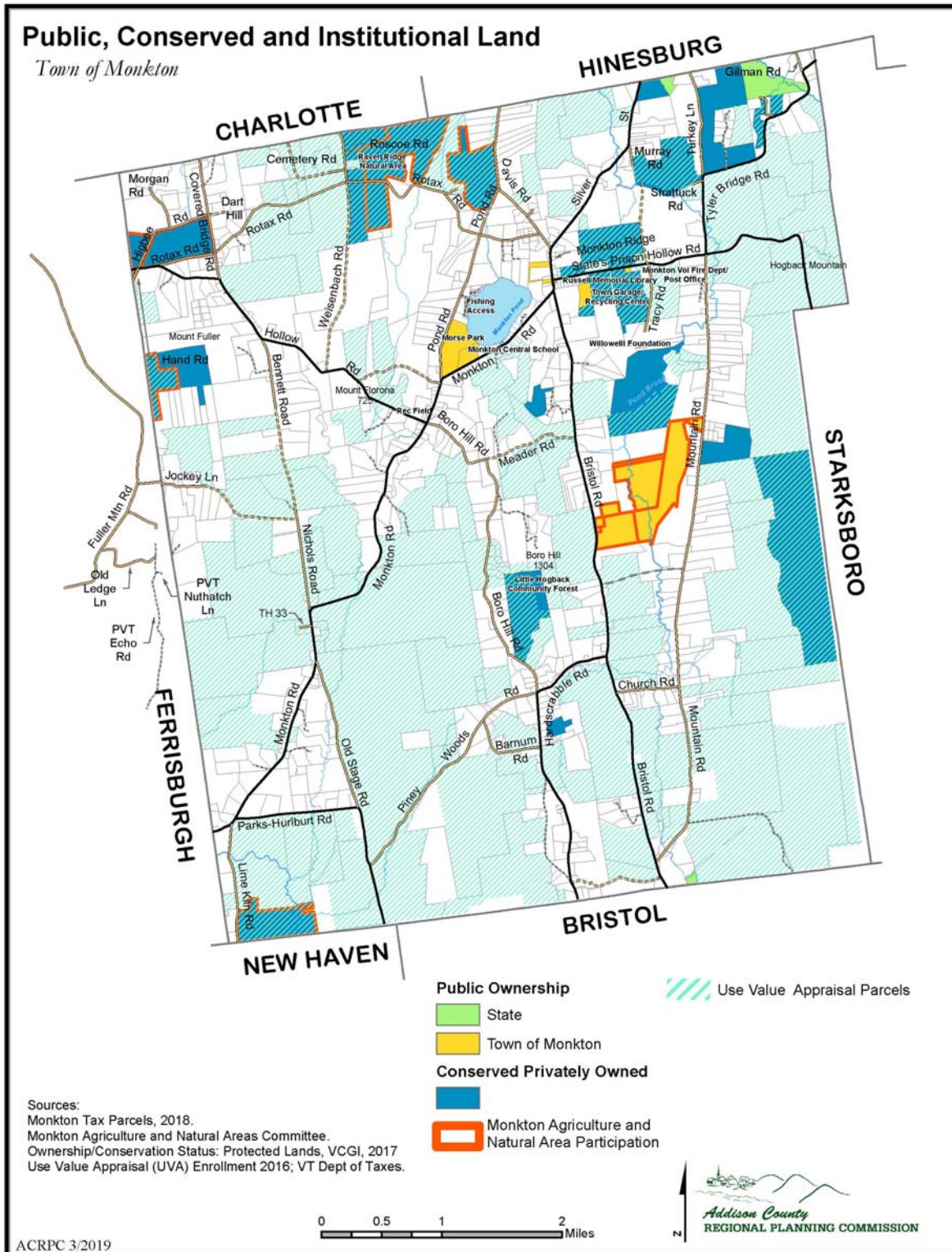
DIVERSIFIED FARMS

Monkton has seen an increase of other types of farms and some dairy farms have diversified into other products. There are at least six commercial vegetable farms, three orchards, three nurseries, a specialty cheese farm, a malting shed, a honey farm, several beef operations, a polo pony farm with a wedding venue, a llama farm, an alpaca farm, two farms with indoor horse arenas, and a flock of sheep. Several farms raise hay to sell. Because the price of maple products has remained fairly steady and new technology has enabled more extensive tapping, there are numerous maple orchards in town. Maple is a large, successful industry dependent on the health of forests to provide the product and firewood to this industry.

CURRENT USE PROGRAM

The Use Value Appraisal Program or current use is a state tax relief program. There are 12,463.54 acres in the Use Value Appraisal Program; commercial farms have 7009.18 acres enrolled and A. Johnson Lumber LLC has 1789.23 acres of forest land in the program.

Forest land owners with a forest management plan (up dated every 10 years) or agricultural land owners who annually certify their land is in agricultural use (may be leased to a person qualifying as a farmer) may apply to have their land taxed at use value. The use value is a statewide value set annually by the Current Use Appraisal Advisory Board to reflect the value of agricultural and forest land based on income from those uses. Agricultural buildings owned by a farmer or leased to a farmer with a three year or longer lease are exempt from the property tax. When land is entered in the program a lien is placed on the property to guarantee that the owner pays the penalty if the property or a portion of it is withdrawn from the program and developed. The Land Use Change Tax is set at ten percent of the fair market value of the land removed from the program. So, if a Monkton owner were to remove a 2-acre building site from the program, the value of an average 2-acre building site in Monkton is \$60,000.00 and the penalty would be \$6,000.00. The state pays the Town for tax reductions as a result of the current use program.



Map 14 Public, Conserved and Inst.



Monkton Celebrates. Photo credit: Buzz Kuhns

LAND CONSERVATION

The Agricultural and Natural Areas Fund has been used to assist in the conservation of 1167 acres in the past seven years. Partners have been the Vermont Housing and Conservation Board, the Vermont Land Trust, the Vermont Agency of Agriculture, the Nature Conservancy, the U.S. Fish and Wildlife Service, the Vermont Department of Fish and Wildlife, and the U.S. Agency of Agriculture. The Trust for Public Land has been discussed as a potential partner for purchasing a Monkton town forest. 813.8 acres of commercial agricultural land have a conservation easement, 11.6percent of Monkton commercial agricultural land (7009.18 acres).

The 2010 town-wide survey showed a high level of support for allocating town funds for the purchase of the development rights (TDR).⁵ At Town Meeting, the Town votes 2 cents on the grand list for the purchase of development rights or direct purchase of land in order to protect open and agricultural lands. The Agricultural and Natural Areas Committee (ANAC) in Monkton is working with the Vermont Land Trust to conserve agricultural and forestland through protective easements.

⁵ TDR's are a land management technique which provides a landowner with monetary compensations for their development rights in order to preserve that land as the outright purchase of agricultural, forest, and open lands in order to preserve and maintain the rural character of the Town, and to protect open land and view sheds.

Water Resources

GOALS

1. Ensure Monkton residences have access to safe, healthy potable water.
2. Become a flood resilient community as identified in 24 V.S.A. § 4302.
3. Identify, protect and manage the quality and quantity of groundwater, including groundwater recharge areas.
4. Identify, protect and manage the quality of our surface waters for recreational and ecological benefits.
5. Identify, protect and manage our wetlands, outflows, rivers and streams for flood resiliency and wildlife refuge.
6. Help land owners on Monkton and Bristol Pond understand and comply with the Shoreland Protection Act.

POLICIES

1. Monkton's regulatory and non-regulatory guidance should follow State guidelines and be developed to minimize the effects of development including: run-off from impervious surfaces, storm water, road ditching, and erosion.
2. New and existing developments must follow Monkton's buffer regulations.
3. New and existing developments and residences must follow Monkton's sewage disposal ordinances.
4. New construction and development projects should incorporate Low Impact Development (LID) and Green Infrastructure Systems (GSI) techniques, including limiting construction on steep slopes (new or retrofitting) to minimize impacts to water quality.
5. Require the use of "best practice" water conservation measures in all new construction to minimize its impact on groundwater.
6. Restrict development in Monkton's forestland and wetlands, and prohibited in ridgelines and in areas identified by the state as State Natural Heritage Sites and shown on the *Natural Resource Area* map this plan.
7. Require development in any overlay district meet the associated standards of that district, as stated in the Land Use section.
8. Maintain a current Local Emergency Operations Plans (LEOP), which must be updated each year after Town Meeting and before May 1. LEOP better prepare towns for emergencies. The LEOP must be updated by the Select Board.
9. Protect water quality by minimizing impacts from roads using best practices, resources, and grants from the Agency of Natural Resources and National Resource Conservation Services funding program and the Better Back Roads program.
10. Encourage the use of best management practices for any farms near wellhead areas.

RECOMMENDED ACTIONS

FLOOD RESILIENCY

1. The Select Board should consider adopting the 2013 Road and Bridge Standards as required for ERAF to qualify for 12.5percent funding from the State after a federally-declared disaster.
2. Meet with ACRPC to discuss the implementation of bylaws to protect river corridors, in order to qualify for the 17.5percent rate of reimbursement from Emergency Relief and Assistance Fund (ERAF).
3. The Planning Commission must update bylaws using current recommended language to protect river corridors, and help manage streams and rivers toward naturally stable, least-erosive conditions.

SURFACE WATER

4. Develop stream/river corridor protection areas with appropriate buffers and setbacks to protect surface water quality.
5. Work with local groups like Addison County River Watch Collaborative, the Lewis Creek Association, the State and Federal government to develop a monitoring program for Monkton's surface water.
6. Support the Monkton Conservation Committee or other town committee seeking grant monies to identify and remove invasive species in wetlands, riparian habitat, and ponds.

GROUND WATER

7. Work with the Vermont Health Department to educate Monkton residents on the value of testing well water and create incentives where possible.
8. Study the feasibility of developing community well water systems in areas where groundwater has been polluted.
9. Use study data to determine areas in Monkton that are important for groundwater recharge and develop a groundwater protection overlay district.
10. Revise regulations to require the use of best water conservation practices in all new construction to minimize its impact on groundwater.

DRINKING WATER

11. Initiate education and outreach efforts to residents regarding the regular testing of residential drinking water following the guidelines set by the Vermont Department of Health.

WATER RESOURCES DISCUSSION

The quality of Monkton's ground and surface waters are essential to our daily lives, our economy and environment. The following water-related discussion highlights specific water sources and the impacts and opportunities relevant to managing and protecting our water resources in Monkton.

GROUND WATER

Groundwater resources provide water for personal, agricultural, commercial and industrial needs. Virtually all Monkton residents have private or community wells, using ground water for drinking and home use. Groundwater consists of surface water that has percolated through the soil to the water table. It can percolate through fractured bedrock and gravel deposits to recharge subterranean or deep groundwater aquifers. The type of soil and bedrock determines this process. Presently in Monkton

groundwater appears to be plentiful, but as growth continues more consumers will share water resources. The point at which the degree of development affects water quality and quantity is undetermined.

Generally, aquifers serve as geologic storage tanks for large volumes of water, which originated as surface water. These sources and their recharge areas must be protected, especially gravel deposits on hillsides, which must be reviewed as much for their water recharge and purification qualities as for their septic carrying capacity. As defined by the Region, no aquifers serving public water systems presently exist in Monkton. All drinking water sources are private or community wells.

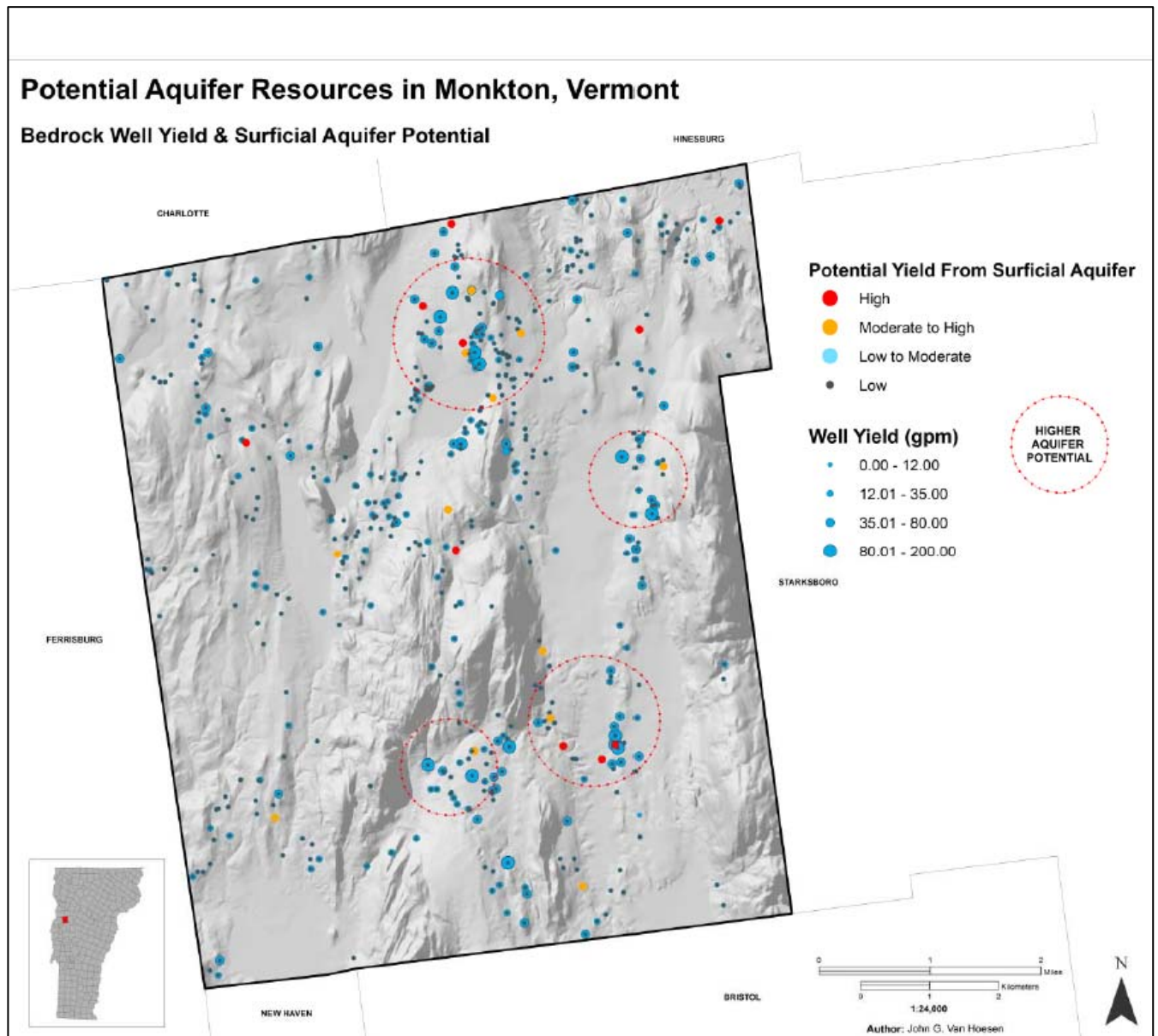
The quality of Monkton's groundwater is dependent upon bedrock geology, proper land use practices, and waste disposal. The Vermont Department of Health (VDH) recommends three tests to determine drinking water quality. The VDH recommends yearly testing for E. coli and coliform bacteria. Positive tests indicate that water may have been polluted by animal or human waste. The inorganic chemicals test and gross alpha test are recommended every five years by the VDH. The inorganic chemicals tested include nutrient pollutants such as nitrate, and naturally occurring pollutants such as arsenic, lead, and uranium. Known sources of contamination from human activities include storage tanks, municipal landfills, illegal dumps and dumping, septic tanks, road salting and runoff for leaching of materials from some home landscaping, and runoff, farmyards and manure pits and some other agricultural activities. Prevention of contamination by human activities is critical, as treatment of groundwater is extremely difficult. The State has a grant program for the removal of underground storage tanks (UST) with 1000-gallon capacity or less (e.g. home heating fuel tanks). The Agency of Agriculture has programs to help with managing the water quality of agriculture operations.

On Monkton Ridge leaking underground fuel storage tanks have impacted groundwater quality; these tanks have been removed, but ground water is still polluted. The State currently provides water to these homes, business and the Town Hall. In the future the town might consider the feasibility of providing drinking water to affected homes through a community water system. Grants are available for these activities.

Bedrock geology can affect the chemistry and quality of drinking water. The Champlain Valley contains several rock layers or strata that can negatively affect groundwater quality with naturally occurring pollutants. Some contain inorganic chemicals and/or radionuclides. Aerial reconnaissance and well testing for radionuclides of the northeast part of Monkton showed promise for uranium extraction in 1976; bedrock testing determined that not enough radioactivity occurred for profitable mining. Some bedrock strata in the Champlain Valley, like the Clarendon Springs formation, are known to contain radionuclides. Several others are suspected. Although the Clarendon Springs formation does not exist in Monkton; it occurs in Hinesburg, Charlotte, Ferrisburgh, New Haven and Bristol. Underground cracks of many miles in length allow water to move from one rock formation to another. Radionuclides can be removed from well water by different filtering systems. Children, the elderly and infirm people are especially vulnerable to these pollutants. Many of these pollutants are easily treated if you know your water contains them. The *gross alpha test* measures radioactivity from radionuclides in the water.

In 2016, a surficial geology and hydrogeology study was done for Monkton. The study was done by John Van Hoesan and published by the Vermont Geological Survey, Department of Environmental Conservation. The following map shows the Potential Aquifer Resources in Monkton. The entire study

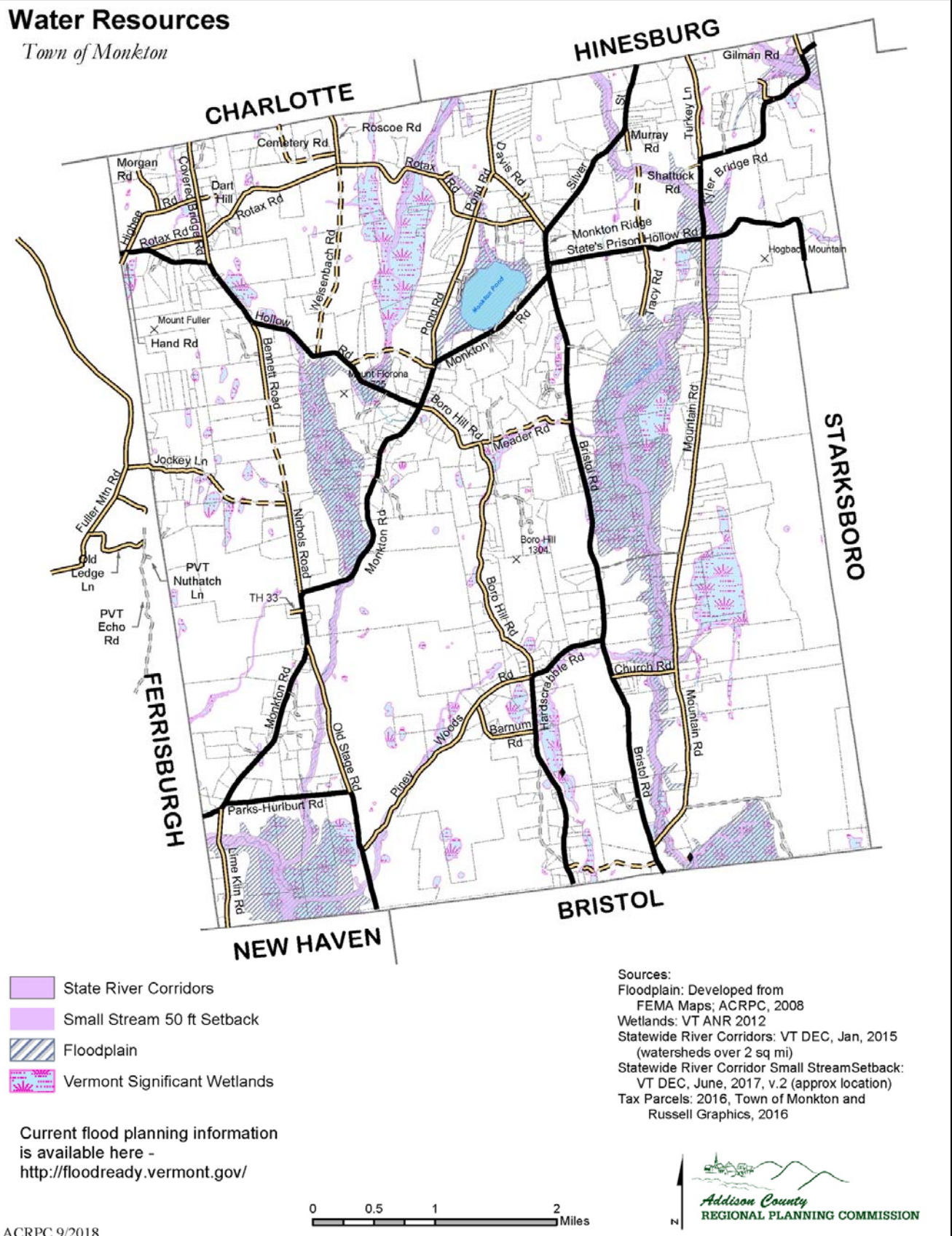
can be found on Monkton's website.



Source: John G. Van Hoesen, Vermont Geological Survey, Department of Environmental Conservation 2016
Map 15 Potential Aquifer Resources

Water Resources

Town of Monkton



Map 16 Water Resources



Stormwater degrades a Monkton road Photo credit: Buzz Kuhns

SURFACE WATER

BUFFERS FOR WATER QUALITY

The conditions of Monkton's shorelines and river corridors⁶, as well as adjacent land use practices, affect the health of adjacent surface waters. Vegetated buffers adjacent to surface waters provide essential benefits including: reduced soil loss, reduced stream bank and shore erosion, reduced sedimentation of aquatic habitat, filtration of sediment, nutrients and pollutants in runoff, provision of cover habitat for aquatic biota and other wildlife, and shading of surface water to maintain cooler summer temperatures.

Proper design, placement, and maintenance of septic systems, erosion control, limitations of development, and prudent management of vegetated buffers along shore lines and stream banks can all help to protect surface water quality. The State of Vermont regulates the development of shoreland areas through requiring vegetated buffer strips and the implementation of other erosion controls.

BUFFERS FOR WILDLIFE HABITAT

Aquatic habitats (ponds, streams, wetlands) crucial for both wildlife and recreational use, suffer from loss of floodplain functions, encroachment, stream alterations, poor water flow, removal of in-stream woody material and shady stream-side vegetation, silt build-up and invasive species.

⁶ Vermont's Agency of Natural Resources defines a river corridor as the area of land surrounding a river that provides for the meandering, floodplain, and the riparian functions necessary to restore and maintain the naturally stable or least erosive form of a river thereby minimizing erosion hazards over time.
<http://floodready.vermont.gov/>

Providing natural land cover adjacent to water bodies is crucial to wildlife as they access water and food. The suggested width recommended by the Department of Fish and Wildlife is 300 feet of land cover from the edge of surface waters.



Monkton's salamander crossing wetland area. Photo credit: Ivor Hughes

Stream flow, hydrology and equilibrium channel shape conditions can be maintained through adherence to Department of Environmental Conservation guidance that suggests planning to accommodate aquatic species and riparian areas by protecting, at a minimum, the predicted fluvial erosion hazard area of a river corridor. Monkton streams have been field assessed by Lewis Creek Association and the Department of Environmental Conservation. Data results are held in a data management system and resulting river corridor plans prioritize stream corridor management options for towns, road managers and landowners (<http://www.lewiscreek.org/lewis-creek-corridor-plan-2010>). In general, small seasonal streams require 50 ft. setbacks while larger streams and floodplains require 50 to 100 feet to move through over time.

Wetlands support great numbers of plant and animal species, particularly marsh birds, waterfowl and amphibians. For this reason, these areas are of significance and should be protected with buffers between 50 and 100 feet.

WETLANDS

Wetlands are defined in the Vermont Wetland Rules as those areas of the state that are inundated by surface or ground water with a frequency sufficient to support significant vegetation or aquatic life that depend on saturated to seasonally saturated soil conditions for growth and reproductions. The federal wetland definition under Section 404 of the Clean Water Act similarly emphasizes hydrology, soil, and vegetation as the criteria for determining the presence of a wetland.

Wetlands include such areas as marshes, swamps, bogs, fens, and shallow water ponds. Wetlands are known to provide many important functions that maintain ecological integrity and values that provide human benefits including temporary storage of flood waters, surface and ground water quality protection by trapping sediment and adsorbing nutrients and metals, ground water recharge, wildlife and migratory bird habitat, fisheries habitat, threatened and endangered species habitat. They are open space that provides recreation, education and aesthetics cultural values.

The Vermont Wetland Rules, implemented by the Water Quality Division of the Department of Environmental Conservation, protect Class One and Class Two wetlands. The State rules describe certain activities that are allowed uses and may occur within these wetlands and identify other uses that are conditional uses and which may only be approved if it can be shown that the use will not adversely affect the function and values of the wetland.

The general locations of Class Two wetlands in Monkton are shown in the National Wetlands Inventory maps, copies of which are kept in the town offices. It should be noted that not all Class Two wetlands are mapped due to limitations of aerial photography, and smaller wetlands connected to Class Two wetlands may not be mapped.

Class Three wetlands are generally small wetlands and are not identified on the National Wetlands Inventory maps. Class Three wetlands are not initially protected under the Vermont Wetland Rules, although they may provide significant function and value and may be protected under Act 250.

There are currently no Class One wetlands in Monkton.

The USDA Wetland Reserve Program provides funds to protect and restore wetland values and functions. The ANR Ecosystem Restoration Program provides funds to protect wetlands adjacent to streams, especially if the wetland can help to attenuate water flow and reduce phosphorus flows to Lake Champlain.

INVASIVE SPECIES

Eurasian Water Milfoil, purple loosestrife, and Japanese Knotweed continue to pose a threat to the recreational use of streams ponds and lakes -- including Monkton Pond (Cedar Lake). The key to stopping this problem is early detection and treatment before large spreading occurs. Therefore, Town support for local efforts to slow or stop invasive spread is crucial, as state funds are generally very limited.

FLOOD RESILIENCE

Flood resilience is essential for a safe, thriving community. By preserving permeable ground, including upland forests and wetlands, and through thoughtful future growth and development, Monkton can be more resilient to increasingly frequent floods and hazardous weather scenarios.

Flood resilience starts with the absorption of water by the soil. Developed land should have adequate topsoil with appropriate levels of organic matter to provide for the adsorption of water and adequate plant growth. The organic matter in soil allows soil to act like a sponge holding 4 to 5 times the amount of water of clay. Plant cover is just as important to flood resiliency by keeping soil in place and preventing erosion and rapid surficial runoff (see previous discussion on vegetated buffers).

Low Impact Development (LID) and Green Stormwater Infrastructure (GSI) are stormwater management techniques that either incorporate natural systems and/or mimic natural systems for slowing, storing, infiltrating and/or filtering stormwater. These techniques must be incorporated into community planning in order to lessen the otherwise drastic impacts stormwater and flooding can have on communities.

Steps that Monkton has already taken to become a flood resilient community include the following:

- Maintain a current Local Emergency Operations Plans (LEOP), which must be updated each year after Town Meeting and before May 1st. LEOP better prepare towns for emergencies. The LEOP must be updated by the Select Board.
- Participation in the National Flood Insurance Program.
- Maintaining a FEMA approved Local Hazard Mitigation Plan (LHMP). Monkton has a current LHMP. The next plan needs to be approved by FEMA and updated every 5 years.

STEWARDSHIP

The Lewis Creek Association (LCA), formed in 1990, and others, which protects, maintains and restores the ecological health of Lewis Creek, is monitoring the waters of Lewis Creek and Pond Brook in Monkton. Pond Brook flows into Lewis Creek. LCA is also conducting a study, funded by the Agency of Natural Resource, to identify water quality improvement opportunities with interested landowners in the Pond Book watershed. LCA works on river corridor conservation agrees with interested riparian landowners on Lewis Creek and Pond Book.

Air Quality Resources

GOALS

1. Identify, protect and improve the quality of air in Monkton.

POLICIES

1. Support the development of bicycle, equestrian, and walking paths in and through town to allow for alternative transportation.
2. Encourage forestland conservation and tree planting to improve air quality.

RECOMMENDED ACTIONS

1. Work with other Addison County towns to encourage the development of an air quality-monitoring program for the county.
2. Work with surrounding towns to develop park-and-ride areas in the north-south corridors of travel.

AIR QUALITY DISCUSSION

Given the rural nature of Monkton, issues regarding air quality are seldom expected. However, increases in traffic over the last 10 years will impact air quality. The State of Vermont has two air quality-monitoring stations in Chittenden County, one station in Rutland County and one in Bennington County. Addison County has no air quality monitoring station, providing no baseline data to determine how increases in vehicular traffic have impacted air quality.

Challenges to air quality in Monkton include, illegal burning of trash and motor vehicle emissions as traffic on Monkton roads continues to increase. Monkton can encourage public transportation, bicycle, horse and foot traffic in town by developing infrastructure for these alternative forms of transportation. Forested areas play a key role in the maintenance of air quality in the Town and region.

Zoning regulations in place have use-restrictions that support maintaining clean air. Quality of air issues will continue to be among those factors considered during any subdivision or Conditional Use Application.

Scenic Resources

GOALS

1. Identify and conserve Monkton's prominent natural and cultural features.
2. Maintain Monkton's existing agricultural, forested landscape.
3. Minimize the impact of development in areas of high scenic or historical value.
4. Preserve the nighttime ambiance and aesthetic qualities of the village and rural landscape.

POLICIES

(See also Land Use, Transportation and Energy Chapter policies and recommended actions as they relate to scenic resources)

1. Commercial activities are encouraged to located within the existing town centers.
2. Support the development of alternative and conventional energy sources shall minimize adverse impacts to Monkton's scenic resources as Identified in the 2016 **Monkton Scenic Viewshed Study**
3. Developers are required to minimize light pollution to night skies in all lighting plans.
4. Communication equipment should be located only on existing poles and towers.
5. Utility poles and lines shall be placed in areas lower than the principle view, or lines be buried.
6. Landscape plantings are required to shield properties from visual impact of any new utility lines.
7. Any new outdoor lighting policies should follow guidelines provided in: *The Outdoor Lighting Manual for Vermont Municipalities*

RECOMMENDED ACTIONS

1. Revisit Monkton's 2016 Scenic Viewshed Study to determine what, if any recommendations should be incorporated into regulatory and/or non-regulatory planning policies.
2. Require lighting that minimizes light pollution in all new construction and new installed lighting.

SCENIC RESOURCES DISCUSSION

In preserving scenic resources, The Vermont Agency of Natural Resources publication: *Vermont's Scenic Landscapes: A Guide for Growth and Protection*, recommends following these steps: 1) Describe the resource, 2) Identify the sensitivities, and 3) Prescribe the protections as a clear community standard. Scenic landscapes can include a village region, working landscape, public corridors or distant views.

Unique or prominent landscapes areas that are generally accepted as having scenic significance and thus, should be address in a public process include:

1. Shore lands immediate to public ponds, rivers or streams;
2. Areas immediately adjacent to scenic corridors;
3. Tree lined gravel roads.
4. Prominent ridgelines, mountain tops, or excessively steep slopes that can be readily seen from public corridors;
5. Exceptional agricultural and historic areas, recognized as outstanding resource values;
6. Areas within or immediately adjacent to significant natural areas; and
7. Areas of high scenic quality, which are publicly recognized as exceptional.

For a full discussion on Monkton's scenic viewsheds, a copy of the 2016 *Monkton Scenic Viewshed Study* can be found on [Monkton's website](#), can be obtained at the Monkton Town Office or ACRPC.

LAND USE

See also the natural resource, transportation and energy policies of this Town Plan concurrently with this land use plan.

GOALS

1. Restore historic land use patterns of denser village regions and hamlets surrounded by agricultural lands and open space.
2. Guide growth which protects our natural, agricultural and scenic resources.
3. Prioritize an active, safe and accessible civic center.
4. Provide a diversity of more affordable housing options fitting within their site context.
5. Encourage growth which builds capacity for alternatives to single occupancy vehicle, including walking, cycling and public transit.
6. Maintain continuity of our upland forest blocks and connecting habitat corridors
7. Respect the right to farm.
8. Encourage a sense of place and civic identity for a diverse population, youth to senior citizens.

POLICIES

1. Encourage development to align with ‘smart growth’ principles and Vermont State Planning Goals which encourages intensive residential development primarily in civic centers.
2. Prioritize development proposals which provide opportunities for safe walking and cycling to and from amenities and services.
3. Prioritize development which allows for on-site stormwater management
4. Development is restricted in Monkton’s forestland and wetlands and prohibited in ridgelines and in those areas identified by the state as State Natural Heritage Sites and shown on the **Important Resources and Habitat Map** of this plan.
5. Discourage commercial strip development and large, big box store development which threatens the integrity of Monkton’s unique identity.
6. Support the development of affordable and diverse housing options fitting within their site context.
7. Support appropriately located commercial and/or light industrial growth which benefits the local economy without compromising social and/or environmental resources and values.
8. Support the preservation of agricultural land and programs that encourage agricultural lands be kept for future generations.
9. Support and encourage the use of Agricultural Best Management Practices and Required Agricultural Practices.
10. Encourage the use of PUD’s, and other planning tools, to minimize fragmentation of agricultural lands and natural areas.
11. Encourage buildings and siting of buildings consistent with the surrounding neighborhood.
12. Require development in any overlay district to meet the associated standards of that district, as stated in this Land Use section.

RECOMMENDED ACTIONS

1. Apply for the Village Regions Designation program.
2. Review and revise Land Use Planning Map to clearly define our conservation areas, including wetlands, forested lands and ridge lines as unique planning areas currently housed in one 'rural residential' planning area in order to minimize the future fragmentation of these resources and clearly guide future zoning regulations.
3. Consider specific design standards for PUD and/or commercial developments.
4. Better understand opportunities and restrictions for transportation linkages, including cycling and pedestrian opportunities, between the 'Boro' and the 'Village District' both on and off-street.
5. Identify growth areas appropriate for emerging commercial and light industrial uses.
6. Educate citizens and Town officials to the availability of digital resources for Monkton Zoning and Overlay Districts.
7. Review zoning district regulations and appropriate areas for design standards.
8. Propose a Ground Water Overlay District within Monkton's zoning regulations
9. Identify and manage forest land for both wildlife habitat and as a local economic/forestry resource.
10. Consider impact fees for major subdivisions.
11. Assist on-going collaboration and periodic work sessions between the planning commission, the DRB, and the zoning administrator in order to bring efficiency and understanding to our shared planning process.

WHAT IS A LAND USE PLAN?

A land use plan guides discussion on future growth and development based on the understanding of the land base, historic and current land use patterns, the unique characteristics of land, including topography and floodplains, and on identified values and priorities of Monkton residents. The Land Use Plan provides the information necessary to create distinguished zoning districts within Monkton's Unified Zoning Bylaws. It is not in itself a regulatory tool, but is used in regulatory proceedings, such as Act 250 and Section 248 hearings.

MANAGING GROWTH

Policies and recommended actions within this Land Use Plan create a framework for growth which seeks to preserve the things residents most love and value in Monkton. These include protecting wildlife areas, contiguous forest, agricultural lands, groundwater recharge areas, environmentally sensitive areas such as wetlands and civic, cultural and/or historic features and amenities.

In order to avoid a suburban landscape throughout the municipality, growth is encouraged first and foremost in the Village Planning Area, with discussion increasingly focused on safer, walk-able/bikeable access to civic services and amenities. Re-routing and/or slowing traffic on Monkton Road and Silver Street is part of this conversation.

Residential development outside of the village district is encouraged to follow cluster development and

PUD (Planned Unit Development) techniques outlined in the zoning bylaws in order to preserve contiguous meadow and forest land. The use of master plans, the identification of wildlife corridors and riparian buffer areas, partnering with land trusts and other sustainable land use strategies are encouraged.

Future zoning regulations may offer incentives to encourage this kind of land use decisions. Examples of incentives could include density bonuses to encourage maintaining as much open and wooded land as possible and/or to provide affordable housing within PUDs, also known as inclusionary zoning.



Monkton residents participate in the May 2018 Pizza and Planning Event at the Fire Station.

PUBLIC PARTICIPATION IN LAND USE PLANNING

Residents of Monkton are an essential voice in town planning. With every town plan and land use plan update Monkton residents are asked to join the conversation. Community surveys and Open House events have asked residents to weigh in on topics such as rezoning, commercial development, scenic amenities, and energy infrastructure to name a few. Surveys at the 2018 Open House focused on local transportation options, solar and wind energy siting, village center planning and forest fragmentation.

VILLAGE-RESIDENTIAL PLANNING REGION

CHARACTER

The *village-residential planning region* encompasses the two traditional settlement areas of Monkton Ridge and Monkton Boro and the areas between them on the perimeter of Cedar Lake (Monkton Pond).

This area houses the traditional compact neighborhoods historic to Monkton, while capturing the vibrant community center of the Monkton Central School and Morse Park. Besides the school, this planning region includes commercial and civic amenities and services, such as the town hall and general store. It has denser residential development patterns than other areas of town. Monkton Pond is included in this region, although protected from further shoreline development by an overlay district distinction within the zoning bylaws.

This area is challenged by serving as a rural commuter route to points north and south of Monkton. Both Monkton Road, Bristol Road and Silver Street see high numbers of daily vehicles and high speeds which are non-conducive to a safe pedestrian environment.

FUTURE USE AND PURPOSE

Create transportation networks which include sidewalks, pedestrian and cycling paths, retrofitting of roads to include traffic calming techniques, striped shoulders and slowed traffic speeds appropriate for denser residential and civic activity.

Attract a diversity of activities that could include commercial, recreational, municipal and educational as well as residential.

Create a gradual increase in the housing density and affordability with the inclusion of multifamily units, PUD's (clustered housing with associated pathways and natural areas), and smaller homes/lots appropriate for down-sizing, seniors, young families and/or first-time buyers.

RURAL RESIDENTIAL PLANNING REGION

CHARACTER

The rural-residential planning area currently encompasses all land outside of the Village Residential Region. This region houses medium and low-density residential areas, clustered and scattered housing, and all of Monkton's agricultural, forest and other open space land. The Hogback range is a prominent natural feature in this region. The rise and fall of the surrounding landscape provides many broad views to valley farmlands. Foreground views include old orchards, wetlands, agricultural crops and livestock, historic cemeteries, old sugar maple stands and other quintessential Vermont backdrops.

FUTURE USE AND PURPOSE

A re-occurring topic for discussion for this area is how to guide new development within this region which will have the least impact on Monkton's rural character and natural resources and support a clear distinction in housing density between the village regions and the surrounding landscape. Below are uses and planning techniques which support this endeavor:

- Energy efficient residential development which clusters development and capitalizes on existing driveways, roads and utilities, and does not further fragment surrounding forestlands and agricultural resources;
- Residential growth which is sited to minimize disruption of broad, public viewsheds;

- Solar and wind utilities sited in clear correlation to existing structures (or on rooftops for solar);
- Farmland and agricultural businesses which support healthy, contiguous, natural resources, including wetlands and other water resources;
- Local forestry businesses which support healthy, contiguous natural resources, including wetlands and other water resources;
- Outdoor recreation infrastructure which supports healthy, contiguous natural resources, including wetlands and other water resources;
- Protected wildlife areas;
- Protection of groundwater recharge areas.

Planning efforts should include understanding advances in septic technology and alternative septic systems in relation to existing soil conditions and current zoning. New technology allows for less restriction on where development can occur. It is in Monkton's best interest to understand how these fit in with the current zoning and land use goals and whether regulations should be adjusted to reflect this technology.

Monkton Pond serves as a unique focal point for the community. In order to preserve this area for the future an overlay district has been created to preserve the existing scenic and ecological characteristics of the Pond and surrounding residences.

SCENIC VIEWS

Critical to the unique rural character of Monkton is the preservation of our prominent scenic views, including views of our undeveloped ridgelines. This does not refer to any individual's right to a preferred view, but view sheds that are public landmarks and provide Monkton with a distinct familiarity. In 2016, the *Monkton Scenic Viewshed Study* was completed to identify Monkton's prominent natural and cultural features as seen and experienced from our public roads. This document does not have associated land use policy but is used in planning discussions as another way to identify places that have value to our community.

ZONING DISTRICTS

Within the above-mentioned *planning regions*, five underlining *zoning districts* have been identified (*please also refer to Monkton's Unified Planning Document*):

- High Density Village District
- Rural Agriculture Village District
- Medium Density Rural Agricultural District
- Low Density Rural Agricultural District
- Conservation, Prohibited (Forest and Wetland)

The five zoning districts in Monkton regulate the degree of density and the type of growth allowed based on the characteristics of these identified areas. Zoning districts are identified based on natural features of

the land (topography, elevation, slope etc.), distance and proximity to the historically denser center(s), important natural features, open space, existing road network etc.

Monkton's conservation-prohibited districts, as outlined in the zoning regulations, allows limited development based on the importance of these areas for wildlife habitat, natural flood and erosion mitigation and/or scenic qualities. Potential uses for land in these areas are limited to agriculture, forestry, outdoor recreation such as walking or hiking trails, or wildlife refuge. Conservation-prohibited districts in Monkton include forest lands and wetland areas. See map for specific areas. The Ridgeline Overlay District prohibits any development due to the environmental and visual impact development would have on these prominent natural features.

OVERLAY DISTRICTS

Overlay districts are used as additional regulatory measures, superimposed on existing zoning in order to protect specific characteristics of that land. Monkton's land use regulations include four overlay districts:

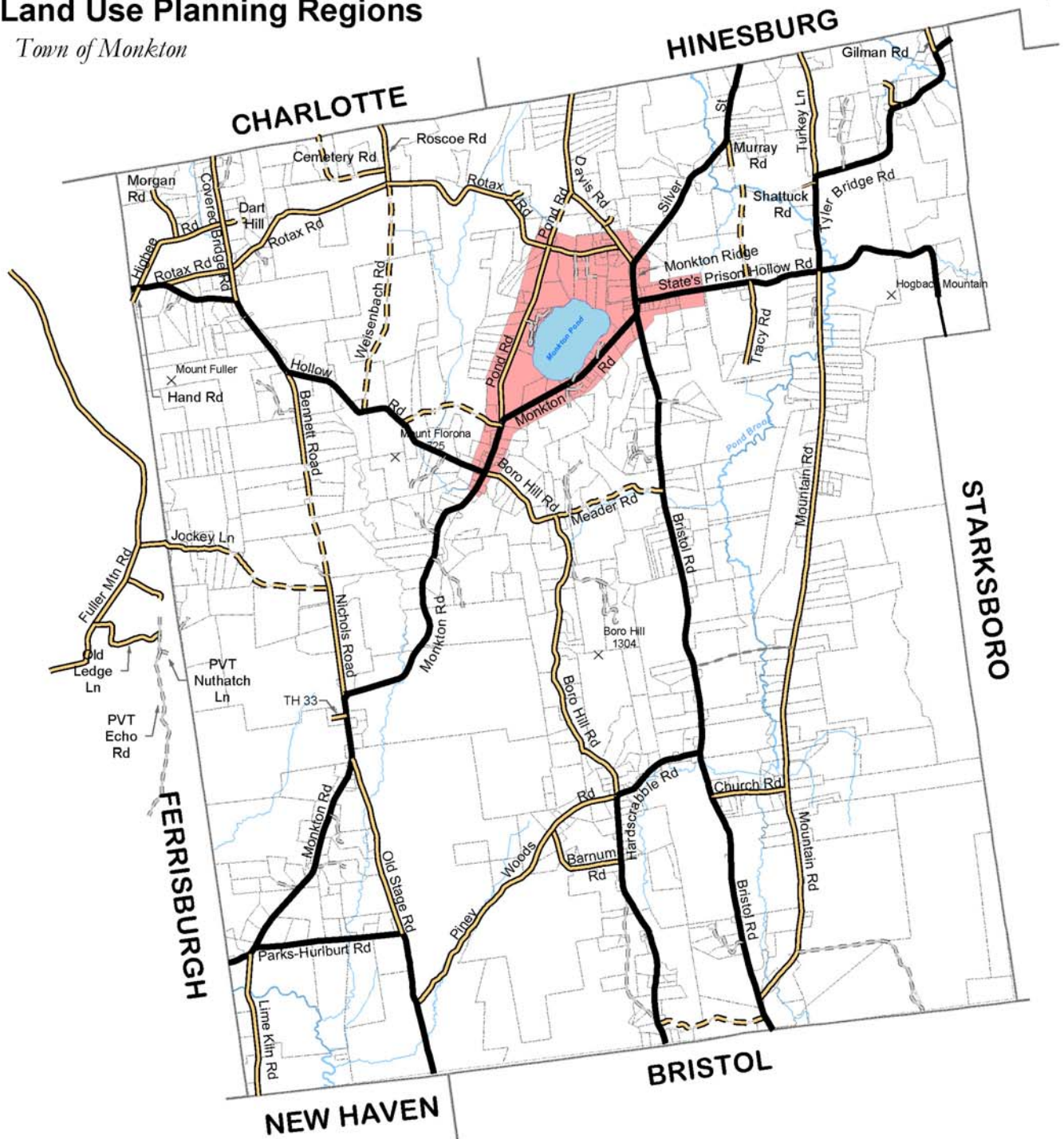
- Monkton Pond Overlay District
- Natural Heritage Protection Overlay District
- Ridgeline Overlay District
- Flood Hazard Overlay District



Monkton Pond. Photo credit: Ivor Hughes

Land Use Planning Regions

Town of Monkton



Planning Regions

- Village Residential Planning Region
- Rural Residential Planning Region

Sources:
 Planning Regions:
 As reviewed by the Planning Commission, 2018.
 Tax Parcels: 2016, Town of Monkton and
 Russell Graphics.

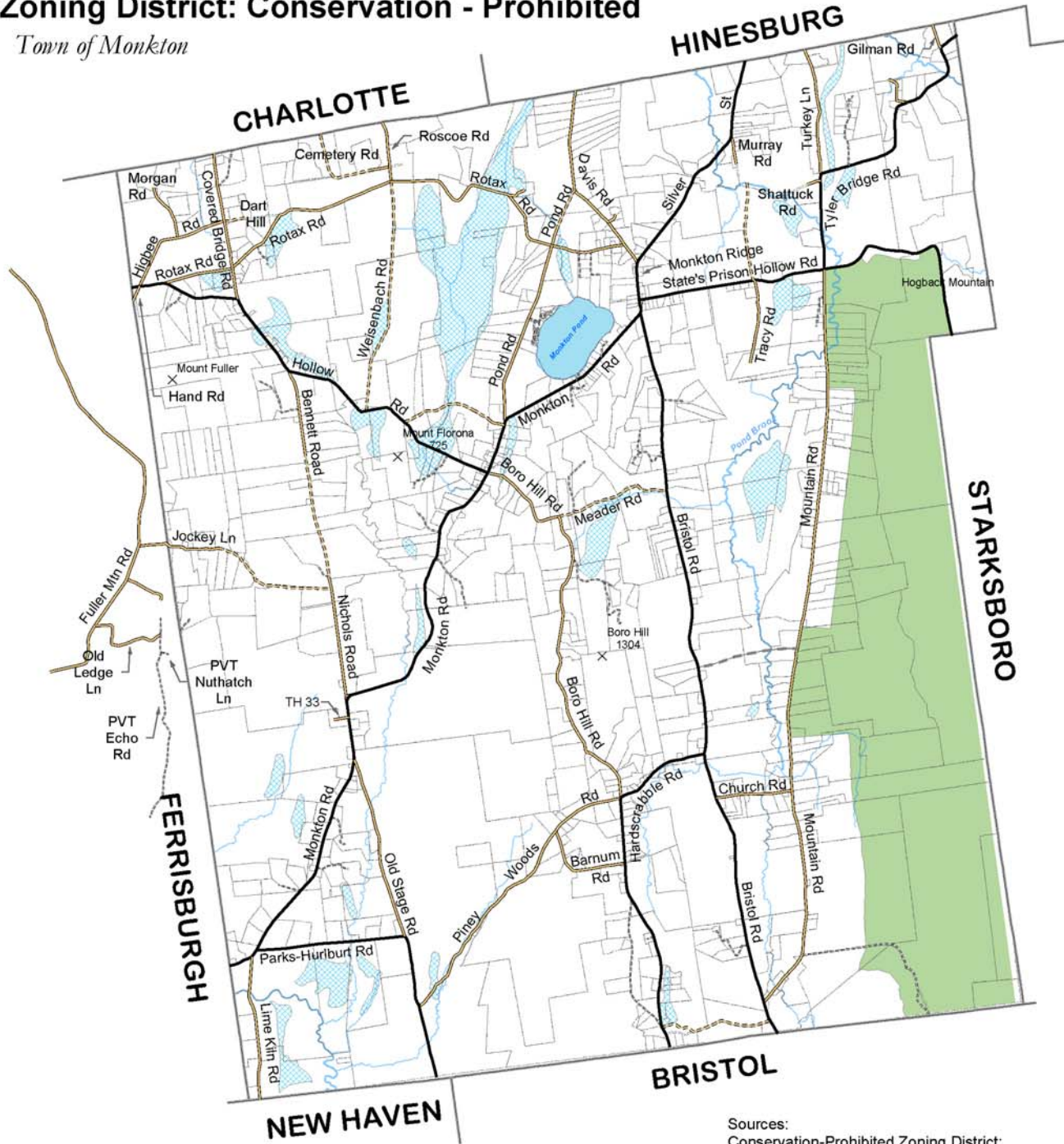


ACRPC 9/2018

Map 17 Land Use Planning Regions

Zoning District: Conservation - Prohibited

Town of Monkton



Sources:
Conservation-Prohibited Zoning District:
As adopted by the Select Board 11/8/2016.

Tax Parcels: 2016, Town of Monkton and
Russell Graphics.

Zoning District: Conservation - Prohibited

- CON-P; Forest
- CON-P; Wetlands

0 0.5 1 2 Miles

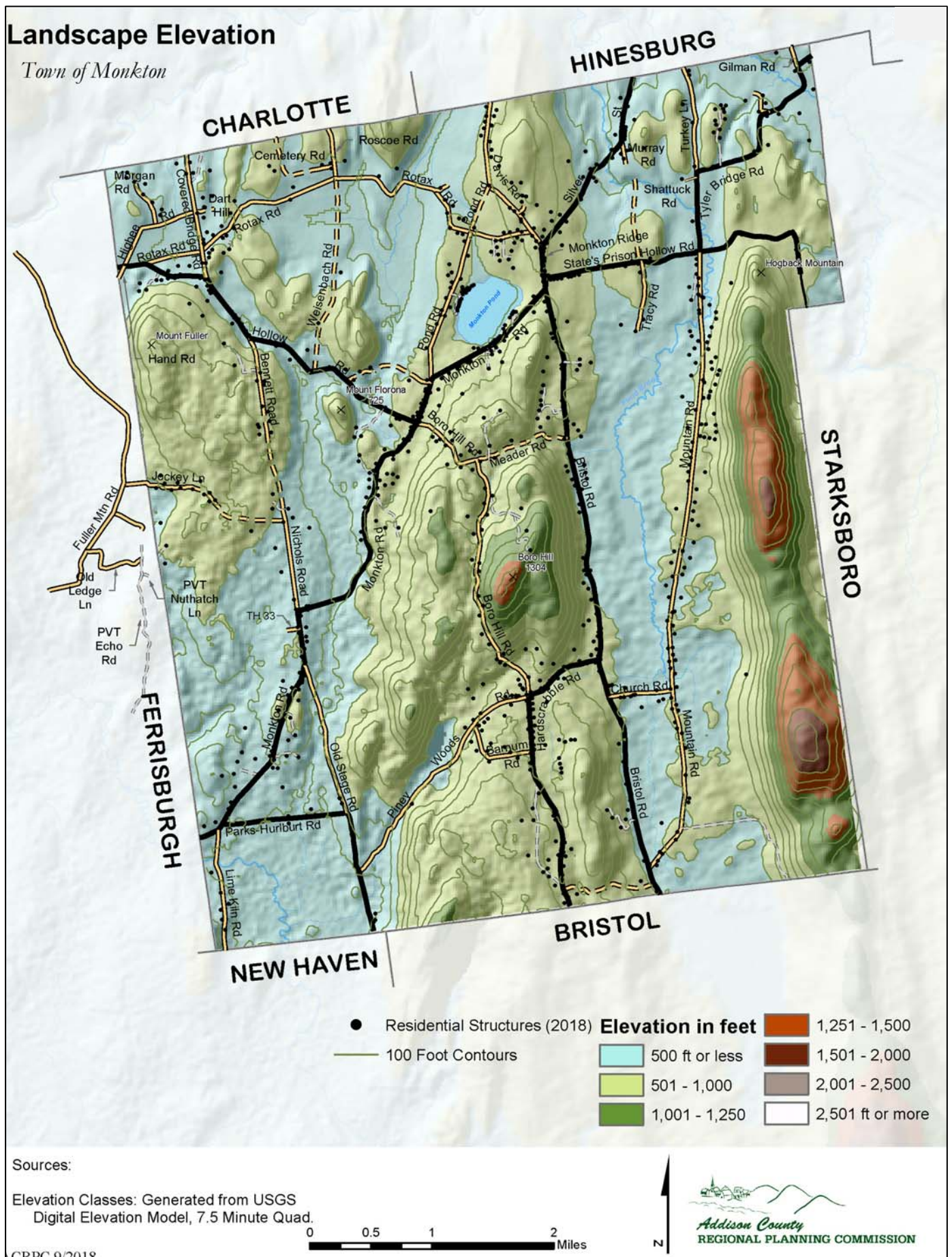


ACRPC 9/2018

Map 18 Zoning Conservation / Prohibited

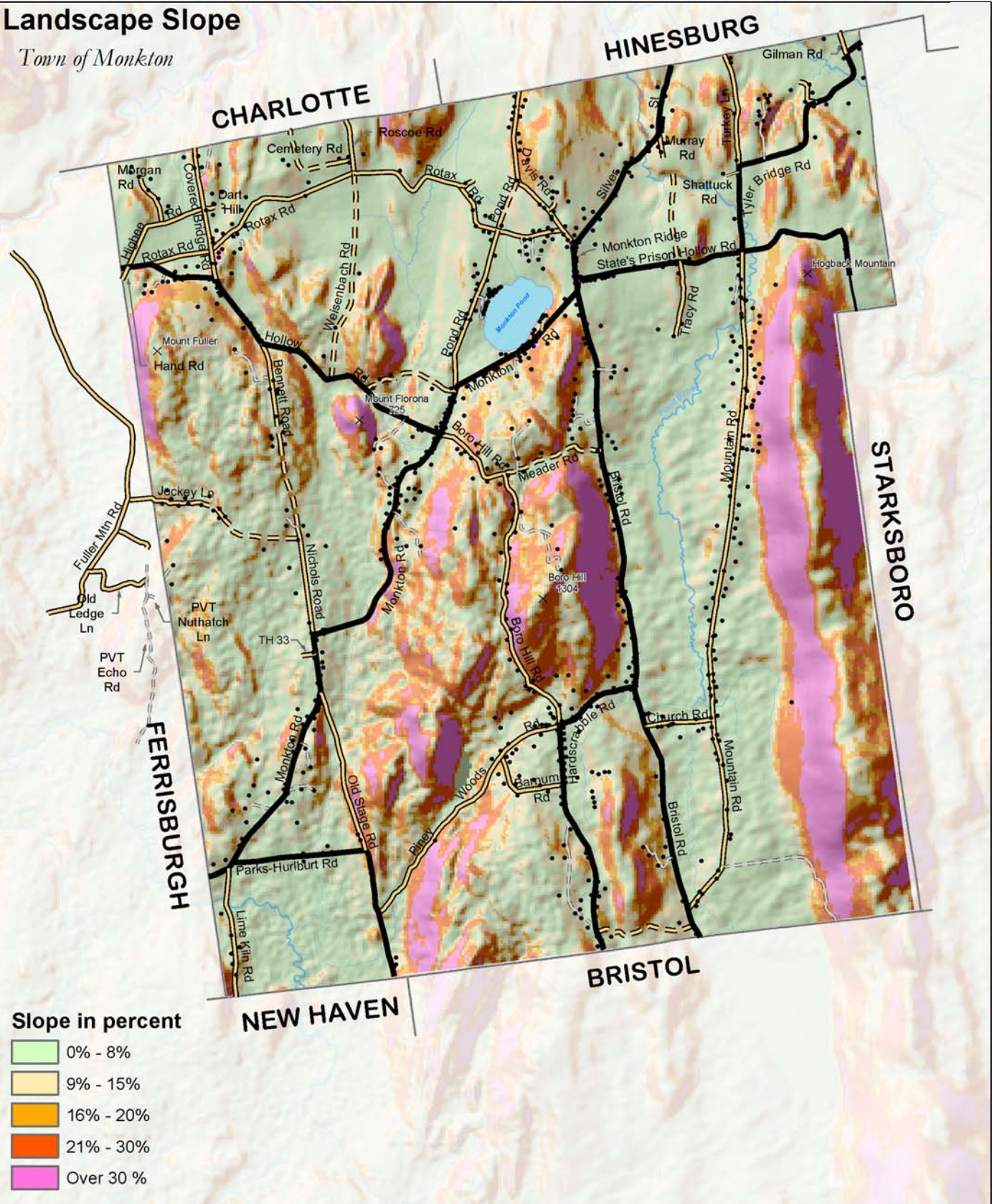
Landscape Elevation

Town of Monkton



Landscape Slope

Town of Monkton



Sources:

Slope Classes: Generated from USGS
Digital Elevation Model, 7.5 Minute Quad.

0 0.5 1 2 Miles



Addison County
REGIONAL PLANNING COMMISSION

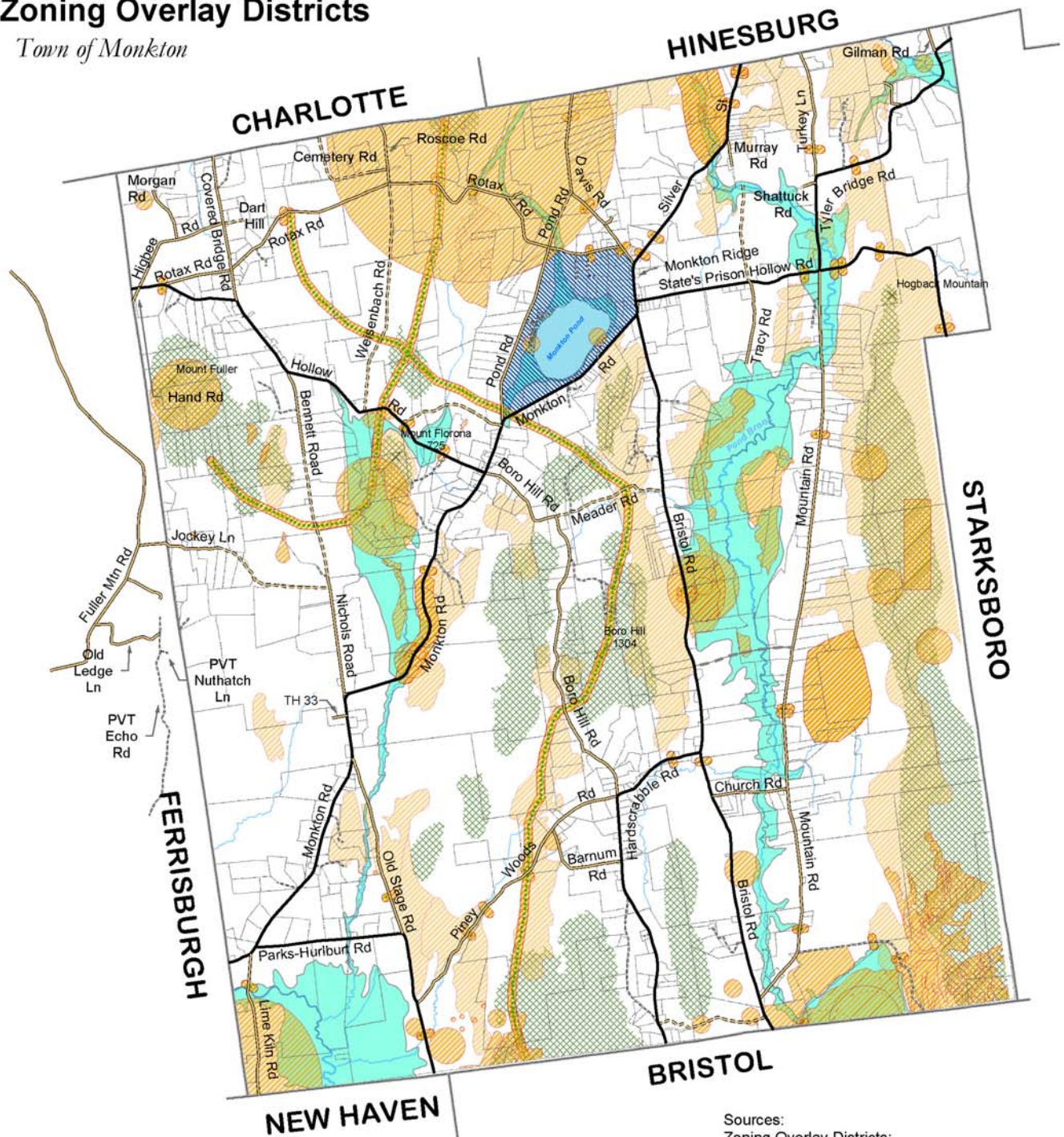
ACRPC 9/2018

Map 20 Slope





Monkton Town Plan 2020 – 2028

Zoning Overlay Districts

Town of Monkton



Zoning Overlay Districts

-  (POND) Monkton Pond Overlay
-  (NAT) Fragile or endangered plant and wildlife communities, and critical transit corridors
-  (RLA) Ridgeline Overlay District
-  (FLHD) Floodplain Hazard Overlay District

Sources:
Zoning Overlay Districts:
As adopted by the Select Board 11/8/2016.
Tax Parcels: 2016, Town of Monkton and
Russell Graphics.

Natural Heritage includes:
State Natural Heritage sites; Deer Wintering,
White Cedar Community, Wood Turtle Habitat,
Amphibian Migration Area and
property within 150 feet of Bobcat
Corridors or identified animal crossing sites

0 0.5 1 2 Miles



ACRPC 9/2018

Map 21 Zoning Overlay Districts

PLAN IMPLEMENTATION

This section provides a road map for the Monkton Planning Commission, prioritizing planning tasks based on goals and recommendations within the plan. The order of priority considers timing of projects with con-current and relevant activities occurring in Town, and concerns that have been raised by Town staff and residents of Monkton.

YEAR 1 TASK LIST (2020-2021)

Action 1: Work to develop planning and zoning that supports affordable housing for families and seniors.

Who: Planning Commission

How: Develop housing policies in our zoning regulations that encourage a diversity of housing types, including affordable options for young families and seniors.

Why: To keep Monkton affordable and to have multigenerational population of residents.

Action 2: Develop land use zoning regulations to prevent forest fragmentation and parcelization.

Who: Planning Commission

How: Zoning and subdivision regulation.

Why: Parcelization, the breaking of contiguous forestland blocks into smaller and smaller units, causes the loss of habitat through fragmentation, negatively impacts wildlife diversity, disrupts the movement, migration and behavior of wildlife, introduces exotic invasive species, and can degrade water quality.

Action 3: Develop a ground water recharge protection overlay district

Who: Planning Commission

How: Zoning and subdivision regulation.

Why: Water is one of, if not the single most, valuable natural resource within the town. Everyone has a well. All possible steps should be taken to maintain the health and safety of water supplies in Monkton and ensure that no development is allowed that will degrade it.

Action 4: Revise regulations to require the use of best water conservation practices in all new construction to minimize its impact on groundwater and update bylaws using current recommended language to protect river corridors, and help manage streams and rivers toward naturally stable, least-erosive conditions

Who: Planning Commission

How: Zoning and subdivision regulation.

Why: To promote flood resiliency and protect property in Monkton.

Action 5: Revisit Monkton's 2016 Scenic Viewshed Study to determine what, if any recommendations should be incorporated into regulatory and/or non-regulatory planning policies.

Who: Planning Commission

How: Zoning and subdivision regulation.

Why: Scenic value of our landscape provide Monkton's quality of live and support our rural economy.

Action 6: Review and revise the Land Use Planning Map to clearly define our conservation areas, including wetlands, forested lands and ridge lines as unique planning areas that are currently based in one rural residential planning area.

Who: Planning Commission

How: Zoning and subdivision regulation.

Why: To minimize the future fragmentation of these resources and clearly guide future zoning regulations.

Action 7: Examine Planned Unit Developments (PUD's) and determine best practices. Consider specific design standards for PUD's or commercial Developments.

Who: Planning Commission

How: Zoning and subdivision regulation.

Why: PUD's are a major tool for regulation growth.

Action 8: Encourage the creation of Monkton's Town Forests

Who: Agriculture and Natural Areas Committee and Monkton Conservation Commission

How: Form a Town Forest Committee to:

- Define the town's priorities and guidelines for Town Forest land.
- Facilitate the process of establishing Town Forest land by working with landowners, agencies and other town committees.

Why: Town Forest improves residents' quality of life by providing opportunities for recreation, hunting, appreciation of the natural environment, and exercise for health and well-being.

YEARS 2-8 TASK LIST (2021-2028)

Population: *Also See Task 1 in Year 1 Tasks above.*

Survey the needs of the senior population of Monkton to identify the needs of the senior population and whether or not they are being met.

Housing: *Also See Task 1 in Year 1 Tasks above.*

Offer educational seminars/workshops for homeowners regarding grants and programs supporting energy efficiency/weatherization, and best practices related to residential development and the protection of natural resources.

Education and Childcare

Survey families in Monkton to better understand daycare needs and offerings.

Utilities and facilities

1. Implement a capital budget and strategic planning for town facilities.
2. Survey the needs of telecommuters and other business owners in Monkton to learn about problems local regulations create and develop a welcoming climate for new businesses.

Energy

1. Research funding sources and support programs that would enable the town to retrofit/ install renewable energy systems for town buildings and the school.

2. Encourage energy conservation.

Transportation

1. Seek funds to create a Monkton cycling and pedestrian plan focused specifically on creating connections between Monkton Ridge and Monkton Boro for bikes, feet, horse riding, and other non-motorized opportunities.
2. Promote energy conservation, public transportation, and ride sharing programs.
3. Continue to work with Addison County Transportation Resources (ACTR) to create bus service to Monkton.
4. Work to implement the recommendation of Monkton's complete Streets document.
5. Partner with the Addison County Transportation Committee (the TAC) and neighboring towns to develop ways to redirect traffic back to route 116 and US Route 7.

Economy and Development

1. Survey the needs of telecommuters and other business owners in Monkton to learn about problems local regulations create and develop a welcoming climate for new businesses.
2. Work with ACTR to improve transportation options and ride sharing opportunities to employment centers such as Burlington and Middlebury.

Natural Resources *Also See Tasks 2 through 6 in Year 1 Tasks above.*

Soil and Mineral Resources

1. Work with NRCS and the Development Review Board to develop electronic tools and maps that identify primary agricultural soils and wetland soils to support their deliberations.
2. Conduct a detailed study to identify a source of sand and gravel for the Town of Monkton

Forestry Resources

1. Conduct a natural resource inventory to identify essential forested habitat blocks and linkages with emphasis on rare, threatened and endanger species.
2. Encourage the creation a town forest and recreational trail system that can serve education and recreation needs of town's people.
3. Develop data for wildlife corridors in town.

Agricultural Resources

Communicate with local agriculturally-related committees to understand needs and concerns for growing markets.

Water Resources

1. Meet with ACRPC to discuss the implementation of bylaws to protect river corridors, in order to qualify for the 17.5percent rate of reimbursement from Emergency Relief and Assistance Fund (ERAF).
2. Develop a monitoring program for Monkton's surface waters.
3. Work with the Vermont Health Department to educate Monkton residents on the value of testing well water and create incentives where possible.

Air Quality

Develop bicycle, horse, and walking paths in and throughout town to allow for alternative

transportation.

Scenic Resources

Review regulations for new lightening and lighting in new construction top reserve the nighttime ambiance and aesthetic qualities of the village and rural landscape.

Land Use *Also See Tasks 2,3,6 and 7 in Year 1 Tasks above.*

Apply for village regions designation.

Better understand opportunities and restrictions for transportation linkages between Monkton ridge and Monkton Boro.



Views to Camel's Hump Mountain Photo credit: Buzz Kuhns

COMPATABILITY

GOALS AND RECOMMENDED ACTIONS

Our plan will:

Look to our surrounding towns as planning collaborators and stewards of our shared natural resources.

We will do this by:

1. Working with adjoining towns to develop transportation strategies that minimize traffic, air, water and noise pollution, which are energy efficient, appealing and serviceable for the region's people.
2. Improving communication and coordination with adjoining municipalities regarding land use and planning for future growth.
3. Working with adjoining towns to develop wildlife corridors that maintain and enhance wildlife habitat and which preserve wildlife migration routes.
4. Working with adjoining towns to develop recreational corridors for enjoyment of the regions agricultural and forested landscape.
5. Collaborate with the neighboring towns to expand recreational opportunities for Monkton's residents.
6. Work with neighboring towns, organizations and state agencies to develop sustainable energy resources in the region and coordinate energy planning initiatives.

The following describes adjacent land uses of Monkton's neighboring towns. To the best of our knowledge, there are no major land use conflicts between Monkton and a neighboring town. There are many shared natural resources and roads.

Charlotte shares Covered Bridge Road, Roscoe Road and Raven Ridge. Bordering land is rural, agricultural and/or conservation land.

Hinesburg shares Turkey Lane, Silver Street, Baldwin Road, the Velco Easement and Raven Ridge. Bordering land is zoned Agricultural.

Starksboro shares Hogback Mountain and the Northern reaches of Lewis Creek. Land is zoned agricultural, rural, scenic-residential.

Bristol shares Pond Brook, an outlet of Bristol Pond (Lake Winona). It also shares Monkton Road, Hardscrabble Road and Hogback Mountain. Land is zoned low-density rural, agricultural and/or conservation district.

New Haven shares Lime Kiln Road and North Street and also a section of the Orb Weaver Farm property. It is zoned rural agricultural, and partly a flood hazard district.

Ferrisburgh shares Hollow Road, Fuller Mountain Road, Jockey Lane and Vergennes Road. It is predominately a rural-agricultural and conservation area.

APPENDIX A ENHANCED ENERGY PLAN

The Town of Monkton Enhanced Energy Plan is included on the following pages as a standalone document to allow it's submission to various State agencies.