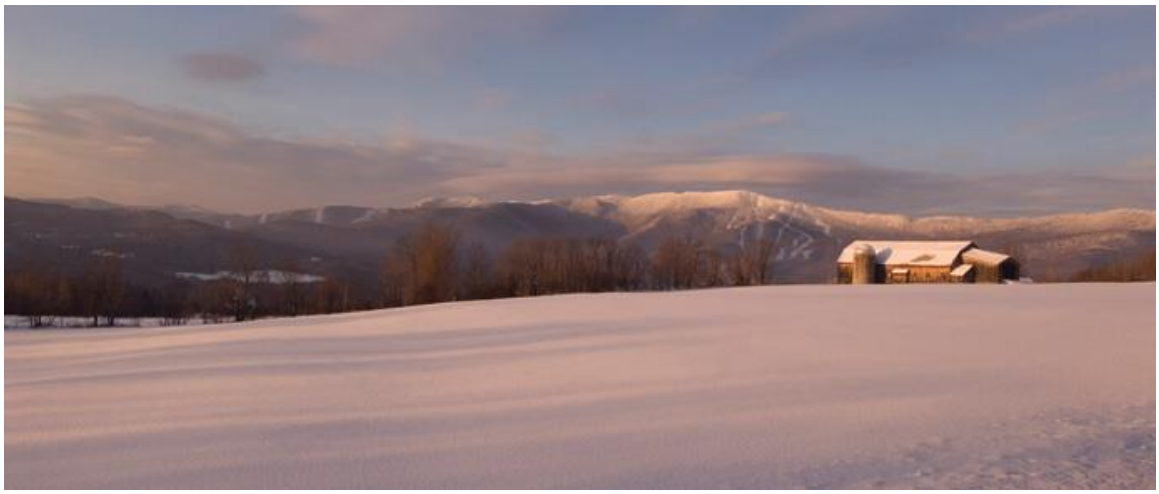
# 2014 Fayston Town Plan



*Prepared by the Fayston Planning Commission*

*Fayston, Vermont*

*Draft: August 2014*

# 2014 Fayston Town Plan

*Prepared by the Fayston Planning Commission*

*Fayston, Vermont*

Dave Koepele, Chair

Polly McMurtry

Fred Gilbert

Carol Chamberlin

Jim Halavonich

*Draft: August 2014*

## TABLE OF CONTENTS


### *1. Introduction*

**1.1. Introduction ..... 1-1**
**1.2. Purpose of the Town Plan ..... 1-1**
**1.3 2006 Fayston Town Survey ..... 1-2**
**1.4. Successes, Challenges, and Opportunities ..... 1-2**
**1.5. Plan and Format ..... 1-2**

### *2 History and Historic Resources*

**2.1 Introduction ..... 2-4**
**2.2 History of Fayston ..... 2-4**
2.2.1 Charter and Settlement ..... 2-4
2.2.2 19th Century Schools, Mills and Farms ..... 2-5
2.2.3 Early Government and Education ..... 2-5
2.2.4 Religion ..... 2-7
2.2.4 Decline of Agriculture ..... 2-7
2.2.5 The Ski Industry Arrives ..... 2-7
**2.3 Historic and Archaeological Resources ..... 2-9**
2.3.1 Historic Structures Inventory ..... 2-9
2.3.2 McLaughlin/Knoll Farm Historic District ..... 2-9
2.3.3 Mad River Glen Ski Area ..... 2-9
2.3.4 Historic Town and School Buildings ..... 2-10
2.3.5 Other Items of Historic Interest ..... 2-10

**2.4 Preserving Fayston's History ..... 2-13**
2.4.1 Preservation Planning in Fayston ..... 2-13
2.4.1.1 Mad River Valley Rural Resource Commission ..... 2-13
2.4.1.2 Fayston Historical Society ..... 2-14
2.4.1.3 Town of Fayston ..... 2-14
2.4.2 Incentives and Regulations for Historic Preservation ..... 2-14

**2.5 Mad River Valley Hill Farm Project ..... 2-15**

**2.6 History Goals and Objectives ..... 2-7**

### *3 Fayston's Ecology*

**3.1 Introduction ..... 3-16**
**3.2 Climate ..... 3-16**

**3.3 Natural Setting ..... 3-17**
**3.4 Geology ..... 3-18**
**3.5 Soils ..... 3-20**
3.5.1 Soil Suitability for Development ..... 3-20
3.5.2 Soil Suitability for Forestry ..... 3-21
3.5.3 Soil Suitability for Agriculture ..... 3-24
**3.6 Wildlife and Habitat ..... 3-24**
3.6.1 Core Forest ..... 3-26
3.6.2 Early Succession Habitat ..... 3-26
3.6.3 Grassland Habitat ..... 3-28
3.6.4 Ledge Habitat ..... 3-28
3.6.5 Natural Communities ..... 3-28
3.6.6 Deer Wintering Habitat ..... 3-29
3.6.7 Mast Stands ..... 3-29
3.6.8 Connecting Habitats ..... 3-29
3.6.9 Riparian Habitats ..... 3-30

**3.7 Invasive Species ..... 3-30**

**3.8 Hunting ..... 3-30**

**3.9 Fayston's Waters ..... 3-32**
3.9.1 Streams ..... 3-34
3.9.1.1 Stream Buffers ..... 3-35
3.9.1.2 Floodplains ..... 3-35
3.9.2 Wetlands ..... 3-36
3.9.3 Groundwater ..... 3-39
3.9.4 Stormwater Runoff ..... 3-40
3.9.4.1 Road Ditches and Stream Crossing Structures ..... 3-41
3.9.5 Flood Resilience Planning ..... 3-41
**3.10 Goals and Objectives ..... 3-45**

## *4 Community Profile*

**4.1 Introduction ..... 4-51**
**4.2 Full-Time Population ..... 4-51**
4.2.1 Household Composition ..... 4-52
4.2.2 Length of Residency and States Moved from ..... 4-53
4.2.3 Educational Attainment ..... 4-54
4.2.4 Household Income ..... 4-54
**4.3 Part-Time Residents ..... 4-55**

**4.5 Community Profile Goals and Objectives ..... 4-57**

## 5 Land Use

**5.1 Introduction ..... 5-59**
**5.2 Current Land Use ..... 5-59**
5.2.1 Conserved Lands ..... 5-60
5.2.2 Scenic Quality ..... 5-63
5.2.3 Agricultural Lands ..... 5-64
5.2.4 Silviculture ..... 5-64
**5.3 Development Regulations ..... 5-65**
5.3.1 Zoning Districts ..... 5-65
**5.4 Planning Considerations ..... 5-67**
**5.5 Future Land Use ..... 5-67**
**5.6 Zoning Districts ..... 5-69**
5.6.1 Forest District ..... 5-69
5.6.2 Soil and Water Conservation District ..... 5-70
5.6.3 Recreation District ..... 5-70
5.6.4 Rural Residential District ..... 5-70
5.6.5 Irasville Commercial District ..... 5-71
5.6.6 Resort Development District ..... 5-72
5.6.7 Industrial District ..... 5-72
5.6.8 Flood Hazard Overlay District ..... 5-72
**5.7 Land Use Goals and Objectives ..... 5-73**

## 6 Housing

**6.1 Introduction ..... 6-76**
**6.2 Housing Trends since 2000 ..... 6-76**
**6.3 Housing Stock ..... 6-76**
**6.4 Housing Costs ..... 6-79**
**6.5 Appropriate Areas For Development ..... 6-81**
**6.6 Seasonal and Other Special Housing Needs ..... 6-82**
**6.7 Housing for People Who Are Elderly or Disabled ..... 6-82**
**6.8 Housing Affordability ..... 6-83**
**6.9 Housing Goals and Objectives ..... 6-85**

## 7 Transportation

**7.1 Introduction** ..... **7-87**
**7.2 Fayston's Road Network** ..... **7-87**
7.2.1 Existing Roadway Network ..... 7-87
7.2.1.1 Major Roads ..... 7-87
7.2.1.2 Local Roads ..... 7-89
7.2.1.3 Bridges and Culverts ..... 7-90
**7.3 Current Roadway Standards** ..... **7-90**
**7.4 Current Traffic Conditions** ..... **7-91**
**7.5 Traffic Projections** ..... **7-92**
**7.6 Average Daily Traffic** ..... **7-92**
**7.7 Peak Traffic Volumes** ..... **7-92**
**7.8 Road Network Issues and Opportunities** ..... **7-94**
7.8.1 Adding New Town Roads ..... 7-94
7.8.2 Access Management ..... 7-94
7.8.3 Roadway Design/Traffic Calming ..... 7-95
7.8.4 Maintaining Rural Character ..... 7-95
7.8.5 Scenic Byway and Scenic Road Designations ..... 7-96
7.8.6 Roadways and Ecology ..... 7-96
**7.9 Public Transportation and Ridesharing** ..... **7-97**
7.9.1 Existing Services ..... 7-97
7.9.2 Public Transit Issues and Opportunities ..... 7-98
7.9.3 Taxi ..... 7-99
7.9.4 Park and Ride Lots ..... 7-99
**7.10 Pedestrians and Bicycles** ..... **7-99**
7.10.1 Bicycle and Pedestrian Networks ..... 7-100
7.10.2 "Family-Friendly" Pedestrian and Bicycle Facilities ..... 7-100
**7.11 Complete Streets** ..... **7-100**
**7.12 Regional Coordination** ..... **7-100**
**7.13 Transportation Goals and Objectives** ..... **7-101**

## *8 Community Facilities: Schools, Services and Energy*

**8.1 Introduction** ..... **8-103**
**8.2 Schools** ..... **8-103**
8.2.1 School Administration and Facilities ..... 8-104
8.2.2 School Enrollments ..... 8-105
8.2.3 Per-Pupil Costs and School Financing ..... 8-105
8.2.4 Adult Education ..... 8-105

**8.3 Utilities ..... 8-106**
8.3.1 Water Supply ..... 8-106
8.3.2 Wastewater Treatment Systems ..... 8-106
8.3.2.1 On-Site Wastewater Regulation in Vermont ..... 8-107
8.3.2.2 Planning Considerations ..... 8-107
**8.4 Wireless Telecommunication Facilities ..... 8-107**
**8.5 Energy ..... 8-107**
8.5.1 Electricity ..... 8-108
8.5.2 Household Heating Fuel ..... 8-108
8.5.3 Transportation Fuel ..... 8-109
8.5.4 Renewable Energy Sources ..... 8-110
8.5.4.1 Hydro ..... 8-110
8.5.4.2 Wind ..... 8-110
8.5.4.3 Wood ..... 8-111
8.5.4.4 Solar ..... 8-112
8.5.4.5 Vegetable Biofuels ..... 8-112
8.5.5 Siting of Energy and Communication Facilities ..... 8-113
**8.6 Community Facilities ..... 8-114**
8.6.1 Child Care ..... 8-114
8.6.2 Senior Citizen Services ..... 8-115
8.6.3 Emergency Services: Fire Protection, Police, and Ambulance Services ..... 8-115
8.6.3.1 Fire Protection ..... 8-115
8.6.3.2 Police ..... 8-116
8.6.3.3 Ambulance Services ..... 8-116
8.6.3.4 Health Care ..... 8-116
8.6.4 Solid Waste Disposal ..... 8-117
8.6.5 Valley and Regional Planning ..... 8-117
8.6.6 Partnerships with Community Agencies ..... 8-118
**8.7 Community Facilities Goals and Objectives ..... 8-118**

## 9 Recreation

**9.1 Introduction ..... 9-123**
**9.2 Recreation Assets ..... 9-124**
9.2.1 Ski Areas ..... 9-124
9.2.2 Publicly Owned Lands Used for Recreation ..... 9-125
9.2.2.1 Phen Basin ..... 9-126
9.2.2.2 Howe Block of Camel's Hump State Forest ..... 9-126
9.2.2.3 Huntington Gap Wildlife Management Area ..... 9-127

9.2.2.4 Chase Brook Town Forest……... 9-127

**9.3 Recreational Facilities ..... 9-127**
9.3.1 Playing Fields..... 9-127
9.3.2 Swimming..... 9-128
9.3.3 Ice Skating ..... 9-128
9.3.4 Trail Network..... 9-128
9.3.4.1 Catamount Trail……... 9-128
9.3.4.2 Mill Brook Trail……... 9-129
9.3.4.3 Vermont Association of Snow Travelers (VAST) Trails…… 9-129
9.3.4.4 The Long Trail…… 9-129
9.3.4.5 Informal Trails…… 9-130
**9.4 Hunting ..... 9-130**
**9.5 Fishing..... 9-130**
**9.6 Recreation Issues..... 9-130**
**9.7 Recreation Goals and Objectives..... 9-131**

## *10 Fayston's Economy*

**10.1 Introduction …… 10-133**
**10.2 The Past ……... 10-133**
**10.3 The Present …….. 10-134**
10.3.1 Home-Based Employment …… 10-134
10.3.2 Covered Employment …… 10-134
10.3.3 Home Towns of Fayston Workers ……..… 10-136
10.3.4 Household Income ……. 10-137
10.3.5 Employment Rates ……. 10-139
10.3.6 Occupations ……... 10-139
10.3.7 Work Locations of Fayston's Employed Residents …….. 10-140
10.3.8 Population Growth and Business Development …… 10-141
10.3.9 Business Development and Appropriate Areas ……. 10-142
**10.4 The Future ……... 10-144**
10.4.1 Economic Outlook ……. 10-145
10.4.2 Tourism and Recreation ……. 10-145
10.4.3 Self-Employment ……... 10-146
10.4.4 Agriculture ……. 10-146
10.4.5 Forestry/Silviculture …….. 10-147

10.4.6 Self-Sustainability ……. 10-147

**10.5 Economic Goals and Objectives …… 10-147**

# Chapter 1: Introduction

## 1.1 Introduction

The 2014 Fayston Town Plan marks the most recent update of the Town's official planning and policy guidance document, which was last adopted in 2008. This new Town Plan is intended to reflect the changes, opportunities and challenges that have occurred since the adoption of the 2008 Town Plan, set goals for the Town in the various areas covered in the Plan, and provide guidance and set policies for Fayston's future.

The authority and requirement to adopt and implement the Town Plan come from the Vermont Planning and Development Act, 24 VSA, Chapter 117, which intends to:

- Encourage responsible use and careful stewardship of natural resources, scenic beauty, rural character, and cultural heritage;
- Identify, maintain, preserve, and enhance natural features and environmental quality for the benefit of future generations;
- Accommodate a reasonable rate of population growth that does not overburden Town services and facilities, or adversely affect the Town's scenic and rural character;
- Support businesses and industries that are compatible with and complementary to Fayston's scenic beauty, rural character, and high quality of life;
- Promote the development of a wide variety of housing types to meet the needs of residents;
- Guide development in a manner which preserves important community resources, while allowing for appropriate land uses in suitable locations; and
- Maintain a reasonable balance between community-imposed limitations on land use and the rights of individual landowners.

## 1.2 Purpose of the Town Plan

The Town Plan has several purposes. It sets the short- and long-range goals that guide planning, budgeting, and policy decisions made by local boards and officials, including the capital budget and changes to Town bylaws. It guides local decision making in the subdivision and site plan review process. It is also an important guidance document for Act 250 (Environmental Review) and Section 248 (Utility Siting) proceedings, as both require applicants to demonstrate conformance with the adopted Town Plan. It also establishes policies for the Town's interactions with neighboring towns and other levels of government.

The Town Plan is also used by public and private agencies, such as the Vermont Land Trust, the Vermont Agency of Transportation, the Department of Housing and Community Affairs, and the Department of Fish and Wildlife when making decisions to fund conservation, planning and infrastructure projects. It is thus extremely important to revise and re-adopt the Town Plan at least every five years, to ensure the Town's current conditions and best interests are considered when decisions are made.

## 1.3 2012 Fayston Town Survey

Much of the information that is presented in this Town Plan is based on the results of the 2012 Fayston Town Survey, which was completed by 201 households: 127 from full-time residents, 51 from part-time residents, and 23 from those who own property in Fayston but that do not spend any time here. Based on the number of occupied housing units in Fayston, this indicates that response rates were 21% for full-time residents and 10% for part-time residents (see Table 1-1). (For additional information on the Town Survey, see the "2012 Town Survey Results" report, Fayston Planning Commission, located at http://faystonvt.com/PCnotices.php.)

**Table 1-1: Fayston Town Survey Response Rates**

| | Survey Responses | Response Rate |
|---|---|---|
| Full-Time Resident | 127 | 21% |
| Part-Time Resident | 51 | 10% |
| Own Property | 23 | |
| Total | 201 | |

## 1.4 Successes, Challenges, and Opportunities

The 2012 Town Survey reveals that Fayston residents have fairly strong opinions on many issues. Importantly, there are high levels of agreement on most issues. The opinions of full-time residents are very similar to those of part-time residents.

Residents believe that the Town's greatest assets are its natural resources, recreation opportunities, scenic beauty, and rural character. Preservation of water quality, rural character, and wildlife habitat and corridors topped the list in importance when balancing development with local qualities. A majority of both full-time and part-time residents concur that the Town must ensure that new development preserves important Town features and natural resources. The Survey also indicates very strong support for restricting high-elevation development.

For the most part, the Town has been able to maintain its character while accommodating reasonable growth. However, Fayston continues to grow. Currently there are a significant number of undeveloped lots throughout the Town, and new subdivisions are applied for every year. The effects of this parcelization will be increasingly visible as these lots are built upon; moving forward, the Town is challenged with how to best maintain its character as growth continues.

## 1.5 Plan and Format

The 2014 Town Plan is an update of the previous plan that is intended to reflect the desires of the Fayston's residents, both permanent and part-time. The plan consists of ten chapters that provide a

significant amount of information that intends to help public and private officials make well-informed policy decisions and to outline a vision for Fayston's future.

These chapters include:

1. Introduction
2. History
3. Ecology
4. Community Profile
5. Land Use
6. Housing
7. Transportation
8. Community Facilities
9. Recreation
10. Economy

Each chapter provides Goals and Objectives that outline the steps to be taken to achieve the vision of the Town Plan. Appendix A provides information regarding details of the tasks to be accomplished before the next Plan revision, including time frames and responsible Town Boards or Committees.

The ideas and opinions of local residents are welcome. The Plan is a living document that is updated at least every five years, and input regarding future revisions is appreciated at any time

# Chapter 2: History and Historic Resources

## 2.1 Introduction

More than any other single factor, Fayston's rugged terrain has shaped its history. Reputed to have the highest average elevation of any town in Vermont, the high lateral ridge along the western border of the Town is a significant barrier that directed the Town's growth down towards the Mad River Valley towns of Moretown and Waitsfield. Today Fayston is essentially a rural residential community; and the reliance on Waitsfield, and to some degree Moretown, as Fayston's service center is even more significant.

This chapter presents an overview of Fayston's history--its settlement, development and growth over time and the character of the Town today--and the Town's historic and archaeological resources.

## 2.2 History of Fayston

Humans have resided in Vermont for over 10,000 years, beginning with Paleo-Indians who hunted large game on the tundra-like land. As the forests grew to permeate the land, the people and their skills evolved to benefit from the changing flora and fauna. The Abenaki people settled in Vermont, making use of the abundant resources offered along the rivers, including the Mad River and its tributaries. With the migration of Europeans into the region began rapid conflict with and change to the Abenaki way of life; after these new arrivals controlled the area the land was considered open for further settlement. This period of the late 1700's is when many Vermont towns established themselves, including the Town of Fayston.

### 2.2.1 Charter and Settlement

Fayston was chartered on February 2, 1782 when Governor Thomas Chittenden signed a charter establishing a township, comprising approximately thirty-six square miles, to Ebenezer Walbridge and his "associates". This signing occurred a mere two days after a similar charter established the neighboring town of Waitsfield. The Town was named for Joseph Fay, the first Secretary of the Council of Safety of Vermont. Fay was a member of the Fay family of Bennington. The Fays operated the Catamount Tavern in Bennington, a popular gathering place for the Green Mountain Boys and a meeting place for the Council of Safety. It appears, however, that Joseph Fay never owned land in Fayston.

Fayston was among the many Vermont towns chartered in the late 18th Century that were sold to proprietors, most of whom were land speculators. In keeping with public policy of populating land for both commerce and defense, the charter clearly intended that the land be cleared and settled: "Each proprietor shall plant and cultivate two acres of land and build a house at least eighteen feet square on the floor or have one family settled on each share of the land in said township." If proprietors failed to live up to this agreement "within the time limited by law", the land would "revert to the freemen of this state in order to be regranted." At the time, these land speculators were heralded as patriots, helping to defend the independent republic by raising money to support its government, pay its soldiers and defend its frontiers--most notably Lake Champlain, which was threatened by the British. Within 20

years, much of the State's land became vested in a handful of landowners through tax sales, swapping and some purchases.

### 2.2.2 19th Century Mills and Farms

The settlement of Fayston began in 1798. In that year, Lynde Wait cleared land and "rolled up" a log house on Bragg Hill. The land he settled later became the Vasseur farm, which was the Town's last remaining dairy farm when it stopped operations in 1987. The Waitsfield connection was a strong one. In fact, many people in Waitsfield seemed to think it would make sense if the land to the west were to become part of their town. In 1804, Waitsfield voted to ask the proprietors of Fayston to join them in petitioning the General Assembly for annexation. But the movement fizzled. Fayston residents, it seemed, were not so enthusiastic, and in 1805 the settlement officially organized as a Town of its own.

While Fayston never developed a mill village like those in Waitsfield and Warren, there were large lumbering operations and a number of sawmills along Shepard and Mill Brooks. Merlin Ward was one of the owners of the Ward Lumber Company, a Moretown operation that cut a significant number of trees in the Fayston forests. In the mid-l800s, Hiram Ward began lumbering in the neighboring hills of Duxbury and erected mills in Duxbury and Moretown to manufacture lumber products. In 1890 Ward purchased a sizeable tract in the Big Basin area and, in time, Ward Lumber Company would become one of the largest landowners in Town. But Hiram and company were by no means the first to earn a living from trees. In 1816, when Joseph Marble built a sawmill along Shepard Brook, it would be the first one in Town. It would also be the first of many sawmills along and above this stream. Marble, and those who followed him, realized the value to be had in lumber, and it was timber that would prove to be the backbone of Fayston's commerce and its only major export. No fewer than four mills were established on aptly-named Mill Brook, including clapboard mills run by Samuel Dana, C.D. Billings, and Hugh Baird. The Boyce, Brighham, and Durkee families all operated mills in North Fayston as did John Grandfield, who ran a mill in the Big Basin area. By the turn of the century, Grandfield owned the largest sawing and milling operation in Town. Evidence also exists of a steam-powered mill operating in Big Basin sometime after the Boyce and Grandfield mills.

Mills existed in other areas of Town as well. John Chase operated a shingle mill on Chase Brook. Frenchman's Brook was the site of a mill operated by Daniel Posnett as well as a clapboard mill run by E. & O. Davis. It is believed that Frenchman's Brook was named after the large number of French Canadian lumberjacks who worked in the area.

> ***Lumbering in Fayston***
>
> *In former times when a lumber company harvested an area, they set up a logging camp consisting of at least a cookhouse and a bunkhouse. The tract was then clear-cut. Each time they moved to a new location, a new camp had to be re-established. Merlin Ward once quipped that the hills and mountains in Fayston were so rugged that when a camp was moved, even the bed bugs had to get off the wagons and walk.*
>
> *-Fayston Historic Sites and Homes Tour*

### 2.2.3 Early Government and Education

The government of the Town of Fayston was organized in 1805. Its major task was to establish, and provide schooling for increasing numbers of the settlers' children. Fayston's schooling has had an interesting history of its own, described by Reba Hall in the *Fayston Historic Sites and Homes Tour*:

> *Between the arrival of the first settler, Lynde Wait, in 1798 and the 1800 census four more pioneers with their families had arrived, increasing the inhabitants to eighteen. It is uncertain how many people were in the Town when it was organized August 6, 1805. We do know that between the 1800 and 1810 census twenty-two more families had arrived swelling the population count to 149 (only nine less than the 158 inhabitants left in Fayston at the time of the 1960 census), and some of the increase was due to the beginning of development in North Fayston. Shepard Brook was a significant source of power, and along its banks lumber mills were built, turning out, among other things, building products useful for further development. Flat lumber coming out of the mills improved construction techniques. New "plank" houses could be built more easily, and at lower cost than the traditional log houses. Clapboard and shingle mills provided similar building advances. As this industry grew, so did the concentration of people living in North Fayston. In fact, by 1879, growth in the area prompted the people of North Fayston to open a post office, just to the west of the No. 4 school.*
>
> *In 1809 the Town voted that the Town be organized as one school. Apparently some questions arose as plans began to be made to build a schoolhouse. Just prior to the warning that was issued to meet to vote for the school, it was voted to divide the Town into two districts, the second district to be all the area North of Shepard brook and to be known as the North School District. This action left it open to issue a warning to the inhabitants of the First School District to proceed with plans to build the first school-house.*

The Town's first schoolhouse opened in 1812, at a cost of $159.75, and had 25 students from the ten families living in Town. By 1844, when the Town's population was about 650, the Town had ten school districts and educated 263 pupils. According to the Fayston Historical Society, in 1844 the Number 4 School in North Fayston had 22 students, Number 2 in North Fayston had 69, and Number 9 in South Fayston had 52. The remaining students were educated in homes, and a few attended schools in Waitsfield. Mrs. Hall's history continues:

> *By the time of the 1830 Census the population had exploded (458 inhabitants). In the meantime the North School District was divided, with a little west of what is now Dunbar Hill Road becoming District #2 and that to the east becoming District #4; the boundaries of the latter were shifted around considerably. No evidence has been found that there was ever a school-house in this area until this building was erected. We do have a bank recording the last Tuesday of March, 1869 and carrying it through to 1893 when the State mandated that all district school systems administered by the inhabitants of the district become a part of a single town system, administered by the town. Many of the district school buildings continued to be used under the same district number but were phased out as population declined.*

Apparently, the Town continued teaching in the various District schoolhouses until all the students could be absorbed into two schools. Fifteen students in South Fayston went to District 9 School, now the Burley Partnership offices, and sixteen students in North Fayston went to District 4 School. District 4

School was closed in the 1950s, and all students went to the District 9 School until the current elementary school was built in 1963.

### 2.2.4 Religion

When the Town was very young, it was common for residents to travel to neighboring towns to worship: those living in South Fayston would attend service in Waitsfield; those in North Fayston would attend in Moretown. In time that would change and there was a period in its history that Fayston supported its own congregations. In 1821, citizens formed the Fayston Unity Society "for the purpose of supporting and settling" a minister. The Unity Society selected Jotham Carpenter as its first minister and gave him a parcel of land. Religion was integral to the life of early residents and the position of minister, like schoolmaster, was held in high regard. For this reason, congregations did whatever they could to support their minister. As part of their compensation, it was common in those days to give the minister a piece of land. For one, land was more plentiful than money. We might also suppose that such a gift might help ensure that the parson stuck around. In 1838, both the Protestant Methodists and the Congregational Society organized. The Congregationalists actually hoped to erect a meetinghouse, though their meetings were eventually held in the No. 3 school. The practice of holding religious meetings in the schools continued. Records indicate that in the mid-1800s the Reformed Presbyterian Society would occasionally host preachers in both schoolhouses No. 3 and No. 1. The final chapter in the growth of religious organizations seems to have occurred when, in 1870, the Freewill Baptist church was formed. It was a small congregation with 15 practicing members.

As the century closed, however, the ability of Fayston to support its own churches dwindled and, like its post office, these institutions were eventually dissolved, largely through unions with like congregations in Moretown and Waitsfield.

### 2.2.5 Decline of Agriculture and Population

Fayston's settlement and subsequent decline in the Nineteenth Century generally reflects the rise and fall of Vermont agriculture during the same period. Industry was limited to lumbering and a very small amount of talc mining; farming was the major economic activity. Most of Fayston was unsuitable for anything but subsistence farming, due to thin soil and steep hillsides. As land west of the Mississippi was opened up for settlement, families left the area for new opportunities.

This rise and decline is clear from Fayston's population changes. As described in more detail in Chapter 4, Fayston had no residents in the first U.S. Census of 1791. The population rose to 18 in 1800, and then grew rapidly to 800 in 1860. After that it began to decline sharply, and at a more rapid rate than the Valley as a whole. While the other Valley towns of Warren and Waitsfield had land suitable for larger dairy operations and thriving mill villages, Fayston's rugged terrain made other farming and industry difficult, and its population declined. By 1900, the Town population was down to 466 residents; by 1960, there were less than 200 residents remaining in Fayston.

### 2.2.6 The Ski Industry Arrives

Fayston's population and farming economy continued to decline until just after World War II, when the land that had long since ceased to sustain agriculture began to seem ideally suited for winter recreation. Roland Palmedo, one of the founders of Mt. Mansfield Ski Area (now Stowe) decided Fayston's Stark

Mountain was ideally suited for a second major Vermont ski resort. Mad River Glen and its famous Single Chair lift began operating in 1949, and Fayston's position as a winter recreation community was established. Mad River Glen celebrated its 65th anniversary in 2013.
In 1962, the Glen Ellen ski area was established on Mount Ellen, another of Fayston's major peaks. Glen Ellen was sold to Sugarbush in 1979. The two base areas at Sugarbush, Lincoln Peak and Mt. Ellen, were connected by the opening of Slide Brook Express during the 1995-96 season. This allows skiers to have easy access to the facilities at both areas.

With two major ski areas operating in Fayston, new residents were attracted to the Town. From fewer than 200 residents in 1960, the Town now has nearly 1,353 full-time residents and approximately 1,000 part-time residents (who own a second home here).

The opening of the ski areas brought an influx of skiers needing a place to stay, and in the late 1940s, a boom of sorts occurred as innkeepers began converting old homesteads into ski lodges. The hospitality business had arrived.

Nancy and Allen Clark were the first to open their doors to skiers in 1948. The young newlyweds were living in Franconia New Hampshire and were looking for a place to establish their own ski lodge. Dismissing Franconia, Conway New Hampshire and Stowe as "too well along", they considered the new ski area being developed by Roland Palmedo. They decided to pay a visit to Walter Gaylord, a Waitsfield farmer and the only real estate agent in the Valley. After being shown three available properties along Rte 17, they settled on an old house with a wonderful view of the mountain. "The Clarks" was born. Currently being run as the "Mountain View Inn", the original establishment was more of a lodge than an inn. After tearing down one of the two barns on the property "to improve the view", the house was renovated to include two "he and she" bunk rooms, a semi-private room and a private room all on the second floor. The charge? $5.50 *to* $6.50, breakfast and dinner included.

Down the road from the Clarks was another new establishment, "The Perkins". Henry Perkins, who opened this inn with his bride Virginia, would become a well-known figure in Town and a Mad River Valley legend. Over the years he would become a Lister, a Justice of the Peace, and most famously, Town Moderator, colorfully orchestrating the annual March Town Meeting. Henry was a member of the famed 10th Mountain Division. Many veterans of this elite Army division, all excellent skiers, were settling in the area at the time. Bud Phillips was director of the ski school at Mad River and Cliff Taylor was an instructor. Sewall Williams, yet another veteran of the 10th Mountain Division, opened "Ulla Lodge" in 1948, the same year that "The Perkins" opened.

***Mad River Glen Becomes a Coop.***
*In 1995, Mad River Glen became a cooperative owned by nearly 2000 skiers. Mad River Glen is the only cooperative skier-owned mountain in America.*

Like the other young innkeepers who timed their arrival in the Valley to coincide with the opening of Mad River Glen, Henry and Ginny Perkins took eagerly to the challenge of converting a ”fixer upper” into a comfortable, if not elegant, guesthouse. They decided the old Dana homestead on Rte 17 would work out just fine, though it was in a sorry state when they bought it in June of 1948. They gutted the old kitchen, fixed “country plumbing”, shored up the feeble foundation and finally hung curtains, anticipating the first ski season and a ton of snow. Winter arrived, but as we know, the snow didn’t; it would be February before any guests would stay at the lodge. It was a slow start for Henry, Ginny and the other lodge owners.

And it was slow going for the skiers when they did arrive. The slogan for the new Mad River could have been “Ski It If You Can ***Get Here”.*** The trip to the Valley from New York was an eight-hour affair, and once here, the road up to the mountain offered an additional challenge. Nancy Clark was able to attest to that. Remembering the awful condition of the roads at the time, Nancy Clark told how Francis Martin, who ran “Tucker Hill Inn” down the road, used to help out by driving his guests to the ski area in his old Jeep. He knew that otherwise his guests might spend the day not skiing, but getting their cars unstuck. Francis would sometimes stop by the other lodges on the way to the mountain, picking up guests who were all too happy not to drive.

## 2.3 Historic and Agricultural Resources

### 2.3.1 Historic Structures Inventory

In 1971, the State of Vermont Division for Historic Preservation began an inventory of all historic structures and buildings in the Town of Fayston. The survey work was largely completed in 1978 and 1979. The inventory lists all structures and buildings in the Town that are on the Vermont Register of Historic Places. The survey lists 39 buildings and structures that were eligible for listing on the National Register of Historic Places in 1979. This survey was updated by the Mad River Valley Rural Resource Commission in the 1990s.

*The **National Register of Historic Places** is the Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate and protect our historic and archeological resources. Properties listed on the Register include districts, sites, buildings, structures and objects that are significant in American history, architecture, archeology, engineering and culture.*

### 2.3.2 McLaughlin/Knoll Farm Historic District

Listed on the National Register of Historic Places, the McLaughlin/Knoll Farm Historic District also has the distinction of being the first property in Fayston conserved through an easement donation to the Vermont Land Trust. In 1999, the National Park Service featured Knoll Farm on a special historic travel itinerary showcasing Central Vermont's National Register properties.

### 2.3.3 Mad River Glen Ski Area

On July 5, 2012 Mad River Glen became the first ski area in the nation to be listed as a historic district in the National Register of Historic Places. Mad River Glen’s historic nomination encompasses the entire

ski area—not just its Single Chair lift. The most significant contributing factor to the Glen's nomination has been the ski trails themselves. "Most of Mad River Glen's carefully placed trails become visible only to those who are descending the mountain," the nomination states. "The design of those trails is historically one of the ski area's most important qualities. These trails define the skiing experience and are much less intrusive to the face of the mountain than the broad, open swaths visibly apparent at other ski resorts."

### 2.3.4 Historic Town and School Buildings

Fayston is fortunate to have three original school house buildings and its original Town Clerk's office still standing. The historic high school building where Fayston students once attended high school is still intact in Waitsfield.

- School Number 4, on North Fayston Road near the intersection with Randell Road, was built in 1860. This school building hosted Town Meeting for many years, even after all schooling was consolidated in the south district, and was only sold by the Town in the late 1960s. Number 4 has been renovated, and is now a private home.

- School Number 9, on Route 17 near the Number Nine Hill Road, was also built in 1860. Originally built on the opposite side of the road and later moved to its present location, this building was in active use as a school until the elementary school was built in 1963. Number 9 was renovated, and is now the architectural offices of the Burley Partnership.

- The older, Number 2 schoolhouse stands at the intersection of Sharpshooter and North Fayston Roads; it too has been renovated, and is now a private home.

- Near School Number 4 is the home that housed the Town Clerk's Office during Mable Henry's tenure as Town Clerk.

### 2.3.5 Other Items of Historic Interest

#### 2.3.5.1 The Folsom Gate

Mary Folsom, daughter of John Folsom, was well educated and a distinguished scholar, fluent in several languages. One story holds that her reputation reached the ears of U.S. Senator William Dillingham of Waterbury. Wanting and able to afford the very best for his children, he hired Mary to be their personal tutor and brought her down to Washington. But he became concerned for Mary's safety when he heard of the attack on Fort Sumter and sent her back to Vermont to live. Mary died in 1910 and was buried along with other members of her family in the Folsom plot. Surrounding the gravesite where Mary and other family members are buried is an iron chain fence and a most beautiful gate.

Trudy Folsom, descendant of the original settlers, wrote an account story of the family resting-place and interesting gate. The Folsom family was of humble means. Why would they have erected such an elaborate gate in a cemetery otherwise adorned with simple stones? Curious, Trudy set out to find out more.

A visit to Tunbridge's East Hill Cemetery, where earlier Folsoms were laid to rest, uncovered similar gates of the same ornate design. It may have been the unexpected loss of a son, who was away in Michigan, which inspired this poor family to spend precious money in this memorial. Daniel Folsom was only 23 years old when he died, apparently of heart problems. The inscription on his stone reads "Be ye also ready, for in such an hour as ye think not, the son of man cometh." His family may have chosen to remember him further with a special entrance to his final resting-place.

#### 2.3.5.2 Clara D. Miller Watering Trough

Another memorial of sorts is readily visible to present-day travelers heading up North Fayston Road; along the side of the road is a cement water trough, just past the Boyce Road intersection. There, Clara D. Miller installed a spring-fed watering trough and donated it to the Town. By all accounts, it seems she simply wanted it to be a perpetual memorial to her sisters, two of whom grew up with Clara on Sharpshooters Road. It is still used as a water source by local residents and visitors; but because the water is not regularly tested, it should be used accordingly.

#### 2.3.5.3 Sharpshooter Road

The road called Sharpshooter, quiet and little traveled today, was once along the main route over the hills of Duxbury and on to the railroad in Waterbury. The name of this road is reason enough to pause here and ask "Why Sharpshooter?" One theory regularly pops up. Reba Hall thinks it arose from the fact that the hunting here was good and that there were a number of hunters in the area who considered themselves pretty good shots.

#### 2.3.5.4 Pigeon Hollow

Just below Phen Basin in Fayston sits Pigeon Hollow. In 1849 thousands of blue pigeons picked this spot to call home -- there are reports that the flock grew so large that the trees in the forest were bending low under their weight. The news spread throughout the county that the birds were in Town and hunters came from as far away as Montpelier to shoot them. By the end of the summer, the population of the huge flock was nearly erased.

#### 2.3.5.5 Battleground

Not far from Pigeon Hollow lies the Battleground, the site of the condominium complex of the same name. It is told that this is the spot where the local militia used to muster. This could explain the name. Another explanation, one more fun to consider, is the story of a "big battle" that almost occurred here.

It seems that a woodsman who lived in the vicinity sent his young son out to the forest to cut some logs. After dropping a number of trees, the young boy drew them out to the landing along the Mill Brook. He then approached a local mill owner to sell his newly harvested logs. Sensing the youngster's lack of business acumen, the mill owner offered the boy a small amount for his logs and paid the boy in cash.

The boy seemed happy enough with the deal, but the same could not be said for his father. Hearing of the low price his son received, the outraged father up and sold the same logs to another mill - for more money, of course. Word got back to the original purchaser that the wood had been sold again. He'd have to act fast and skid those logs out before they disappeared! Word also reached the ears of townsfolk eager for a little excitement; they thought for sure there would be an entertaining skirmish at the landing as the two clashed over the disputed timber. Hoping to see a good fight, a number of residents headed down to the landing in the wee hours of the night. The logs were there and so was the high bidder. But the first buyer was nowhere to be seen. Shortly before dawn, the first mill owner finally did arrive, but only after the second had skid his logs to safety. Alas, no fists were thrown, no shots were fired and the spectators never saw the show they were hoping for; but, to this day, that spot along Mill Brook will always be called the "Battleground."

#### 2.3.5.6 Slide Brook

The following account was contained in the "Historical Sketch" written by Anna Bixby Bragg for the Fayston Centennial Celebration in 1898:

"There have been several landslides on the eastern slope of the Green Mountains; though they may have started in Warren or Lincoln, they surely landed in Fayston. The first one was in 1812. The longest slide occurred June 28, 1827. There had been a heavy rain for some days. The noise and roar of the slide was heard for miles. A party of a dozen men visited the place on the next Fourth of July and reported the length of the slide from the top to the turn 200 rods, and from the turn to the lower end 280 rods; greatest width, 24 rods. There was a jam of naked timber piled up at the lower end, 15 or 20 feet deep, for a long distance. There was another one [slide] in 1840. The most remarkable slide was on July 14, 1897. After a copious shower which lasted the whole night and most of the early morning a heavy, roaring sound was heard a long distance and for a long time. Those living near "slide off brook" soon saw a tremendous mass of floating trees, rocks and mud coming down the stream. It cleared a wide channel in its course as it went on its way of destruction. Bridges, flumes and meadow land were swept away by its resistless current. Before the summer was over thousands of people from all about the country had visited its wonderful course."

***The 1897 Landslide***

*Slide Brook's name commemorates a major landslide on the east side of Lincoln Mountain. There had been other slides on this slope, but the one that rumbled down this uninhabited section of Fayston on July 14, 1897 is the one people remember. In an address at the Town's Centennial celebration the following year, this account of the event was given:*

*'After a copious shower which lasted the whole night and most of the early morning, a heavy, roaring sound was heard for a long distance and for a long time. Those living near "Slide Off Brook" soon saw a tremendous mass of floating trees, rocks and mud coming down the stream. It cleared a wide channel in its course as it went on its way with a resistless current. Before the summer was over thousands of people from all about the country had visited its wonderful course.'*

*-Fayston Historic Sites and Homes Tour*

#### 2.3.5.7 McCullough Barn

For three days in May, 2012, 40 volunteers worked to reconstruct the McCullough barn on German Flats Road in Fayston, across from the Fayston Elementary School. The barn was originally built circa 1840 and is a classic example of an "English barn." Some of the timbers are hand hewn and some of them were sawn by a mill. Sawmills didn't show up in the area until 1840. The barn was cleaned out by numerous volunteers starting in May 2010. The frame was taken down in the fall of 2010. Timbers, beams and posts were pressure washed by a crew of Green Mountain Valley School students. Over the 2011-2012 winter, Fayston resident Ky Koitzsch worked on restoring any parts of the frame that were rotted out. The following May, the barn's frame went back up; approximately 40 volunteers closed in the barn and put the roof on. The McCullough barn is now part of the Chase Brook Town Forest and is used by the Town of Fayston and the Mad River Valley as an outdoor education center, meeting place and recreational stopover.

## 2.4 Preserving Fayston's History

The drastic de-population of Fayston between 1860 and 1960 resulted in the loss of many historic barns, logging camps, and farmhouses through abandonment and disrepair. The many nineteenth-century farmhouse cellar holes and other remnants are all that is left to attest to the Town's early settlement. As a result, preserving the Town's early history requires attention to planning for preservation of historic structures and archaeological sites. One site of historical interest in Fayston harbors a working relic from the early days of the ski industry. Mad River Glen maintains and operates the last remaining single chair lift in the lower 48 States.

### 2.4.1 Preservation Planning in Fayston

Efforts by public agencies, local citizens, and the Fayston Historical Society all help to preserve Fayston's history. The groups most active in preservation planning are described below.

#### 2.4.1.1 Mad River Valley Rural Resource Commission

Preservation planning and the nominating of eligible properties to the National Register is the responsibility of the Mad River Valley Rural Resource Commission [MRVRRC]. The MRVRRC was designated a "Certified Local Government" (CLG) by the Vermont Division for Historic Preservation, which gives it standing to apply for federal preservation planning funds through the National Parks Service.

The MRVRRC's representatives come from Fayston, Warren and Waitsfield and are recommended by the Mad River Valley Planning District Steering Committee and appointed by the State. In addition to preservation planning and education projects, the MRVRRC works with interested owners of National Register eligible properties to secure CLG grant funds to complete the nomination process. To date, the Rural Resource Commission has helped list four districts and two individual properties on the National Register, including the Knoll Farm in Fayston.

The MRVRRC and Mad River Glen's cooperative board worked together to have Mad River Glen nominated to the National Register of Historic Places. This successful endeavor placed Mad

River Glen as the first and only ski area on the National Register of Historic Places. Recognizing the unique and distinctive history of Mad River Glen and its operations will benefit future preservation of the ski area's facilities.

#### 2.4.1.2 Fayston Historical Society

The Fayston Historical Society's mission is to collect, research and preserve Fayston history. The membership is comprised mainly of Fayston residents. The Society has a board with elected officers. Membership varies from year to year, and in 2014 the Society has just under forty members. The Society currently houses historical displays in the meeting room of the Town Hall, and in the meeting room adjacent to the Town Clerk's office. New members are always welcome; for information on membership contact Nicole Migneault at 496.2083 or Ave Haviland at 496.6677.

#### 2.4.1.3 Town of Fayston

The Town can continue to have an active role in celebrating and preserving Fayston's cultural heritage and history. The Town hosted Centennial and Bicentennial celebrations in 1898 and 1998, respectively, at the Vasseur Farm on Bragg Hill. The Bicentennial was an exceptional success in bringing together new and old residents of Fayston to honor the Town's history. The collection of historic photos and artifacts at Town Hall is an important resource for residents and visitors alike.

### 2.4.2 Incentives and Regulations for Historic Preservation

The Town of Fayston does not have any regulations in place governing the use, repair or demolition of any historic structures or archaeological resources, such as cellar holes and foundations. Listing on the National Register of Historic Places does not impose any restrictions on the use, repair or demolition of any building or structure, unless the owner chooses to take advantage of the Historic Preservation Tax Credit program.

The Town may wish to consider creating incentives for the preservation of historic and archaeological resources. Some options may include participation in a Valley barn restoration fund or provisioning guidelines for protection of features such as stonewalls and cellar holes when land is subdivided or developed. Continued Town support for events like the Bicentennial also helps educate residents on Fayston's rich history.

## 2.5 Mad River Valley Hill Farm Project

The MRV Hill Farm Research Project explores the successes and challenges of upper elevation agriculture in an attempt to identify opportunities for greater resilience in the face of climate change and natural flooding events. The project's two deliverables, a historical essay and documentary film, utilize extensive public input and historical analysis.

The Mad River Valley's earliest farmers built their farms, homes, schools and communities on high ground, understanding the unpredictable flooding power of the "Mad" River (aptly named) that runs south to north through the Valley alongside the current Route 100 corridor. The Mad River Valley's

original town commons of Moretown, Warren and Waitsfield were located high above the Mad River. Vermont's 19th century industrial revolution saw the arrival of extractive industries like logging, potash, and sheep grazing. Town centers and farms gradually migrated off Vermont hillsides and down into the Mad River Valley floodplains to harness the river's energy. Today, as the twenty-first century begins, Valley towns confront repeated challenges around the river's unpredictable behavior, including a series of floods during the past 100 years that have devastated low-lying Valley-floor neighborhoods, businesses, and farms. If the Mad River Valley seeks to contribute to Vermont's agricultural economy and expand its local food system in this century, its towns and farms must look to the highlands once again for land and agricultural opportunities that offer more resilience in the face of climate change and natural events like Tropical Storm Irene. The purpose of this project is to start this process of looking back to the highlands and identifying successes and challenges that can inform our future.

***The Fayston Planning Commission sincerely thanks the Waitsfield and Champlain Valley Telephone Company for allowing us to quote from and re-use sections of their history publications related to the Town of Fayston. For more enjoyable reading about history in The Mad River Valley, go to WCVT.com/history.***

## 2.6 History Goals and Objectives

**Goal 2.1: Preserve Fayston's historical artifacts and related stories.**

Objectives:

1. Increase understanding and awareness of Fayston's historic settlement patterns and development.
   Strategies:
   a. Support the Fayston Historical Society's efforts to preserve and promote awareness of its history.
   b. Continue Town support for events such as the Bicentennial that celebrate the Town's history.
   c. Support the efforts of the Mad River Valley Rural Resource Commission to continue efforts related to historic preservation planning and education in Fayston and the Valley.

2. Protect and preserve historic buildings, structures and archaeological sites significant to Fayston's history.
   Strategies:
   a. Encourage the Town Historical Society and others to identify and map historic buildings, structures, archaeological and National Register sites
   b. Explore the potential to encourage protection of historic and archaeological resources through the site plan and subdivision review process.
   c. Support the efforts of the Rural Resource Commission to nominate eligible structures, buildings and districts to the National Register of Historic Places.
   d. Encourage Fayston's appropriate municipal panels to protect historical structures during their deliberations.

# Chapter 3: Fayston's Ecology

*It would be a shame to not attempt to preserve what we have - once it is gone there won't really be that much to say is "different" or "better" up here than many other places people could call home*

------ Comment from 2012 Fayston Town Survey

## 3.1 Introduction

Fayston residents place a high value on their local ecology and the myriad benefits that it provides. Responses to the 2012 Town Survey consistently indicate that Fayston's rural character, scenic beauty, natural resources, and recreation opportunities are the Town's most important assets. Further, there is agreement that it is very important to extremely important that future development strives to preserve Fayston's rural character, ridgelines, wildlife habitat and corridors, water quality, wetlands, and open spaces; and residential development must be restricted in these areas. There is strong agreement that development regulations must ensure the preservation of important Town features and natural resources. Fayston's growth rate has slowed considerably over the past several years, and currently most Townspeople believe that the Town's rate of growth is neither too fast nor too slow.

With strong political will to control growth patterns in order to preserve ecological features, Fayston is challenged with the task of guiding development patterns and practices in a direction that will allow for a reasonable growth rate while also sustaining the integrity and resilience of the ecology, particularly wildlife habitat. Loss of biodiversity is now understood to be more of a threat to human and planetary health than the physical climate changes on the horizon; thus protection of Fayston's natural environment to allow healthy diversity is essential. To meet these challenges, the Town must establish a sound understanding of its various natural areas, their components, values, and sensitivities. This chapter provides a brief discussion of Fayston's ecology, establishes ecosystem goals that reflect the sentiment of Fayston residents, and lists strategies for achieving those goals.

## 3.2 Climate

Climate is the average weather conditions for an area over a period of time. During the past 50 years, there has been a consistent pattern of warming in Vermont. Mean annual air temperature at long-term weather stations in Vermont has been increasing at a rate of 0.5 °F per decade. Seasonal differences are evident, with mean winter temperatures rising fastest. There has also been an increase in the number of extremely hot days and a decrease in the number of extremely cold days. The length of the growing season has increased. These warming trends are projected to continue. Historical trends in annual precipitation are highly variable but there has been a long-term trend towards overall wetter conditions in the Northeast. In Vermont, precipitation has increased by 15-20% in the past 50 years, and total precipitation is expected to continue increasing in all seasons except summer. Heavy precipitation events also have been increasing across much of the Northeast in recent decades, and this trend is also expected to continue. Fayston's climate is strongly influenced by the Green Mountains and therefore varies from Vermont averages. In general, average temperature and length of the growing season decrease and average precipitation and average wind velocities increase with elevation.

In recent decades, there has been increased awareness that this rapid change in climate is occurring due to greenhouse gas emissions and the feedback loops that the subsequent warming is creating. The

burning of fossil fuels (such as coal and oil), in addition to other activities that have increased to support our quality of life (automobile use, large-scale agriculture, silviculture, and livestock rearing practices), have caused concentrations of heat-trapping greenhouse gases to increase significantly in our atmosphere. Greenhouse gases are necessary to life as we know it, however as the concentrations of these gases continue to increase in the atmosphere, the Earth's temperature is rising above previous levels. While a vast majority of scientists are certain that human activities are changing the composition of the atmosphere, and that increasing the concentration of greenhouse gases will change the planet's climate, it is not certain just by how much climate will change, at what rate it will change, or what the effects will be. The current consensus however, is that global temperatures will continue to rise over the next several decades regardless of whether or not greenhouse gas emissions are reduced. While no data has been collected specifically for the Mad River Valley, climate change indicators for the state over the past forty years show that the growing season has increased by approximately two weeks and the length of pond freezes have in some instances shortened by four weeks. (http://alanbetts.com/understanding-climate-change/topic/vermont-climate-change-indicators/)

Climate and climate variations are important planning considerations, as climate affects ecosystems, wildlife habitat, agriculture, silviculture, transportation, public safety, economics, human health, and recreation. It is important for Fayston to recognize that climate variations will undoubtedly necessitate social change and begin to consider and plan action steps necessary to not only decrease our contribution to the problem, but also to diminish the impacts to our community. The Town must have the foresight to protect its ecological features, in effect preserving the stage for future changes in the species of flora and fauna that live here. Additionally, the impact of future population growth due to increasingly less hospitable climates in other regions must be addressed proactively through planning and zoning considerations.

## 3.3 Natural Setting

Fayston is situated on the eastern slope of the Green Mountains in the southwest corner of Washington County. Fayston's northern border with Duxbury runs just below the Duxbury Ridge. Its western border with Huntington and Buel's Gore runs roughly along the spine of the Green Mountains. A good portion of Fayston's southern border with Warren is defined by the Lockwood Brook drainage. Its eastern border with Waitsfield is to the east and approximately parallels the toe of the eastern slopes of the Green Mountains as they meet the floor of the Mad River Valley.

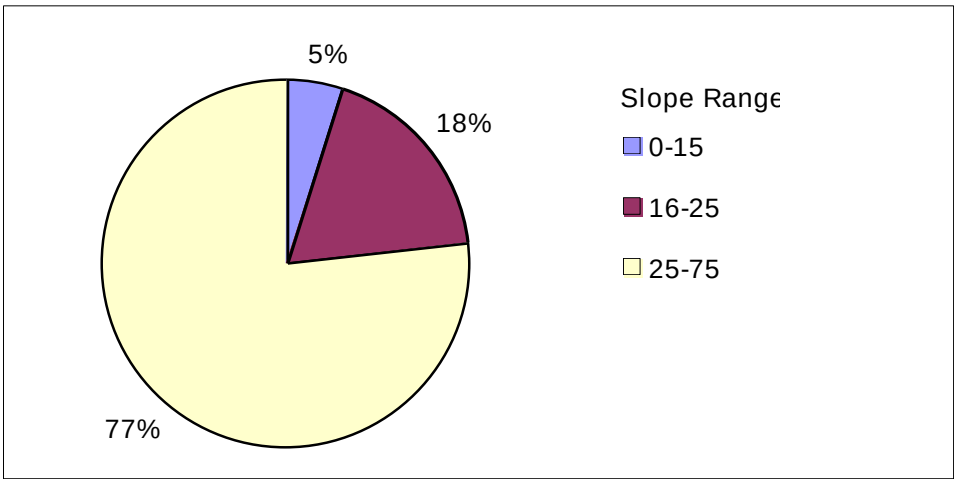
Occupying 23,560 acres (36.5 square miles) Fayston comprises 26 percent of the Mad River's 91,661-acre (142 square mile) watershed and contains some of its most pristine headwaters. Fayston is drained primarily by Shepard Brook in North Fayston and Mill Brook in South Fayston, two of the Mad River's largest tributaries.

Fayston's lowest elevation of 700 feet is near the north-east corner of Town where Shepard Brook runs into Waitsfield. Its highest point of 3,780 feet is in the southwest corner of Town near the peak of Mt. Ellen. In the north-west corner of Town is Burnt Rock at 3,160 feet. Fayston's interior is comprised of the Mill and Shepard Brook basins, divided by the Center Fayston Ridgeline.

Most of the land area in Fayston is composed of steep hillsides, terraces, ridgelines and narrow valley bottoms with steep hillsides being the dominant feature. Ninety five percent of Fayston's landscape has

a slope greater than 15 percent (see Figure 3-1). Generally speaking, the greater the slope of an area, the less suitable it is for development. As shown in Table 3-2 and reflected in Fayston's current land use regulations, slopes greater than 15 percent are considered unsuitable for most development and septic systems, and slopes greater than 25 percent are unsuitable for all but alpine ski area development. With such limitations, Fayston will have to work carefully to ensure that soil erosion and changes to hydrology associated with land uses such as development, forestry, agriculture, recreation and transportation do not significantly impact Fayston's ecosystems.

**Figure 3-1 Fayston Slopes**



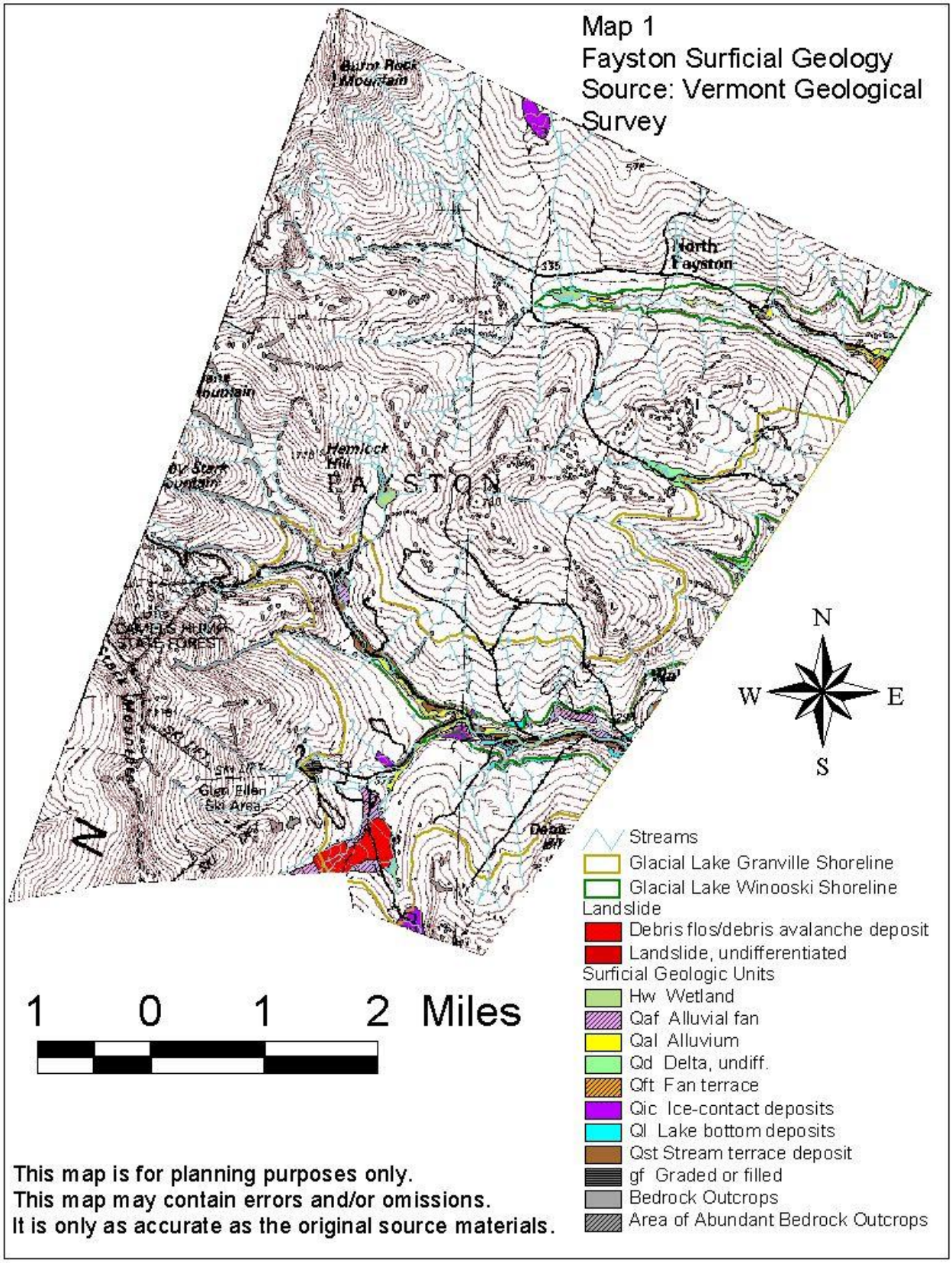

*Source: VT Center for Geographic Information*

**Table 3-2 Development Constraints Associated with Slopes**

| Slope | Development Suitability |
|---|---|
| 0-3% | Suitable for development, may require drainage improvements |
| 3-8% | Most desirable for development, fewest restrictions |
| 8-15% | Suitable for low density development with consideration given to erosion control, runoff and septic design |
| 15-25% | Unsuitable for most development and septic systems, construction costly, erosion and runoff problems likely |
| 25%+ | All development prohibited unless variance issued |

## 3.4 Geology

Fayston's bedrock consists primarily of generally acidic metamorphic rocks including schists, phyllites, gneisses, and quartzites. Currently, there are no active mines or rock quarries in Town.


Map 1
Fayston Surficial Geology
Source: Vermont Geological Survey
Burnt Rock Mountain
North Fayston
Hemlock Hill
FAYSTON
Glen Ellen Ski Area
N
W
E
S
1 0 1 2 Miles
Streams
Glacial Lake Granville Shoreline
Glacial Lake Winooski Shoreline
Landslide
Debris flos/debris avalanche deposit
Landslide, undifferentiated
Surficial Geologic Units
Hw Wetland
Qaf Alluvial fan
Qal Alluvium
Qd Delta, undiff.
Qft Fan terrace
Qic Ice-contact deposits
Ql Lake bottom deposits
Qst Stream terrace deposit
gf Graded or filled
Bedrock Outcrops
Area of Abundant Bedrock Outcrops
This map is for planning purposes only.
This map may contain errors and/or omissions.
It is only as accurate as the original source materials.

Fayston's surficial geology consists primarily of thin till, which is a layer of mixed material that was laid down by glacial ice. Map 1 identifies several gravel deposits of glacial origin sparsely distributed along portions of Shepard, Mill and Slide Brooks and at the top of Sharpshooter Road. Glacial lake deltas occur at the intersection of Center Fayston and Old Center Fayston roads. Glacial clays are found along a portion of the lower Shepard Brook and recent stream alluvium exists along the floodplains of the Shepard and lower Mill Brooks near the Waitsfield town line.

Surficial materials can serve as a gravel resource, provide important functions such as ground water storage and recharge, filter contaminants from solid waste and septic disposal sites, and indicate hazardous or sensitive areas such as unstable hill slopes, areas of historic river locations and wetlands. The Town uses the ice-contact deposit at the top of Sharpshooter Road as a supply of gravel for infrastructure and road maintenance. This site is very valuable to the Town yet it is finite, and according to the surficial geology map alternative gravel supplies are not abundant in Town. Fayston should begin planning for future gravel supply and demand issues.

## 3.5 Soils

One of the greatest resources of a rural community is its soil. Soil is a critical component of the natural environment, is essential to agriculture and silviculture, and is also used to treat sewage in rural areas with no centralized wastewater system. It is easily lost through erosion processes, and takes hundreds of years to be created through the natural decay process. Consideration of soil characteristics when making land use decisions will help ensure land is used as sustainably as possible and will help retain suitable agricultural soils for productive purposes. Slope, drainage rate, permeability, depth to bedrock and depth to water table are the primary factors that determine the appropriate use of a particular soil. This section discusses the suitability of Fayston's soils for different land uses.

### 3.5.1 Soil Suitability for Development

Fayston does not have a central sewer system; rather its residents rely on on-site waste disposal systems. The suitability of a site for an on-site waste disposal system depends largely on soil characteristics. Placement of waste disposal systems in unsuitable soils can result in unsatisfactory performance, including excessively slow absorption of effluent, surfacing of effluent, and hillside seepage, and can affect public health.

After the passage of statewide environmental protection rules in 2002, new ancillary soil ratings for on-site waste disposal systems were developed (see Table 3-3). The rating of Fayston's soils is shown on Map 2. While the rating doesn't replace onsite investigation, it is useful for planning purposes. An analysis of the map reveals that thirty two percent of Fayston's soils are well suited for on-site waste disposal systems, 49 percent of Fayston's soils are marginally suited for on-site waste disposal and 17 percent of Fayston's soils would preclude satisfactory function of on-site disposal systems (Table 3-4).

**Table 3-3 Ancillary Soil Ratings For Residential On-Site Waste Disposal In Vermont**

| Suitability | Characteristics |
|---|---|
| Well suited | Soil properties and site features that will provide for good performance and low maintenance. |
| Moderately well suited | One or more soil properties or site features, such as the percent slope, that make the soil less desirable than the soils rated well suited. |
| Marginally suited | One or more soil properties that limit the suitability of the site and overcoming those limitations requires special design, extra maintenance, or costly alteration. |
| Not suited | Soil properties or site features that would preclude satisfactory function of the system |

*Source: USDA Natural Resources Conservation Service, 2003*

**Table 3-4: Fayston Septic Suitability**

| Sewage Disposal Class | Acres | Percent of Land Base |
|---|---|---|
| Well suited | 4,545 | 19 |
| Moderately Suited | 3,093 | 13 |
| Marginally Suited | 11,427 | 49 |
| Not Suited | 3,991 | 17 |

*Source: NRCS soils data.*

### 3.5.2 Soil Suitability for Forestry

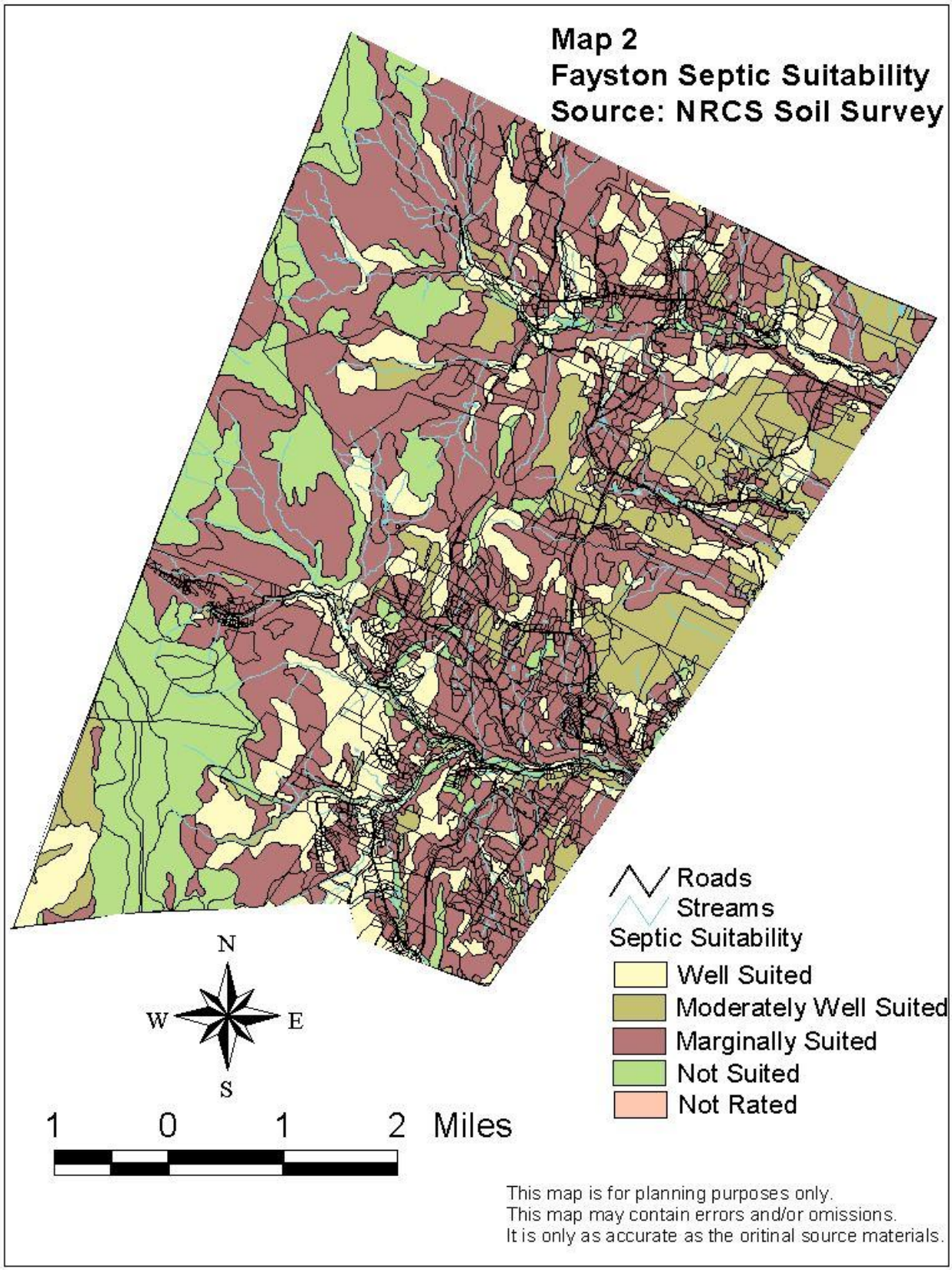
The US Department of Agriculture Natural Resources Conservation Service (NRCS) soil survey assigns a relative forest value to each soil unit (Forest Value Groups and Forest Soil Potential Study for Vermont Soils, United States Department of Agriculture Natural Resources Conservation Service, 2003). The relative values may be used to compare the relative profitability of growing timber on various soils, and is determined by considering: soil performance or estimated yield, cost of measures necessary to overcome soil limitations and cost of continuing limitations.

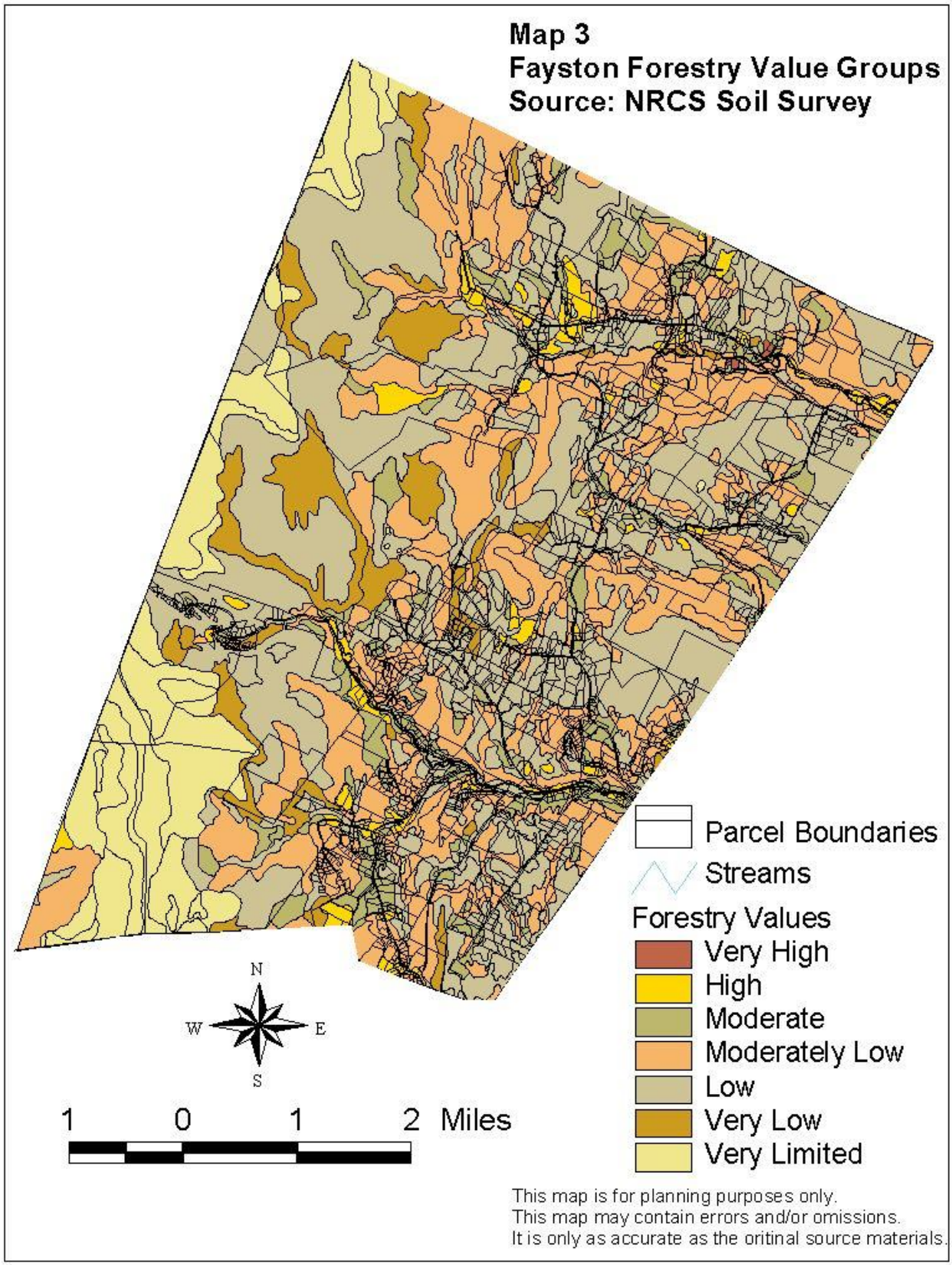
As worldwide oil resources become increasingly scarce and drive up distribution and home heating costs local timber supplies are likely to become increasingly important. Fayston should remain mindful, however, that trees and other vegetation also serve as carbon sinks, storing carbon in their mass and the soil in which they grow and lessening negative climate impacts. As shown in Table 3-5 only nine percent of Fayston's soils have moderate to very high productivity potential. These soils are sparsely distributed throughout Town and many have been fragmented by subdivision (see Map 3). Consideration of future timber supply needs must be considered in today's land use decisions.

**Table 3-5 Fayston Soil Productivity Potential**

| Forest Value Group | Productivity Potential | Acres | Total Acreage |
|---|---|---|---|
| Group 1 | Very High | 14 | 0% |
| Group 2 | High | 685 | 3% |
| Group 3 | Moderate | 1504 | 6% |
| Group 4 | Moderately low | 6862 | 29% |
| Group 5 | Low | 9655 | 41% |
| Group 6 | Very low | 1555 | 7% |
| Group 7 | Very limited | 2820 | 12% |

*Source: NRCS, 2003*


Map 2
Fayston Septic Suitability
Source: NRCS Soil Survey
Roads
Streams
Septic Suitability
Well Suited
Moderately Well Suited
Marginally Suited
Not Suited
Not Rated
N
W
E
S
1 0 1 2 Miles
This map is for planning purposes only.
This map may contain errors and/or omissions.
It is only as accurate as the oritinal source materials.


Map 3
Fayston Forestry Value Groups
Source: NRCS Soil Survey
Parcel Boundaries
Streams
Forestry Values
Very High
High
Moderate
Moderately Low
Low
Very Low
Very Limited
N
W
E
S
1 0 1 2 Miles
This map is for planning purposes only.
This map may contain errors and/or omissions.
It is only as accurate as the oritinal source materials.

### 3.5.3 Soil Suitability for Agriculture

NRCS characterizes the most productive soils as "prime" and "statewide" agricultural soils. Prime farmland has the qualities needed to produce sustained high yields of crops when managed according to acceptable farming methods. Statewide soils have good potential for growing crops but also have limitations that will restrict the choice of crops and/or require more intensive management.

As food distribution costs rise, locally produced agriculture will become increasingly important. The NRCS Soil Survey identifies 78 acres or 0.3 percent of Fayston's soils as prime and 1,535 acres or 6.5 percent of Fayston's soils as statewide agriculture soils. Map 4 shows that these soils are clustered around the Mill and Shepard brooks and also found in the vicinity of Bragg Hill and Center Fayston Rd. The map also shows that many of these soils have been fragmented by subdivision. The maps do not show smaller pockets of suitable agricultural soils, many of which are or will become important for local small-scale agriculture; future agricultural needs must be considered in today's land use decisions.

## 3.6 Wildlife and Habitat

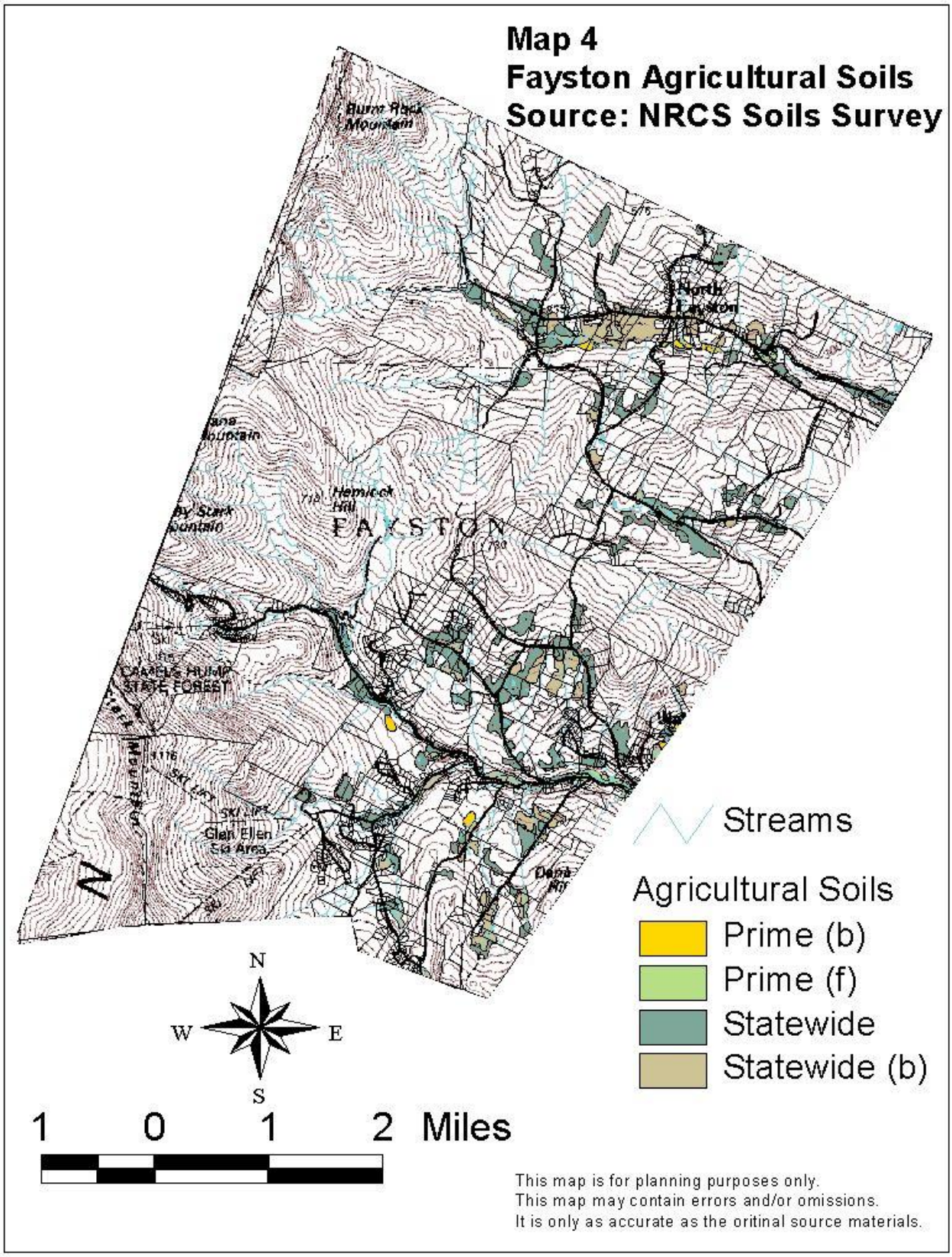
Fayston is home to a diversity of animals and plants including mammals, birds, invertebrates, reptiles, amphibians, fishes, coniferous and deciduous trees and shrubs, wetland plants, mosses, lichen, ferns, and many wildflowers. This biological diversity is very important to the health of Fayston's ecosystems, which are in turn very important to the health of all species, including our own. Ironically, while biodiversity is critical to our survival, it is ultimately diminished by our increasing population. As we transform the landscape to make it compatible for increasingly dense human populations we inevitably make it less habitable for other species. Striking a balance between human land use and the conservation of healthy wildlife habitat has become a challenging and critical task for Fayston. The 2012 Town Survey indicates compelling support for the Town's funding of conservation of local land parcels; the majority of the Town's residents understand that preserving habitat and corridors is integral to maintaining ecosystem health.

Figure 3-2 illustrates the general impacts of land subdivision and fragmentation of large tracts of forest land on wildlife populations in northern New England. The left-hand column identifies expected species in large (3,000+ acres) tracts of undeveloped forest, while each subsequent column depicts the species likely to be extirpated as the land is subdivided into smaller parcels for scattered development. Certain species such as black bear, which require large contiguous habitat areas that also support a variety of other species, serve as indicators of the health and diversity of local wildlife populations. There is a growing understanding of the importance of maintaining corridors between these habitat areas, and land use decisions must emphasize the need to preserve and create these connections.

**Fayston's Well-Known Wildlife**

**Mammals**
*white-tailed deer, black bear, moose, bobcat, common gray fox, porcupine, fisher, mink, long-tailed weasel, beaver, raccoon, red squirrel, grey squirrel, chipmunk, striped skunk, river otter, groundhog*

**Birds**
*Wild Turkey, Ruffed Grouse, Barred Owl, Black-Capped Chickadee, American Robin, American Goldfinch, Black-throated Blue Warbler, Pileated Woodpecker, American Woodcock, Northern Saw-whet Owl, Eastern Bluebird*


Map 4
Fayston Agricultural Soils
Source: NRCS Soils Survey
Burn Rock Mountain
North Fayston
Hemlock Hill
FAYSTON
CAMELS HUMP STATE FOREST
Glen Ellen Ski Area
Streams
Agricultural Soils
Prime (b)
Prime (f)
Statewide
Statewide (b)
N
W
E
S
1 0 1 2 Miles
This map is for planning purposes only.
This map may contain errors and/or omissions.
It is only as accurate as the oritinal source materials.

Conserving wildlife habitat and biodiversity while also providing for continued development requires an informed planning effort. As a first step in this effort the Town of Fayston conducted an inventory of its wildlife habitat elements (see Waitsfield and Fayston Natural Heritage Inventory 2007 for further information, and maps generated as a part of the project). These include: core forests, connecting lands, natural communities, rare and threatened species, deer wintering areas, mast stands, important bat, turtle and grassland habitats and early-succession forest and shrub habitat. A brief discussion of the habitat elements of most concern in Fayston is given below.

### 3.6.1 Core Forest

Core Forest Habitat is an area of forested land with few or no roads or human developments. It provides a myriad of ecological functions for fish, wildlife, plants, and all the natural processes that sustain them. Many of Fayston's wildlife species such as black bear, moose, and bobcat are extremely solitary and wide ranging and require large core forest areas to survive. Other animals such as songbirds are highly susceptible to predation by animals such as raccoon, skunk, and domestic cats and require large tracks of forest to avoid predators. Fragmentation and the resulting loss of habitat for some carnivores, raptors, and small mammals has led to increased cases of Lyme disease in pet and human populations; land use decisions must ensure that the full spectrum of biodiversity is able to thrive in the area.

Large core forests are a vital element of Fayston's rural character and their conservation provides a significant contribution to the local community's interest in its natural heritage, identity, and working landscape. Conservation of large forests also maintains options and choices for future generations of the community. Table 3-6 shows core habitat statistics generated as part of the 2007 Natural Heritage Inventory (NHI). Map 5 shows that the largest of these core habitat units occur at higher elevations, yet there are core habitat units adjacent to all of the Town borders, even the lower elevation border with Waitsfield. Maintaining the existing corridors between core units, minimizing further fragmentation and preventing the creation of interior forest edges within core units are actions necessary to the preservation of Fayston's wildlife.

### 3.6.2 Early Succession Habitat

Early Succession Habitat (ESH) is characterized by dense shrubs and tree saplings. ESH is created through active forest management or natural disturbances such as disease, ice storms, or wind throw. Fallow fields with substantial shrub component can also be considered ESH. A variety of birds and mammals rely on ESH, many of which serve as prey for larger species such as fox, coyote, and bobcat. ESH also provides berry crops for black bear and other species that depend on berries. Table 3-6 shows early succession habitat statistics as developed as part of the 2007 Natural Heritage Inventory. Map 5 shows that the ESH units occur primarily below 2000 ft. which places them on the east side of Town. Three of these units occur within larger core habitat units while most others occur on fallow fields or utility lines. Maintaining a sufficient area and distribution of ESH units requires outreach to private landowners and managers.

**Figure 3-2: Impact of Forest Fragmentation on Wildlife Species**

**IMPACT OF FOREST FRAGMENTATION ON WILDLIFE SPECIES**

| TIER 1: Undeveloped Forest | TIER 1: 500-2,500 Acres Developed Parcels | TIER 3: 100-499 Acres Developed Parcels | TIER 3: 20-99 Acres Developed Parcels | TIER 3: 1-19 Acres Developed Parcels |
|---|---|---|---|---|
| Raccoon | Raccoon | Raccoon | Raccoon | Raccoon |
| Hare | Hare | Hare | Hare | |
| Coyote | | | | |
| Small Rodent | Small Rodent | Small Rodent | Small Rodent | Small Rodent |
| Porcupine | Porcupine | Porcupine | Porcupine | |
| Bobcat | | | | |
| Cottontail | Cottontail | Cottontail | Cottontail | Cottontail |
| Beaver | Beaver | Beaver | Beaver | |
| Black Bear | | | | |
| Squirrel | Squirrel | Squirrel | Squirrel | Squirrel |
| Weasel | Weasel | Weasel | Weasel | |
| Mink | Mink | Mink | | |
| Fisher | | | | |
| Woodchuck | Woodchuck | Woodchuck | Woodchuck | |
| Deer | Deer | Deer | | |
| Muskrat | Muskrat | Muskrat | Muskrat | Muskrat |
| Moose | Moose | | | |
| Red Fox | Red Fox | Red Fox | Red Fox | Red Fox |
| Songbirds | Songbirds | Songbirds | Songbirds | Songbirds |
| Sharp-Shinned Hawk | Sharp-Shinned Hawk | Sharp-Shinned Hawk | | |
| Bald Eagle | Bald Eagle | | | |
| Skunk | Skunk | Skunk | Skunk | Skunk |
| Cooper's Hawk | Cooper's Hawk | Cooper's Hawk | | |
| Harrier | Harrier | Harrier | | |
| Broad Winged Hawk | Broad Winged Hawk | Broad Winged Hawk | | |
| Goshawk | Goshawk | | | |
| Kestrel | Kestrel | Kestrel | | |
| Red-Tail Hawk | Red-Tail Hawk | | | |
| Horned Owl | Horned Owl | Horned Owl | | |
| Raven | Raven | | | |
| Barred Owl | Barred Owl | Barred Owl | | |
| Osprey | Osprey | Osprey | | |
| Turkey Vulture | Turkey Vulture | Turkey Vulture | | |
| Reptiles | Reptiles | Reptiles | Most Reptiles | Most Reptiles |
| Garter Snake | Garter Snake | Garter Snake | Garter Snake | |
| Ring-Neck Snake | Ring-Neck Snake | Ring-Neck Snake | Ring-Neck Snake | |
| Amphibians | Amphibians | Amphibians | Most Amphibians | Most Amphibians |
| Wood Frog | Wood Frog | Wood Frog | | |

*Source: Designing Communities to Protect Wildlife Development and Accommodate Development, a report of the Patterns of Development Task Force, Maine Environmental Priorities Project. July, 1997*

### 3.6.3 Grassland Habitat

Grassland Habitat consists of open areas that are composed of hay or natural meadow vegetation. Grassland habitats are used by a wide variety of species including: Bobolink, Savannah Sparrow, Common Snipe, red fox, deer and groundhogs. Where they are larger than 25 acres in size grasslands serve as important breeding habitats for many of these grassland species. Table 3-6 shows that there are only 12 grassland units totaling 355 acres. Preserving this habitat is an important consideration in land use decisions.

### 3.6.4 Ledge Habitat

Ledge Habitat is found in areas of steep land and vertical rock structure and is used by a limited number of species including Common Ravens, and the Small-footed Bat. Where ledge is fractured and contains hollows and caves it is important habitat for a wide-variety of animals including raccoons, porcupines, fishers, coyotes, bobcats, ruffed grouse and some rodents. The 2007 NHI identified six areas of ledge habitat. Because of the intensive investigation required to find ledge habitat it is likely that more exists.

### 3.6.5 Natural Communities

Natural Communities are distinct assemblages of species and their physical environment. As shown in Table 3-7 several of the natural communities in Fayston occur in three or fewer places and three are less than 50 acres in size. Because there is little known about many of Vermont's plant and animal species, biologists use natural community diversity as a surrogate for species diversity with the hope that conservation of examples of the various natural communities in an area will result in conservation of a great majority of the plant and animal species that are found there. Fayston shall use the most current scientific understanding of local natural communities for the conservation of biological diversity.

**Table 3-6 Habitat Summary Statistics (2007 NHI)**

| | Sites | Size (acres) | Size (acres) | Size (acres) | Acres |
|---|---|---|---|---|---|
| Habitat Unit | Number | Min | Max | Avg. | Total |
| Core Forest | 16 | 48 | 5,477 | 882 | 14,108 |
| Early Succession | 9 | 13 | 260 | 85 | 766 |
| Grassland | 12 | 13 | 62 | 30 | 355 |
| Deer Wintering Areas | 32 | 2 | 297 | 87 | 2,795 |
| Mast Stands | 13 | 9 | 111 | 38 | 498 |

*Source: 2007 NHI*

### 3.6.6 Deer Wintering Habitat

Deer Wintering Habitat is used by white-tailed deer during the snow-covered, cold winter months. Dense stands of coniferous trees, primarily hemlock, provide a thermal cover and shelter the ground below from a good portion of snowfall. Such stands are critical to the survival of deer through the winter when temperatures can drop to 20 degrees F below zero and deep snow can prevent deer from moving about. Map 5 shows that existing wintering areas are generally located at lower elevations of Town and that most of these units have been subdivided; many are not yet developed. Approximately half of the deer wintering areas occur within core habitat areas. Because these areas occur across landowner boundaries, protecting them requires working with many different landowners.

### 3.6.7 Mast Stands

Mast Stands are secluded stands of mature American beech trees that provide nutrient rich food critical to Black Bear populations. Female bears must reach a weight of 150 pounds before going into hibernation in order to successfully reproduce. The beech nut resource is a fragile one. Beech trees do not produce nuts until they are approximately 30 years old and nut production does not occur every year. Protecting existing beech stands is critical for the maintenance of a healthy black bear population in Fayston. As shown in Table 6, Fayston's mast stands are limited. Map 5 shows that mast stands are distributed fairly evenly throughout the Town and many occur within core habitat units.

### 3.6.8 Connecting Habitats

Connecting Habitats are areas where landscape and land use characteristics combine to create an area where wildlife can move to and from larger patches of habitat allowing for migration and genetic dispersal of animals and plants. Much of Fayston's wildlife relies on vastly different types of habitat

**Table 3-7 Summary of Locally Significant Upland Natural Forest Communities**

| Natural Community | Number of Sites | Total Acres |
|---|---|---|
| Hemlock Forest | 2 | 256 |
| Hemlock-Northern Hardwood Forest | 8 | 222 |
| Montane Spruce-Fir Forest | 13 | 1615 |
| Montane Yellow Birch-Red Spruce Forest | 13 | 2293 |
| Montane Yellow Birch-Sugar Maple-Red Spruce Forest | 1 | 37 |
| Northern Hardwood Forest | 3 | 5662 |
| Red Oak-Northern Hardwood Forest | 1 | 9 |
| Red Spruce-Northern Hardwood Forest | 3 | 14 |
| Rich Northern Hardwood Forest | 1 | 99 |

*Source: 2007 NHI.*

during different periods of the year and for different life functions. Quite often animals must travel great distances to access the different habitat types they depend upon. Black bear use connecting habitats to move from the wetlands where they feed in early Spring to areas containing succulent vegetation and berries for mid-summer feeding and then to beech and oak stands to feed on hard mast in the late summer and fall months. Many salamander and frog species use connecting habitat to move from hibernation to breeding sites.

Roads and associated development can sever connecting habitat. Map 5 shows that there are likely crossing possibilities linking all core habitat units, however, these areas are significantly fewer than what existed prior to current levels of development. Efforts must be made not only to protect the corridors that have been mapped but also to restore lost corridors where possible.

### 3.6.9 Riparian Habitats

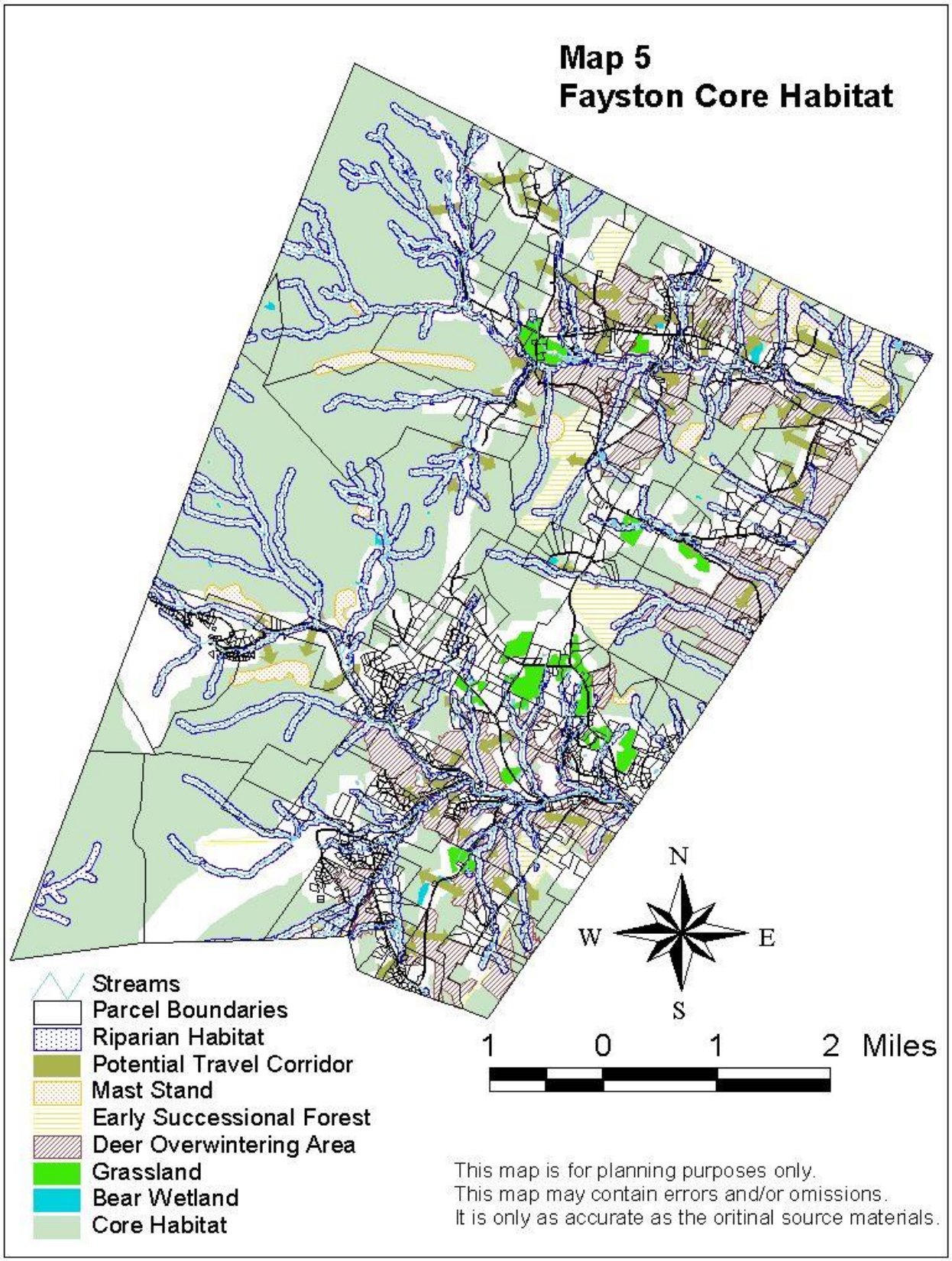
Riparian Habitats are the areas along stream banks where the aquatic environment transitions into the terrestrial. Riparian areas support a wide variety of plant and animal communities, contribute to the health of the waters near them, and provide for the dissipation of flood waters. Forested riparian vegetation anchors the stream bank by limiting erosion and also provides woody substrate and leaf litter that serves as habitat and the foundation of the aquatic food chain. Map 5 shows the extent of forested riparian buffers in Fayston, which must not be encroached upon in order to allow them to continue providing these functions.

## 3.7 Invasive Species

Some non-native species of plants and animals are able to proliferate to the detriment of native species, natural communities, and ecosystem functions. These organisms often have no natural predators and can out-compete native species, greatly reducing biodiversity and altering ecosystems. Such invasive exotic species pose a number of environmental, economic, and human health threats. The list of such species that are already present in the Mad River Valley is extensive and includes knotweed, glossy buckthorn, honeysuckle, Japanese barberry, Didymo (or “Rock Snot”), winged euonymus or “burning bush,” purple loosestrife, and wild chervil. And others that could have a transformative effect on our forests—such as Asian longhorn beetle, emerald ash borer, and hemlock wooly adelgid—are not here yet but may not be far off. Before the threat and impacts of existing and new exotic invasive species intensify, the Town should act independently and in collaboration with others (e.g., the other Mad River Valley towns, appropriate state agencies, nonprofit organizations such as Friends of the Mad River and the Vermont Chapter of The Nature Conservancy) to develop and implement an effective prevention and management regime.

## 3.8 Hunting

Hunting is an important part of Fayston’s heritage. In the absence of effective natural predators such as wolves and cougars, deer and moose populations may grow beyond what existing available habitat can sustain. When this occurs, habitat is stressed by overbrowsing and in turn the health of the deer or moose herd suffers. Measured population management in the form of hunting aims to keep these ungulate populations in check thereby maintaining a balance between the herd and available habitat.


Map 5
Fayston Core Habitat
N
W
E
S
1 0 1 2 Miles
Streams
Parcel Boundaries
Riparian Habitat
Potential Travel Corridor
Mast Stand
Early Successional Forest
Deer Overwintering Area
Grassland
Bear Wetland
Core Habitat
This map is for planning purposes only.
This map may contain errors and/or omissions.
It is only as accurate as the oritinal source materials.

Of the game species in Fayston, the most commonly hunted is the white-tailed deer, although Wild Turkey and Ruffed Grouse hunting is also popular. Game hunting can provide a source of sustainable food for humans. Fayston deer harvest data for 2003 through 2012 (see Table 3-8) show that the number of deer taken in Fayston is generally in decline. It is not known whether the decrease in deer harvested in Fayston is a result of a smaller deer population, a smaller hunter population, poor hunter success or some combination of the above factors.

**Table 3-8 Fayston Deer Harvesting Data**

| Season | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|---|---|---|
| Archery | 10 | 15 | 7 | 3 | 5 | 7 | 4 | 12 | 5 | 8 |
| Youth | 7 | 1 | 2 | 6 | 2 | 0 | 0 | 1 | 2 | 1 |
| Rifle | 27 | 10 | 8 | 14 | 12 | 20 | 15 | 11 | 12 | 6 |
| Muzzle Loader | 1 | 5 | 0 | 0 | 1 | 1 | 2 | 8 | 0 | 0 |
| Total | 45 | 31 | 17 | 23 | 20 | 28 | 21 | 32 | 19 | 15 |

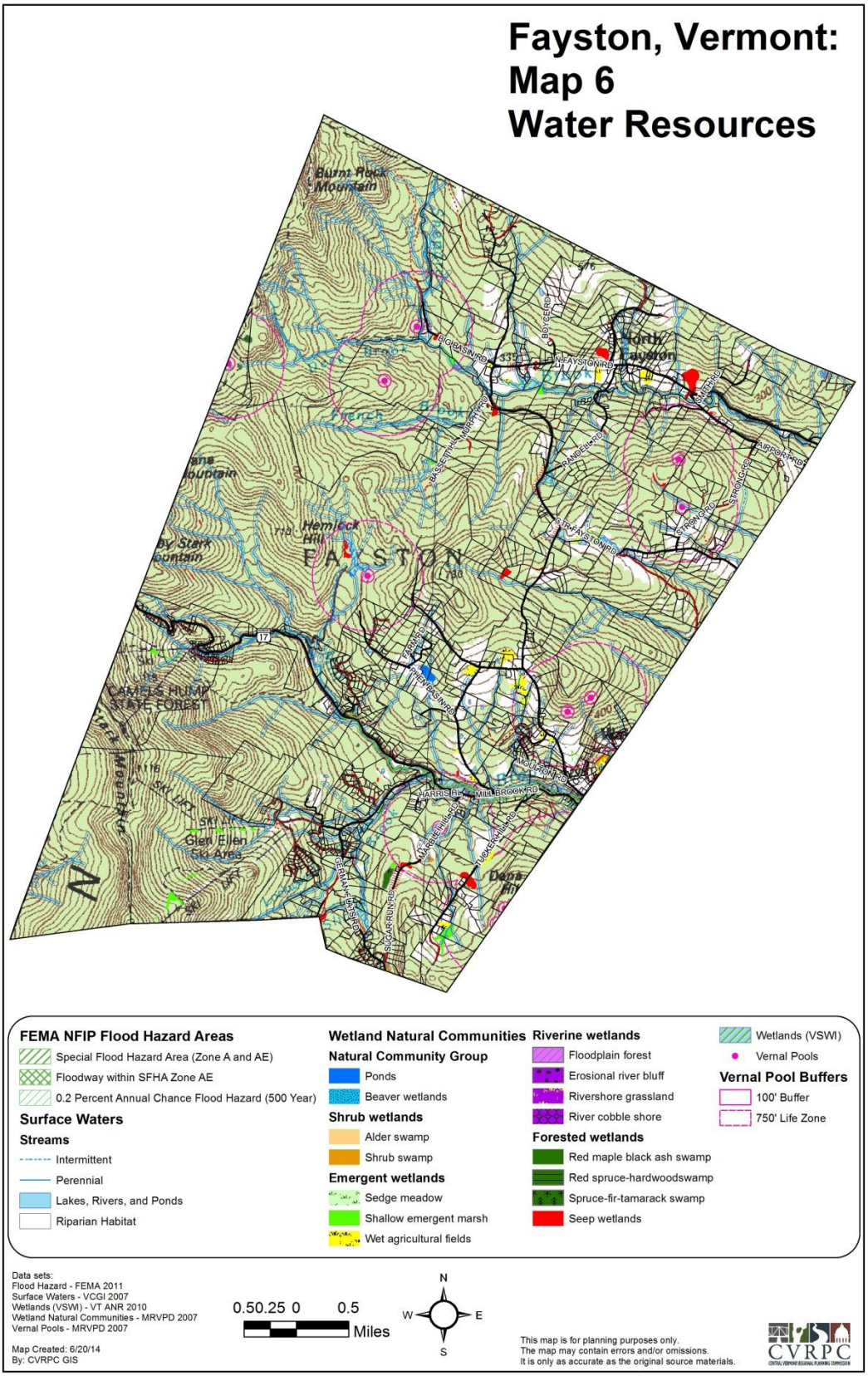
*Source: Vermont Department of Fish and Wildlife.*

Continued monitoring of deer harvests in Fayston over the long term in combination with analysis of related data such as available deer habitat or hunter surveys may yield valuable insights with respect to Fayston's deer population. Hunting is a valuable part of Fayston's cultural heritage and the Town shall work to see that this continues by adequately protecting sustainable deer habitat, especially wintering areas.

## 3.9 Fayston's Waters

Fayston enjoys high quality water sources that include streams, wetlands, seeps, springs, vernal pools and naturally occurring stores of groundwater. Historically, throughout Vermont, human activities such as altering stream channels, converting land cover, constructing dams and constructing road networks have degraded water quality and aquatic habitat. However, over the last few decades an awareness and understanding of the impact of such activities on our water resources has grown and today we enjoy generally healthy surface and ground waters. Preservation of this water quality is one priority highlighted in the Town Survey responses. These waters are fragile and addressing their protection is necessary via Town zoning regulations and other avenues.

Twenty six percent of the Mad River watershed is within Fayston. Therefore, Fayston and its residents have a significant influence on the health of the Mad River ecosystem. In 1993, the Friends of the Mad River, a nonprofit river advocacy group, identified several important steps towns can take through policies and implementation to improve water quality and river health. The Vermont Agency of Natural Resources and various federal programs also provide water quality assistance to towns and individuals. It is in the long term interest of Fayston and the Town's downstream neighbors to work with these programs to protect water quality.


Fayston, Vermont:
Map 6
Water Resources
FAYSTON
North Fayston
Burnt Rock Mountain
Hemlock Hill
Glen Ellen Ski Area
CAMEL'S HUMP STATE FOREST
FEMA NFIP Flood Hazard Areas
Special Flood Hazard Area (Zone A and AE)
Floodway within SFHA Zone AE
0.2 Percent Annual Chance Flood Hazard (500 Year)
Surface Waters
Streams
Intermittent
Perennial
Lakes, Rivers, and Ponds
Riparian Habitat
Wetland Natural Communities
Natural Community Group
Ponds
Beaver wetlands
Shrub wetlands
Alder swamp
Shrub swamp
Emergent wetlands
Sedge meadow
Shallow emergent marsh
Wet agricultural fields
Riverine wetlands
Floodplain forest
Erosional river bluff
Rivershore grassland
River cobble shore
Forested wetlands
Red maple black ash swamp
Red spruce-hardwoodswamp
Spruce-fir-tamarack swamp
Seep wetlands
Wetlands (VSWI)
Vernal Pools
Vernal Pool Buffers
100' Buffer
750' Life Zone
Data sets:
Flood Hazard - FEMA 2011
Surface Waters - VCGI 2007
Wetlands (VSWI) - VT ANR 2010
Wetland Natural Communities - MRVPD 2007
Vernal Pools - MRVPD 2007
Map Created: 6/20/14
By: CVRPC GIS
0.50.25 0 0.5
Miles
N
W
E
S
This map is for planning purposes only.
The map may contain errors and/or omissions.
It is only as accurate as the original source materials.
CVRPC

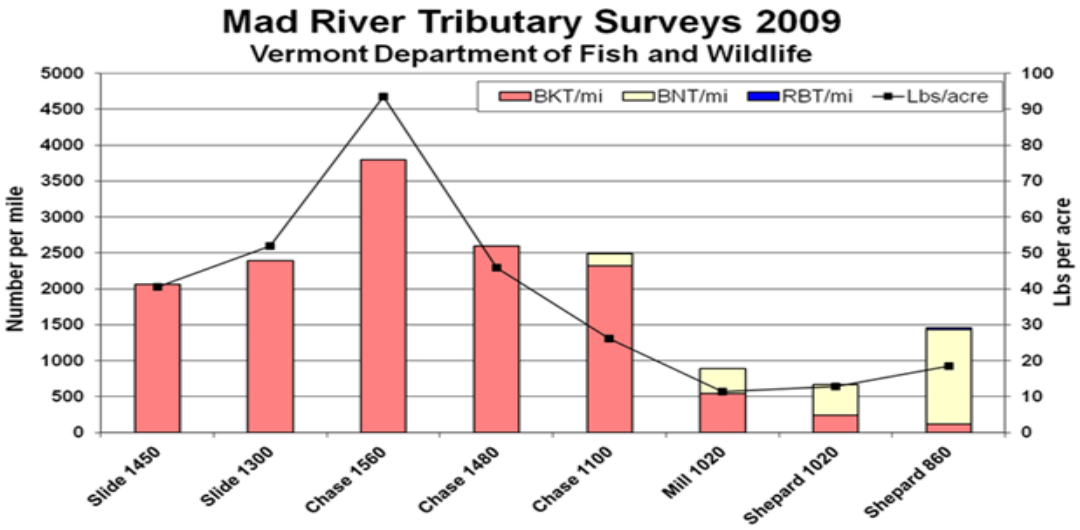
### 3.9.1 Streams

There are dozens of brooks and streams in Fayston, most of which are small to medium high gradient gravel and cobble streams. Deer Brook, French Brook and Lockwood Brook are good examples of small high gradient streams and the lower reaches of Shepard and Mill brook are good examples of medium high gradient streams. Additionally, small headwater marsh streams and clean sand bottomed stream reaches below cold water spring seeps are also found in Fayston.

According to the Vermont Water Quality Standards (2006), surface waters in Fayston are classified as Class A1 above 2,500 feet and Class B below 2,500 feet. Class A1 waters are managed to the highest possible standard to achieve and maintain waters in a natural condition. Class B waters are managed to achieve and maintain a level of quality that fully supports a range of uses including aquatic biota, wildlife, aquatic habitat, aesthetics, public water supply suitability, irrigation of crops, swimming and other recreation. Because of the healthy aquatic communities it supports, Shepard Brook has been identified as one of the best examples of a small high-gradient stream in the state.

Fayston's streams support diverse populations of aquatic insects and abundant populations of wild, self-sustaining brook, brown and/or rainbow trout and nongame fish species. Since the early 1990s the Vermont Fish and Wildlife Department (VDFW) has managed Fayston's streams as "wild trout waters" and they therefore do not receive stockings of hatchery-reared fish. Trout population estimates derived from VDFW surveys are given below. Figure 3-3 shows that Brook Trout are by far the dominant Salmonid species of Fayston's streams, and Chase Brook appears to hold the greatest density of fish. For some perspective, 20 lbs/acre is generally considered a good wild trout population…50 is excellent, 90 is at the top of the chart. These vary year to year and by stream size; generally the fewer lbs/acre results from decreasing percentages of effective habitat as the stream gets wider. All in all the Fayston tributaries are in good shape. Protecting and restoring forested riparian buffers and habitat connectivity will be the key to their long-term viability.

**Figure 3-3: Fish Surveys**



#### 3.9.1.1 Stream Buffers

When left undisturbed, naturally vegetated stream buffers reduce the impact of adjacent land uses, protect water quality and aquatic habitat, maintain channel stability, and provide important terrestrial wildlife habitats. They are also effective filters, trapping and reducing the input of sediments and other pollutants to streams, thereby protecting water quality. The downed wood, leaves, and other organic material associated with undisturbed riparian areas are important components of the food base and habitat in streams. Undisturbed riparian corridors provide travel and dispersal routes for wildlife and plants. Mature vegetation associated with undisturbed riparian areas shades aquatic habitats, thereby reducing water temperatures; it also stabilizes stream banks, thereby minimizing erosion.

***Riparian Buffers: The Solution to One of the Mad River's Primary Impairments***

*One of the primary impairments to the aquatic habitat of the Mad River is water temperature. For Trout species, summer water temperatures in the Mad River can be deadly. To escape the warm waters of the Mad, Brook Trout and other cold water species will move into the colder tributaries. Riparian vegetation to shade Fayston's streams from the sun so they deliver cool water to the Mad River and provide for cold water retreat during the summer months is critical to the Mad River's cold water fishes.*

In 2005, the Vermont Agency of Natural Resources developed guidance for recommended minimum riparian buffer zone widths to maintain or enhance the functions and values of riparian areas. The minimum buffer width recommendations are 100 feet for lakes and either 50 feet or 100 feet for streams, depending on site and project specific factors. There are also certain situations where the recommended buffer widths should be wider than the minimums established. The guidance states that buffers should be measured horizontally from the mean water level for lakes and from top of bank or top of slope for streams, depending on site characteristics. In areas where a wetland is contiguous to a water body, buffers should be measured from the upland edge of the delineated wetland.

It is imperative for the Town of Fayston to continue to plan for and implement strategies that will conserve or provide long-term stewardship for riparian areas. Currently the Fayston Land Use Regulations provide for a 50 foot vegetated buffer strip from wetlands, streams, brooks and rivers. Fayston should consider the future incorporation of the Agency of Natural Resources recommendations for buffers in order to provide for sufficient protection of riparian resources.

#### 3.9.1.2 Floodplains

A floodplain is the land area adjacent to rivers and streams that is periodically inundated when water flows over banks. Some of the many natural functions and values associated with floodplains that need to be considered in land use planning including: flood storage and conveyance, stream bank stability, water quality maintenance, groundwater recharge and discharge, biologic resources and functions, community resources, and economic resources.

In the past the apparent ease of building on level floodplains led people to use them as home and building sites. This created environmental and safety hazards and is detrimental to the Town and to all downstream residents of the watershed. Development of floodplains increases the frequency, height,

and therefore risk of flooding by increasing runoff and by reducing the flood storage and conveyance capacity of a stream.

Floodplains are delineated in terms of their statistical frequency of flooding. A "100-year flood" or "100-year floodplain" describes an event or an area subject to a 1% probability of a certain size flood occurring in any given year. This concept does not mean a flood will occur only once in one hundred years. Whether or not it occurs in a given year has no bearing on the fact that there is still a 1% chance of a similar occurrence in the following year. Any statistical frequency of a flood event may be chosen depending on the degree of risk that is selected for evaluation, (e.g., 5-year, 20-year, 50-year, 500-year floodplain). The boundary of the 100-year flood is used by the Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP) to map flood hazard areas.

In order to be able to provide federally backed flood insurance to its residents and to be eligible for federal disaster and flood mitigation related grants and loans, Fayston participates in the FEMA NFIP. As a requirement of participation in the NFIP, the Town adopted flood hazard area regulations to regulate development in floodplains. The flood hazard area regulations apply to the special flood hazard areas (SFHA) as identified on Flood Insurance Study, Floodway map, and Flood Insurance Rate Map (FIRM) provided by FEMA. The FIRM for the Town of Fayston maps only the 100-year floodplain along Mill Brook from the Waitsfield-Fayston Town Line to 3.0 miles upstream, and includes nine vulnerable parcels.

It is important to recognize the many shortcomings of solely relying on the NFIP maps to provide an indication of the flood hazards in the Town of Fayston. The FIRM does not map all areas of possible flooding, incorporate the change in watershed hydrology due to development that has taken place over the last 25 years, map localized drainage issues, or consider possible erosion of the stream channel during flood events. Therefore, the FIRM does not identify all of the hazards associated with inundation and erosion.

Fayston has adopted land use regulations that prohibit new structures (except as required for flood control or stream management) in floodplains and require conditional use approval for substantial improvements and additions to structures located in floodplains. The Town should maintain these regulations as well as consider adopting others in order to better protect its residents from hazards associated with inundation and erosion and to better protect the natural functions and values of floodplains.

### 3.9.2 Wetlands

Wetlands are areas inundated by surface or ground water with a frequency sufficient to support plants and animals that depend on saturated or seasonally saturated soil conditions for growth and reproduction. An area is considered a wetland if it contains the required vegetation, soils, and hydrology. Wetlands often occur in association with lakes, ponds, rivers, and streams, however, they may also be isolated from any obvious connection to surface water.

Wetlands can be either open or forested. Open wetlands likely found in Fayston include open peat lands, marshes, sedge meadows, wet shores and shrub swamps. Forested wetlands might include softwood swamps, seeps and vernal pools.

Seeps and vernal pools are small in size, generally under one half acre. Seeps are areas of groundwater discharge typically occurring on or at the base of slopes. Vernal pools are small depressions in forests that fill with water in the spring and fall and provide breeding habitat for many salamanders and frogs. Vernal pools are critical for the survival of many of Fayston's salamander and frog populations yet knowledge of pool locations is very limited. The 2007 Natural Heritage Inventory identified nine vernal pools which are shown on Map 6 but it is suspected that many more exist. Knowledge of vernal pool locations shall be improved upon and known pools protected.

***Functions and Values of Wetlands***

- *Flood and storm water storage*
- *Erosion control*
- *Water quality protection*
- *Fisheries habitat*
- *Wildlife and migratory bird habitat*
- *Hydrophytic vegetation habitat*
- *Threatened and endangered species habitat*
- *Education and research in natural sciences*
- *Recreational value and Economic benefits*
- *Open space and aesthetics*

Vernal pools should be protected from encroaching development, including roads and driveways, by retaining and/or establishing adequate forested buffers. Current literature indicates that a 100-foot buffer is important to the quality of the pool and a buffer as large 750 feet is required to protect the critical land habitat of the amphibians that use the pool. It is possible to determine habitat protection on a case-by-case basis (See the 2007 NHI Report for more discussion on vernal pool management recommendations). Map 6 shows both the 100 and 750 foot buffers.

The State of Vermont adopted the Vermont Wetland Rules, effective in 1990, to identify and protect Vermont's "significant wetlands." The determination of whether any specific wetland is "significant" is based on an evaluation of the extent that it serves one or more of the 10 functions listed in the box above. The Vermont Wetland Rules identify three classes of wetlands. The first two classes (Class One and Class Two) are considered "significant" and are protected by the Vermont Wetland Rules.

Class One wetlands are those wetlands the Vermont Natural Resources Board (VNRB) determines are exceptional or irreplaceable and merit the highest level of protection. A 100-foot buffer zone is designated adjacent to Class One wetlands. Class Two wetlands are presumed to serve one or more wetland functions at a significant level. A 50-foot buffer zone is designated adjacent to all Class Two wetlands.

The Wetland Rules designate most wetlands on the National Wetland Inventory (NWI) maps and those wetlands contiguous to mapped wetlands as Class Two wetlands. A contiguous wetland is a wetland which shares a boundary with or touches a mapped wetland.

Class Three wetlands are those wetlands that have not been mapped on the NWI maps or have been found by VNRB to not be significant in providing any wetland functions when last evaluated. Class Three wetlands and vernal pools are not protected under the State Wetland Rules but are protected by other federal (U.S. Army Corps of Engineers and Environmental Protection Agency), and State (Act 250) regulations. Petitions can be presented to VNRB to upgrade a Class Three wetland based on an evaluation of its functions.

The Vermont Significant Wetlands Inventory (VSWI) shows that there are 26 wetlands in Fayston that comprise a total of 68 acres. These numbers are helpful in giving us some idea of how much of Fayston is wetland, however, the VSWI maps are not a complete representation of all wetlands in Vermont. Due to the scale of the VSWI maps, many small wetlands are entirely omitted and the boundaries of many of the mapped wetlands are not accurate. The 2007 NHI identified 207 wetlands in Fayston totaling 306 acres (Table 3-9). These wetlands can be seen on Map 6.

**Table 3-9 Fayston Wetland Statistics**

| | From Vermont State Wetlands Inventory | From 2007 Fayston NHI |
|---|---|---|
| Number | 26 | 207 |
| Minimal Size (acres) | 0.4 | 0.02 |
| Maximum Size (acres) | 9 | 16.5 |
| Average Size (acres) | 3 | 1.5 |
| Total Land Area (acres) | 68 | 306 |

The Town of Fayston Land Use Regulations currently require a 50-foot buffer strip around all wetlands and state that "no development, excavation, landfill or grading shall occur within the buffer strip, with the exception of clearing and associated site development necessary to accommodate the following noted exceptions." The current regulations need clarification as they appear to allow for a building or structure to be placed within the 50 foot buffer with Development Review Board approval. The Town should consider revising the current regulations to provide clarity to better protect its wetland resources. Fayston's Land Use Regulations apply to all wetlands. As the area experiences more frequent rainstorms, even smaller, unmapped wetlands are likely to increase in significance for the protection they offer from flooding for both Fayston residents and those downstream; this must be taken into account in Fayston's Land Use Regulations and further protection considered.

Traditionally, the planning commission has sought advice from the state wetlands biologist in determining which wetlands deserve protection. The problem with this approach is that state wetlands biologists only recommend protection of wetlands that they consider significant at a statewide scale. Due to Fayston's steep topography, few of its wetlands are considered state significant. Yet when considered at the local or valley level, many of Fayston's wetlands are certainly significant to local wildlife and ecosystems. The 2007 NHI used a methodology to identify locally significant wetlands. The results are shown in Table 3-10. Wetland management recommendations are provided in the 2007 NHI. The implementation of these recommendations should be encouraged.

**Table 3-10 Significance of Fayston's wetlands (2007 NHI)**

| Total Wetlands Assessed | Number |
|---|---|
| Not Ranked | 52 |
| State Significant | 0 |
| Locally Significant | 39 |
| Total | 207 |

*Source: 2007 NHI.*

### 3.9.3 Groundwater

Groundwater is held in the sand and gravel deposits and fractured bedrock that underlies Fayston's landscape. Fayston's residents enjoy the availability of generally uncontaminated groundwater from individual wells for use as domestic water. Yet it is a both a limited resource and one that is vulnerable to contamination. As development continues in Fayston the demand for water and the likelihood of its contamination will increase. Developing an understanding of ground water supplies and how to best conserve them and protect them from contamination has become increasingly important.

Map 1 shows that with the exception of a few areas of river valley sand and gravel deposits the vast majority of Fayston's surficial geology consists of dense glacial till which provides low water yields. Well log data from VT DEC shows that over 75 percent of the wells drilled in Fayston are greater than 300 feet deep into bedrock. Even at these depths average yields are only 4 to 15 gallons per minute enough to support only residential and light commercial use (VT Water Resources 1966). While nearly all of Fayston residents have access to pure groundwater, it is clearly a limited resource.

As Fayston continues to develop, the chance of groundwater supplies being contaminated by pollutants carried by infiltrating surface waters will increase. Agricultural, industrial and residential land uses can all be sources of contaminants ranging from bacterial contaminants to volatile organic compounds (VOCs). Protecting Fayston's groundwater depends on identifying significant aquifer recharge zones, determining their vulnerability to contamination and planning for their protection.

Groundwater can also be polluted by naturally occurring radioactive contaminants including radionuclides and arsenic in bedrock. As radioactive elements decay radiation is released into the groundwater. Over a long period of time, and at elevated levels, radium increases one's risk of bone cancer and uranium increases one's risk of kidney damage. Several wells in Fayston are known to be contaminated by radioactive material. Fortunately, water contaminated with radiation can be treated. The primary problem is that most private well owners are unaware of the potential for radioactive contamination. The Vermont Geological Survey has conducted limited mapping of radioactive bedrock and public water supplies are required to test for radioactivity. Fayston should encourage its residents to test for radionuclides, track results of both private and public water supply sampling, and disseminate those results as a public health measure.

### 3.9.4 Stormwater Runoff

Stormwater runoff occurs when precipitation and snowmelt do not infiltrate into the ground or evaporate but rather flow over the built environment into streams or wetlands, often carrying a range of pollutants such as sediment, oil, grease, nutrients, metals, bacteria, and salts. According to the Environmental Protection Agency (EPA), stormwater runoff is now the most common source of water pollution in the United States.

Impervious surfaces such as rooftops, driveways, roads, and parking areas are the primary source of a range of harmful contaminants, which are carried with the runoff into our waterways. Impervious surfaces also reduce the natural process of runoff infiltration into the ground, and result in greater volumes of stormwater runoff reaching water bodies, which can cause increased stream channel erosion and flooding. Runoff from large areas of exposed soil, typically construction sites, is another main source of stormwater runoff pollution. High volumes of sediment and other pollutants from the construction site can be carried to water bodies, destroying aquatic habitat and increasing stream channel erosion.

Historically, stormwater runoff has been managed by attempting to simply reduce the volume of runoff by installing centralized detention ponds and other structures, and largely, this strategy has failed. There is now an increased effort to focus on removing pollutants from stormwater in addition to reducing the volume of stormwater flow getting to the water bodies. Several new technologies have been introduced recently such as bio-retention cells, constructed wetlands, rain gardens, “green” roofs, and a variety of propriety products which are effective for improving the quality of stormwater runoff. These new technologies are a part of shift in stormwater management to Low Impact Development (LID) design, which focuses on “maintaining and advancing the pre-development hydrologic regime of urban and developing watersheds”, according to the Low Impact Development Center.

Effective stormwater management includes educating the public on proper management of household pollutants such as pesticides and fertilizers, designing new development sites with both structural treatment systems and non-structural techniques, such as buffers zones around wetlands and streams, preserving open space, and reducing impervious surfaces by promoting reduced roadway widths, hammer-head turnarounds instead of traditional cul-de-sacs, and shared driveways. Improved construction site management activities include avoiding soil disturbance during unstable times such as the late fall and winter after thaw, limiting the duration of exposed soils by developing a phasing plan, stabilizing disturbed areas promptly and effectively, correctly installing erosion and sediment control practices such as silt fence and other structures, and frequently inspecting and maintaining these practices as required.

Currently, stormwater runoff from new and existing impervious surfaces, construction sites and industrial sites greater than a certain threshold is regulated by the State of Vermont. Generally, new development, redevelopment or expansion projects generating one or more acres of impervious area are required to seek state permits. Fayston should recognize that although a new development or construction activity may not meet the threshold for permit coverage through the State of Vermont, even a small development or construction project may have the potential to create an adverse impact to surface water quality. The Town shall therefore evaluate each development or construction project to determine if treatment is necessary to reduce potential stormwater impacts. Factors to consider

include size of the impervious surface, drainage pattern, hydrologic connectivity, installation or modification of drainage or conveyance structures, location of the discharge and existing stormwater treatment.

#### 3.9.4.1 Road Ditches and Stream Crossing Structures

Careful management of Fayston's transportation infrastructure is important to water quality and aquatic habitat. Road ditches can deliver substantial volumes of water and sediment to streams. Inadequately sized and poorly installed culverts often cause increased stream erosion and act as barriers to the movement of fish and other aquatic organisms.

Road ditches gather and transform water that would otherwise move slowly over the ground as a thin sheet into deep fast moving and highly erosive flow. When road ditches discharge directly into streams they play a primary role in the degradation of water quality and aquatic habitat. The impact of road ditches on water quality can be reduced with practices such as adequate sizing, stone lining of steep ditches, adequate seeding and mulching and prevention of direct discharge into streams. Where suitable, Fayston shall require stormwater diversion points as part of the permitting process in order to prevent as much as possible the conduction of storm water directly down roadside ditches and into streams.

It is well understood that undersized culverts and bridges can fail catastrophically during high flow events; therefore, guidelines based on stream hydraulics have been established for the appropriate sizing of crossing structures. What has been less appreciated is the extent to which crossing structures cause chronic stream channel instability that in many cases causes premature failure of the crossing structure. Also under appreciated is the extent to which crossing structures can act as barriers to aquatic organism movement. Chronic stream instability and premature structure failure have significant water quality and financial consequences and the prevention of aquatic organism movement severely impacts the aquatic ecosystem.

The Vermont Better Backroads program offers technical assistance and funding for identification, capital budget planning and the correction of road related water quality problems. The Vermont Agency of Natural Resources (ANR) has established methods for assessing crossing structures to determine the extent to which they are causing channel instability and acting as barriers to aquatic organism movement. Other natural resource programs provide funding for eliminating road related water quality problems. Fayston should take advantage of these programs to minimize the impact of its transportation infrastructure on water quality, stream stability, and aquatic habitat. Fayston should also review all private stream-crossing structures for potential impacts on water quality stream stability and aquatic habitat.

### 3.9.5 Flood Resilience Planning

On May 6, 2013, Act 16 became effective, requiring a Flood Resilience Element in all municipal and regional plans adopted or amended after July 1, 2014. Act 16 stipulated the following:

- Accessory dwelling units may now be regulated in hazard areas;

- New development in identified flood hazard, fluvial erosion, and river corridor protection areas should be avoided. If new development is to be built in such areas, it should not exacerbate flooding and fluvial erosion;
- The protection and restoration of floodplains and upland forested areas that attenuate and moderate flooding and fluvial erosion should be encouraged;
- Flood emergency preparedness and response planning should be encouraged; and
- The plan must (a) identify flood hazard and fluvial erosion hazard areas and designate those areas to be protected, including floodplains, river corridors, land adjacent to streams, wetlands, and upland forests, to reduce the risk of flood damage to infrastructure and improved property; and (b) recommend policies and strategies to protect the areas identified and designated as flood hazard and fluvial erosion hazard areas;

Fayston lies within the Mad River watershed, which flows into the Winooski River and ultimately into Lake Champlain. Two types of flooding impacts can occur within the town. The first is from water inundation, where water rises into low-lying land. This generally happens during in low-lying areas, including areas of Mill Brook and Shepherd Brook, during heavy rain events. The second impact is from river and stream erosion when a river or stream jumps its bank and rips through an area, taking whatever is in its path. Due to Fayston's hilly terrain and its many upland streams, the latter is even more of a threat to the town, where fast-moving water from heavy rain storms carries rocks, mud and other debris, undermining stream banks, mountain sides, and road beds.

The most recent flood events were in May and August of 2011—the latter was when Tropical Storm Irene hit Vermont and the Valley. During TS Irene, Fayston fared better than most towns along the Route 100 corridor because of the Town's relative altitude. While the town suffered less property and infrastructure destruction than many towns, the storm still damaged culverts, bridges and road surfaces. The town has had a good history of replacing bridges and culverts as needed, and most of them now meet current standards. However, some of the damage came from private infrastructure, and the town is interested in having private landowners take responsibility for driveway culvert maintenance and upsizing.

On June 25, 2012, Fayston adopted a *Local Hazard Mitigation Plan* approved under 44 C.F.R. § 201.6. Act 16 allows this plan to be referenced as part of the required flood resilience element. This hazard mitigation plan addresses many of the Act 16 requirements, and is thus incorporated into the Fayston Town Plan by reference.

Fayston's Land Use Regulations (LUR) contain a flood hazard overlay district, which include the areas of town that would be inundated in the 100-yr flood (or 1% chance of occurring in any given year). This district is recognized as the Special Flood Hazard Area in and on the most current flood insurance studies and maps published by the Department of Homeland Security, Federal Emergency Management Agency, National Flood Insurance Program, as provided by the Secretary of the Agency of Natural Resources pursuant to 10 V.S.A. Chapter 32 § 753.

Fayston's flood hazard regulations prohibit new structures in this zone and limit development to non-substantial improvements, infrastructure improvements, outdoor recreation, agriculture and forestry.

Any substantial improvement (reconstruction, rehabilitation, addition, or other improvement of an existing structure) must go through conditional use review.

In the identified flood hazard areas, all development must be

- reasonably safe from flooding;
- designed, operated, maintained, modified, and adequately anchored to prevent flotation, collapse, release, or lateral movement of the structure;
- constructed with materials resistant to flood damage;
- constructed by methods and practices that minimize flood damage;
- constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- adequately drained to reduce exposure to flood hazards;
- located so as to minimize conflict with changes in channel location over time and the need to intervene with such changes; and
- required to locate any fuel storage tanks (as needed to serve an existing building in the Special Flood Hazard Zone) a minimum of one foot above the base flood elevation and be securely anchored to prevent flotation; or storage tanks may be placed underground, if securely anchored as certified by a qualified professional.

In addition:

- water supply systems must be designed to minimize or eliminate infiltration of flood waters into the systems;
- sanitary sewage systems must be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters;
- on-site waste disposal systems must be located to avoid impairment to them or contamination from them during flooding;
- the flood carrying and sediment transport capacity within the altered or relocated portion of any watercourse must be maintained, and any alteration or relocation shall not result in any decrease of stream stability;
- bridges and culverts must have a stream alteration permit from the Agency of Natural Resources where applicable;
- subdivisions and Planned Unit Developments must be accessible by dry land access outside the special flood hazard area; and
- existing buildings, including manufactured homes, to be substantially improved to meet standards.

While the town's flood hazard map identifies the official 100-year flood hazard, mitigating issues in the FEMA-floodplain is just one approach to reducing flood hazards. As mentioned above, Fayston has experienced damages from flood events outside of the mapped floodplain, caused by fluvial erosion. The Areas of Local Concern map (found in Map 6, the Water Resources Map) shows the most vulnerable areas of fluvial erosion.

There are nine properties located in the fluvial erosion zone. Section 3.9.1.5 of this Plan covers storm water runoff and management. In addition, the Fayston LUR address stream channels as follows: Proposed buildings or structures will not adversely affect the ability of the stream to carry floodwaters;

stream channel stability shall be maintained; the water quality of the stream shall not be compromised due to potential erosion and runoff; and there shall be no alteration of the natural course of any stream except to rectify a natural catastrophe for the protection of the public health, safety and welfare.

As referenced in Section 3.9.1.1, development is limited within required stream buffers in order to prevent soil erosion, protect wildlife habitat and maintain water quality. It is particularly important to limit development in the fluvial erosion hazard (FEH) areas, because of potential damage to the environment, danger to human life, and cost to both the town and affected individuals. In addition, preventing river corridor encroachment will also help downstream neighbors as it will allow for a river's natural tendency to adjust toward a more stable, equilibrium condition

The state is now referring to FEH zones as River Corridors and releasing statewide River Corridor maps later this year. To be eligible for the new Emergency Relief and Assistance Fund, it may be worth connecting with ANR to see if the town will have to adapt our regulated areas to prevent fluvial erosion to their new maps and standards, since Fayston was an early adopter.

In terms of emergency response planning, Fayston currently has a Basic Emergency Operations Plan that identifies responsibilities during a local emergency. The Plan identifies the people who are the points of contact in an emergency. These include the Selectboard Chair, the Emergency Management Director and the Road Foreman. It is important for the Road Foreman to stay on top of any road washouts that can cut off residents. High risk populations include the Town's two schools, the Fayston Elementary and Green Mountain Valley, which have their own emergency evacuation plans.

The plan also identifies (a) evacuation routes and (b) emergency shelters as follows: (a) Route 100 south and north, Route 17 west, and the Moretown and Roxbury Gap Roads; (b) Fayston Elementary School, Harwood Union, and the Fayston Municipal Building. Harwood can be reached only by driving to route 100, and might be hard for some to access during a flood, but the other two should be accessible. The need for such facilities has not been tested.

The Town's emergency notification system includes alert announcements on local radio and TV stations. In a rural scattered community, it is difficult to have other types (siren, PA system, door-to-door notification) that would be effective. In addition, due to Fayston's rural nature, the Town does not have emergency response facilities of their own (fire department, police, ambulance), and thus has no control over the location of these facilities and whether they are within or outside of flood hazard areas.

The town will be updating the emergency response plan in 2014. These plans are now called Local Emergency Operations Plans (LEOPs), and need to be submitted to the state as they are updated. When the town updates the LEOP, there are several issues relative to flooding emergencies that should be considered:

- Were there any kinks from the Tropical Storm Irene response that need to be worked out?
- Are residents signed up for the new VTAlert service?
- Can Fayston provide resources for flood preparedness response on the Town web site?

## 3.10 Ecology Goals and Objectives

**Goal 3.1 The responsible stewardship and maintenance of Fayston's ecology, rural character, natural heritage, and environmental quality to minimize impacts from development and other human activities.**

Objective 1: Ensure that the extraction of finite earth resources, including sand and gravel, is conducted carefully to minimize adverse impacts on surrounding properties and the community at large.

Strategies

a. Carefully site such resources to retain, to the extent possible, future access.
b. Ensure restoration of extraction sites upon completion of the extraction activity.

Objective 2: Prohibit land development on slopes of 25% or greater.

Strategies

a. Include appropriate language in Fayston's Land Use Regulations.

Objective 3: Prohibit land development within 100 feet of wetlands and waterways where appropriate and require mitigation of development effects where necessary.

Strategies

a. Include appropriate language in Fayston's Land Use Regulations.
b. Consider adoption of River Corridor regulations based on River Corridor maps developed by the State.

Objective 4: Design land subdivisions to minimize development on and fragmentation of land characterized by:

Primary agricultural soils
High elevation (above 1,500 feet)
Significant wildlife habitat and travel corridors
Trail corridors, river accesses, and areas for dispersed recreation
Riparian lands, river corridors
Identified scenic viewsheds
Adjacency to existing conserved lands

Strategies

a. Identify lands with the relevant characteristics
b. Ensure that land subdivision minimizes or mitigates adverse impacts to significant wildlife habitat, productive forest land, scenic viewsheds, shallow soils, and headwater streams. Appropriate methods include clustering development on the least sensitive portion of the site and retaining the bulk of the parcel(s) as open space.
c. Take the following steps to ensure that Fayston's land use regulations promote natural heritage protection.

-Review the land use regulations in the context of data gathered in the 2006 Natural Heritage Inventory to ensure that the goals of maintaining unfragmented tracts of large forest are facilitated by the regulations.

-Consider the establishment of an impact fee program that requires developers to pay a fee toward the protection or restoration of Town-owned open space lands, forests, parks, or recreation areas.

-Use overlay districts, TDRs, density bonuses, PRDs and PUDs to conserve and properly manage significant natural heritage elements.

-Require land designated as "common land" in the PRD/PUD to have a conservation easement that ensures the proper management and uses of the land that are compatible with the Conservation Goals and interests of the habitat.

-Work with natural resources experts to determine a suitable buffer width around sensitive natural heritage elements such as travel corridors, wetlands and vernal pools.

-Incorporate zoning setbacks from mapped corridors by including corridors in zoning districts.

-Seek to reclassify highly significant vernal pools as Class II wetlands so that they are protected by the Vermont Wetland Rules.

-Restrict development in designated flood hazard areas to agriculture, silviculture, and recreational uses with the exception of those activities related to the substantial improvements and additions to existing structures.

-Maintain existing surface water classifications of all Town surface waters.

-Evaluate current zoning setbacks from rivers and streams for adequacy, and make changes as deemed necessary.

d. Use the Subdivision Review process to ensure that sub-divisions projects do not conflict with Fayston's natural resources goals.

-Consult the natural heritage inventory maps, the FNRC, and natural resource experts other than those hired by the applicant to understand and minimize potential impacts that the proposed development may have on Fayston's natural heritage.

-Prevent potential adverse impacts to groundwater resources, including depletion and degradation of water quality, from groundwater extraction.

-Ensure that development within wellhead protection areas is carefully designed to prevent adverse impacts to groundwater supplies

-Require proper stormwater runoff and erosion control measures during construction and on-going maintenance of the development.

Objective 5: Encourage responsible use and careful stewardship of Fayston's natural heritage by landowners and managers.

Strategies

a. Appoint the Planning Commission, FNRC or other appropriate group to conduct outreach and education to facilitate voluntary natural heritage protection efforts by landowners and land managers.

b. Inform landowners of the locations of mast stands, deer wintering areas, vernal pools, wetlands and other natural heritage elements on their property, the habitat needs of associated wildlife, and how they can conserve these heritage elements to keep them functioning as important wildlife habitat.

c. Inform landowners about programs such as Vermont 's current use program, Vermont Family Forests, Natural Resources Conservation Service's Wildlife Habitat Incentives Program and the U.S. Fish and Wildlife Partners for Wildlife program.

d. Inform landowners and hunters on the subject of wildlife management and protection and the role of hunting as a possible wildlife management tool.
e. Inform landowners about the threats that domestic pets pose to wildlife and threats that wildlife can pose to domestic pets. Seek ways to prevent conflict between domestic animals and wildlife.
f. Support efforts to improve water quality by Friends of the Mad River and other organizations.
g. Appoint the Planning Commission, Natural Resources Committee or other appropriate group to write land management plans for Town-owned lands designed to protect the ecological functions of natural heritage elements.
h. Work with the Vermont Geological Survey to develop a better understanding of aquifer potentials and the location and vulnerability of recharge zones.

**Goal 3.2 The responsible preservation, conservation, and enhancement of Fayston's ecological health and biological diversity.**

Objective 1: Encourage the permanent conservation of areas containing:

Significant natural heritage elements and other listed attributes
Primary agricultural soils
Ridgelines
Significant wildlife habitat and travel corridors
Trail corridors, river accesses, and areas for dispersed recreation
Riparian lands, river corridors
Identified scenic viewsheds
Adjacency to existing conserved lands

Strategies
a. Coordinate with the Conservation Committee to identify, prioritize and work to conserve areas containing significant natural heritage elements.
b. Encourage yearly additions to the Town's Conservation Fund.
c. Support the efforts of local, regional and statewide conservation organizations to protect natural areas in Fayston through voluntary programs (e.g., purchase or donation of development rights).
d. Develop long-range plans for Town-owned parcels.
e. Develop a criteria/ranking system with which the Town can evaluate proposed conservation projects for conformance with this plan.

Objective 2: Develop a comprehensive natural heritage conservation plan following guidance provided by “The Vermont Fish and Wildlife Department’s Conserving Vermont’s Natural Heritage: A guide to Community Based Planning for the Conservation of Vermont’s Fish, Wildlife, and Biological Diversity,” to ensure the functional integrity and provide stewardship of Fayston’s natural heritage including:

-Existing relatively large unfragmented patches of core forest habitat
-Connecting habitats
-Natural community types at a large enough scale to function ecologically
-Mast stands
-Deer wintering areas
-Wetlands and vernal pools

-Rivers and brooks

Strategies

a. Work with the Fayston Natural Resources Committee (FNRC) to develop a comprehensive natural heritage conservation plan.

b. Use the Natural Heritage Inventory and other data and work with experts to identify and explain the importance of Fayston's natural heritage elements.

c. Hold public workshops to establish a natural heritage vision for Fayston.

d. Establish specific goals and objectives to achieve Fayston's natural heritage vision that utilize both regulatory and non-regulatory approaches.

e. Consider adoption of strategies given in The Vermont Fish and Wildlife Department's Wildlife Action Plan (2005).

f. Conduct an on-ground verification of/additions to Fayston's natural heritage elements.

Objective 3: Protect water quality.

Strategies

a. Support the efforts of the Friends of the Mad River and other organizations to prevent negative impacts to the Mad River watershed.

b. Prevent development upstream or within 100 feet of any water corridor affecting the Mad River watershed.

c. Promote road maintenance strategies that disperse stormwater rather than directing flows into streams and other waterways.

d. Protect and enhance the quality of Fayston's surface waters through the maintenance of vegetated buffers and river corridors along all streams.

e. Promote sustainable forest management to ensure the maintenance of water quality, the enhancement of wildlife habitat and the avoidance of adverse impact on scenic resources.

f. Prevent and eliminate invasive exotic species in Fayston and the Mad River Valley through Town actions, public engagement with landowners and other residents, and collaborative efforts with other towns and partners.

g. Protect natural and beneficial function for mitigating flood hazards, including Fayston waterway's contributions to downstream flooding.

Objective 4: Reduce human impact on climate.

Strategies

a. Promote the use of home-scale renewable energy.

b. Encourage and support increased use of public transportation and ride sharing.

c. Support the efforts of local and regional organizations to reduce greenhouse gas emissions.

d. Consider societal change that may become necessary due to future climatic variations.

**Goal 3.3 The minimization of impacts to public: health, safety and welfare associated with natural hazards or poor environmental quality.**

Objective 1: Prevent the exposure of Fayston residents to air and or water pollution.

Strategies

a. Review zoning districts to ensure that land use activities that degrade environmental quality (air and water) are not adjacent to residential areas.

b. Inform Town residents about naturally occurring ground water contaminants.

c. Consider societal change that may become necessary due to future climatic variations.

d. Fayston should encourage its residents to test for radionuclides, track results of both private and public water supply sampling and disseminate those results as a public health measure.

Objective 2: Minimize the extent to which development occurs in areas subject to natural and/or environmental hazards.

Strategies

a. Maintain proper administration and enforcement of the Fayston's flood hazard area regulations, to be updated as needed to maintain eligibility in the National Flood Insurance Program to ensure that property owners in designated flood hazard areas are eligible for flood insurance.

b. Identify and map flood hazards that are not mapped by the NFIP including areas subject to erosion during floods and consider adopting land use regulations to protect property owners from these hazards.

Objective 3: To take actions to reduce or eliminate the long-term risk to human life and property from flooding and fluvial erosion.

Strategies:

a. Ensure existing and future drainage systems are adequate and functioning properly. Finish replacing/upgrade any remaining culverts identified in the Hazard Mitigation Plan and not yet done. Look into applying for Hazard Mitigation Grants to upgrade the priority culverts.
b. Preserve and prevent development in areas where natural hazard potential is high
c. Encourage the protection and restoration of floodplains and upland forested areas that attenuate and moderate flooding and fluvial erosion.
d. Ensure that all residents and business owners are aware of the hazards that exist within Fayston and ways they can protect themselves and insure their property. Place information on the Town's website, and consider producing an informational pamphlet
e. Educate landowners regarding storm water, culverts and LID. Again, information can be included on the town website and a pamphlet.
f. Develop regulations for driveway culverts, including provisions for private landowners to be responsible for maintenance and upgrades
g. Ensure that emergency response services and critical facilities functions are not interrupted by natural hazards.
h. Work with elected officials, state and FEMA to ensure compliance with FEMA regulations
i. Check with the Agency of Natural Resources to see if the town will have to adapt our fluvial erosion regulated areas to their new maps and standards, in order to be eligible for the new Emergency Relief and Assistance Funds.
j. Submit an up-to-date Local Emergency Operations Plan to the State.
k. When the town updates the LEOP, there are several issues relative to flooding emergencies that should be considered:
    - Were there any kinks from the Tropical Storm Irene response that need to be worked out?

- Are residents signed up for the new VTAlert service?
- Can the Town provide resources for flood preparedness response its web site?

# Chapter 4: Community Profile

## 4.1 Introduction

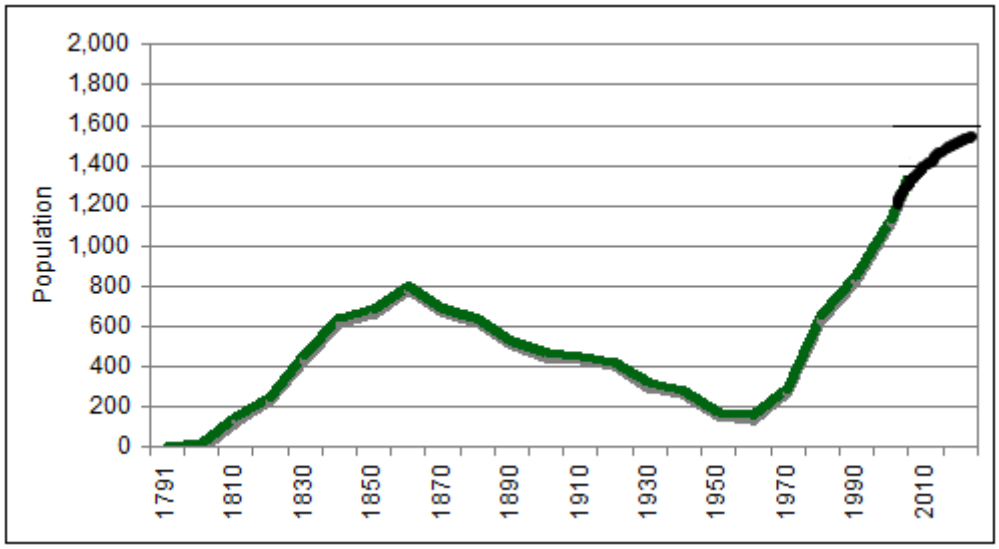
Fayston is a residential rural community. Between 1960 and 2000, the population grew from 158 residents to 1,141. As of 2010, Fayston's population consisted of 1,353 full-time residents (2010 U.S. Census) and approximately 1,000 part-time residents.

In 2012, in preparation for updating the Town Plan, the Fayston Planning Commission asked residents to fill out a Town Survey, which asked for opinions and attitudes on a wide variety of topics. A total of 201 useable surveys were returned, 127 from full-time residents, 51 from part-time residents, and 23 from those who own property in Fayston but who do not spend any time here. Responses were on a per household basis. Based on the number of occupied housing units in Fayston, this indicates that response rates were 21% for full-time residents and 10% for part-time residents.

## 4.2 Full-Time Population

Fayston has experienced extreme fluctuations in its population throughout its history. From the Town's founding in 1782, the population grew to 800 in 1860 (see Figure 4-1). Then, in conjunction with environmental, agricultural, and economic changes in the late 1800s, the population declined to 533 by 1890. Population declines continued and the Town reached a low of 158 residents in 1960.

**Figure 4-1: Fayston Population Growth**



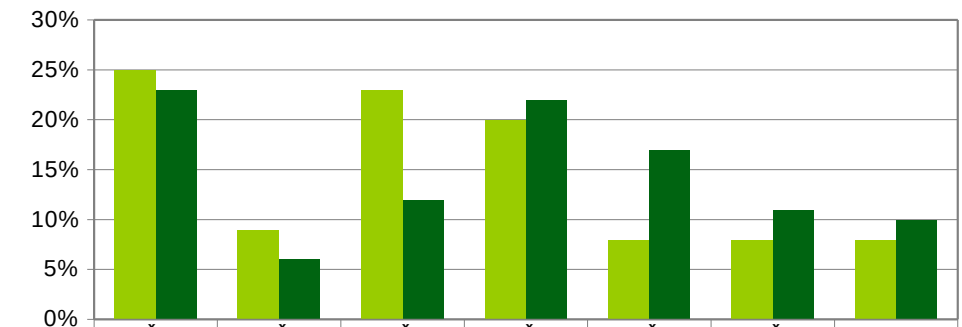

*Sources: 1791 to 2000: US Census; 2000 to 2020: Central Vermont Planning Commission.*

With the growth of the ski industry and tourism, however, new residents were once again attracted to Fayston. By 1990, the full-time population had reached 846 and exceeded the previous historical high

point of over 100 years earlier. By 2000, this year-round population had grown to 1,141. As of 2010, this segment of the Town's population had grown to 1,353.

In recent years, as the full-time population has grown, its composition has also been changing. The percentage of younger residents has declined dramatically, while the proportion of middle-aged residents has grown. Between 1990 and 2000, the number of residents between 18 and 34 has declined from 32% of the population to only 18%, while the number of residents 45 and older has grown from 24% to 38% (see Figure 4-2). Statewide, there has been a migration of younger residents from Vermont, and an overall "aging" of the population. In Fayston, this trend is particularly marked.

**Figure 4-2: Age Distribution**




| | 0 Š 17 | 18 Š 24 | 25 Š 34 | 35 Š 44 | 45 Š 54 | 55 Š 64 | 65+ |
|---|---|---|---|---|---|---|---|
| 1990 | 25% | 9% | 23% | 20% | 8% | 8% | 8% |
| 2000 | 23% | 6% | 12% | 22% | 17% | 11% | 10% |

*Source: 1990 and 2000 US Census*

### 4.2.1 Household Composition

The average household size of Survey respondents was 2.7 for full-time residents. The reported household size for full-time residents was the same as reported in the 2010 US Census, which indicates that those who responded to the Survey were representative of the total population in this respect.

**Table 4-1: Household Size**

| | Adults (18 to 64) | Children (17 and under) | Adults (65or older) | Total |
|---|---|---|---|---|
| Full-Time Resident | 1.7 | 0.6 | 0.4 | 2.7 |

*Source: 2012 Fayston Town Survey. Number of respondents = 127*

Roughly one-third of the households of full-time residents have children. Of those that do, all that responded had three or fewer children, and the average number of children per household was 1.7.

**Table 4-2: Full-Time Households with and without Children**

| | |
|---|---|
| Number of Households with Children | |
| 1 Child | 15 |
| 2 Children | 27 |
| 3 Children | 2 |
| Total Households with Children | 44 |
| % of Households with Children | 37% |
| Average Children per Household with Children | 1.7 |
| Total Households without Children | 75 |
| % of Households without Children | 63% |

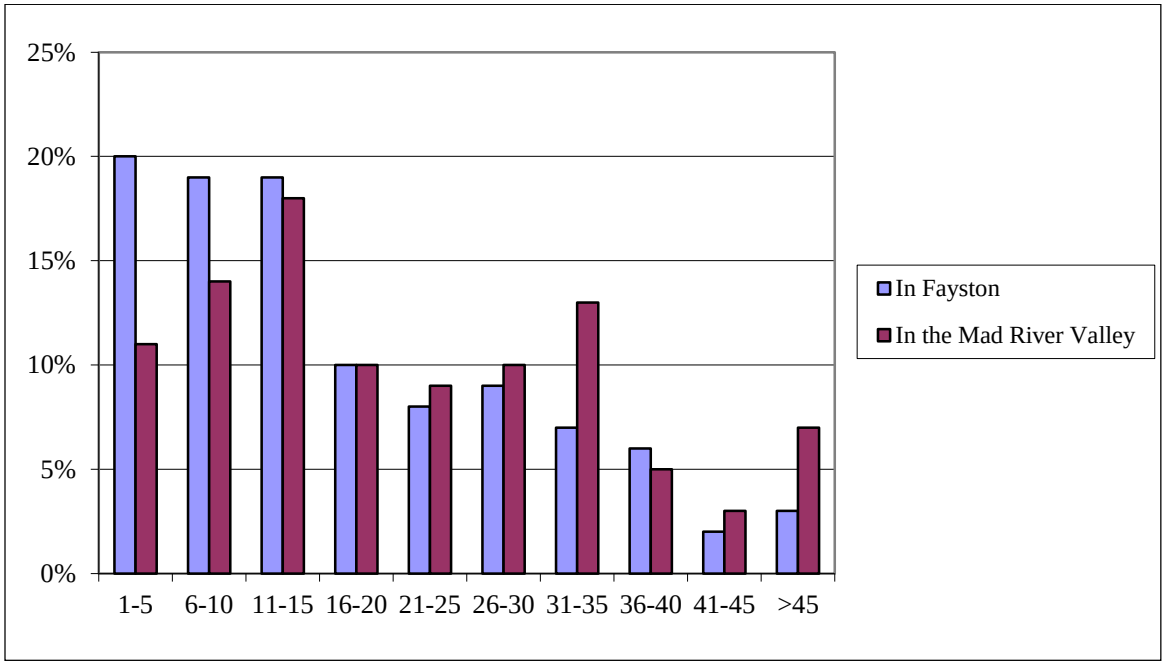
*Source: 2012 Fayston Town Survey.*

### 4.2.2 Length of Residency and States Moved From

The 2012 Fayston Town Survey indicates that most full-time residents have moved to Fayston within the past twenty years. More than one third (39%) have lived in Fayston for 10 years or less, 29% have lived here for 11 to 20 years, and 35% have lived here for over 20 years. These response rates are generally consistent with recent growth trends in which Fayston has grown from only 45 households and 158 residents in 1960 to 594 households and 1,353 residents today.

However, Survey respondents, in general, have lived in the Mad River Valley for longer than they have in Fayston. In total, 25% have lived in the Valley for 10 years or less, 28% have lived here for 11 to 20 years, and 47% have lived here for more than 20 years. These figures (see Figure 4-3) indicate that many Fayston residents, especially long-term residents, have moved here from other Valley towns.

**Figure 4-3: Full-Time Residents: Years Lived in Fayston and Mad River Valley**




*Source: 2012 Fayston Town Survey.*

Of those who have moved to Fayston from outside of the Mad River Valley, the largest numbers have moved here from Vermont and Massachusetts, followed by other states in the northeast (see Table 4-3).

**Table 4-3: States that Fayston Residents Moved From**

| State | Percent |
|---|---|
| Vermont | 50% |
| Massachusetts | 10% |
| Connecticut | 4% |
| New York | 8% |
| New Jersey | 8% |
| New Hampshire | 4% |
| Maine | 3% |
| Pennsylvania | 3% |
| Other | 11% |

*Source: 2012 Fayston Town Survey. Note: Percentages refer to percent of residents that have moved from other states, and not percentages of total residents.*

### 4.2.3 Educational Attainment

Fayston residents generally have a higher overall level of educational attainment than is typical for Vermont as a whole. As shown in Table 4-4, many more Fayston residents have Bachelor's degrees than in the state as a whole (33% versus 21%). Also, the number of residents that did not complete high school is much lower than throughout the state (2% versus 9%).

**Table 4-4: Educational Attainment**

| | Fayston | Vermont |
|---|---|---|
| < 9th Grade | 1% | 3% |
| 9 thru 12 | 1% | 6% |
| High School | 18% | 32% |
| Some College | 13% | 17% |
| Associates | 7% | 8% |
| Bachelors | 33% | 21% |
| Graduate or Professional | 27% | 13% |

*Source: 2010 American Community Survey*

### 4.2.4 Household Income

Fayston residents have the highest median incomes in the Mad River Valley and significantly higher incomes than in the rest of Washington County and Vermont as a whole. According to the 2000 US Census, which is the most recent source of comprehensive income data, the 1999 Fayston median household income was slightly over $56,000, compared to slightly less than $50,000 in Warren and Waitsfield, and approximately $42,000 in Washington County and Vermont as a whole. This reflects a

changing demographic in Fayston, where in the past median income was on the lower end of the Mad River Valley income range.

## 4.3 Part-Time Residents

Fayston has approximately 1,000 part-time residents who own second homes. As with full-time residents, the largest proportion of part-time residents have come to Fayston fairly recently. Slightly less than half (44%) have had their second homes for 10 years or less, 20% have had second homes for 11 to 20 years, and 38% have had second home for more than 20 years (see Table 4-5).

**Table 4-5: Part-Time Residents: Years with Second Home**

| Years with Second Home | Percent |
|---|---|
| 1-5 | 22% |
| 6-10 | 22% |
| 11-15 | 9% |
| 16-20 | 11% |
| 21-25 | 9% |
| 25-30 | 9% |
| 30-35 | 2% |
| 35-40 | 4% |
| 40-45 | 7% |
| >45 | 7% |

*Source: 2012 Town Survey*

The largest number of part-time residents is from Massachusetts, followed by Connecticut, New York, and New Jersey (see Table 4-6).

**Table 4.6: Part-Time Residents: Home States**

| Home State | Percent |
|---|---|
| Massachusetts | 48% |
| Connecticut | 9% |
| New York | 13% |
| New Jersey | 11% |
| Vermont | 2% |
| Florida | 11% |
| Other | 7% |

*Source: 2012 Town Survey*

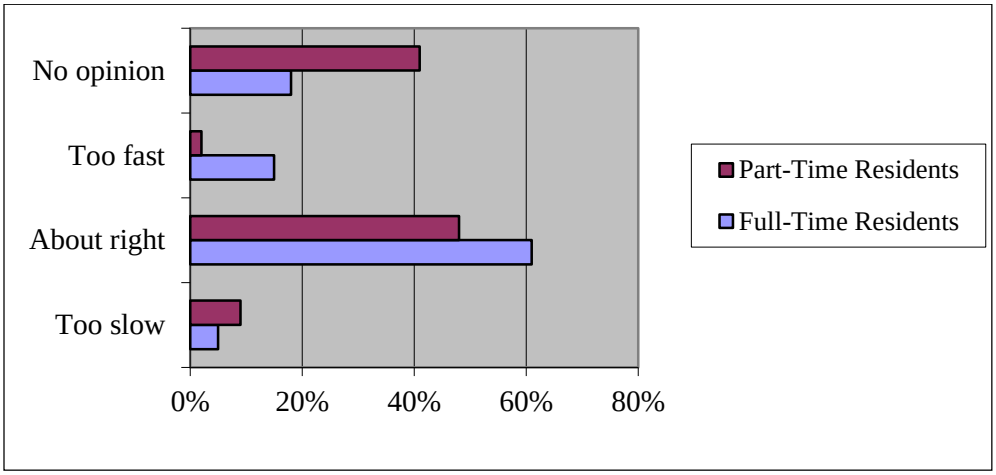
Part-time residents spend most of their time here in the summer, followed by winter, fall, and then spring. More than half (52%) of respondents plan either to move or retire to Fayston.

## 4.4 Resident Attitudes on Growth

It was only in 1990 that Fayston's population exceeded its circa-1860 population high of 800 residents. However, since that time, the population has grown by over 50%. Increasing subdivision activity, the increasing availability of at-home work options, a revitalization of Sugarbush, and growth in the region's largest employment center in Chittenden County, are likely to continue to fuel this growth.

The largest percentages of both full-time and part-time residents believe that Fayston's rate of growth is "about right." Of all full-time residents, 61% believe that the Town is growing at about the right rate, 15% believe that the Town is growing too rapidly, 5% believe that it is growing too slowly, and 18% did not have an opinion about the rate of growth (see Figure 4-4).

**Figure 4-4: Rate of Growth**



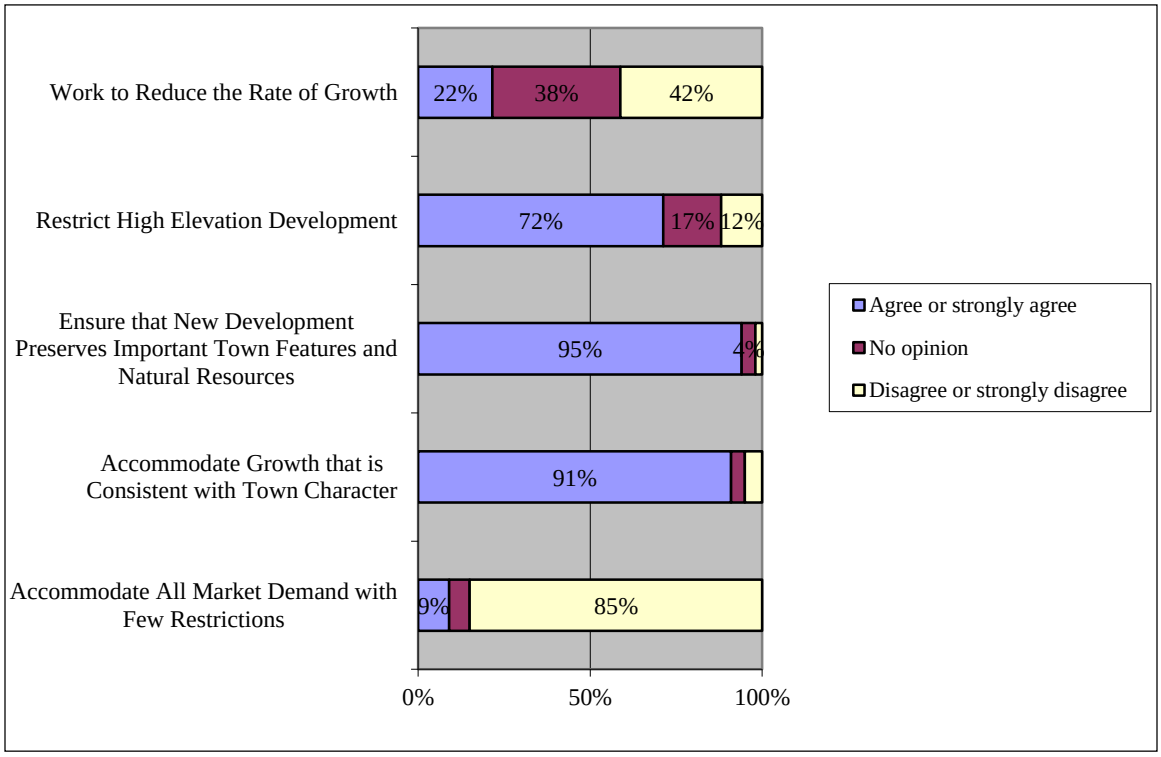

*Source: 20012 Fayston Town Survey*

Consistent with the views of full-time residents, the largest percentage of part-time residents believes that growth has had no significant impact on Fayston's character (52%). Approximately 39% percent do not have an opinion on the impact of growth, while 7% believe that growth has had a positive impact, and only 2% believe that growth has had a negative impact.

While there are significant concerns about growth, a large majority of Fayston's residents believe that growth that is consistent with the Town's character should be accommodated (91%), but that the Town should not accommodate all market demand with few restrictions (85%) (see Figure 4-5). A very large majority also believes that new development should preserve important Town features and natural resources (95%).

These attitudes are very consistent among full-time residents and part-time residents.

**Figure 4-5: Attitudes on Growth and Development: All Residents**




*Source: 2012 Fayston Town Survey*

## 4.5 Community Profile Goals and Objectives

**Goal 4.1: Ensure that residential development is compatible with the Town's character and protects its natural resources.**

Objectives:

1. Ensure that new residential development will be compatible with the character of the neighborhood or area in which it will be located.

   Strategies:

   a. Ensure that new development preserves Fayston's rural character and natural features such as ridgelines, open fields, wildlife habitat, wildlife corridors, water quality, and wetlands.

   b. Ensure that residential development does not erode recreational opportunities (hiking, biking, walking, backcountry skiing, snowmobiling, hunting, etc.)

**Goal 4.2: Accommodate a moderate rate of socially and economically diverse population growth.**

Objectives:

1. Manage growth to accommodate the subsequent demand for housing, economic opportunity, and community services and to protect the Town's cultural and natural resources.

Strategies:

a. Work cooperatively with other towns in the Mad River Valley and Central Vermont to plan for population growth.

b. Review and adjust population projections on a regular basis.

c. Exercise party status in the Act 250 development review process and other state regulatory proceedings, as appropriate, to ensure that the Town's growth needs and limitations are properly addressed relative to this plan.

d. Encourage, through land use and housing goals and policies, a socially and economically diverse population that includes families with children, young adults who grew up in the community, senior citizens and those new to Town.

# Chapter 5: Land Use

## 5.1 Introduction

Land use is an important issue in Fayston, and the entire Mad River Valley. Land use decisions affect the quality of life, the character of the community, environmental health and the value of property. Thus these decisions are a legitimate public concern. Balancing the needs and rights of individual property owners with the increasing pressures to protect the Town's scenic quality, natural environment, and public safety will continue to be a significant challenge for the Town.

The scenic and rural quality of the Town is highly valued by both residents and visitors and is considered one of the Town's main assets. Fayston is primarily rural in character, much of the landscape is mountainous, and it remains largely forested. The nature of the terrain has limited potential development. Development concentrations are now found along German Flats Road, Center and North Fayston Roads, Kew-Vasseur Rd, Bragg Hill Rd, Phen-Basin Rd, Stagecoach Rd, Sharpshooter Rd, Tucker Hill Rd, Marble Hill Rd and Harris Hill Rd.

Responses to the Town Surveys of 2006 & 2012 are consistent with a 1999 Fayston Town Meeting Survey citing the preservation of visual and scenic quality in the Town and protection of water, wildlife and other environmental qualities as priority planning goals. This demonstrates that a majority of residents believe that additional development in Town must be consistent with these goals.

Fayston's proximity to local ski areas and to the job markets of the Barre-Montpelier area and Chittenden County, combined with the attractiveness of its rural landscape and quality of life, continue to increase development pressures. Care must be taken to safeguard the environment that makes the Town so attractive to home-buyers. In addition, Fayston's Land Use Regulations must ensure that future development takes into account the multiple effects of climate disruption and provides for a balance between the natural and built environments.

## 5.2 Current Land Use

Current land use and development in Fayston largely reflect the fact that much of the Town consists of high elevation, forested land, with steep slopes and shallow soils. These constraints are reflected in the delineation of the Town's established zoning districts. Fayston has widely distributed residential development, and very limited commercial activity. Existing commercial development is concentrated along Route 17, and at the ski resorts. Agriculture, which once played an important role in Town, is now limited yet more diversified. Silviculture, another important historic activity, is still practiced for both private and commercial purposes.

The principal economic activity of the Town occurs at the two major ski resorts near Route 17 in South Fayston - Mt. Ellen and Mad River Glen. The southern section of Town has historically been the focus of development, and there is still potential for expansion along the German Flats Road. North Fayston continues to experience much of the Town's recent residential development due to its relative proximity to I-89 and the employment centers of Waterbury and Montpelier, and to a lesser degree Burlington. Fayston continues to see an increasing interest in home-based businesses. Because of terrain and Valley-wide development trends, Waitsfield Village and Irasville serve as the principal shopping and

business centers for Fayston residents. The Town does have a very small commercial district adjacent to Irasville, but realistic commercial development is prevented by the limited acreage, extensive wetlands and current residential use in this district.

### 5.2.1 Conserved Lands

Results of the 2012 Town Survey indicate that maintaining Fayston's traditional, rural character is a priority for Fayston residents. A fundamental component of rural landscapes is large tracts of open and/or forested land. Conserving open and forested lands is commonly achieved through the use of conservation easements. A conservation easement is a voluntary legal agreement between a landowner and a qualified conservation organization such as a land trust or a government entity. An easement permanently limits a property's uses in order to protect the natural resource value of the land.

There are currently over a dozen parcels of conserved land accounting for 4,804 total acres or about 21 percent of the total land base in Town (Figure 5-1). Most of these conserved parcels are privately owned; four are publicly owned. The publicly owned parcels include the Camels Hump State Park (including the Phen Basin parcel), the Howe Block State Forest, the Huntington Gap Wildlife Management Area and the Chase brook parcel owned by the Town. See Map 7 for conserved lands.

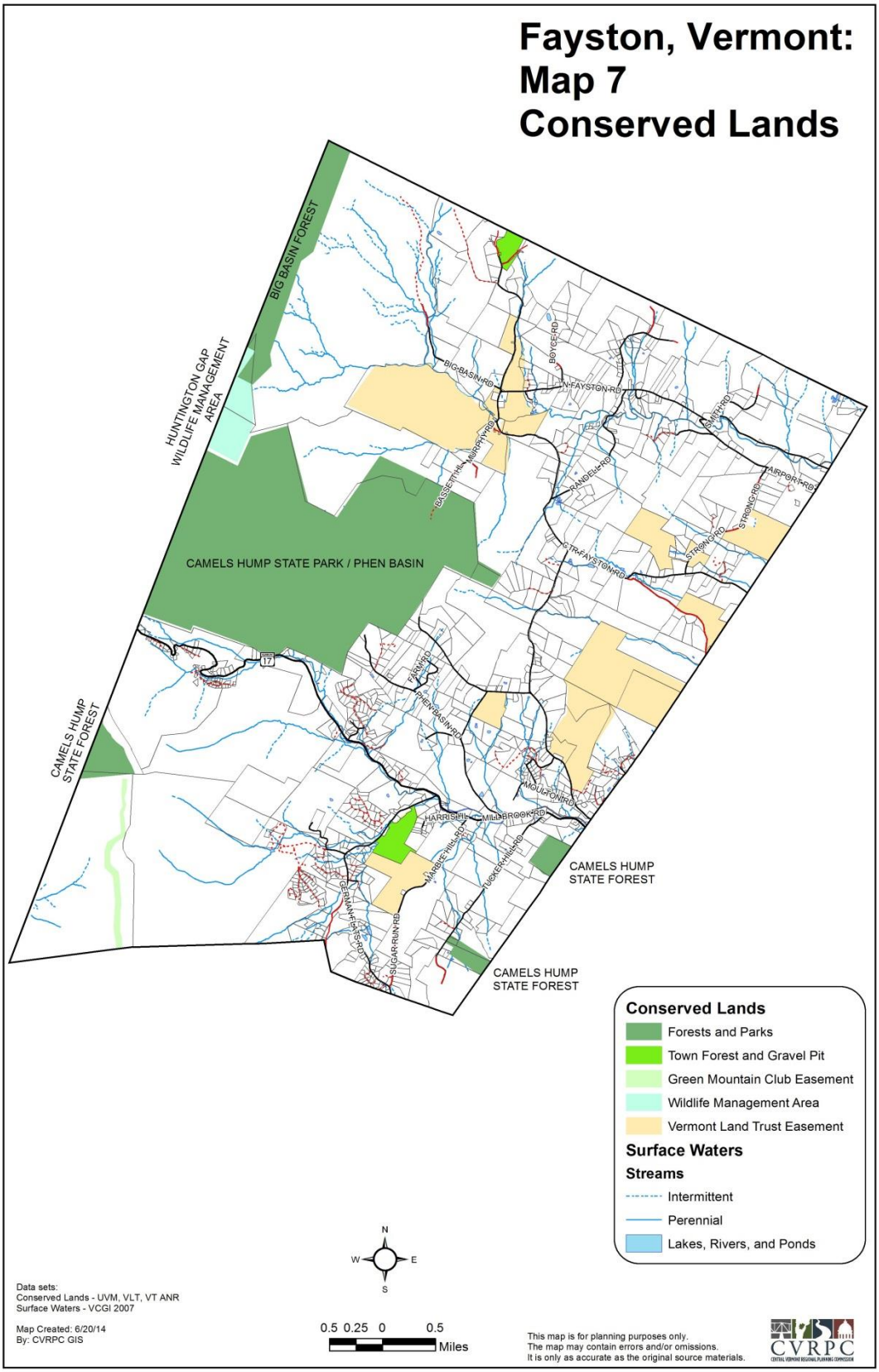
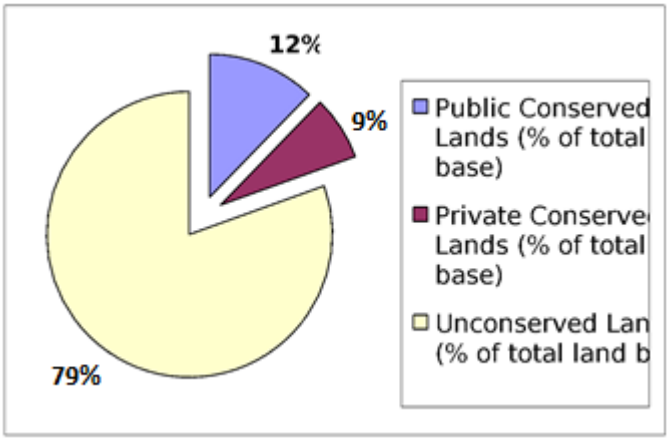

Fayston, Vermont:
Map 7
Conserved Lands
BIG BASIN FOREST
HUNTINGTON GAP WILDLIFE MANAGEMENT AREA
CAMELS HUMP STATE PARK / PHEN BASIN
CAMELS HUMP STATE FOREST
CAMELS HUMP STATE FOREST
CAMELS HUMP STATE FOREST
BIG BASIN RD
BOYCE RD
N FAYSTON RD
SMITH RD
AIRPORT RD
STRONG RD
DANDELL RD
S TR FAYSTON RD
FARM RD
PHEN BASIN RD
MOUL FOND RD
HARRISHILL
MILLBROOK RD
MARBLE HILL RD
TUCKER HILL RD
GRUMAN RD
SUGAR RUN RD
17
Conserved Lands
Forests and Parks
Town Forest and Gravel Pit
Green Mountain Club Easement
Wildlife Management Area
Vermont Land Trust Easement
Surface Waters
Streams
Intermittent
Perennial
Lakes, Rivers, and Ponds
N
W
E
S
Data sets:
Conserved Lands - UVM, VLT, VT ANR
Surface Waters - VCGI 2007
Map Created: 6/20/14
By: CVRPC GIS
0.5 0.25 0 0.5
Miles
This map is for planning purposes only.
The map may contain errors and/or omissions.
It is only as accurate as the original source materials.
CVRPC

**Figure 5-1: Current Land Use**




In 1995 the 2,695 acre Phen Basin tract of forest encompassing the west-central section of Fayston was acquired by the Vermont Agency of Natural Resources (ANR). Phen Basin was formerly owned by American Wilderness Resources, Inc., which liquidated most of its holdings in the Valley in the mid-1990s. The Vermont Land Trust and the Vermont Housing and Conservation Board co-own a conservation easement on the parcel.

Phen Basin now provides an area of large-scale forest management, segments of the Long Trail system, Catamount Trail and VAST trails, an excellent habitat for such deep woods species of wildlife as black bear and moose, two significant beaver-maintained wetland complexes and an important visual resource, as it has ensured the permanent protection of a large stretch of Green Mountains ridgeline. A long-range management plan was completed in March 2002 by ANR's Department of Forests, Parks and Recreation to assure that these values are maintained over time.

In 2005, Fayston, with the Vermont Land Trust, acquired the 72 acre Chase Brook parcel. The project was facilitated by the Mad River Watershed Conservation Partnership and received financial support from myriad individuals, non-profit organizations and businesses. The 72-acre parcel on German Flats Road along the Chase Brook contains key sections of both the Millbrook Trail and the Catamount Trail, along with several other informal neighborhood trails. These trails are popular with cross-country skiers, snowshoers, mountain bikers, and hikers of all ages.

The parcel is also significant due to its close proximity to the Fayston School, and is being used in conjunction with various school programs including the Four Winds Program (formerly known as the Environmental Learning for the Future (ELF) program). Approximately one half of the property is deer wintering habitat. It is an important link in wildlife travel corridors between Camel's Hump State Forest & forestlands to the west and has 3,400 feet of frontage on Chase Brook.

Land conservation can be an important non-regulatory tool for conservation of wildlife habitat, agricultural and forestry resources, and can provide opportunities for outdoor recreation and educational opportunities in Fayston. As demonstrated by the Chase Brook project, partnering in these opportunities can bring successful results. The Mad River Watershed Conservation Partnership and other organizations both inside and outside the Valley can play key roles in bringing conservation

projects to fruition. Fayston will consider taking advantage of land conservation opportunities as they arise.

Privately owned parcels that have been permanently conserved include The Knoll Farm and the Brightenback properties which total 400 acres of rolling meadows and woodland, the 171-acre Farnsworth property, the 65-acre Quackenbush property and a cluster of seven parcels in North Fayston that make up 652 acres. Recent additions totaling over 400 acres include the Bragg Farm, the Jefferys property in center Fayston and the Tenney property on Marble Hill Road.

### 5.2.2 Scenic Quality

The scenic quality of the area is extremely important. Fayston is composed of steep-sided hills and valleys, upland plateaus, fields, forest, mountain streams and small winding roads. The beauty of the surrounding landscape contributes greatly to the local economy and the quality of life in Town. It is the primary reason for attracting high-value vacation home development to the area. Fayston has been able to maintain the scenic quality of the Town because recent development has been primarily low density, often set well back from roads. This practice of low visibility has repercussions, however, as the long driveways which serve to hide houses also cut into wildlife habitat and corridors; keeping homes closer to travelled roadways lessens the impacts on wildlife and forest cover. Further development along Town roads shall be carefully considered so that the mixture of views, open fields, forest and existing buildings does not become overpowered by new development but at the same time does not interfere with necessary wildlife habitat. There is a need to consider what areas of Town are suitable for higher-density development to ensure that scenic views as well as wildlife corridors are maintained.

A variety of tools are available for protecting and enhancing the quality of the landscape. Design-oriented measures can be used along rural roads to reduce the impact of new construction; these include minimal removal of buffer zones and appropriate landscaping to be associated with new structures built along all roads. Limiting development can be effective in protecting environmentally-sensitive areas. Potential methods include: prohibiting development on slopes over twenty-five percent gradient, allowing only limited development on slopes between fifteen and twenty-five percent gradient, and prohibiting most development above 1700 feet elevation. The Town may want to consider establishing a ridge-line/steep slope overlay district. To protect open fields, the Town may want to consider encouraging development to be done in a way that prevents placing houses in the center of an open area.

Non-regulatory measures include working with private organizations such as the Vermont Land Trust to provide opportunities for maintaining open land through the donation of conservation easements. There are significant federal tax incentives for such donations. State tax incentives are also available to qualified agricultural and forest landowners through the Use Value Appraisal Program, also known as Current Use. The Town may also consider offering incentives to maintain open land through a tax stabilization agreement with owners of such land, encourage the use of the transfer of development rights provision of the Fayston Land Use Regulations, or engage in the outright purchase of development rights.

### 5.2.3 Agricultural Lands

Fayston's mountainous terrain and lack of highly productive soils limits agricultural activity in Town. Combined with socioeconomic factors such as the strength of the tourist and second home industries, this has resulted in a drastic reduction of farms in Fayston, where hill farms were once common. There are still small produce, maple sugaring, greenhouse, hay production and livestock operations scattered throughout the Town but for the most part Fayston is much less of an agricultural community than its neighbors Waitsfield and Warren. However, awareness of the importance of locally produced foods is on the rise and several new agricultural endeavors in Fayston may signal a re-emergence of agriculture as a significant part of Fayston's economy. One valuable indication of this is the recent endeavor of the Vermont Land Trust to permanently protect the Bragg Farm, which culminated in the farm's simultaneous conservation and sale to Marisa Mauro of Ploughgate Creamery in December, 2013.

The economic viability of agriculture is dependent upon the availability of suitable farmland. As discussed in section 3.5.3 of the Ecology Chapter, NRCS soils maps identify 78 acres or 0.3 percent of Fayston's soils as prime and 1,535 acres or 6.5 percent of Fayston's soils as statewide agriculture soils (see Map 4).

Unlike neighboring towns, Fayston is almost completely forested and has very little land in open fields. Much of the land that had been used for grazing or agriculture has been allowed to grow back into forest over the past 30 years or has been developed for residential use. The few tracts of open pasture and agricultural land that remain in the Town are highly visible from scenic roads and other vantage points. These lands are also among the most scenic elements of the Town's landscape, characterized by exceptional views. As such, they are highly desirable for residential development; however, statewide agricultural soils are finite and have been designated a state resource. Efforts to maintain Fayston's agricultural land base shall focus, in part, on protecting its statewide agricultural soils to ensure their availability for future agricultural enterprises.

### 5.2.4 Silviculture

Fayston's extensive forest resources provide many benefits to residents, visitors, workers and the ecosystem of the Mad River Valley and preserving them is challenging as Fayston develops.

Fayston's woodlands are all second growth, with a few possible stands of virgin timber on some of the steeper mountain slopes and, like most of Vermont's forest areas, have been extensively used for lumber. While there are a few notable stands of conifers in the Town, the majority of the forest is hardwood or a mixture of hardwood and softwood. As discussed in section 3.5.2 of the Ecology chapter only 9 percent of Fayston's soils have moderate to very high productivity potential.

Fayston's forests provide wildlife habitat, offer recreation opportunities for residents and visitors, and are an essential component of the Town's rural, scenic visual quality so highly prized by residents. Additionally, they provide an economic return for local landowners and workers. Conservation of, and sound forest management of, public and private lands thus becomes an extremely important part of planning and growth management for the Town. Long term planning shall focus in part on identifying and promoting sustainable practices with Fayston's most productive forest lands.

Just as protection of the visual and environmental quality of Fayston's forest resources is essential to many Town Plan goals, forestry is also an important part of Fayston's economy. At issue for Fayston's future is the encouragement of sound forest management of public and private forest lands. Accomplishing this will allow for the support of local industry and provide incentives to keep large tracts of land available for recreation, wildlife habitat, and scenic enjoyment.

Generally, sound forest management plans serve to further multiple objectives including sustainable timber production, protection of water quality, maintaining a diversity of wildlife habitat and enhancing aesthetic quality. Using uneven-aged timber cutting on a 15-20 year cutting schedule is a common practice in many forest management plans, in contrast to even-aged management which can often result in clear-cutting. Forest management plans must also balance timber production with recreation and wildlife protection.

## 5.3 Development Regulations

The Town uses the Zoning Ordinance, initially adopted in 1975 and most recently updated in 2011. The 2004 Land Use Regulations, adopted by the voters in November of that year, combined the Subdivision Regulations and the Zoning Ordinance as the primary tools for regulating land use.

Although many factors influence growth, development, and future land use patterns, the Land Use Regulations provide the Town with the best means of achieving its land use goals. The Regulations allow for higher density development and commercial activities adjacent to the ski areas, allow for residential development in the most easily accessible areas of Town, but restrict development in less accessible or more sensitive areas such as those with steep slopes and at high elevation.

Subdivision Regulations were enacted in Fayston in 1984, primarily to insure that development conforms to the policies set forth in the Town Plan. They also provide public oversight regarding development patterns, the protection of natural resources, and the scenic quality of the Town landscape. There has been concern recently over the development of land at higher elevations and its visual and environmental impact. As land at lower elevations becomes less available, there will be more pressure to develop in areas that were previously considered to be marginal. These regulations have since been incorporated into Fayston's Land Use Regulations, and must be reviewed periodically to ensure compatibility with the Town's land use goals and objectives.

### 5.3.1 Zoning Districts

Land use patterns in Fayston have been largely determined by the physical limitations of the landscape. There are eight districts designated in the plan. Each district has a unique character, specific development standards and land use objectives. The steep slopes and shallow soils found within the Forest, Recreation and Soil Conservation Districts allow for only limited development. The Residential District accommodates most of the Town's growth. The commercial district at Irasville is small and restricted by wetlands; therefore, Fayston residents will continue to use the commercial facilities in Waitsfield for the foreseeable future.

The Town of Fayston consists of approximately 23,360 acres or 36.5 square miles. There are currently eight zoning districts in Fayston. (See Map 8 for the Zoning Districts)

- The **Forest Reserve District** consists of approximately 2,800 acres or 12 percent of Town land. It includes all lands above 2500' elevation.

- The **Soil and Water District** contains approximately 6,400 acres or 28 percent of Fayston land. The district includes lands between the Forest Reserve District and the Rural Residential District.

- The **Recreation District**, encompassing the ski areas, contains approximately 1,600 acres, or 9 percent of the total. It includes all lands bounded by the Soil and Water Conservation District, German Flats Road and Route 17 west of the intersection with German Flats.

- The **Rural Residential District** contains approximately 12,000 acres, or 50 percent of Town land. It includes all lands not in the other districts.

- The **Irasville Commercial District** contains approximately 15 acres, less than 1 percent of land. It is bordered by Waitsfield's Commercial District to the east, and the Rural Residential District to its south, west, and north.

- The **Resort Development District**, located adjacent to the Town's ski areas, contains 330 acres, or 1.4 percent of the Town's land. The District was added to the Town's Zoning Map and Land Use Regulations to accommodate increased activity and development around the ski areas. There are two pieces to this district, one encompassing Sugarbush North Ski Area, and the other encompassing Mad River Glen Ski Area.

- The **Industrial (IN) District** allows for the promotion of well-paying, year-round employment in the Mad River Valley by encouraging the concentration of manufacturing and other compatible uses in an appropriate location that will have minimal negative impact on surrounding properties and the rural character of the community. This area contains approximately 14 Acres bounded by Airport Road on the south and the Mad River Industrial Park (designated by Waitsfield as an Industrial area) on the east.

- The **Flood Hazard Overlay (FHO) District** designates those areas eligible for flood insurance under the National Flood Insurance Program (NFIP). These areas are mainly along Chase brook, paralleling Mill Brook Road (Route 17) and Shepard Brook paralleling North Fayston Road.
  To minimize flooding hazards, Flood Hazard Area regulations limit and regulate development within mapped floodplains that are susceptible to a 1% annual chance of flooding (100-year floodplain). These regulations are required for participation in the NFIP. The Town's regulations were updated in 2010 to meet the NFIP requirements, in association with newly digitized flood maps. At the same time flood area regulations were updated.

Permitted, conditional, and prohibited uses for each Zoning District can be found in the Town of Fayston Land Use Regulations.

## 5.4 Planning Considerations

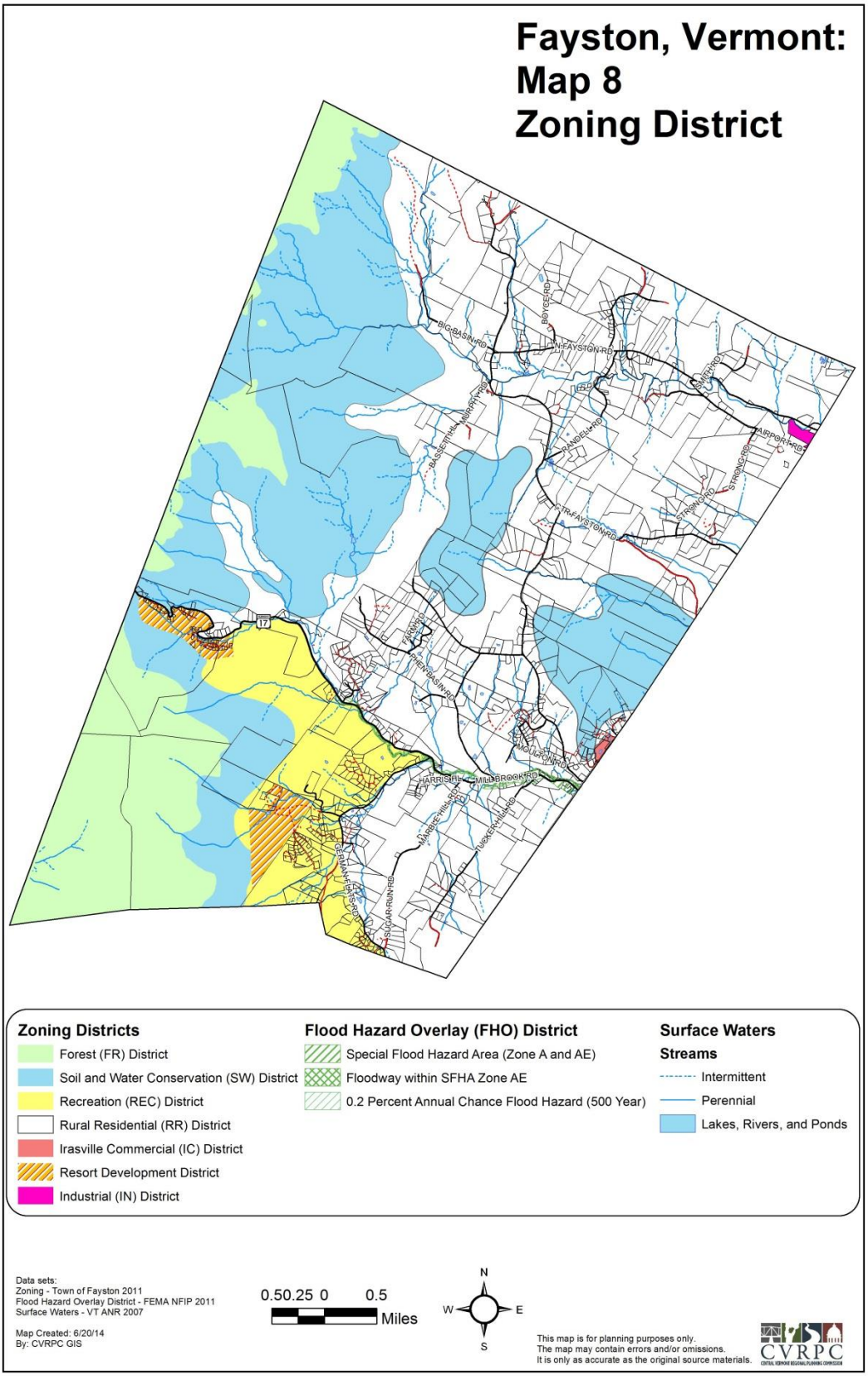
Town Ordinances shall be periodically reviewed to see if they are in accordance with the Town Plan. The plan may need to be updated to address current issues such as the increase in home occupations. Due to recent residential growth, consideration shall be given to adding environmental and landscape protection measures to the site planning process. Also, the Town may want to consider encouraging the preservation and expansion of a recreation trail system which is supported by the 2012 Town Survey results. The FNRC could work with land owners to accomplish this. In addition, new trails that connect into the system could be encouraged within development projects.

Another critical issue is wildlife habitat; as land is developed habitat and wildlife corridors are constrained. The 2012 Town Survey shows all residents and non-residents (93%) supported restricting development in wildlife corridor areas. The Town shall consider developing a conservation protection plan or conservation overlay district that includes a habitat map to guide the development review process. Such a plan shall inform the Development Review Board (DRB) where the habitat and corridor areas are and what the impacts would be if parts of these are lost. In the meantime, the DRB shall use the Mad River Valley Planning Districts Natural Heritage Inventory and Assessment, completed in April 2007, for information to use in their reviews. They shall also work with landowners and developers in providing the least impact to wildlife habitat as site plans are reviewed for approval.

## 5.5 Future Land Use

The most significant land use trend affecting Fayston is continuing population growth taking place in a Town with considerable physical limits on its development potential. The Town experienced a thirty-one percent increase in the number of year-round housing units during the 1990s. Between 2000 and 2010, the Town experienced a thirty-four percent increase in the number of year-round housing units, adding 145 new units. Since 2010, growth has slowed somewhat, as the Town has seen only a four percent increase in the number of year-round units, adding a total of 24 new units. The spread of new residential development across almost all areas of the Town rapidly consumes land by utilizing large lots, access roads and septic systems. Land could be better utilized by clustering where appropriate and feasible.

According to the 2012 Town Survey, a large majority of the Town's residents believe that growth that is consistent with the Town's character should be accommodated, but that the Town shall reasonably restrict how the development occurs. Ninety-five percent believe that new development must preserve important Town features and natural resources. Very large majorities of those surveyed believe that development must be restricted from wildlife habitat, wildlife corridors, on ridgelines, in open fields, wetlands and recreation paths. As the Town continues to grow, Fayston must work toward achieving a balance between ensuring protection of the local ecology and providing housing for residents.


Fayston, Vermont:
Map 8
Zoning District
Zoning Districts
Forest (FR) District
Soil and Water Conservation (SW) District
Recreation (REC) District
Rural Residential (RR) District
Irasville Commercial (IC) District
Resort Development District
Industrial (IN) District
Flood Hazard Overlay (FHO) District
Special Flood Hazard Area (Zone A and AE)
Floodway within SFHA Zone AE
0.2 Percent Annual Chance Flood Hazard (500 Year)
Surface Waters
Streams
Intermittent
Perennial
Lakes, Rivers, and Ponds
Data sets:
Zoning - Town of Fayston 2011
Flood Hazard Overlay District - FEMA NFIP 2011
Surface Waters - VT ANR 2007
Map Created: 6/20/14
By: CVRPC GIS
0.50.25 0 0.5
Miles
N
W
E
S
This map is for planning purposes only.
The map may contain errors and/or omissions.
It is only as accurate as the original source materials.
CVRPC

## 5.6 Zoning Districts

### 5.6.1 Forest District

The Forest District is characterized by scenic ridgelines above 2,500 feet in elevation that create the backdrop for the Town and the Valley. The Green Mountain ridgeline is one of the main attractions for people who want to invest in the community. It is important that the high visual quality of the District be protected. Additional characteristics of the Forest District include shallow soils with poor septic suitability, steep slopes, extensive wildlife habitat and large areas of productive forestland. Forestry and the construction of ponds are the only permitted uses in the District. This area has the most severe limitations for building and development; however, some conditional uses are permitted.

It is likely that the growing demand for recreation opportunities will increase pressure on the extensive, informal trail system within the Forest District. Opportunities exist for formalizing the trail system through the efforts of the Mad River Path Association, Green Mountain Club, Catamount Trail Association and other organizations. The conservation of Phen Basin by Vermont Land Trust provides approximately 2,695 acres of wildlife habitat and provides some recreational opportunities for the community. Other opportunities for protecting large areas of forestland from development may become available in the future.

There are important environmental considerations and limitations for this district. The Forest District provides large undisturbed areas of wildlife habitat for black bear, moose and bobcat that shall be protected. Building on the steep slopes within the district shall not be allowed because of the environmental impacts associated, such as erosion and increased stormwater runoff. The visual impact of increased development on the Town's forested hillsides shall also be considered, as this could reduce the scenic and visual quality of the Town that is so important to the residents. The steep slopes and shallow soils in the Forest District make building difficult and expensive. Access to Town and Emergency Services is limited by the steep, narrow roads. The Forest District shall be maintained as it is to protect forest resources and headwater streams from development.

### 5.6.2 Soil and Water Conservation District

This District also has severe physical limitations for development, and any development must be sited with extreme care. Limitations in the district include slopes above thirty percent grade, shallow soils (bedrock within 3' of surface), wetlands, poorly drained soils and a significant amount of wildlife habitat. The serious environmental constraints require that only low-density development be allowed. Within the District, the minimum lot size for a single dwelling is five acres; however, some areas within the District may require as much as 25 acres to accommodate a dwelling, driveway, well and sewage disposal system. The Soil and Conservation District and the Forest District share many of the same limitations; however, in the Soil and Conservation district there is better access to services and utilities.

As in the Forest District, the impact on Town Services and access to Emergency Services need to be considered. The Town shall also bear in mind the further fragmentation of the landscape that could be caused by private road building and the continued creation of large residential lots. Development in this District also has the potential to cause erosion and increased runoff. Any additional subdivisions shall be

sited carefully with attention given to preserving existing features, landscape protection and the potential impact on the environment and scenic views.

### 5.6.3 Recreation District

The Recreation District is located in the southwest region of the town. Concentrated development in the form of multi-family dwellings may be desirable in the vicinity of the ski resorts and may be allowed through the Planned Residential Development (PRD) provision of the Zoning Ordinance. For future development to occur in the form of a compact settlement pattern, a sewage treatment facility may be required. Such a system may have the potential for serving an area beyond the immediate base and may require disposal sites outside the Recreation District. The type and character of future development, particularly along the German Flats Road and Route 17, will have a significant impact on the scenic beauty of the area.

Currently, most commercial uses are allowed only through the Planned Unit Development (PUD) provision of the Zoning Ordinance. The PUD allows for greater flexibility in site design than would be permitted under conventional zoning. Within the PUD commercial facilities, recreation facilities and neighborhood grocery stores can be considered. Coordination between the Town, Sugarbush and Mad River Valley Planning District will continue in regards to further development at the resort. The goal is to find an appropriate balance between development and capacity at the ski areas.

An increase in either ski area activities or development patterns has warranted the addition of the Recreation District. Given the existing constraints of steep slopes and shallow soils, much of the land in the District is difficult and expensive to develop. Through the use of the PRD and PUD provisions, development will continue to be allowed adjacent to the ski areas.

### 5.6.4 Rural Residential

The Rural Residential District covers 12,000 acres. Comprising almost fifty percent of land in Town, it is the largest of the zoning districts. Although the entire district is treated the same in the existing Zoning Ordinance, the development pressures and trends vary among different areas within the district. Within the Rural Residential District there are distinct areas such as Mill Brook, Bragg Hill, Center and North Fayston as delineated by roads, natural features and settlement patterns. The increased demand for residential building sites has put pressure on the Town to allow development at higher elevations where shallow soils, steep slopes and accessibility may be problematic.

The portion of the Rural Residential District that lies within the Mill Brook drainage basin contains the greatest area of valley bottom and gentle slopes within the Town. This area is well served by State highways. Since it is also close to the two ski areas, past development has been characterized by a greater mix of commercial enterprises and tourist-related land uses than elsewhere in Town. Within the Rural Residential District, a variety of uses are allowed conditionally, such as (but not limited to) bed-and-breakfast establishments, private clubs, camps or schools, cross country ski facilities and some professional offices. The same mix of residential and commercial is found along the eastern side of the German Flats Road. Additional high-density development, such as multi-family dwellings, may be permitted in the area through the use of the Town's Planned Residential Development (PRD) provision.

Bragg Hill offers some of the area's most stunning views. The open fields and dramatic topography make it an attractive area for residential growth. The demand for large lots with views continues to be strong, and it is likely that there will be additional residential development pressure in the area. Any additional development shall be carefully planned to protect natural and aesthetic resources. Between 1994 and 2006, over 100 new parcels were created in Fayston. Approximately one third of them are located in Center Fayston. Many of these parcels have not yet been developed, and restrictions on further subdivision shall be considered, taking into account the numerous undeveloped lots already in existence. The Town has recently experienced substantial growth along Sharpshooters, Randell, and German Flats Road. The wooded hillsides of the area shield some of the new residential development from view and protect the rural atmosphere to a degree.

The area of North Fayston is defined by Shepard Brook, which drains a broad basin through a narrow valley. The basin and gentle slopes of the area allow for residential development. A small, historic settlement exists adjacent to one of the Town cemeteries. In recent years, a number of new single-family homes have been built in the area. However, as with most other areas in the Town, the development has been low-density, which has both benefits and drawbacks which must be balanced. As development increases in this area, scenic quality and wildlife habitat will be compromised, unless the development is carefully planned. Commercial development, such as lodging is not encouraged. However, convenience services for residents may be considered.

As the Town develops, it shall be remembered that, according to residents, the rural character and scenic quality of the Town is an important planning goal, and the Town may want to look into ways, including the adoption of standards, that help protect these valued qualities. Also, impacts on the Town's road system need to be considered. The pattern of development should maintain the viewscape of forested hillsides, open fields and views. Through existing regulations, the Town can encourage environmental and landscape protection during the subdivision process. Good site planning shall be promoted and can be a key to protecting the Town's natural resources and scenic quality. When making development decisions, consideration shall be given to maintaining existing wildlife habitat and associated corridors. The Town may want to consider adopting standards in the future to protect ecological features, including but not limited to wetlands, steep slopes, streams and ridgelines, as well as scenic resources. Environmental and landscape protection shall be the primary design criteria for new subdivisions.

Even with alternative system technology available, septic suitability will continue to be a determining factor in the growth and location of residential development in Fayston. The possibility of a municipal water system in Waitsfield may allow for medium density or clustered housing to be developed near the intersection of Routes 17 and 100 in the future, once adequate septic capacity is designed and implemented. An increase in home occupations indicates that Fayston should continue to revise ordinances to allow suitable businesses, while maintaining the residential character of the district.

### 5.6.5 Irasville Commercial District

Allowed in this district, as conditional uses, are a number of medium density commercial office and business activities. However, because such a small portion of the district is actually within the boundaries of Fayston, its development potential is uncertain. The types of businesses that Fayston

residents feel should be most encouraged, according to the 2012 Survey, are light farming and sugaring, value-added agriculture, tourism, and outdoor recreation businesses.

Only fifteen acres of the Irasville Commercial District are within the boundaries of Fayston. It is unlikely there will be any development for the foreseeable future. Fayston should continue to encourage the Town of Waitsfield to develop the Irasville Growth Center as the Mad River Valley's downtown commercial center.

### 5.6.6 Resort Development District

This District is intended to encourage the development of a compact, mixed use growth center at the bases of the Sugarbush (Mount Ellen Base Area) and Mad River Glen ski areas.

Development in this District should accommodate four-season resort activities, and shall occur in accordance with comprehensive base area planning that establishes a clear indication of the desired and anticipated pattern of future development. As this area develops, there shall be such considerations as an integrated street network, pedestrian orientation, shared parking, elimination of expansive surface parking lots, focal points, adequate infrastructure, and access management. Town and ski area officials shall continue to work together to ensure that the future development occurs in a manner that creates a pattern and scale of development that balances the Town's planning goals with the ski areas' economic goals.

### 5.6.7 Industrial District

The purpose of the Industrial District is to promote well-paying, year-round employment in the Mad River Valley by encouraging the concentration of manufacturing and other compatible uses in an appropriate location that will have minimal negative impact on surrounding properties and the rural character of the community.

### 5.6.8 Flood Hazard Overlay District

The purposes of this district are (1) to protect public health, safety, and welfare by preventing or minimizing hazards to life and property due to flooding and (2) to ensure that private property owners within designated flood hazard areas are eligible for flood insurance under the National Flood Insurance Program (NFIP).

Development in the overlay district is limited, subject to special design standards, or prohibited. Most development in this district requires conditional use approval from the Development Review Board and documentation that applicable state permits or certifications have been obtained.

## 5.7 Land Use Goals and Objectives

**Goal 5.1 Guide land development in a manner which preserves important community resources, encourages a range of land uses in the appropriate locations, and maintains a reasonable balance between community-imposed limitations on land use and the rights of individual land owners.**

Objective 1: Administer and enforce land use regulations that recognize distinct districts and regulate land use activities to ensure compatibility with the purpose of the respective districts.

Strategies

a. Maintain the Forest District to protect significant forest resources and headwater streams and to limit development in areas with steep slopes, shallow soils, wildlife habitat, fragile features, scenic resources and poor access to Town roads, facilities and services.

b. Maintain the Rural Residential District to encourage low-density residential development; allowing moderate or higher-density residential development in appropriate locations and; encouraging continued agricultural and forestry practices; and preserving rural resources and natural features.

c. Carefully plan development in the North Fayston area so that scenic quality is not compromised; larger-scale commercial development that is out of context with the rural residential character of the area shall not be encouraged.

d. Maintain the Recreation District for the purpose of encouraging tourist accommodations, vacation homes, recreation and cultural facilities and winter recreation facilities, including ski resorts, in a manner compatible with the protection of the Town's rural resources.

e. Continue to work with ski area officials in the Resort Development District to ensure that the future development occurs in a manner that creates a pattern and scale of development that balances the Town's planning goals with the ski areas' economic goals; consider an integrated street network, pedestrian orientation, shared parking, elimination of expansive surface parking lots, focal points, adequate infrastructure, and access management for this district.

f. Review and revise the Town's Zoning Ordinance and Subdivision Regulations on a regular basis to identify and correct technical deficiencies, ensure compatibility with the Town Plan, and to make substantive revisions identified elsewhere in the Plan.

g. Review administration and enforcement practices related to zoning and subdivision regulations and ensure that all standards and associated permit conditions are efficiently administered and strictly enforced.

h. Refer to the goals, objectives and strategies set forth in this Town Plan during all conditional use, PUD/PRD, subdivision reviews, and all state and regulatory reviews.

i. Maintain permit tracking, record keeping and filing systems to ensure consistent and complete land use data.

j. Implement all objectives and strategies set forth in this Town Plan regarding the preservation of the Town's rural resources, natural features and the continued viability of farming and forestry.

Objective 2: Encourage the efficient and sustainable use of land and inhibit the further fragmentation of Fayston's rural landscape, and ensure that development does not undermine the community's rural character and quality of life.

Strategies

a. Continue to consider taking advantage of land conservation opportunities, using such non-regulatory measures as conservation easements, tax stabilization agreements or purchase of development rights.
b. Maintain communication with the FNRC to further conservation efforts in the Town.
c. Encourage the preservation and expansion of a recreation trail system. The FNRC should work with land owners and the Mad River Path Association to help preserve and expand the recreation trail system within the Town.
d. Development review should consider opportunities for the addition of new recreation trails that connect into the existing trail system and such trails should be encouraged within development projects.
e. Through the Fayston Land Use Regulations, require that land subdivision be designed to ensure that the pattern of future development does not adversely impact the Town's natural features, rural resources and scenic character; encourage such means as clustering, flexible development standards, limited densities and the preservation of significant features through conservation easements and/or protective deed covenants.
f. Encourage the use of PRDs in order to maintain a balance between density and preservation of open space.
g. In maintaining the Town's agricultural land, focus efforts, in part, on protecting its statewide agricultural soils to ensure their availability for future agricultural enterprises, and update Land Use Regulations accordingly.
h. Identify the Town's most productive forest lands and promote sustainable silviculture practices for these lands.
i. Carefully consider development along Town roads so that the mixture of views, open fields, forest and existing buildings does not become overpowered by new development; consider adopting standards to enhance the quality of the landscape, using such techniques as minimal removal of buffer zones, landscaping in conjunction with new structures built along all roads, and encouraging that development be done in a way that locates buildings at the edge of the field or in the wooded portion of the property.
j. Consider identifying forest ownership patterns for parcels of less than 50 acres, determine what management plans are in place, educate regarding connectivity issues, and so forth.

Objective 3: Maintain an overall high level of site design and environmental protection throughout Town.

Strategies

a. Review and revise conditional use standards in the Forest Reserve District and lands at higher elevations/ and or steep slopes to address the impact of land uses on adjacent properties, neighborhoods and the greater community.
b. Continue to review land uses permitted in each zoning district, and identify uses which, because of natural features, impact on the environment or public safety, or other adverse conditions, may be inappropriate, and revise the land use regulations accordingly.
c. Continue to keep Section 6.3 of the LUR up to date referencing current studies and technology to protect natural resources and fragile features, including wetlands, headwater streams, steep slopes, view sheds, and wildlife habitat.
d. Consider establishing a ridge-line/steep slope overlay district.

e. Continue to promote good site planning as a key to protecting the Town's natural resources and scenic quality in harmony with Section 3.4 of the LUR. Keep this section 3.4 of the LUR up to date with current information, technology and environmental studies.
f. Keep standards Contained in Section 3.4 & Section 6 of the LUR for the protection and enhancement of surface and groundwater quality, including but not limited to, maintaining building and septic setbacks from streams and wetlands, and consider a minimum undisturbed setback along streams.
g. Continue to work with the Vermont Land Trust, Mad River Watershed Conservation Partnership and other conservation organizations to protect significant natural resources.
h. The Planning Commission and FNRC should work together to develop a wildlife habitat protection plan that includes a habitat map to help guide the development review process to help guide the DRB in their decisions.
i. Until such a plan is in place, the DRB should use the Mad River Valley Planning Districts Natural Heritage Inventory and Assessment, completed in April 2007, for information to use in their reviews. They should also work with the landowners and developers in providing the least impact to wildlife habitat as these owners develop their site plans.

Objective 4: Balance infrastructure and transportation improvements and any other potential development effects that may influence Town costs with land use policies, and ensure that growth and development occurs at a rate and scale that do not overburden community facilities or services.

Strategies

a. Continue to prepare and adopt an annual capital improvements program to identify capital needs; ensure that capital improvement planning is coordinated with land use planning.
b. Consider requiring a phasing plan for large developments and major subdivisions when necessary to ensure that the rate of development does not overburden Town services and facilities.
c. Support the Memorandum of Understanding between the Mad River Valley towns and Sugarbush Resort to maintain a balance between ski area expansion and the Valley's capacity to accommodate additional resort-related growth and activity.
d. Maintain a balance between the number of commercial accommodations (beds) and on-mountain ski area capacity.
e. Through the Land Use Regulations, ensure that large scale developments and major sub divisions do not result in significant diminishment of highway safety or existing levels of service (LOS).
f. Consider assessing impact fees to pay for needed capital improvements (such as schools, roads, or for other necessary mitigation) which are a direct consequence of any new development.

# Chapter 6: Housing

## 6.1 Introduction

Housing supply, affordability, and location impact local economic development, land use, the environment, traffic patterns, road maintenance, school enrollment and other Town services. Fayston's appeal as a place to live for families, retirees, and outdoor enthusiasts has led to increased population, development pressure, and higher housing costs. This chapter addresses year-round and seasonal housing trends since 2000, as well as the policy considerations that Fayston needs to address.

## 6.2 Housing Trends Since 2000

Demand for housing in Fayston is driven by the several types of residents that live in Town: full-time residents, second-home owners, and seasonal residents. A number of other factors also impact demand, and these include:

- A trend toward smaller household sizes which requires more housing, even without an increase in population.
- Rapid growth over the past few decades.
- A trend toward larger house and lot sizes.
- The aging of Fayston's population, including projections of significant increases in the numbers of householders over 60 years of age, and a corresponding decrease in young adults and children.
- Uncertainty regarding the effects of climate disruption on movement both to and from the area.

Since 2000, the proportion of full-time residential to vacation homes in Fayston has been approximately equal. According to Grand List, in 2000 there were 430 full-time residential and 453 vacation homes, for a full-time/vacation ratio of 49/51 percent. In 2007, there were 468 full-time residential and 510 vacation homes, for a full-time/vacation home ratio of 48/52 percent. And in 2012, there were 460 full-time residential and 529 vacation homes, for a full-time/vacation home ratio of 47/53. However, it should be noted that these numbers may be slightly inaccurate due to the practice of listing non-owner occupied homes as vacations homes when many are rental units for full-time residents. In comparison, the 2010 U.S. census indicates that 15 percent of the non-residential homes are year round rental properties.

## 6.3 Housing Stock

Fayston's housing stock consists primarily of single family homes (see Table 6-1). In 2013, 792 of Fayston's 988 housing units were single family homes; 17 were mobile homes and 179 were condominium units.

**Table 6-1: Housing Stock 2007-2012**

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|
| R-1 | 288 | 287 | 284 | 285 | 284 | 287 |
| R-2 | 146 | 141 | 139 | 141 | 142 | 146 |
| Mobile | 20 | 22 | 21 | 19 | 19 | 17 |
| VAC-1 | 260 | 261 | 261 | 266 | 268 | 267 |
| VAC-2 | 84 | 89 | 93 | 93 | 92 | 92 |
| Condos | 180 | 180 | 179 | 179 | 179 | 179 |
| Total | 978 | 980 | 977 | 983 | 984 | 988 |

*Source: Fayston Grand Lists*
*Notes: R-1 indicates residential properties situated on less than 6 acres,*
*R-2 indicates residential properties situated on more than 6 acres.*
*VAC-1 indicates vacation properties situated on less than 6 acres,*
*VAC-2 indicates vacation properties situated on more than 6 acres*
*Condominiums are vacation residences, except for 14 year round.*

In 2007, 80 percent of all housing units were single-family dwellings, 18 percent were multiple-unit buildings (condos or townhouse) and less than 2 percent were mobile homes (see Table 6-2). In 2012, the percentages remained approximately the same. These figures indicate that the composition of Fayston's housing stock is not changing.

**Table 6-2: Fayston Housing Types 2007 and 2012**

| Housing Type | 2007 | 2012 | %Change |
|---|---|---|---|
| Single Family | 778 | 792 | 2.0% |
| Multiple Unit | 180 | 179 | -0.5% |
| Mobile Home | 20 | 17 | -15% |
| Total | 978 | 988 | 1.0% |

*Source: Town of Fayston Grand Lists, 2007 and 2012*

The large majority of full-time residents (80%) own their homes and a majority own single family homes. The 2012 Town Survey indicates that 54% live in houses with three bedrooms, 14% live in houses with two bedrooms and 20% live in houses with four bedrooms, and a very small number live in houses with either one bedroom or more than four bedrooms (see Table 6-3).

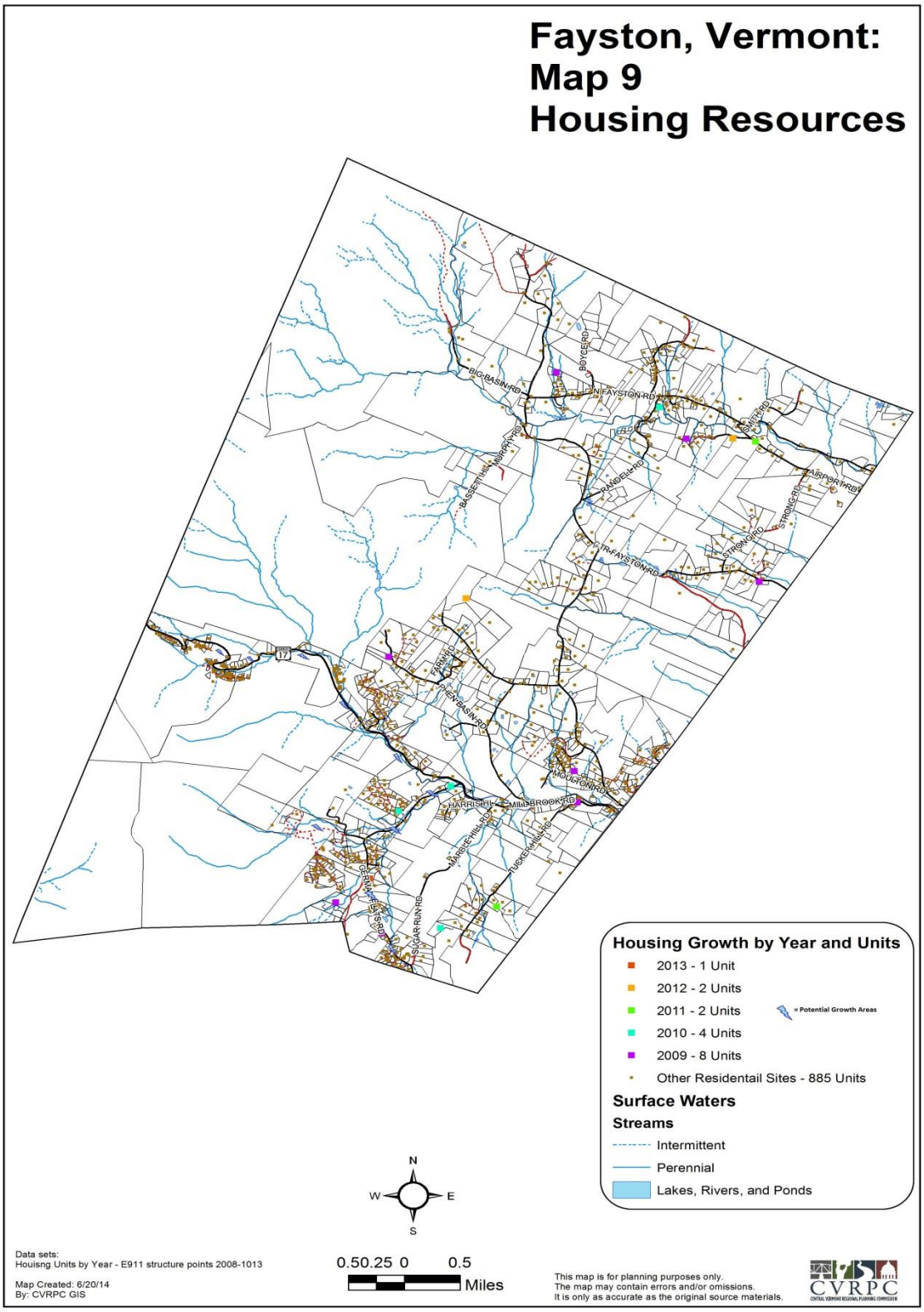

Fayston, Vermont:
Map 9
Housing Resources
BIG BASIN RD
N FAYSTON RD
BOYCE RD
BASSETT HILL NORTH RD
RANDEL RD
AIRPORT RD
STRONG RD
FOR FAYSTON RD
ARMY RD
HEN BASIN RD
HARRIS HILL RD
MILLBROOK RD
MOULTON RD
MARCHE HILL RD
TUCKER HILL RD
SUGAR RUN RD
Housing Growth by Year and Units
2013 - 1 Unit
2012 - 2 Units
2011 - 2 Units
2010 - 4 Units
2009 - 8 Units
Other Residentail Sites - 885 Units
= Potential Growth Areas
Surface Waters
Streams
Intermittent
Perennial
Lakes, Rivers, and Ponds
N
W
E
S
Data sets:
Houisng Units by Year - E911 structure points 2008-1013
Map Created: 6/20/14
By: CVRPC GIS
0.50.25 0 0.5
Miles
This map is for planning purposes only.
The map may contain errors and/or omissions.
It is only as accurate as the original source materials.
CVRPC

**Table 6-3 Fayston bedrooms per house as percentages**

| Number of Bedrooms | Percent |
|---|---|
| 3 bedrooms | 54% |
| 2 bedrooms | 14% |
| 4 bedrooms | 20% |
| 5+ bedrooms | 7% |
| 1 bedroom | 4% |

*Source: 2012 Town Survey*

Fayston's housing stock is also relatively new and generally in good condition. Less than 5% of the Town's housing stock was built before 1940. Older homes have generally been updated over the years to incorporate modern conveniences. Census data indicate that all housing units in Fayston have complete plumbing and kitchen facilities.

## 6.4 Housing Costs

The median cost of residential housing in Fayston had been steadily increasing until 2007, when prices began to decline. Since 2007, the median price for residential property on six acres or more has fluctuated greatly, whereas the median price for residential property on less than six acres has risen steadily. The median cost of vacation homes on over six acres has widely fluctuated, mainly because sale volumes are low at one or two per year. On the other hand, the median cost of vacation homes on property less than six acres has declined steadily since 2008.

**Table 6-4 Median Home Prices: 2007-2012 (000s)**

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|
| Residence Under 6 Acres | $210 | $330 | $250 | $257 | $256 | $221 |
| Residence Over 6 Acres | $560 | $871 | $665 | $225 | $428 | $427 |
| Vacation Under 6 Acres | $250 | $270 | $105 | $225 | $227 | $168 |
| Vacation Over 6 Acres | $475 | $1,300 | $553 | $680 | $0 | $0 |
| Condominiums | $214 | $164 | $134 | $156 | $80 | $0 |

*Source: State of Vermont Property Transfer Tax System*

Relative to other Mad River Valley towns, in 2011 and 2012, the median sales price of residences on less than six acres was highest in Waitsfield, followed by Fayston and then Warren (see Table 6-5). For the same two years, the median sales price of vacation homes on less than six acres was highest in Warren,

followed by Fayston and then Waitsfield. (These prices can also fluctuate widely due to low sales volumes.)

**Table 6-5 Valley-Wide Median Sales Prices of Homes with Less than 6 Acres (000s)**

| | 2011 | 2012 |
|---|---|---|
| **Fayston** | | |
| Full-Time Residence Under 6 Acres | $256 | $221 |
| Vacation Under 6 Acres | $227 | $168 |
| **Waitsfield** | | |
| Full-Time Residence Under 6 Acres | $283 | $240 |
| Vacation Under 6 Acres | $171 | $105 |
| **Warren** | | |
| Full-Time Residence Under 6 Acres | $200 | $178 |
| Vacation Under 6 Acres | $245 | $196 |

*Source: State of Vermont Property Transfer Tax System*

In recent years, there has been an increased trend toward development in widely scattered locations, leading to fragmentation of Fayston's open space, wooded areas and hilly areas. Sales of vacation homes on over six acres has been slow since 2007, zero to two sales per year. Sales of residential homes with over six acres of land had slowed since a peak of nine in 2005 (see Table 6-6). However, this trend substantially changed in 2012, which saw a total of eleven sales of residences over six acres. Although in decline since 2005, 2012 saw resurgence in total home sales.

**Table 6-6 Residential and Vacation Home Sales: 2007-2012**

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|
| Residence Under 6 Acres | 10 | 9 | 11 | 4 | 7 | 10 |
| Residence Over 6 Acres | 5 | 3 | 4 | 4 | 2 | 11 |
| Vacation Under 6 Acres | 3 | 5 | 3 | 7 | 10 | 10 |
| Vacation Over 6 Acres | 2 | 1 | 2 | 1 | 0 | 0 |

*Source: State of Vermont Property Transfer Tax System*

One of the major factors that drive housing demand is population growth. Between 2000 and 2010, Fayston's population grew by 213 residents and the town added 16 new year-round housing units (1.6 units yearly) or roughly 1.6 new year-round units for every 21.3 new full-time residents. The *Central Vermont Regional Housing Distribution Plan* estimates that there was a demand for 103 units within this time frame. This same plan estimates that, based on the projected 2020 population, that there will be a demand of 223 housing units between 2010 and 2020. (See Table 6-7). This translates into 22 new housing units per year. However, based a much lower level of construction between 2000 and 2010 (1.6 units per year), the number of pre-existing homes currently on the market, and that many subdivisions have been approved without subsequent construction, the total projection of 22 units per year between 2010 and 2020 is much higher than what is actually anticipated.

Another factor is economic conditions. For a long time the trend was for the larger towns in Central Vermont to contribute a lower percentage of the regional housing due in part to lower land costs in rural areas. This is no longer true. Land costs are higher in Fayston than in Washington County's larger communities. High gasoline prices can also contribute to people's desire to live closer to population centers, reducing their willingness to commute long distances.

There are also other variables that will affect the construction of new homes in Fayston. Many of these indicate that rural areas may become less attractive, which could reduce the demand for both full-time and seasonable homes. These variables include:

- An aging population.
- Trends toward building smaller and greener homes.
- A desire to achieve a more appropriate balance between resource protection and the need for new housing.
- Opposition to new housing development.

So in spite of there being a small resurgence of home sales the last two years, it is too soon to predict that there will be another housing boom in Fayston. With the lack of affordable housing/home sites in the town, especially in these economic times, other towns in the region may continue to draw the market, leading to fewer housing sales and construction in Fayston.

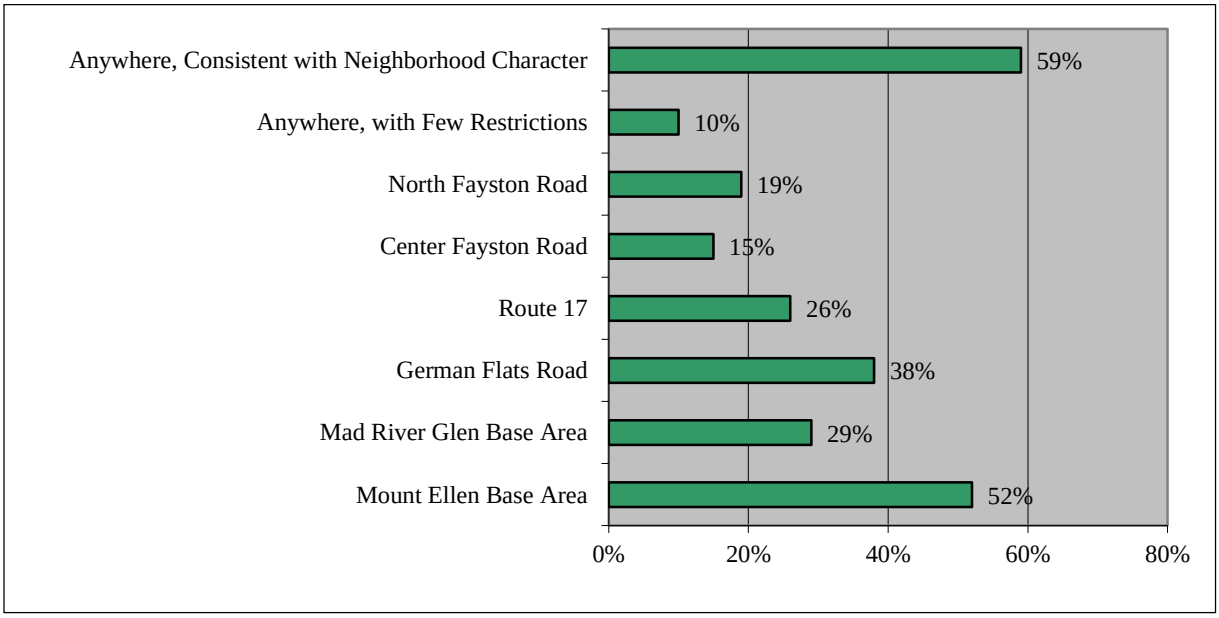
**Table 6-7 Fayston Housing Distribution From CVRPC Plan**

| Time Span | 2000-2004 | 2005-2009 | 2010-2014 | 2015-2020 | Total (20 years) |
|---|---|---|---|---|---|
| # of units | 48 | 55 | 89 | 134 | 326 |

## 6.5 Appropriate Areas for Development

A large majority of residents believe that there are appropriate areas for residential development. However, there is a wide disparity of views on where those areas are. The areas that received the highest levels of support for residential development, were anywhere in Town, consistent with neighborhood character (59%), and the Mount Ellen base area (52%) (Figure 6-1). These were followed by German Flats Road (38%), Mad River Glen base area (29%), and Route 17 (26%). Only 10% believe that development is appropriate anywhere with few restrictions.

**Figure 6-1 Most Appropriate Areas for Residential Development**




*Source: 2012 Town Survey*

Map 9, Housing Resources, shows the location and number of units created since the adoption of Fayston's last Town Plan in 2008. In spite of efforts to concentrate housing, the trend has continued to be widely scattered. Only some of the housing has been in the four preferred areas of Route 17, German Flats Road, and the base of the two ski areas. The Town of Fayston should consider the creation of growth centers in these areas, where higher density housing—higher than what the Town has been traditionally developing—and affordable housing projects can be encouraged. Map 9 also shows the location of these areas.

## 6.6 Seasonal and Other Special Housing Needs

Seasonal employment at Mad River Glen and Sugarbush produces demand for seasonal housing that historically has been difficult to meet. However, data from Sugarbush Resort now suggests that there is enough housing in the Mad River Valley for most of its employees. For both the 2009-2010 and 2010-2011 seasons, approximately 44 percent of Sugarbush employees lived in one of the three Valley towns. (*Source: Mad River Valley Planning District, 2010 Report.*) Mad River Glen, on the other hand, largely employs Valley residents, and therefore does not provide nor seek housing for any of its employees.

## 6.7 Housing for People Who Are Elderly or Disabled

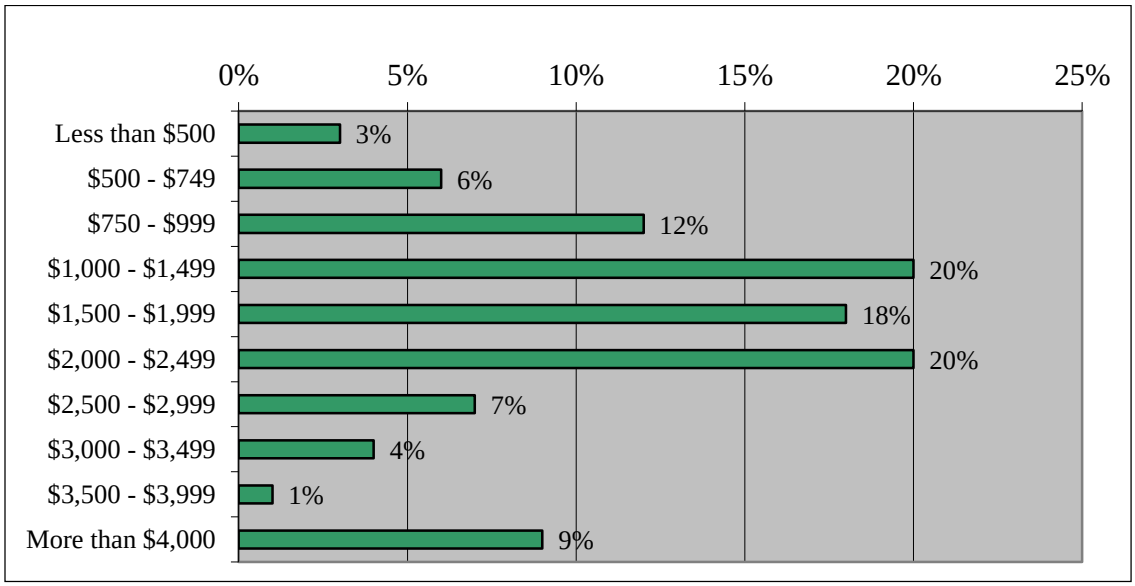
In 2006, Central Vermont Community Land Trust spearheaded the expansion of Evergreen Place in Waitsfield. Evergreen Place provides eighteen units of affordable housing for elderly or disabled residents, and houses the Senior Citizen Center and the local food bank.

For future development, the needs of elderly and disabled residents may be best served by finding housing in close proximity to food, banking and medical facilities, thereby providing independence that would not otherwise be possible. Although Fayston does not have such centers, there are parts of Fayston adjacent to Waitsfield's Irasville in which affordable housing may be appropriate. Outside of this area, it is unlikely that these needs would be well served in Fayston, but rather in our neighboring communities.

## 6.8 Housing Affordability

Housing costs vary widely. Based on the 2012 Town Survey, approximately 38% of Survey respondents pay between $1,000 and $2,000 per month for housing. (These costs include mortgage costs, taxes, and utilities for homeowners, and rent plus utilities for renters.) Approximately 12% pay $750 to $999 per month, 6% pay $500 to $749 per month, and 3% pay less than $500 per month. A total of 41% pay more than $2,000 per month.

**Figure 6-2: Monthly Housing Costs**

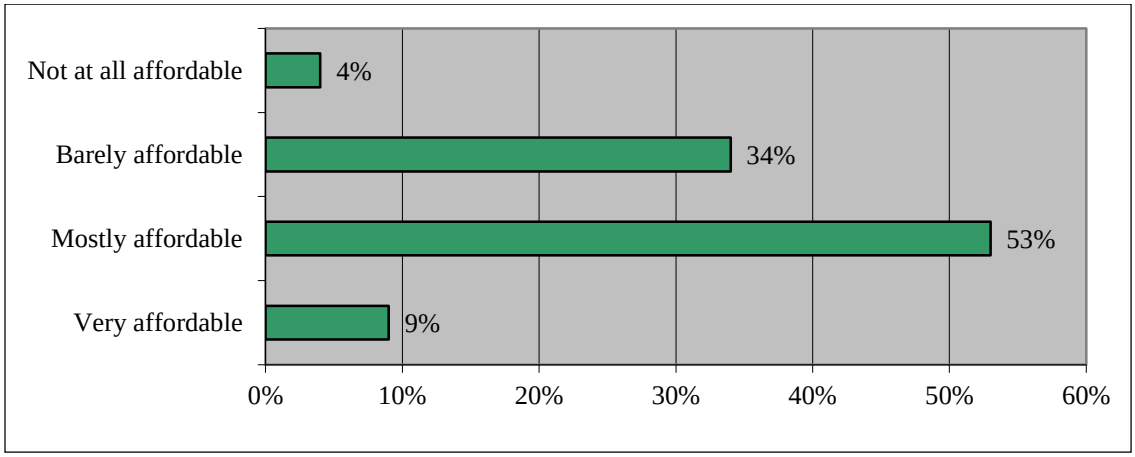



*Source: 2012 Town Survey*

A majority of Fayston households (62%) consider their own housing costs to be mostly or very affordable (see Figure 6-3). Nonetheless, a large portion of respondents (34%) consider their housing costs to be "barely" affordable, and 4% consider their costs to be "not at all" affordable.

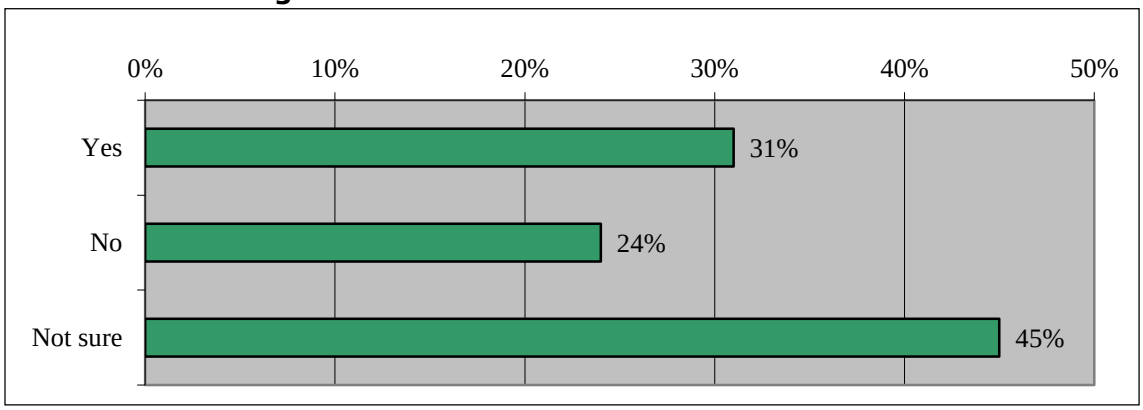
There is a significant level of concern about housing affordability. Approximately 31% believe that the Town should "become more actively involved in encouraging the development of affordable housing" (see Figure 6-4). On the other hand, nearly 24% do not believe that the Town should become involved, and 45% are not sure.

**Figure 6-3: Attitudes on Affordability of Own Residence**




*Source: 2012 Town Survey*

**Figure 6-4: Opinions on Whether the Town Should Become More Involved in Affordable Housing**




*Source: 2012 Town Survey*

For future development, the most appropriate sites for more affordable workforce housing would be in close proximity to jobs, food, banking and medical facilities. Although Fayston does not have such centers, there are parts of Fayston adjacent to Waitsfield's Irasville in which affordable housing may be appropriate, as well as potentially at the base of Mad River and Mt Ellen ski areas.

In addition, approximately one quarter of Fayston residents (26%) would consider providing an accessory apartment for others to rent. (An "accessory apartment" is defined as a separate living unit created within, or adjacent to, a single-family home and occupied by either a family member or a non-family tenant.) Approximately 24% responded that they would not consider providing an accessory apartment. The largest number of responses (36%) indicated that it would not be practical or possible, while 8% were not sure and 5% already have done so.

There are a number of other options that Fayston should consider to encourage the development of more affordable housing options. These include:

- Consider new zoning regulations that encourage the creation of lower priced building lots, including smaller minimum lot sizes.
- Consider reducing or waiving development fees, tax incentives, impact fees or other methods that could help foster affordable housing.
- Develop incentives for major subdivisions and large landowners to include one or more small lots for affordable housing.
- Consider dual goal conservation projects to create affordable house sites in conjunction with the preservation of open space, farm land and natural resources.
- Consider the creation of growth centers, where higher density housing and affordable housing projects can be encouraged.
- Encourage interested residents to participate in developing creative solutions to Fayston's housing issues, possibly through the formation of a housing committee.
- Work with organizations that specialize in affordable housing projects to encourage projects within Fayston that meet the growing need.
- Support the Mad River Valley Housing Coalition and other locally based non-profit organizations dedicated to provision of affordable housing to address housing needs in the Valley.
- Through the MRVPD and CVRPC, participate in coordinated efforts to monitor and address affordable housing needs in the Mad River Valley

## 6.9 Housing Goals and Objectives

**Goal 6.1: Maintain a sustainable rate of housing development to accommodate the Town's actual population in a manner that does not over burden public services and is consistent with the Town's rural character and ecology.**

Objective 1: Promote, through the Town's development regulations and related policies, the creation of a wide variety of housing types to meet the needs of Fayston residents.

Strategies

a. Consider the creation of growth centers, where higher density housing and affordable housing projects can be encouraged.

b. Seek grants to hire a consultant to determine if and where a growth center could be designated and how it should relate to Waitsfield's growth center.

c. Encourage interested residents to participate in developing creative solutions to Fayston's housing issues, possibly through the formation of a housing committee or working with the MRV Housing Coalition

**Goal 6.2: Foster the development of housing that covers a wide range of home prices to accommodate changing demographics and a more balanced community.**

Objective 1: Promote the development of affordable housing projects.

Strategies

a. Consider reducing or waiving development fees, tax incentives, impact fees or other methods that could help foster affordable housing.

b. Develop incentives for major subdivisions and large landowners to include one or more small lots for affordable housing.

c. Consider dual goal conservation projects to create affordable house sites in conjunction with the preservation of open space, farm land and natural resources.
d. Consider new zoning regulations that encourage the creation of lower priced building lots, including smaller minimum lot sizes

Objective 2: To work in cooperation with other local, regional, and state organizations to plan for and promote programs to assist residents of Fayston and the Mad River Valley to obtain affordable and energy efficient housing.

Strategies

a. Continue working with neighboring towns, through the Mad River Valley Planning District, to identify Valley-wide growth centers that cross town lines.
b. Work with organizations that specialize in affordable housing projects to encourage projects within Fayston that meet the growing need.
c. Support the Mad River Valley Housing Coalition and other locally based non-profit organizations dedicated to provision of affordable housing to address housing needs in the Valley.
d. Through the MOU between the Valley Towns, the MRVPD and Sugarbush Resort, ensure that expansion activities at Sugarbush do not adversely affect the cost and availability of housing in Fayston and the neighboring towns, taking action to mitigate adverse impacts as deemed.
e. Explore means with which to support local economic diversification to improve wages and thus the ability of local workers to afford local housing.
f. Support State and regional energy efficiency and weatherization programs for dwellings occupied by persons of low or moderate income.
g. Through the MRVPD and CVRPC, participate in coordinated efforts to monitor and address affordable housing needs in the Mad River Valley

# Chapter 7: Transportation

## 7.1 Introduction

Ensuring residents can conveniently get from place to place is a key function of Town government. This chapter of the Town Plan presents a discussion of the state of the Town's transportation system: Roads and bridges, public transit and bicycle and pedestrian routes. Within each section, the existing conditions and current issues are outlined followed by suggested strategies and guidelines for the Town to consider in the next five years.

## 7.2 Fayston's Road Network

As classified by the state, Fayston's road network consists of one State highway (Route 17), and Class 2, 3, and 4 "town highways" (see Map 8):[1]

- Class 2 town highways are town-maintained highways selected as the most important highways in each town (in addition to Class 1 highways) and usually serve the region from town to town. They are required to have a minimum 3 rod (49.5 feet) right of way and be maintained primarily by the town (although the state is responsible for centerline marking). Class 2 highways are designated by the town, but this designation must be approved by the state. The total mileage of class 2 town highways should not exceed 25 percent of the total mileage of the town's class 2 and 3 roads. The Town has two Class 2 town highways, German Flats Road and North Fayston road, which total 6.0 miles.
- Class 3 town highways are other town-maintained highways negotiable under normal conditions all seasons of the year by a standard manufactured passenger car. There are now a total of 37 Class 3 town highways in Town, totaling 26.3 miles.
- Class 4 Town Highways are all other roads. There are 7.0 miles of Class 4 highways in Fayston.

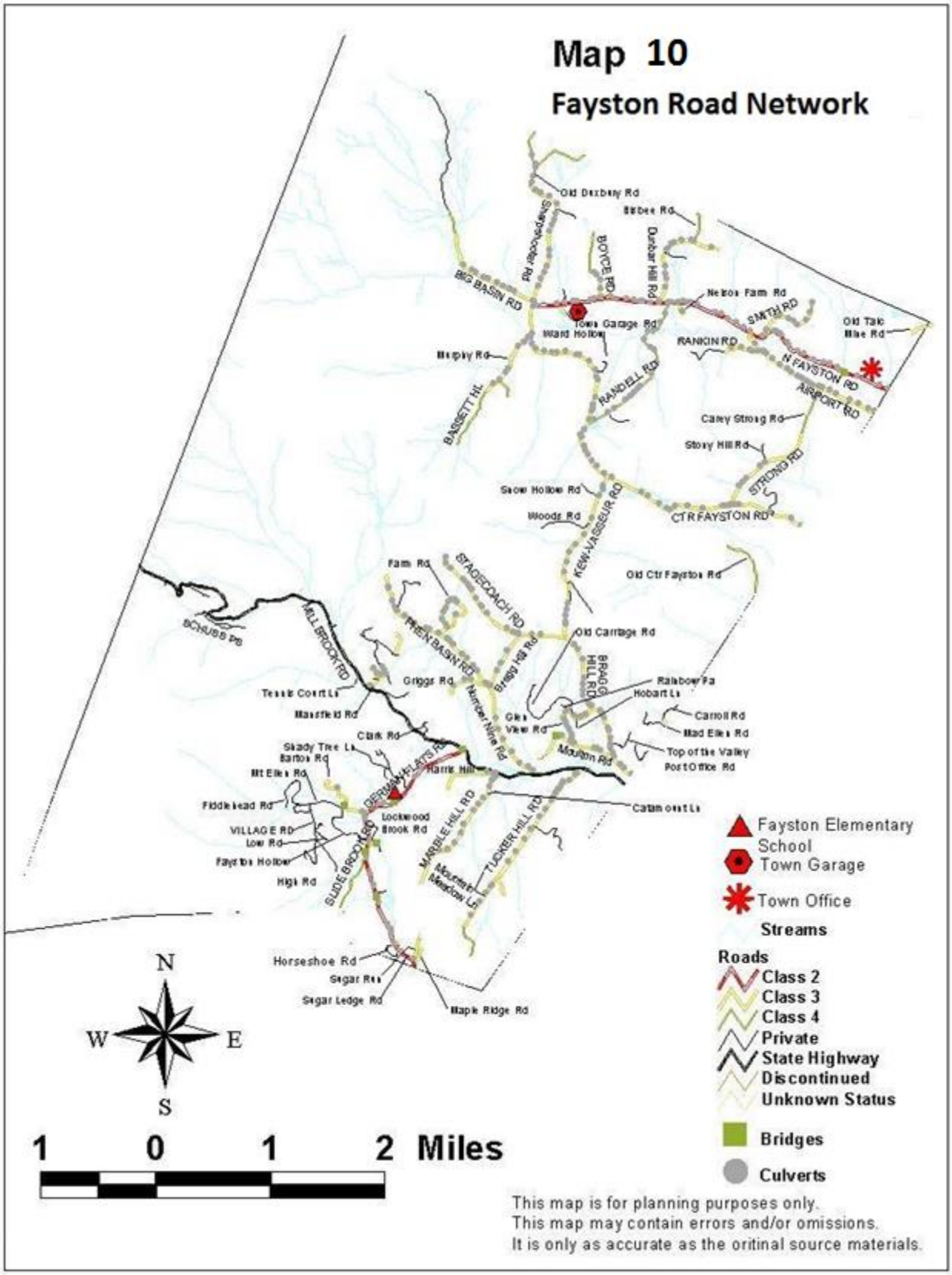
### 7.2.1 Existing Roadway Network

Fayston's road network consists of one State highway and approximately 32 miles of Class 2 and 3 local roads. Segments of the local road network were extensively damaged by Tropical Storm Irene in 2011, but were quickly repaired and roads are once again generally in very good condition and serve the Town's vehicular travel needs well. State Route 17, however, is deteriorating and in need of attention.

#### 7.2.1.1 Major Roads

Collector roads are state or town roads that, in Fayston, serve as the backbone of the local road network. Fayston is served by three collector highways: Route 17, German Flats Road and North Fayston Road. Vermont Route 17 is a State highway that is a major link between U.S. Route 7 and Vermont Route 100, the north-south arterial routes west and east of the ridge of the Green Mountains.

[1] Class 1 town highways are town-maintained highways that are an extension of a state highway route and carry a state highway route number. Fayston does not have any Class 1 town highways.


Map 10
Fayston Road Network
Old Duxbury Rd
Bisbee Rd
Simpsonville Rd
BOYCE RD
Dunbar Hill Rd
BIG BASIN RD
Nelson Farm Rd
Town Garage Rd
Ward Hollow
SMITH RD
Old Talc Mine Rd
RANKIN RD
Murphy Rd
N FAYSTON RD
AIRPORT RD
RANDELL RD
BASSETT HL
Carey Strong Rd
Story Hill Rd
STRONG RD
Snow Hollow Rd
Woods Rd
CTR FAYSTON RD
KEW-MASSEUR RD
Farm Rd
STAGECOACH RD
Old Ctr Fayston Rd
SCHUSS Pb
MILL BROOK RD
PHEIN BASIN RD
Old Carriage Rd
Bragg Hill Rd
BRAGG HILL RD
Griggs Rd
Rainbow Fa
Hobart Ln
Tessie Cont Ln
Mansfield Rd
Number Nine Rd
Carroll Rd
Glen View Rd
Mad Elks Rd
Clark Rd
Shady Tree Ln
Barton Rd
Mountain Rd
Top of the Valley
Post Office Rd
Mt Elks Rd
Harris Hill
DERBY FLATS RD
Fiddlehead Rd
Catamount Ln
Lockwood Brook Rd
VILLAGE RD
Low Rd
MARBLE HILL RD
TUCKER HILL RD
Fayston Hollow
High Rd
SLIDE BROOK RD
Mountain Meadow Ln
Horseshoe Rd
Sugar Rds
Sugar Ledge Rd
Maple Ridge Rd
N
W
E
S
1 0 1 2 Miles
Fayston Elementary School
Town Garage
Town Office
Streams
Roads
Class 2
Class 3
Class 4
Private
State Highway
Discontinued
Unknown Status
Bridges
Culverts
This map is for planning purposes only.
This map may contain errors and/or omissions.
It is only as accurate as the oritinal source materials.

Route 17 travels east to west for just under six miles through Fayston and is classified as a "major collector" by the Agency of Transportation. The lower portion of this road is heavily used by skier traffic to and from the Town's two ski areas during the winter, and the upper portion has very sharp curves and steep grades as it climbs toward Appalachian Gap.

A second collector, German Flats Road, is a paved Class 2 town highway linking Route 17 to the Sugarbush Access Road in Warren. German Flats Road carries its highest traffic volumes during the ski season since this road serves as the direct connection between the Valley's ski areas, including the Mt. Ellen base area of Sugarbush. Fayston Elementary School is also located on the German Flats Road.

North Fayston Road, the third collector, is also a Class 2 town highway and connects the portions of Fayston along Shepard Brook with Vermont Route 100 in Waitsfield. This road is paved for approximately 2.3 miles from its eastern end at Route 100 (in Waitsfield) and then gravel surfaced to its western end near Sharpshooter and Big Basin Roads.

#### 7.2.1.2 Local Roads

The majority of roads within Fayston are gravel surfaced, and consist of public and private roads. These roads serve year-round and vacation homes and are rated by most residents as maintained in "very good" or "excellent" condition. Due to Fayston's steep topography, most of these roads have significant changes in vertical elevation and often frequent sections of steep grades. Most Fayston roads are very rural in character and appearance, lined with forests and fields. These qualities contribute to the scenic quality of Fayston's environment that residents valued highly in the 2012 Town Plan Survey. The Town has long recognized in plans and policies that the roads' scenic qualities contribute to the overall health of the Town.

Class 2 and 3 town highways receive state aid for maintenance purposes and are required by state law (Title 19 VSA Section 301) to be passable with a pleasure vehicle year-round. From 1989 to 1999, Fayston pursued an aggressive road upgrade program with the goal of bringing all Class 3 Town highways up to State standards or better. With the program's completion, the Town now has one of the best rural road networks in Vermont. The Town Select Board now creates an annual two-year plan for roadway construction after consultation with the Road Foreman. In addition to keeping the roads in top condition, the plan alerts the Planning Commission and others about upcoming roadway improvement projects.

***Trails***
*A "Trail" is defined by law as a public right-of-way which is not a highway and which (a) previously was a designated highway having the same width as the designated town highway, or a lesser width if so designated; or (b) a new public right-of-way laid out as a trail by the Select Board for the purpose of providing access to abutting properties for recreational use.*

Several Class 4 town highways and trails also exist in Fayston. Class 4 town highways are typically unimproved, primitive and/or untraveled roads, which are often unusable for vehicles or bicycles due to their generally poor condition. VSA Title 19, Sections 708, 710 and 711 allow towns to set policies regarding which Class 4 highways and trails they wish to upgrade. By law, the Town is not required to provide any maintenance or upkeep on Class 4 highways or trails, but permission for others to repair, maintain, improve or restore these roads cannot be "unreasonably withheld" by the Select Board.

Any costs for such requests have to be borne by the petitioner(s) requesting to make the improvement(s), and the road must be left in as good or better condition than what existed when permission was granted.

#### 7.2.1.3 Bridges and Culverts

The bridges and major culverts in Fayston are generally in good condition, and most culverts were improved in 2011 (both before and after Tropical Storm Irene).

Fayston joins most towns in maintaining a statewide online database of its bridges and culverts. This enables the Town to keep up-to-date information on Town structures and their condition.

## 7.3 Current Roadway Standards

New roads in Fayston's subdivisions must meet the requirements in the Fayston Land Use Regulations. These requirements and regulations are generally seen as doing a sufficient job of implementing Town Plan directives. The 2011 Land Use Regulations contain the following requirements relating to roadways and transportation:

**Setbacks:** The Zoning Ordinance provides detailed requirements of the setback regulation. This regulation is meant to preserve the existing rural character of Fayston's roads. Deep setbacks (at least 65 feet) from the roadway have historically been an important strategy for preserving the scenic, rural qualities of local roads. However, in the Resort Development District and the Industrial District, where denser development is desired, shorter setbacks are required (15 feet). In addition, there are many areas, including along Route 17, North Fayston Road, and Center Fayston Road, where earlier development is situated much closer to roads.

**Rights-of-Way:** Each lot in Fayston must be served by a twenty-five foot right-of-way to a roadway if it does not directly border on a recognized roadway. This width appears to be workable. It is wide enough to ensure that an adequate access drive can be created within it, but not wide enough to be readily developed into a private road without further Town review.

Establishment of vehicular or pedestrian rights-of-way may also be required when permitting a subdivision in order to ensure public access through to an adjoining property, public facility, or other use. Town officials encourage the creation of additional pedestrian rights-of-way, but prefer that private or not-for-profit organizations accept them as easements rather than the Town accepting, managing, maintaining, and enforcing these rights-of-way.

**Access Points (Curb Cuts):** The number of access points to a parcel is regulated by the Land Use Regulations, with a maximum of one curb cut allowed per lot. For new subdivisions, new access to a Town road must be approved by the Select Board. The longer the frontage or common border, the larger will be the average separation between access points. In addition to separation regulations, the Select Board currently considers sight distances, drainage concerns, and erosion potential when reviewing new access requests for existing lots.

**Roadway Capacity:** The Fayston Subdivision Regulations currently have several sections that directly relate to transportation in the Town. One requirement of the Subdivision Regulations is that improved roadway capacity is necessary when development exceeds the capacity of the existing system. However, the regulations also call for the preservation of the landscape, and state that access to scenic highways can be limited. Roadway capacity expansion proposed to accommodate additional traffic must be consistent with the scenic, rural character of the Town and its roads.

**Roadway Design:** For new roads, the Subdivision Regulations mandate a 90 degree (but not less than 70 degrees preferred) angle for the intersection of two roadways, with no more than a three percent grade for 100 feet away from the intersection (with the maximum 3 percent grade designed to ensure vehicles do not slide into intersections in winter conditions). The geometry of any new Town road should be in conformance with accepted engineering principles used for roadway design. The Agency of Transportation maintains the Vermont State Standards that provide roadway widths and geometry based on traffic volumes and design speeds.

## 7.4 Current Traffic Conditions

Traffic conditions are typically measured in terms of "Level of Service," or LOS, with letter grades used to designate conditions. LOS A indicates completely free flowing traffic, and LOS F indicates very congested conditions (see boxed text). Generally, the goal is to maintain traffic LOS C, which indicates "stable flows," or better. In terms of vehicle volumes, Level of Service C generally consists of up to a maximum of roughly 2,000 vehicles per day (vpd) on a 24-foot-wide, two-lane rural highway. Level of Service "D" would correspond to 2,000 to 4,000 vpd on a similar road, and would seem much more congested to drivers in a non-urban setting.

***Traffic Level of Service***

*The American Association of State Highway and Transportation Officials (AASHTO) ranks traffic conditions along roadways using the following Level of Service "grades:"*

*A= Free flow*
*B=Reasonably free flow*
*C=Stable flow*
*D=Approaching unstable flow*
*E=Unstable flow*
*F=Forced or breakdown flow*

*At intersections, Levels of service are measured as a function of the average overall wait times:*

| LOS | Signalized Intersection | Un-signalized Intersection |
|---|---|---|
| A | ≤10 sec | ≤10 sec |
| B | 10-20 sec | 10-15 sec |
| C | 20-35 sec | 15-25 sec |
| D | 35-55 sec | 25-35 sec |
| E | 55-80 sec | 35-50 sec |
| F | ≥80 sec | ≥50 sec |

At the present time, based on a review of VTrans and other available data, all of Fayston roads do operate at LOS C or better. However, other roadways and intersections that are heavily used by Fayston residents that are just beyond the Town's borders carry higher volumes. These include:

- Mad River Green Shopping Center and Route 100 in Irasville.
- Bridge Street and Route 100 in Waitsfield Village.
- Route 17, Bragg Hill Road and Route 100.
- North Fayston Road and Route 100
- Center Fayston and Route 100.

Traffic conditions at these locations are not currently of significant concern, but as Fayston and Waitsfield continue to grow, the two towns will need to work cooperatively to address future needs as they occur.

## 7.5 Traffic Projections

In resort areas such as the Mad River Valley, traffic consists of two very different types of traffic: resident traffic and visitor traffic. Resident traffic predominates on weekdays, while visitor traffic is heaviest on weekends and holiday periods, particularly in the winter.

For the future, residential growth will be the most significant determinant of future resident travel volumes. The strength of the Valley's ski areas and tourism industry will determine future visitor travel levels. The different types of travel also impact the Town's roads in significantly different ways. In contrast to most areas where resident traffic comprises the bulk of total traffic and volumes are highest on weekdays, the Valley's highest traffic volumes occur on ski weekends and winter holiday periods.

## 7.6 Average Daily Traffic

In terms of Average Annual Daily Traffic (AADT), or average daily traffic over the course of a year, estimated traffic volumes on key Fayston roads between 2009 and 2013 ranged from 640 (North Fayston Road) to approximately 2000 (German Flats Road), which are low. The highest volume intersection that is heavily used by Fayston residents is the intersection of Route 17 and 100, just over the Fayston town line in Waitsfield. Volumes on Route 17 at this intersection are significantly higher than on any of Fayston's roads at approximately 3,500 per day in 2012, but have been declining since 2005, when they were 4,300 per day.

Over the life of this version of the Town Plan, these average daily traffic volumes can be expected to grow at a rate close to the Town's projected population growth. Fayston's population increased from 1,141 to an estimated 1,252 in 2005, and then to 1,353 in 2010. The population increase between 2005 and 2010 was 8.1%, or less than 1.3% per year. On this basis, traffic volumes on key Fayston Roads will grow slowly, and for the foreseeable future, traffic levels will remain low.

## 7.7 Peak Traffic Volumes

In Fayston, peak traffic volumes typically occur in the late afternoon on ski season Saturdays and holiday periods. As shown for the intersection of Route 17 and 100 in Table 7-1, in 2005, 90% of the 30 highest volume hours occurred during the ski season. Half of these were on Holidays, such as Christmas, New Year's and Valentine's Day. Friday, Saturday and Sunday saw 83 percent of the highest volume hours, and 90% occurred at some time between 3:00 PM and 6:00 PM[2].

These peak volumes are driven by traffic leaving Sugarbush and Mad River Glen and most heavily impact German Flats Road and Route 17. Although there have been recent increases, skier traffic volumes declined throughout most of the 2000s, and are still below historical levels. For example, according to

[2] No data specifically focused on German Flats Road, so it is not possible to see how local school traffic correlates to the ski season traffic volumes.

Warren's 2005 Town Plan, Sugarbush attracted nearly 450,000 skier visits in 1980/81, but by 1990/91 skier visits had dropped to approximately 260,000, and then climbed to approximately 350,000 throughout most of the mid and late 1990s. Since that time, according to the Mad River Valley Planning District's Mad River Valley 2010 Annual Data Report, skier visits, have recently recovered to close to 300,000. In terms of future planning, the fact that peak volumes are much lower than in the recent past also means that there should not be large new demands on the road network, or the need for significant expansion.

**Table 7-1: VT Route 17 Continuous Count Station: Highest Hours, 2005**

| Hourly Ranking | Day of Week | Month & Day | Time of Day | Vehicles per Hour |
|---|---|---|---|---|
| 1 | Saturday | Jan 29 | 4-5 PM | 814 |
| 2 | Saturday | Feb 19 | 4-5 | 777 |
| 3 | Saturday | Feb 12 | 4-5 PM | 749 |
| 4 | Sunday | Feb 20 | 4-5 PM | 739 |
| 5 | Sunday | Feb 13 | 4-5 PM | 712 |
| 6 | Saturday | March 26 | 4-5 PM | 687 |
| 7 | Saturday | March 5 | 4-5 PM | 679 |
| 8 | Saturday | Jan 15 | 4-5 PM | 676 |
| 9 | Sunday | Feb 13 | 3-4 | 674 |
| 10 | Friday | Feb 11 | 4-5 PM | 673 |
| 11 | Sunday | March 6 | 4-5 PM | 667 |
| 12 | Saturday | March 19 | 4-5 | 664 |
| 13 | Saturday | Jan 29 | 3-4 | 660 |
| 14 | Sunday | Jan 30 | 4-5 | 659 |
| 15 | Saturday | Feb. 12 | 3-4 PM | 651 |

*Source: Lamoureux & Dickinson from VAOT, 2005*

The fact that the highest traffic volumes are related to skiing argues that traffic planning should be carried out differently in Fayston and the Mad River Valley than in non-resort areas. Typically, roads are designed to accommodate the volumes that are experienced during the 30$^{th}$ highest hour that is experienced over the course of a year. The rationale for the use of this measure is that by avoiding the use of the highest hours, roadways will not be over-designed to accommodate events that are likely to be atypical. Generally, the use of the 30$^{th}$ highest hour represents peak traffic volumes that are experienced day in and day out.

In Fayston and the Mad River Valley, the 30th highest hour does not represent day-in and day-out peak volumes, but instead peak volumes on a relatively few number of days. Average peak volumes are significantly lower. For the Mad River Valley, rather than building roads for infrequent volumes, alternative approaches should continue to be used. For example, at the intersection of Route 17 and 100, when traffic volumes were higher, traffic officers were stationed at peak times to manage traffic flow. (However, the advent of high speed lifts combined with an aging population has meant that fewer skiers now ski full days, and skier departures are now more distributed throughout the day. As a result, Saturday peak period volumes at the intersection of Route 100 and 17 have decreased, and the use of traffic officers has largely been discontinued.)

In terms of roadway design, since the 30th highest hour represent infrequent conditions, it would be more appropriate to accept a lower design hour volume than the 30th highest hour. Examination of the 200 high hour list for the Route 17/Route 100 intersection indicates that the 50th highest hourly volume may be most appropriate for roadway design on Route 17 and German Flats Road if future roadway improvements are considered.

Within Fayston, the Route 17/German Flats Road intersection is the most heavily traveled intersection. However, as with the Route 17/Route 100 intersection, there are no significant congestion problems, nor are any expected for the foreseeable future.

## 7.8 Road Network Issues and Opportunities

### 7.8.1 Adding New Town Roads

In the past, Fayston residents had expressed concern about the expansion of the public road system and the possible cost of improving sub-standard roads to State standards. Therefore, the Town adopted a policy of not accepting new roads as public roads. New roads created as part of subdivisions are maintained as private roads.

### 7.8.2 Access Management

Future development along German Flats Road, Route 17 and the North Fayston Road holds the potential to increase access points along these roads. To ensure that increased requests for access do not adversely affect either the function or aesthetics of these roads, or the other roads in Fayston, access points shall be strictly controlled by both the Development Review Board and the Select Board. To limit numerous single-access driveways to collector roads, curb cuts shall be restricted through the Land Use Regulations. Shared access points shall be required wherever possible. This would include planning for combined access points in the future even if access is being developed to only one property. Access to individual parcels along Fayston's three collector highways shall, whenever possible, be from feeder roads that lead to the collector road instead of from individual access driveways.

Existing access points that have less than adequate sight distances shall be examined jointly by the landowner and the Town to determine how the problem can best be resolved. Solutions will need to balance the needs of drivers using the access points with safety and aesthetic objectives for roadways in the Town.

Driveway design is also important; driveways shall not be so wide as to allow vehicles to enter or exit the main roadway at a variety of angles, increasing the likelihood of crashes. The Regulations shall specify maximum widths in order to promote pedestrian and driver safety, while also reducing the area of impervious paved or gravel surfaces, resulting in environmental and aesthetic benefits. The driveway radii of the curve as it intersects the roadway affect the speed of the vehicles that turn in or out of the driveway. The appropriate radii for a driveway shall be based on the specific characteristics of its location and use.

Other access management strategies include:

- Minimum distance between driveways and minimum distance between driveways and intersections
- Mandatory access to a minor road, such as a frontage or service road
- Mandatory connections (immediate or future) to adjacent properties
- Mandatory location of access on a corner lot
- Driveway turnaround area (for small existing lots fronting the corridor)
- Left turn or right turn ingress lane
- Landscaping and buffers to visually define and enhance access points

### 7.8.3 Roadway Design/Traffic Calming

Speed on some of the Town's roads is a concern, and roadway design is a major factor that determines how fast drivers will drive. Wide roads with wide shoulders encourage drivers to drive faster (for example, Route 100B through Moretown) and smaller roads encourage drivers to drive more slowly. On roads where speeds are higher than desirable, the Town may want to consider adopting some traffic calming techniques, especially in areas where there are pedestrians, such as the hamlet of North Fayston or on German Flats Road.

Traffic calming is the physical design or redesign of a road to reduce the inappropriate impacts of vehicular traffic. When successfully employed, traffic calming can decrease cut-through traffic volumes, lower traffic speeds, and improve safety for all transportation modes. Less measurable benefits include an improved aesthetic quality of streets such as trees and other landscaping. A better looking roadway evokes a psychological reaction whereby motorists identify a road's character as a neighborhood asset supporting a community as opposed to a highway that supports ever improving mobility.

The Agency of Transportation has adopted a recommended procedure for establishing traffic calming techniques. While this procedure, along with the techniques it includes, is geared toward state highways, it could be applied to town highways as well.

### 7.8.4 Maintaining Rural Character

In Vermont, small-scale roadways, gravel roads, and covered bridges are defining elements of the state's character. In Fayston, maintaining the natural appearance of the Town's roads is a crucial component of Fayston's roadway management strategies. As the projected increase in population brings more people and more cars to Fayston's roads, every effort shall be made to keep the roadways' rural character. Local Town roads shall remain gravel surfaced; they shall not be widened, straightened or leveled unless

such changes can maintain existing rural character or are absolutely necessary for safety reasons. Existing trees and topographic features that are part of the scenic qualities of a designated scenic roadway shall also be preserved. The Town shall encourage new road construction and existing road maintenance to be done in accordance with The Vermont Better Backroads Program for improving or maintaining rural, scenic roads without harming water quality or their visual character.

An overlay zoning district is one tool that could be considered to protect scenic views and corridors. An overlay zoning district places additional or modified standards and/or review in a particular area changing some of the requirements of the base zoning district. Overlay zoning can be used to regulate use, density, site design, grading, ridgeline development, vegetation, building design, etc.

### 7.8.5 Scenic Byway and Scenic Road Designation

Route 17 is designated as a Scenic Byway, a national designation. Consideration should be given to designating other Fayston roads as Vermont-designated scenic roads since doing so will result in the availability of federal grants. Such a designation would provide Fayston with another tool to help it keep the scenic nature of its roads. Official designation of scenic roads would obligate the Town first to conduct an inventory of the roads to be designated, so that the special features that make it scenic can be recognized and recorded. After designation, according to the process outlined in Vermont statute, the Town would be obligated to maintain the road so that those features within the right-of-way that contribute to the scenic quality are left intact.

While the identified features may include vistas, views, structures or vegetation that lie beyond the right-of-way, the scenic road designation does not regulate these features. The designation only affects those elements of scenic roads that lie within the right-of-way maintained by the Town. Scenic road designation can affect adjacent properties only if the Town decides to change the current bylaws or regulations to address scenic roads directly.

Official designation of roads as scenic would require the Town to maintain those roads in accordance with the guidelines in The Vermont Better Backroads Manual. These requirements are similar to the maintenance practices the Town now follows. If it becomes necessary to reconstruct or improve a designated scenic road, the improvements shall be undertaken so as not to remove those features that make it scenic. Again, The Better Backroads Manual would serve as the guide for reconstruction work.

### 7.8.6 Roadways and Ecology

Transportation systems can create negative impacts to soil, water, and air quality, and often contribute to the fragmentation of land tracts and wildlife habitats. For wildlife, bridges and culverts can discourage fish passage, roads can physically prevent the seasonal movement of amphibians, and traveling vehicles can dissuade or collide with our indigenous mega-fauna. For air quality, choices in fuel and fuel economy can result in significant changes in the production of greenhouse gases and federally regulated pollutants. For water quality, failing culverts, deteriorating gravel roads, improper roadside ditching, and other insufficient stormwater mitigation techniques can allow the discharge of polluted sediment into our streams and rivers.

Not all impacts can be controlled but there are mitigation strategies the Town can implement to minimize disturbances. While adequate resources and sometimes differing philosophies present challenges for addressing these impacts, the Town shall pursue opportunities to advance the planning and construction of projects that preserve or enhance soil, water, and air quality. Culverts and bridge replacements appropriately designed to handle stormwater runoff, promote fish passage, and minimize the discharge of road sediment are a high priority. The Town shall seek to implement on-site stormwater mitigation measures in road and bridge construction projects. The Town shall also encourage the construction of transportation facilities that mitigate impacts to the surrounding environment.

## 7.9 Public Transportation and Ridesharing

The provision of an effective public transit service in the Valley has been a challenge. Still, as indicated by both the 2006 and 2012 Town Surveys, most residents desire better public transportation. There are ongoing efforts at the State level to provide for more public transit and shared commuting; Fayston residents should be provided with appropriate information regarding these opportunities.

### 7.9.1 Existing Services

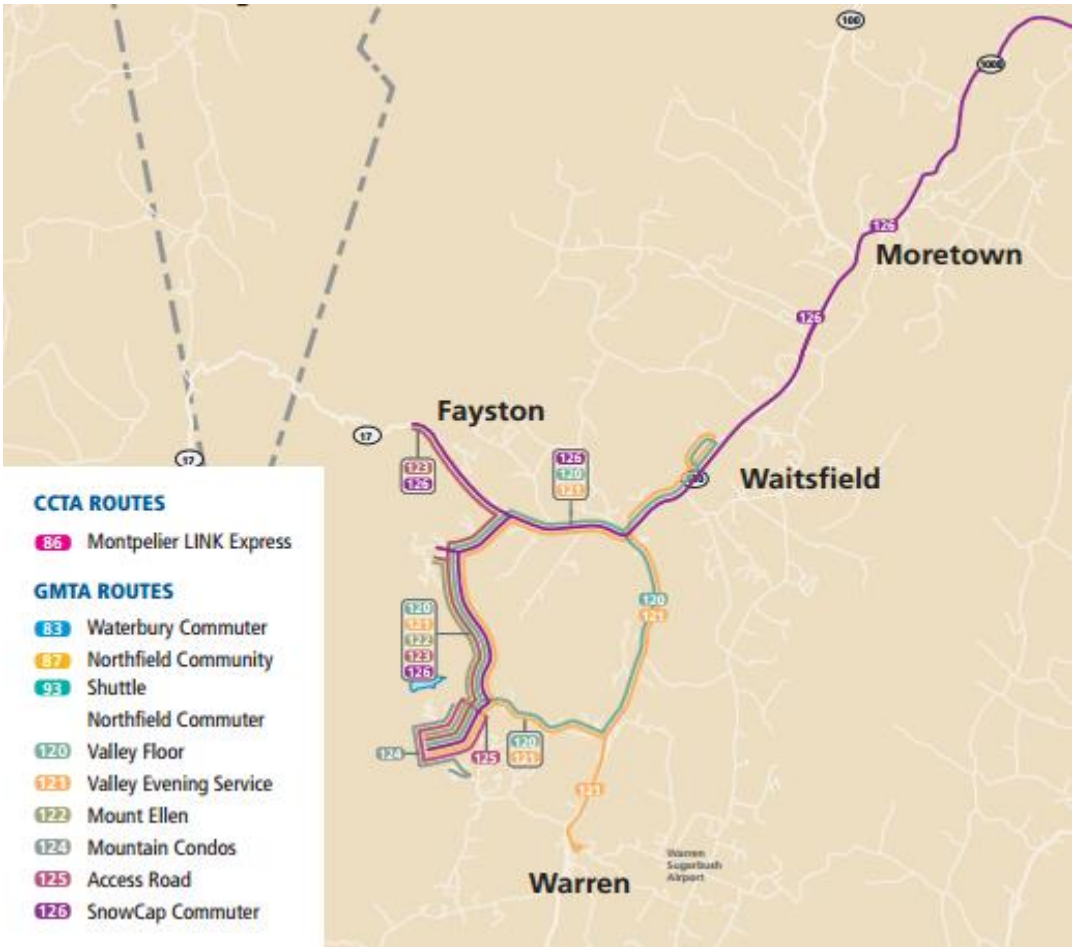
The demand for transit service in Fayston, and throughout the Mad River Valley, is largely driven by visitors, and largely by skiers. To respond to this demand, the Green Mountain Transit Agency (GMTA) provides winter season Mad Bus service between the Valley's major activity centers including Mad River Glen and Sugarbush's Mount Ellen base area. In Fayston, these services operate along Route 17, German Flats Road, and the Mount Ellen access road, and provide connections with Sugarbush's Lincoln Peak base area, Warren Village, Irasville, and Waitsfield Village (see Figure 7-2). More limited service operates between Waterbury and Harwood High School and the ski areas.

Transit service in the Valley has struggled to be successful, and the services that have been provided since public transit was first introduced have varied significantly. From 1993 through 1998 Sugarbush Resort provided shuttle services between Mount Ellen in Fayston and Lincoln Peak in Warren on weekends during the ski season. Until the fall of 1999, this was the only public transit service operating in the Valley and Fayston.

In October 1999, Wheels Transportation began offering "Valley T" public transit funded primarily with Federal CMAQ funds and local matching funds. Funds that Sugarbush had spent on their own system were contributed to Wheels as the local match in order to leverage the Federal funds and provide more comprehensive service. The original 1998 *Short Range Transit Plan* recommended five routes, two of which (a link from Warren to Waitsfield and a separate commuter link) would have been year-around. However, there was no recommendation for a dedicated route to Fayston, as geographic constraints and the Town's dispersed population made a dedicated route impractical.

In 2002, after Wheels went out of business, Alpha Transit of Morrisville was appointed to run the service for one year. In 2003, CCTA had successfully changed its charter to allow it to serve areas outside Chittenden County and took over the transit provider roll. Since then, CCTA, and now GMTA, which is a subsidiary of CCTA, has provided the Valley's Mad Bus service.

**Figure 7-2 Mad Bus Service**




In addition to Mad Bus service, the Ticket to Ride (TTR) program, a collaboration between Vermont's disability community, the Central Vermont Council on Aging (CVCOA) and GMTA, pays for the cost of rides for senior citizens (60+) and persons with disabilities to medical services, shopping and daily needs. This service is also provided by GMTA.

### 7.9.2 Public Transport Issues and Opportunities

There are significant desires within Fayston and throughout the Mad River Valley for more comprehensive public transportation, and for year-round service. However, when GMTA has examined potential new services it has determined that ridership would not be high enough to produce acceptable levels of productivity, and that as a result, subsidy levels would be unacceptably high. This is the case for a number of reasons, but primarily because the Valley's population is low and very dispersed.

As an example of the challenges, the 2000 Census data (the 2010 Census did not collect comparable data) indicated that more than 60 Valley residents commute to the Barre-Montpelier area and that another 60+ people commute to Chittenden County. If public transit were available, and if 10% used it (a much higher percentage than would likely be achieved based on experience elsewhere), there would

be only six riders per direction on each service, which is far too few to warrant the level of subsidy that would be required and that VTrans would accept.

As a result, the development of comprehensive year-round public transit is unlikely. However, Fayston should continue to support existing Mad Bus service, and its expansion to the extent possible. In addition, a greater emphasis on ridesharing could encourage smaller groups of commuters to group commute trips. (Go Vermont, which is a program of the Vermont Agency of Transportation, provides rideshare matching and Guaranteed Ride Home service.)

### 7.9.3 Taxi

The Mad River Valley is served by a single taxi company, which is C&L Taxi, which is based in Warren. C&L provides service throughout the Valley and beyond, including to and from Burlington International Airport.

### 7.9.4 Park and Ride Lots

The towns in the Valley should encourage carpooling and vanpooling. One way to make this easier is to provide Park and Ride lots. Park and ride facilities enable motorists to drive from their homes, park, and then carpool or use public transit to arrive at their destination while reducing traffic congestion and pollution. Public transit providers also often depend on park and rides for commuter based ridership. The use of park and rides is an important public transit resource and facilities should be planned and constructed to better support fixed route services.

While there are no dedicated park and ride commuter parking areas in Fayston, several areas on the Valley floor are utilized on an informal basis, including the bottom of North Fayston and Center Fayston Roads. More formal parking locations would enhance the current practice by providing a safe, well-lit facility, and should be considered, especially near the intersection of Routes 17 and 100. The parking area at the Town Hall near the foot of the North Fayston Road should also be more widely advertised as a public parking area.

## 7.10 Pedestrians and Bicycles

While Fayston has a well-established network of trails for recreational hiking and biking, it does not have any pedestrian or bicycle facilities for non-recreational travel. Those who desire to travel by walking or biking use the regular road network, and do so on the shoulders of Route 17 and within the travel lanes of other roads.

The lack of pedestrian and bicycle facilities discourages the use these modes. While the use of regular travel lanes is safe and comfortable on smaller roads, it is not on larger roads, and becomes increasingly less so as the Town grows and travel volumes increase. The Town should work with other towns, volunteers, and non-profit organizations such as the Mad River Path Association and Mad River Riders, to develop a valley-wide network of pedestrian and bicycle facilities.

### 7.10.1 Bicycle and Pedestrian Networks

Some mountain resort communities have created networks of bicycle and pedestrian paths that parallel major roadways. In Vermont, Stowe's Recreation Path is a more limited example. These paths provide safe and comfortable alternatives to driving, and recreational facilities that benefit local residents and attract tourists. In many cases, these networks can be developed within the rights-of-ways of existing roadways.

### 7.10.2 "Family Friendly" Pedestrian and Bicycle Facilities

As described above, bicycle and pedestrian travel currently requires the use of shoulders where they exist or regular travel lanes where they do not. The use of shoulders and regular travel lanes is acceptable to many adults, especially recreational road bikers. However, children and families will only rarely walk or bike if they need to do so on regular roads—for example, in the summer of 2007, a poll of readers in the Valley Reporter indicated that approximately two-thirds of respondents believed that it was unsafe for their children to ride bicycles on busier roadways. As an alternative to constructing wide shoulders on roadways for pedestrians and bicyclists, pedestrian/bicycle facilities can be constructed adjacent to and separated from the road in lieu of the roadway shoulders.

## 7.11 Complete Streets

A recent concept in roadway design is that streets should be "complete" in that they should accommodate vehicles, bicycles, and pedestrians. Rather than constructing or requiring roadways only to meet the needs of vehicular travel the Town could require all modes to be accommodated. This has been done to a limited extent during the consideration of subdivisions that would upgrade Class 4 roads, but not for larger roads. The implementation of such a policy for the upgrading of existing roads and for new roads could help toward the development of a comprehensive bicycle and pedestrian network.

In Vermont and Fayston, the greatest emphasis is placed on vehicular travel, and often at the expense of pedestrians. For example, straighter, wider roads encourage faster driving, which is less comfortable for pedestrians. A second example is the reconstruction of Route 17 in the mid-2000s that added long distances of new guardrails that prevented pedestrians from walking on the shoulders and forced them into the travel lanes. The reconstruction of Fayston's roads, either by the Town or the state should better consider the needs of all users.

## 7.12 Regional Coordination

It is important to consider local land use and transportation decisions in the context of the regional transportation network that serves Fayston. In addition to working with neighboring communities to plan for alternative transportation modes, such as public transit, it is also important to consider local highway matters—such as the traffic impacts of ski area development—in a regional context. Fayston, Warren and Waitsfield have created the Mad River Valley Planning District (MRVPD) to coordinate planning efforts for the three towns. Among other things, the District encourages each town to consider impacts on the other towns' facilities when reviewing development options, alternatives and/or requests. The Town has shown ongoing participation and support for the Mad River Valley Planning

District's and the Central Vermont Regional Planning Commission's transportation planning efforts and should continue to do so, as these efforts are an important means of addressing regional concerns.

Fayston's participation in the MRVPD strengthens the influence it can have during the project review process relative to roadways, especially for projects that could result in valley-wide transportation impacts. This three-town relationship will be especially important for the Irasville Master Planning initiative in Waitsfield, which could have significant traffic impacts on Fayston's roadway network, especially the Bragg Hill Road/Route 100/Route 17 intersections.

## 7.13 Transportation Goals and Objectives

**Goal 7.1: Manage the Town's transportation network in a manner that meets community-level demand and protects important natural, cultural, and scenic characteristics of the system.**

Objective 1 : Continue to provide a well-maintained and balanced local road network.

Strategies

a. Develop a road management program that assesses current conditions, desired conditions, improvement and maintenance needs, and the levels of routine maintenance needed to sustain desired conditions.

b. Minimize curb cuts on Town roads and maximize the use of shared driveways.

c. Slow traffic on back roads and otherwise improve opportunities for bicycling and walking.

Objective 2: Ensure that new development and changes to land use activities do not produce undue adverse impacts to the condition and function of the Town's transportation system.

Strategies

a. Continue to use the Town's land use and subdivision regulations to set design and safety standards for roads, driveways, and other transportation facilities.

Objective 3: Maintain the scale, rural quality, and capacity of Town roads during improvement and maintenance procedures.

Strategies

a. Work with the Central Vermont Regional Planning Commission and VTrans to ensure that improvements to state roads are programmed and implemented to be consistent with the Town's rural character.

b. Scenic roads- conduct an inventory of the scenic qualities of the Town highways in accordance with the Vermont field guides such as "Designating Scenic Roads" and "Vermont Byway Fieldguide," in order to protect to the extent possible, those features located within the right-of-way which contribute to the road's scenic features.

**Goal 7.2: Promote and support effective and efficient alternative transportation services.**

Objective 1 : Encourage the development of bikeways adjacent to major valley roadways.

Strategies

a. Maintain the use of class four town highways for walking, bicycling, and other recreational uses.

b. Add bicycle and pedestrian facilities to the local transportation network, especially Rte 17.

Objective 2 : Encourage off road trails and paths for walking and bicycling

Strategies

a. Work with other valley towns and volunteer groups such as the Mad River Path Association, the Catamount Trail, VAST, and the Mad River Riders, to develop a network of bicycle paths and trails throughout the valley.

b. Encourage landowners to dedicate easements to permanently protect trails.

Objective 3 : Encourage the shared use of transportation services and facilities.

Strategies

a. Continue to support the Mad Bus local transit service, and support efforts to make service more attractive and cost-effective.

b. Encourage development of a Senior van program.

c. Investigate the development of a volunteer driver program for elderly and disabled residents.

d. Develop park and ride lots and encourage ridesharing and bicycling.

**Goal 7.3: Plan Fayston's transportation network in a comprehensive manner and in coordination with the efforts with neighboring towns.**

Objective 1: Continue regional transportation planning through the Mad River Valley Planning District, Mad River Valley Transportation Advisory Committee and Central Vermont Regional Planning Commission.

Strategies

a. Investigate methods to focus development in growth centers in a manner that will reduce automobile trips.

b. Support the efforts of Waitsfield and Warren to focus development in growth centers (Warren Village, Sugarbush Lincoln Peak, and Waitsfield Village/Irasville) in a manner that will reduce automobile trips.

c. Work with neighboring towns to ensure that proposed developments in one town will not adversely impact the transportation system in neighboring towns.

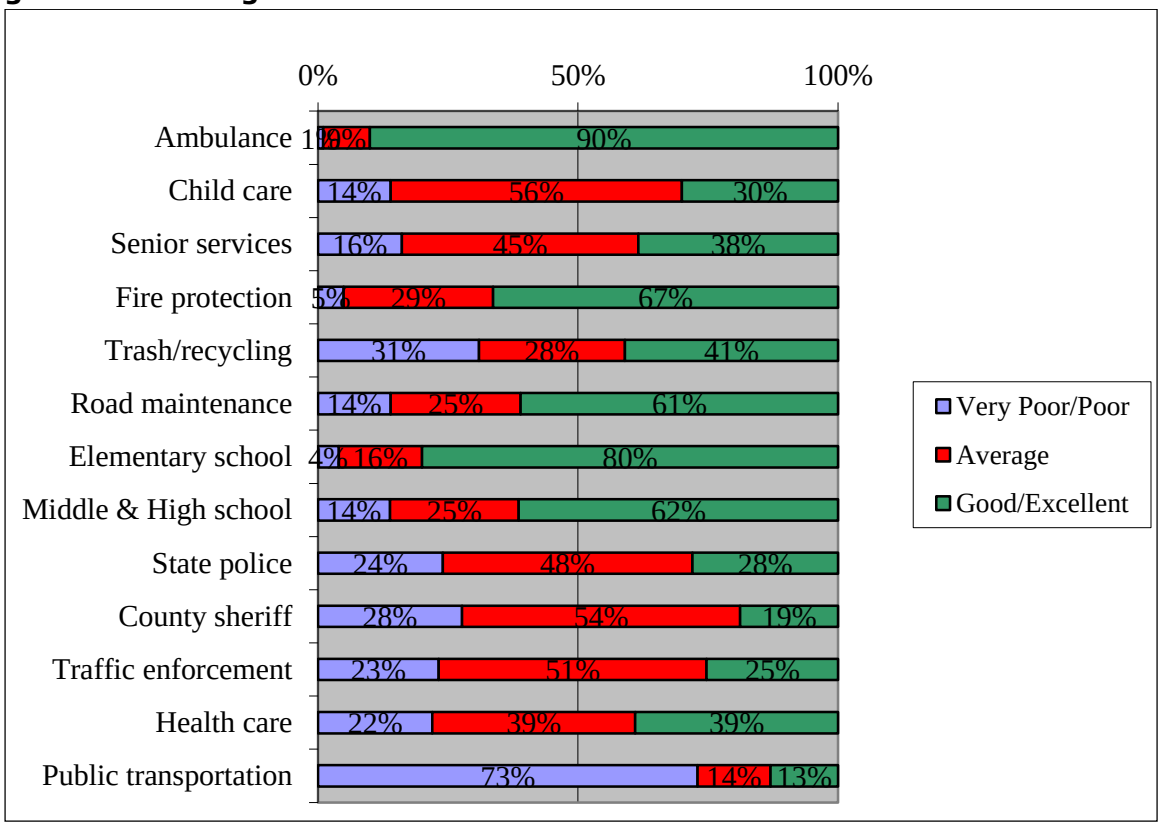
# Chapter 8: Community Facilities – Schools, Services, and Energy

## 8.1 Introduction

There are a wide variety of community services and facilities available to Fayston's residents. Many of these are shared with the other Mad River Valley Towns, with funds allocated in the Fayston Town budget to pay our pro-rata share where appropriate. In the 2012 Town Survey, residents rated most of the Town-provided services as good to excellent, and most privately- or state-provided services as average or better (see fig 8-1). No additional needs were identified. The only exception appears to be Public Transportation. Details regarding Public Transportation can be found in Chapter 7, Transportation, of the Town Plan.

This chapter describes the educational and other public services currently provided by the Town, issues facing the Town in the next five to ten years and strategies for maintaining and enhancing these services.

**Figure 8-1: Ratings of Available Services**




*Source: 2012 Fayston Town Survey*

## 8.2 Schools

Fayston, along with Waitsfield, Warren, Moretown, Duxbury and Waterbury, is a part of Washington West Supervisory Union. Children in pre-school through sixth grade attend Fayston Elementary School on German Flats Road, while seventh- through twelfth-graders attend Harwood Union High School in

neighboring Duxbury. In the recent Town Survey 80 percent of respondents gave the elementary school an excellent rating and 62 percent gave the high school an excellent rating. Test scores in both Fayston and the WWSU continue to be among the highest in the state.

Long-term planning for Fayston's educational system centers on several issues including: planning for current students in all grade levels, long-term enrollment trends, administration, financing, education planning, and school policy issues.

### 8.2.1 School Administration and Facilities

In 1962 the Town passed a bond to build a new school on German Flats Road, an idea proposed by school board members Erlene Bragg, Augusta Graves and Hanne Williams. The cost was around $50,000; the building consisted of 2 classrooms, a multi-purpose room and a kitchen. This replaced the last remaining small school in Fayston at the bottom of Number Nine Hill. A second teacher was hired to work with Geneva Howes; and a hot lunch program was added, with Mrs. Fielder as the cook. Students began attendance in the fall of 1963. George Armstrong continued to drive his Jeep "bus "to pick up the 36 students in grades 1-8, although the seventh- and eighth-graders attended the Waitsfield School the following year. In 1972, Town Meeting was held at Glen Ellen due to construction at the school which added a gymnasium/multi-purpose room and a new kitchen. A large renovation by architect Art Lowe in 1980 radically changed the appearance of the school. A kindergarten, library and offices were added, as well as cedar shake siding. A tower was constructed, and soon housed the famous bell donated by Sewall Williams, and now rung by all graduating sixth-graders. A small renovation, including the addition of a staff room and nurse's office occurred in 1986, followed by a substantial renovation/addition by Black River Design in 1992. This project created two classrooms from the old gymnasium, and a resource room where the kitchen had been. New spaces included the art/music room, the front offices, and a larger kitchen and gymnasium.

In 2005, an addition to the Fayston Elementary School added two new classrooms. With the added space, the school will be able to meet the educational needs for several years. A large private donation covered most of the construction cost; the balance was covered in a one-time assessment in the general budget for FY 2005 – 2006.

The Fayston Elementary School is administered by the Fayston School Board, a five-member board elected by Town residents. In addition to developing policy, overseeing the operation of the school and the management of school facilities, the Board serves as the Town's liaison with the State Department of Education in ensuring that the Fayston School meets state education and facility standards.

Located on Route 100 in Duxbury, Harwood Union High School was built in 1966 with capacity for 800 students, with additions and renovations the current capacity is 850 students. The building currently serves seventh- and eighth-graders from the Mad River Valley and high school students from both the Valley and the Duxbury/Waterbury district. The enrollment for the 2012 year was 716. Enrollment continues to decline annually from a high of 862 students in 2003.

The Washington West Supervisory Union, under the guidance of a nine-member Board of Directors, administers the regional school Supervisory Union.

### 8.2.2 School Enrollments

Enrollment trends for Fayston Elementary have been very difficult to predict in recent years. Thanks to the 2005 expansion, Fayston Elementary School has a maximum capacity of approximately 150 students. At the time of the 1992-93 addition, it was anticipated that the expansion would provide sufficient space through 2000. Enrollment continues to decline at the Pre-K through 6 level at the Elementary School; in 2010, there were 118 children in PreK through Sixth Grade; in 2011, 101 children; and in 2012, 99 children. Even should this trend reverse, there will continue to be more than enough space to accommodate enrollment needs in the foreseeable future.

Washington West Supervisory Union is unable to forecast future enrollment at Fayston Elementary School with great accuracy, partially due to the unpredictability of new arrivals to Town. Current projections show the school population remaining fewer than 100 students. It is important to note, however, that in a small town, unanticipated increase can significantly affect total enrollment. However, recent Census data, as discussed in Chapter 4, indicates that the number of 18-to-34-year-olds continues to decline (1990- 32%; 2000- 18%; 2010- 14%), while the number of residents that are 45+ continues to increase (1990- 24%; 2000- 38%; 2010- 50%). This "aging" of the population matches a state-wide trend. With historical enrollment trends showing a constant decline while the average age of our residents increased over the past ten years, we would assume that the decline in enrollment will continue for the foreseeable future.

### 8.2.3 Per-Pupil Costs and School Financing

Fayston's per-pupil expenditures have increased in absolute and real terms at both the elementary and high school levels. Spending data also indicate that Fayston's per-pupil costs ($14,199 for fiscal 2013) are higher than most of the Mad River Valley Towns (Waitsfield- $13,112; Warren- $11,461).

Under Act 68, the amount of State support for education is based primarily on the number of pupils in a Town's school. This per-pupil block grant formula has posed difficulties for schools with small enrollments, where the fixed costs of education, such as basic operational and facilities costs, are much higher per pupil than in schools with larger enrollments.

The Legislature has talked about reviewing the Act 68 funding formulas for many years. Spending caps and limiting increases are among the options under consideration. However, there has not been the "political will" to address the challenges of this system. As a result, budgeting for a small school while keeping tax increases in check will continue to be a challenge. With rising property values, the Common Level of Appraisal (CLA) will continue to impact our tax base.

### 8.2.4 Adult Education

There are no formal opportunities for continuing adult education in the Mad River Valley. The nearest source of adult education opportunities are available through the Community College of Vermont's Montpelier campus, and at nearby schools, including the University of Vermont, and several other private colleges in Burlington, Northfield, Middlebury and the Vermont Technical College in Randolph. Opportunities for "distance learning" on-line and through the Vermont Interactive Television sites are also growing each year. A variety of adult basic educational programs are available through Central

Vermont Adult Basic Education, also located in Waterbury. These include individualized and group educational services to adults in their homes, at the learning center, and in community settings. Basic education programs serve those who wish to improve their reading, writing and math skills for use on the job or in daily life, those who are studying for their high school equivalency degree (GED) or adult diploma, and those who want to learn English as a second language. Computer training is also available. The Adult Basic Education Center also offers a family literacy program, an out of school youth program, a teen parenting education program, and a getting ready to work program for welfare recipients who are seeking academic and job skills to improve their occupational outlook.

## 8.3 Utilities

### 8.3.1 Water Supply

Residences and businesses within the Town of Fayston, including the two ski operations, draw their water supplies from individual or small-scale community wells and springs. For the majority of the Town's water users, Fayston's mountainous terrain and dispersed settlement patterns make a public water supply system impractical. However, more intensive development at Sugarbush Mount Ellen or elsewhere within the Resort Development and Recreation Districts may require a multi-user water supply system when development occurs. Such a system would be the responsibility of the private developers involved.

The Town of Waitsfield has recently completed the installation of a Town Water System. There had been some discussion that residents of Fayston, located along Rt. 17, may be able to access that system. However, the Waitsfield Water System does not go down Rt. 17 from Rt. 100, so the potential for those connections now seems unlikely. Fayston residents who live near Carroll Rd. in Waitsfield, however, may have easier access to this system. Details relating to these possible connections have not yet been worked out.

### 8.3.2 Wastewater Treatment Systems

Fayston faces several issues that are related to on-site wastewater treatment. One issue is to ensure that subsurface disposal systems are properly designed, installed and maintained for new and existing buildings. A second is the potential to provide community wastewater service (sewers) to those areas of Town where more intensive development is desirable.

***How a Septic System Works***

*To properly treat wastewater from homes and businesses, traditional septic systems first collect water in a septic tank where solid materials "settle out." The water then flows or is pumped to a leach field, a set of trenches in the soil. Wastewater then percolates down through the soil, which cleans out bacteria and viruses. After passing through the soil, it returns to the groundwater under the leach field.*

*If a septic system doesn't function properly, or if there is too little soil under a leach field, the system may not completely clean the wastewater before it returns to groundwater. If untreated water reaches drinking wells, rivers or streams, these will become contaminated. Among the most common reasons for failure are poorly maintained systems and soils that are too shallow or too porous.*

*Floodplains and water recharge areas also present situations where sewage can easily contaminate water supplies. In general, leach fields should not be located on delineated floodplains and should be located an adequate distance from floodplains, streams and groundwater recharge areas to ensure water quality is not compromised.*

*Alternative treatment technologies are widely available. Such treatment systems utilize new technologies to treat wastewater more thoroughly before in-ground disposal. With improved treatment, wastewater can be discharged into poorer soils or a much smaller leach field than required for a conventional or sand filter system, making more land suitable for on-site disposal. Alternative systems have become available for residential and commercial use, and make more land available for development. A pumping schedule should be adhered to so as to ensure proper function.*

#### 8.3.2.1 On-Site Wastewater Regulation in Vermont

Effective July 1, 2007, local ordinances were superseded by state rules. These regulations provide criteria for isolating disposal systems, septic tanks and leach fields from wells, property lines and buildings. Permits are also required for any substantial modification of a building that would lead to increased wastewater flows. The regional office of the Department of Environmental Conservation issues State wastewater permits.

#### 8.3.2.2 Planning Considerations

Fayston's terrain and soils can pose serious problems for siting septic systems. Slopes of over fifteen percent (15%) gradient represent a majority of Fayston's land area; under new state regulations the maximum allowable ground slope at leach fields is 20 percent (up to 30 percent under discretionary considerations). Many soils in Fayston have poor quality for subsurface sewage disposal.

## 8.4 Wireless Telecommunication Facilities

Wireless communication has become part of everyday life and a service relied upon by business, emergency services, and the public. The ability to communicate from almost anywhere brings added convenience and security to our lives. The residents of Fayston want and expect good service, but they also expect the design and placement of new facilities to be camouflaged and/or respect the quality of the rural landscape.

Wireless telecommunication facilities in Fayston are regulated through the Land Use Regulations and the Public Service Board. The facilities are allowed in all zoning districts as a conditional use. Currently there are three facilities, of which one is located at Mount Ellen, another at Mad River Glen, and a third off of Tucker Hill Road. There are several carriers in Vermont, and many new companies seeking sites in the state. Balancing the siting of telecommunication towers with the increasing demand for service is an ongoing issue.

## 8.5 Energy

The sun and the forest were the earliest energy sources in Fayston. In the twenty-first century, the Town's land use patterns and economy have been shaped by the advent of other energy supplies, including electricity, gasoline, LP gas and fuel oil. These energy developments have facilitated the rapid growth of our community; this has resulted in the loss of the self-sufficiency afforded our region up until the early 1900's when animal, wood, and mechanical hydropower provided the bulk of our energy supply. While the Town has a very limited ability to influence local dependence on various energy sources, some Town policies can influence the efficient use of energy resources. Further, through an understanding of the issues related to energy use, the Town can more effectively plan for its future.

Increasing a home's energy efficiency is an extremely effective way to conserve energy consumption and related expenses. Efficiency Vermont has worked to develop a program for financing efficiency or renewable energy improvements to homes, known as PACE. PACE stands for Property Assessed Clean Energy. It is another method of financing which allows homeowners to invest in energy improvements

to their homes through on a special assessment tied to the property. Fayston voters approved the Town's joining the PACE Program at 2014's Town Meeting in March.

### 8.5.1 Electricity

Fayston is serviced by two suppliers of electricity, Green Mountain Power Corporation (GMP) and the Washington Electric Cooperative (WEC). WEC serves customers in North Fayston and parts of Center Fayston, with GMP serving the remainder of the Town.

Despite hosting two ski areas, which are energy-intensive businesses, Fayston does not appear to have any capacity problems. GMP worked with the Valley's largest electricity user, Sugarbush Resort, to implement a load management plan enhancing efficiency at the ski area. This plan, coupled with improvements to the substation, should ensure that capacity exists to serve the Town for some time to come.

A sampling of the electricity usage in Fayston is shown in Figure 8-2, with data provided by Washington Electric Company. There are 286 metered residences located in their territory. The data shows that the annual consumption was 1,576,557 kilowatt-hours (kWh) which averages to 459 kWh per household per month, or 15 kWh/day. By comparison the state average is 20 kWh per household per day.

**Figure 8-2: Electrical Consumption Patterns**

| Households | kWh/Year | kWh/Year/Household | Avg kWh/day |
|---|---|---|---|
| 236 Residential | 1,390,510 | 5,892 | 16 |
| 16 Commecial | 88,958 | 5,560 | 15 |
| 34 Seasonal Res | 97,089 | 2,856 | 8 |
| 286 Total | 1,576,557 | 5,512 | 15 |

*Source: Washington Electric Coop, 3-28-13*

If the average usage is about 15 kWh/day, the average cost for that block of usage is .157/kWh, or $2.36/day. In addition to usage, there are monthly service charges (Washington Electric - $11.79; Green Mountain Power- $14.95)

While Town policy has little influence over state-regulated electricity rates, developing local policy, which encourages residents to improve energy efficiency, should clearly be a focus going forward. Another area that could have a significant impact would be net metering (where power is produced by the household owner, and excess power is sold back to the utility). Washington Electric has a total of 151 net metering members , five of whom are in Fayston (3% of net metering members). As a percent of population, Fayston has 1.7% of their Washington Electric households using net metering, vs 1.5% of all Washington Electric Co-op members. How net-metering works, especially with the smaller utilities, may change in the future. See discussion under Section 8.5.4, Renewable Energy Sources.

### 8.5.2 Household Heating Fuel

Household energy use accounts for almost a third of total energy used in the state, and most of that residential use is for home heating and hot water needs. Several suppliers located in Waitsfield,

Waterbury, Montpelier, and Morrisville supply Fayston's petroleum-based residences with fuel. Some of these suppliers are: Irving Oil, Gillespie Fuel & Propane, Bourne's Energy, and Suburban Fuel & Propane. Since 1990, some shifts in residential energy usage have occurred and are reflected in the table below comparing the 1990 and 2000 Census data. The data suggests that during the period, wood and electricity have become proportionally less common as a primary heating fuel, and propane has increased in market share. Data from the American Housing Survey (AHS) shows this trend is national as well. New construction and heating conversions have contributed to this trend. Propane use has also increased its market share with fireplace inserts and space heaters.

**Table 8-1: Primary Heating Fuel (All Occupied Housing Units)**

| Type of Fuel | 1990 | 2000 | 2010 |
|---|---|---|---|
| Wood | 35% | 14% | 18% |
| Oil/Kerosene | 29% | 29% | 29% |
| Gas-Propane | 28% | 52% | 48% |
| Electricity | 8% | 4% | 4% |
| Solar/Other | 0% | 1% | 1% |

*Source: 1990 and 2000 U.S. Census, 2010 American Community Survey*

The higher cost of electric heat is largely responsible for the popularity of oil and gas for home heating. Since 1998 however, the cost of residential fuel oil and propane have increased significantly, supply issues have arisen, and environmental impacts have been identified that may direct consumers away from fossil fuels. Harwood Union High school has replaced its fuel oil boiler with a wood chip boiler and expects there to be a benefit in efficiencies, cost, and carbon dioxide ($CO_2$) emissions. The Town added an outdoor wood burner at the Town Garage, and converted to a Wood Chip Boiler for the Town Offices in 2010, making it the Town Office with the smallest carbon footprint in Vermont. It is likely that new residential and heating conversions will turn to alternative energy methods for the same reasons (see 8.5.4). The Town should encourage catalytic converters on all wood burning units. Additionally solar hot water panels have proven to be an extremely effective and environmentally friendly method of heating water. Some State incentives for solar hot water panels are still in place; these may help cover the cost of the panels, not including installation and other materials. Efforts should be made by the Town to educate the public about such programs and builders should be notified that they are strongly encouraged to incorporate measures toward energy efficiency in all areas of construction.

### 8.5.3 Transportation Fuel

As is the case in most of Vermont, the private automobile is the dominant means of transportation in Fayston. Heavy reliance on private cars has a significant impact on energy use in the Mad River Valley (MRV). The Table below identifies energy consumption in 2012 in terms of electricity and transportation. Electrical consumption data came from the Renewable Energy Atlas of Vermont, while the transportation data was based on calculating population and average mpg figures from the US Department of Transportation. Transportation contributes a much larger portion of the MRV energy consumption, constituting nearly four times the electrical consumption of Fayston.

**Table 8.2 - MRV Energy Consumption Comparison (2012)**

| | Electrical (MWh) | Transportation (MWh) |
|---|---|---|
| Fayston | 5,732 | 19,730 |
| Waitsfield | 15,238 | 25,067 |
| Warren | 35,376 | 24,863 |
| Total | 56,346 | 69,660 |

*Source- Mad River Valley Planning District Data Report, 2012*

One means of conserving this transportation energy would be by increasing use of Public Transportation where feasible, or through increased ride-sharing. (See related discussion in Chapter 7.) As more and more workers can commute electronically from their homes, there will also be a corresponding reduction in transportation energy use. Finally, the potential for creating a growth center with integrated residential and commercial uses is an energy efficiency as well as a land use issue as growth center development can reduce dependence on the automobile.

## 8.5.4 Renewable Energy Sources

### 8.5.4.1 Hydro

Hydro power has been used in Vermont for over 150 years. Originally used to provide mechanical power for such applications as grain and saw mills, hydro is now almost exclusively used to produce electricity. There are several opportunities for micro scale (residential) hydro in Fayston. Micro-hydro systems do not dam rivers or streams. Their utility depends on the dynamic head, amount of water flow, and the efficiency of the turbine. Some might consider the steep hilly geography within our borders a nuisance but this condition is well suited for hydro power where high head (vertical drop) is as important as gallons per minute. However, cost and the effect of cold weather on the equipment also need to be considered.

The State and Federal regulatory climate is not especially favorable toward hydro development, particularly relating to any grid-tied application. Some residential off-grid applications, though, appear to be exempt from most if not all of the state and federal scrutiny and in these applications the Town is encouraged to support reasonably designed projects.

### 8.5.4.2 Wind

Wind power has the potential to be an economically viable source of renewable power and can be in some applications competitive with traditional power generation plants, with the added benefit that it is not affected by spikes such as those seen fossil fuel prices. In recent years it has experienced resurgence as the fastest growing energy source in the world. Although Vermont has potential for wind power, the intermittent nature of wind as an energy source has not yet been compensated for by development of adequate and cost efficient storage solutions. However, advances in small scale wind turbine technology figure to make it an increasingly viable option for private individuals or groups of individuals.

Fayston homeowners may have potential non-ridgeline locations for the placement of smaller-scale residential wind turbines, but not for commercial systems. Commercial wind energy systems (wind

farms) are generally large-scale projects with multiple turbines designed to generate electricity, and these are not appropriate for location in Fayston for several reasons. The Green Mountain ridgeline and hill tops are not suitable for locating the turbines due to relative inaccessibility, to the prevailing wind directions (which are more south/north than west/east), and to the existence of the ski areas as well as the Long Trail. Also, the potential impacts of these turbines on the landscape and environment is extremely problematic. Fayston's highest elevation lands contain many important natural resources and are the most sensitive sites. They are also located in our Forest and Soil and Conservation Districts, where development is limited. The prohibition of large scale energy systems was supported by the 2012 Fayston Town Survey, where public sentiment looked favorably on the idea of wind power on a residential scale, but much less so for larger commercial scale. Most of these people supported the installation of individual, home-scale towers in places other than the ridgelines.

Thus it is the policy of the Town of Fayston to prohibit commercial wind energy systems, but to encourage wind energy development on the smaller individual scale. The Fayston Town Land Use Regulations shall be revised to reflect this policy. Understanding and honoring the importance of finding sustainable, clean and renewable sources of locally produced power shall be a high priority for the Town. Net metering is one way in which a homeowner can realize savings from operating an individual wind system. Under net metering, a homeowner is permitted to connect suitable generating equipment to the public power grid. During periods when more energy is generated than the property is using, the metered amount of electrical energy provided to the grid reduces residential electric bills. In order to net meter, the homeowner must receive a Certificate of Public Good from the Public Service Board. Wind energy systems of up to 15kW or less are eligible for net metered electric rates. These wind systems account for only a small percentage of Vermont's net-metered capacity; by far the majority, according to the Department of Public Service, are accounted for by photovoltaic arrays (solar systems).

It is important to note here that there are some issues for the utility companies, especially the smaller ones, connected with net metering. Under the state's rules, Vermont utility companies can deny new net-metering customers when net-metered energy has reached 15 percent of a utility's service area's total peak load. Three small utilities, including Washington Electric Coop, have reached this cap by the summer of 2013. While two of the companies have placed a moratorium on new net-metering projects, WEC has opted for a slower-growth strategy. Beginning in October 2013, all new net-metering arrays must be limited in capacity to 500 kilowatt-hours. Reaching the allowable cap has not yet become an issue with the larger utilities, such as Green Mountain Power, but the legislature will most likely be looking at the issue and making changes in the future to bring some equity to the system.

#### 8.5.4.3 Wood

Wood is a biomass fuel. The use of biomass fuel can replace or reduce the use of non-renewable fuels such as heating oil. When grown and harvested in conjunction with effective forest management plans, woodlots may provide an alternative fuel source for landowners, thereby decreasing dependence on fossil resources. While burning wood does create air pollution, wood-burning technology has improved and emission requirements have been implemented. Also, the increasing use of wood and wood chips in large-scale systems raises concerns regarding the ability to keep up with demand while maintaining sustainable harvest levels in our forests.

Recently, wood pellet stoves have become popular. Pellets come from a variety of wood sources. They are dried and compressed into small cylinder-shaped pieces of wood whose density allows them to burn more efficiently (up to 15% more efficiently than a wood stove), producing a lot of heat and very little ash. They do require a power source (electrical outlet) to operate.

Wood still serves as the primary source of home heating fuel for many Fayston households and possibly provides a back-up or supplemental heating source for many more. According to recent census figures, about 18% of Fayston homeowners use wood. Encouraging sound forestry management and retention of an adequate land base to allow for sustainable timber production are important ways to encourage this self-sufficiency when coupled with clean burning technologies. Fayston supports the continued use of wood as a fuel source and encourages residents to use low-emission word burning appliances.

#### 8.5.4.4 Solar

The application of active (systems which collect, store and distribute solar energy within a building) and passive (systems which utilize a building's structure to trap sunlight and store it as heat) solar technologies have demonstrated their cost effectiveness in Vermont, particularly in rural areas.

Photovoltaic systems can be used to convert sunlight to electricity. These systems require equipment such as solar panels, a charge controller, batteries, and an inverter, which converts DC current into AC current for household use. Photovoltaic systems of up to 15kW are eligible for net metered electric rates, after receiving a Certificate of Public Good from the Public Service Board. Since solar energy is inexhaustible, and neither contributes pollutants to the atmosphere nor to our reliance on foreign energy suppliers, strategies should be developed to encourage its use in Fayston. However, as with wind turbines, while Fayston residents are supportive of residential-scale solar, they are not as favorably inclined toward the large industrial-scale solar farms. Most people who responded to the questions on solar power in the 2012 Fayston Town Survey believe that any solar panel installation should meet setback requirements and take visual impacts into consideration. See Section 8.5.5 below on the siting of facilities.

Passive solar designs can reduce heating and electricity bills. No mechanical means are employed in passive solar heating. Instead, siting and design measures, such as south facing windows, open floor plans, and ventilation are used. Solar-tempered buildings are buildings that have their long axis oriented within 30 degrees of true south and have an unobstructed net south facing window area equal to at least 7% of the total floor area. Solar-tempering coupled with proper insulating can offset heat costs in a building by 40%. Although solar-tempering at initial construction generally requires no additional investment, experts suggest that a majority of new buildings in Vermont do not incorporate such design principles. Fayston supports the use of solar energy design in new construction within the Town. Efficiency Vermont, an organization created by the PSB in 1999, offers a program called *Vermont Energy Star R Homes* that provides technical assistance and rebates to homebuilders and buyers who build energy efficient homes.

#### 8.5.4.5 Vegetable Biofuels

Biofuels are agriculturally derived liquid fuels that can be used to run vehicles and heat buildings. They include biodiesel, ethanol, and even straight vegetable oils. A variety of plants with high oil or cellulose content can be employed to produce these products. Some, including corn, sunflower, canola, soy and

hemp, could be grown and processed in the Valley. Doing so could help keep money circulating in the community, creating jobs and sustaining local agriculture, while helping to avoid the external costs associated with fossil fuels. However, it may also take farmland out of food production and some question the energy inputs processing requires.

### 8.5.5 Siting of Energy and Communication Facilities

The siting of facilities has become controversial statewide, not only for wind turbines, but also for solar farms and cell towers. As stated above, the 2012 Fayston Town Survey indicated that those who answered the questions about renewable energy and communication facilities are in favor of promoting these facilities, but are concerned about scale and location. Large scale wind farms should be prohibited in all of Fayston and the regulations need to be revised accordingly. Large scale solar energy systems should be prohibited in the Forest District and Soil and Water Conservation District, where the Town's highest elevation lands are located and where development is limited; the regulations need to be revised accordingly.

Because of the likelihood of undue adverse scenic and environmental impacts to higher elevation lands, all new energy and telecommunication facilities—including residential wind towers, transmission and distribution lines, accessory structures and access roads—are prohibited above 1,700 feet elevation. Any energy or telecommunication development under 1,700 feet shall not result in undue adverse impacts to surface waters, ground water and mapped source protection areas, core forest areas, inventoried wildlife habitat and travel corridors, and mapped scenic resources.

Most of these facilities, including small facilities connected to the power grid, are regulated by the Vermont Public Service Board (PSB) rather than the Town. The Town of Fayston requests that the Public Service Board require, for their review of all energy and telecommunication facilities within the Town, the developer to provide the following:

- A wildlife habitat assessment, including but not limited to assessment of impact to migratory, resident and breeding avian and bat populations
- A rare species assessment; and mitigation plans (if necessary)
- A visual impact assessment, including pre- and post-construction photo simulations of the project as seen during the day and at night
- Alternative sites analysis.
- Adequate financial surety, either in cash or letter of credit, to repair damage to local roads and to stabilize the entire construction site during and following construction of the project. The financial surety should be available to the municipality in the event that the municipality is forced to conduct work to secure the stability of the soil and vegetation on the site, including the access road, after construction is completed.
- Sufficient decommissioning funds, kept in an escrow account associated with the property that is separate from the developer's general accounts, so that the site will be restored to natural conditions if the project is not repowered at the end of its useful life.
- A contingency plan that outlines mitigation action, in the event of unforeseen and unacceptable negative impacts from the completed project.

- Financial assistance to the Town to pay for the hiring of qualified engineering, environmental, and legal consultants to assist the Town in reviewing the application and establishing local revenue agreements.

Individual wind systems with blades less than 20 feet in diameter and those not connected to the grid are not regulated unless a town specifically addresses them in their zoning bylaws; Fayston does not currently regulate these structures. Rural areas with low density residential development or working agricultural landscapes are considered the most appropriate places to locate individual wind systems.

A small net-metered or off-grid renewable energy facility, including solar, wind or a combined system intended solely to serve an individual residence or business, will be considered an accessory structure allowed in all zoning districts in which structures are allowed. Individual energy systems must be designed so that they are not located as a focal point in one of the scenic areas identified in this plan. The permitting of these facilities shall be reviewed under the conditional use review process with additional safeguards specified in the Land Use Regulations. At a minimum, the additional safeguards shall regulate setbacks which accommodate a fall zone, operational noise levels, and lighting.

The siting of some solar installations has raised concerns in other parts of the Valley and the state about the impacts that such facilities can have on a town's scenic, historic and agricultural resources. While it hasn't become a concern in Fayston yet, it may in the future as solar becomes a more viable option. As a result, the Planning Commission shall develop community siting standards, for consideration by the municipality and the Public Service Board, that are intended to avoid and mitigate potential impacts of facility development, while promoting new installations in appropriate locations. When feasible, solar arrays should be sited outside of or at the edge of scenic views, conforming to setback requirements; they should also be screened from view through the use of existing topography, structures, or vegetation that does not block the distant views.

The Planning Commission and Conservation Committee should identify and map those areas of the Town that are most suitable for renewable energy and telecommunication facility development and include this information in the Town Plan.

## 8.6 Community Facilities

The Fayston Elementary School and Fayston Town Hall are the only two municipally owned community service facilities in Fayston. Both facilities are well used on a regular basis, serving as a location for meetings, sports practices, gatherings and more.

### 8.6.1 Child Care

Recognizing that child day care is vital to a healthy community and a healthy economy, Vermont law requires that "A state registered family day care home serving six or fewer children shall be considered by right to constitute a permitted single-family residential use of property." As such, childcare is permitted by right in all but the Forest Reserve districts in Fayston. Day care centers serving more than six children are also permitted as conditional uses in the Rural Residential and Recreation districts.

Within Fayston and the surrounding Valley towns, there are several registered home day care providers and twelve State-licensed childcare providers. The 2012 Town Survey reports that 10 percent of full-time residents have at least one child in day care, 47 percent of these parents reported that childcare is hard to find and 27% state that this often negatively impacts them. As the State of Vermont moves toward mandatory Pre-K education, further studies may be required to assess the impact on child care needs.

### 8.6.2 Senior Citizen Services

Fayston's senior citizens are served by Mad River Senior Citizens, Inc., which is the clearinghouse for senior meals, transportation and housing services in the Mad River Valley. Services are based in the Evergreen Place Senior Center in Irasville, which hosts bi-weekly meals, medical services and social activities, as well as providing shared housing units. The facility has enabled the seniors to consolidate activities and services into one building that is served by transit and within walking distance of banks, offices and shops in Irasville.

When Evergreen Place opened in 1999, it marked the culmination of a multi-year, million dollar planning and fundraising effort to provide what became Vermont's first combined senior shared housing and Senior Center complex. Capital planning for current and future needs of Evergreen Place is an on-going effort.

Transportation by GMTA is provided to those who qualify for medical treatment, meal programs, senior center services and shopping trips.

### 8.6.3 Emergency Services: Fire Protection, Police, and Ambulance Services

Fayston utilizes cooperative agreements with other area governments to provide both police and fire protection services to residents.

#### 8.6.3.1 Fire Protection

Since 1988, Fayston has maintained an agreement with the Town of Waitsfield for fire protection. The budget is allocated… 60/40 percent allocation between Waitsfield and Fayston, respectively. This allocation, determined at a joint Waitsfield/Fayston select board meeting each year, is based on the distribution of the number and type of calls in each town over the past year. Since 1996, the Fire Department has made an average of 16 calls in Fayston and 24 calls in Waitsfield each year. In 2012, the Fire Department responded to 98 calls, of which 37 were in Fayston. During that year, 12 of the calls were mutual aid to Moretown (9) and Warren (3). Therefore, of the calls between the two towns, Fayston remains close to 40% (43% ).

The Fire Department feels that the 60/40 arrangement continues to be appropriate. However, it may need to be re-evaluated if new development in Fayston leads to an increase in the proportion of calls from Fayston and/or a significant, longer-term increase in the total number of calls per year. At the present time, there are no areas in Fayston that are especially difficult for the Fire Department to serve, and Chief Bub Burbank states that communication between the Town and Fire Department has always been excellent.

The Fire Department is currently made up of approximately 24 active volunteers, mostly Waitsfield residents. The Department is located in Waitsfield Village next to the General Wait House on property leased from the Waitsfield School Board. The past performance of the Fire Department has been exceptional. In 2005 the department was awarded a Homeland Security grant in the amount of $40,850 which was used for equipment.

#### 8.6.3.2 Police

The Vermont State Police and the Washington County Sheriff's Department are the two organizations responsible for law enforcement in Fayston and the Mad River Valley. The State Police operate out of the Middlesex Barracks, located on Route 2 in Middlesex, and are primarily responsible for all law enforcement matters in the Valley, including major criminal investigations.

Unlike the neighboring towns of Waitsfield and Warren, Fayston has elected not to supplement the level of police protection currently provided by the State Police and County Sheriff. Should the Town choose to add services in the future, this can be done by contracting with the County Sheriff for services on a cost-per-patrol hour basis.

#### 8.6.3.3 Ambulance Services

Fayston's ambulance services are provided by the volunteer Mad River Valley Ambulance Service (MRVAS) based in Waitsfield. The MRVAS is supported by annual appropriations from the Towns and Sugarbush, as well as community donations, subscriptions and fees for service. In 2012, the MRVAS responded to a record number of 473 calls; 59 of these calls were in Fayston.

Helping support the continued vitality and financial health of this volunteer ambulance service will be important for Fayston to ensure that these services are available for residents and skiers. As with fire protection, residents strongly support the MRVAS and believe it provides excellent service.

#### 8.6.3.4 Health Care

The Mad River Valley is served by one health care facility, the Mad River Valley Health Center, Inc. (MRVHC) in Waitsfield. This non-profit Corporation was formed in the early 1980's, and purchased a small ranch house on Route 100, hoping to attract a physician to The Valley, and thus ensure the provision of "local" health care services. Dr. Fran Cook eventually came to The Valley and purchased the practice (Mad River Valley Family Health), while the MRVHC , Inc. retained ownership of the building. As the local population grew, so did Dr. Cook's practice, and eventually the "little ranch house" was no longer meeting the needs of the community. After a successful Valley-wide capital campaign, the MRVHC began construction of a new, two-story facility in the Spring of 2005, and opened the building in December of that same year. With the construction completed, the MRVHC volunteer Board of Directors (comprised of members from Warren, Waitsfield, Fayston, Moretown, and Duxbury) remains focused on its duties as landlord, and is also coordinating health education programs and outreach on topics of interest to the community. Mad River Valley Family Health was recently sold to Central Vermont Medical Practices Group (a part of Central Vermont Hospital), who has signed a long term lease with MRVHC, Inc.

The MRVHC operating budget includes contributions from the Valley towns. Contributions are also requested from Moretown and Duxbury. Financial support from the Valley towns enables the MRVHC, Inc. to achieve its mission and best serve the community. Specifically, the Health Center is:

- A modern health center keeping with the character of the Valley
- A custom designed medical office space that provides improved privacy and confidentiality and is fully accessible to the disabled and the Mad River Valley Ambulance
- A building that is leased to a variety of healthcare providers including family practice, mental health services, physical therapy and massage therapy
- A health center that is a community owned building
- A venue to emphasize health promotion with a movement/wellness studio
- A venue for a wide variety of Community Health education services and workshops

The Mad River Valley Health Center is committed to serving all residents, regardless of their ability to pay. Outpatient hospital care is available at the Central Vermont Medical Center in Berlin, Gifford Medical Center in Randolph, and Fletcher Allen Health Care in Burlington.

### 8.6.4 Solid Waste Disposal

Under Vermont law (Act 78), all Vermont communities are required to adopt a solid waste management plan or participate in a solid waste district with an approved solid waste plan. Fayston is part of the Mad River Solid Waste Alliance (MRSWA), which was formed through an Interlocal Agreement signed in 1994. The MRSWA, which includes Fayston, Waitsfield, Waterbury, Moretown and Warren, operates with a Solid Waste Implementation Plan (SWIP) that was completed in 1993 and amended in 1995. TheSWIP was prepared with the assistance of the Central Vermont Regional Planning Commission and was adopted by the Board of Selectmen in October 1993. The SWIP addresses the Town's solid waste responsibilities through the competitive use of private waste management and disposal vendors.

Under this plan Fayston residents used the Moretown Landfill, Inc. in Moretown for solid waste disposal and have the Waitsfield Transfer Station for a local transfer station. A number of private haulers also provide home and business pickup. Two used oil collection tanks were also made available at the Waitsfield Transfer Station and Moretown Landfill, Inc. landfill in Moretown, and an oil filter crusher was available at the landfill.

During 2012, the owners of the Moretown Landfill, Advanced Disposal, were cited with a number of violations related to the prior operator’s failure to control odor and landfill gas emissions at the facility, and the facility’s contribution to violations of groundwater quality standards. The facility is currently closed.

### 8.6.5 Valley and Regional Planning

Fayston is an active participant in two regional planning agencies, the Central Vermont Regional Planning Commission (CVRPC) and the locally-funded Mad River Valley Planning District (MRVPD). Participating in these two agencies gives the Town a voice in planning and policy at the county/regional level through CVRPC and in matters of Valley-wide concern, including ski area growth and development, through the MRVPD.

Fayston has representatives to CVRPC's planning body and its Transportation Advisory Committee, or TAC. One of the most important roles of CVRPC is policy setting on transportation projects; CVRPC has one vote on the preferred alternative. The Town's representative to CVRPC's TAC actively represents the Town's position on the preferred alternative. Fayston must maintain an active presence at the Regional Planning Commission TAC to ensure its concerns are fully represented in regional transportation decisions.

One Fayston Planning Commission member and one Select Board member represent the Town on the Steering Committee of the Mad River Valley Planning District. In addition, the towns of Waitsfield and Warren, the Mad River Valley Chamber of Commerce, and Sugarbush Resort are represented on this committee. For Fayston, the MRVPD has four major functions: planning support; special project assistance and management; writing of grant proposals; and ski area growth and development review. The MRVPD provides grant proposal writing and planning assistance to Town boards and staff, as well as support on major projects such as Tropical Storm Irene clean-up and Town Plan updates. The Steering Committee also reviews all Act 250 permit applications sought by Sugarbush Resort. In cases where a Valley-wide impact is identified, the Steering Committee seeks party status for the Act 250 proceedings and works with Sugarbush on mitigation measures to offset any anticipated impacts. This role will be important in monitoring any future development that might occur.

CVRPC is supported through annual dues assessed based on a Town's population. Funding for the MRVPD is set annually by the Steering Committee. Generally, the MRVPD's budget is divided into four equal shares paid by the three towns and Sugarbush. Fayston's share of the MRVPD budget in 2013 is $23,842.

### 8.6.6 Partnerships with Community Agencies

To enhance the services it provides to its residents and to pool resources with other towns, the Town of Fayston provides annual financial support to a range of non-profit organizations operating within Fayston and the Mad River Valley. These organizations, such as CCTA, Joslin Memorial Library, the Mad River Valley Ambulance Service, Mad River Valley Senior Citizens, Inc. and Skatium, offer important community services that the Town on its own could not provide. Supporting non-profit and community organizations has long been seen as sound governmental policy and a cost-effective way to provide these services to residents. Moving forward, groups that desire Town funding should assist the Town by demonstrating how Town funding fits into an organization's larger financial plan and what services are provided to Fayston residents.

## 8.7 Community Facilities Goals and Objectives

**Goal 1: Maintain community services and facilities, and expand as required, in a manner which reinforces Fayston's land use policies and does not overburden the Town's taxpayers.**

Objective 1: Continue to provide high quality education to Fayston's youth

Implementation Strategies:

a. Consistent use by the School Board of proven methods for monitoring and projecting enrollment trends to facilitate planning for Fayston Elementary School.

b. Support Harwood Union School District's effort to identify current and future space needs, ansd alternatives for addressing these needs.
c. Schools should continue to monitor trends in technology that may better deliver education, or better prepare students for working with the latest in technology.

Objective 2: Provide municipal services necessary to ensure the health, safety, welfare and emergency service needs of Fayston residents and visitors.

Implementation Strategies:
a. Continue the agreement with Waitsfield to jointly fund the Waitsfield/Fayston Volunteer Fire Department.
b. Ensure that all development is accessible to emergency service vehicles and require that new development provide fire protection facilities as deemed necessary, such as pull offs on driveways in excess of 500' and ponds for protections.
c. Continue to provide annual financial support to the Mad River Valley Ambulance Service.
d. Continue to provide annual financial support to the Mad River Valley Health Center.
e. Continue to provide annual financial support to the Joslin Memorial Library.
f. Encourage Fayston residents to volunteer for service with the Mad River Valley Ambulance Service, Waitsfield/Fayston Fire Department, etc.

Objective 3: Encourage and support private organizations working to meet the diverse needs of our community.

Implementation Strategies:
a. Continue to support the Mad River Valley Senior Citizens as current and future needs for seniors and for the Evergreen Place Senior Center are developed.
b. Review the Fayston Land Use Regulations to ensure that adequate provisions allowing day care facilities are included and reflect statutory changes.
c. Encourage the continued vitality of the Valley's private cultural organizations and facilities.
d. Encourage the continuation of the Valley Community Fund.
e. Continue to increase the utilization of the Fayston Elementary School as a community resource available for a variety of public uses other than its primary educational function.

Objective 4: Explore the potential for public water and wastewater treatment services with adjacent towns, Sugarbush Resort and Mad River Glen.

Implementation Strategies:
a. Work closely with the Town of Waitsfield and the Mad River Valley Planning District on plans for public sewer and water serving Irasville to determine if service could/should be extended into Fayston.
b. Through the MRVPD, continue efforts to explore the feasibility of a Valley wastewater district.

**Goal 2: Facilitate and encourage the availability of energy resources at reasonable costs, while ensuring public health, aesthetic quality and environmental protection.**

Objective 1**:** Encourage conservation of energy resources and the efficient use of renewable sources of energy.

Implementation Strategies:

a. New residential, commercial and industrial developments should be encouraged to meet high standards for energy efficiency.
b. Provide information to homeowners regarding the use of the PACE program to increase home energy efficiency.
c. Encourage concentrated development patterns and promote land use policies that help achieve this goal.
d. Encourage energy audits of existing residential, commercial, and industrial buildings through the MRVPD grant program and other available means.
e. Support appropriate legislation and encourage Green Mountain Power and Washington Electric Co-Op to develop and implement demand-side energy management programs, and expand net metering programs.

**Goal 3: Increase cooperation and coordination with neighboring towns, the Central Vermont region, and the State.**

Objective 1**:** Continue fostering cooperative partnerships with other Valley Towns in order to better address issues of mutual concern, enhance efficiency through cost sharing, and minimize conflict through ongoing communication.

Implementation Strategies:

a. Continue the Town's participation in such multi-town organizations as the Mad River Valley Planning District, Mad River Valley Recreation District, Central Vermont Regional Planning Commission, and Washington West Supervisory Union, and explore other opportunities for forming inter-town entities to provide services in a cost-effective manner.
b. Provide neighboring towns with an opportunity to participate in the planning process regarding matters of mutual concern.
c. Continue to work with neighboring towns to address such issues of mutual concern as solid waste management and police and fire protection, and explore other opportunities for such relationships.
f. Encourage and support private organizations currently providing public services to area towns, such as the Mad River Valley Ambulance Service and the Mad River Senior Citizens.
g. Work with other Valley towns and the Central Vermont Regional Planning Commission, in developing any modifications required to the Five Town Solid Waste Alliance Management Plan, as a result of the closing of the Moretown Landfill.
h. Continue to support the operation and expansion of the transfer station at a convenient location, subject to the terms of the aforementioned solid waste plan.

Objective 2: Ensure that state decisions affecting land use, transportation and commercial activity in the Town of Fayston are compatible with the Fayston Town Plan.

Implementation Strategies:

a. Maintain an active presence on the Central Vermont Regional Planning Commission and its Transportation Advisory Committee to ensure Fayston's position is fully represented on all regional policy and transportation decisions.
b. Review state decisions and actions affecting the Town for compatibility with the Fayston Town Plan.
c. Participate in Act 250 decisions to ensure that interpretations of compatibility with the Town Plan are made by the Fayston Board of Selectmen and Planning Commission.
d. Review State agency plans to ensure consistency with this Town Plan.

**Goal 4: Facilitate and encourage the availability of energy resources at appropriate costs, while ensuring public health, aesthetic quality, and environmental protection.**

Objective 1: Support the use of individual on-site energy sources.

Implementation Strategies:
a. Cordwood for domestic use is an important by-product of better forest management. Encourage landowners with woodlots to participate in sustainable management programs that emphasize responsible utilization of fuel wood resources as well as the production of high grade saw timber.
b. Encourage the retention of an adequate undeveloped land base to allow for sustainable fuel wood production.
c. Update the zoning bylaw to prohibit commercial wind energy systems and to prohibit large-scale solar energy systems within the Forest and Soil Conservation District, but to encourage wind and solar systems on a smaller individual scale below 1700 feet elevation outside this districts. Residential connection of individual wind energy and photovoltaic systems to the electric power grid under “net-metering” shall not be considered commercial use.
d. Add specific standards for residential wind and solar energy systems that address limitations on height, separation of structures, minimum lot size, setbacks, aesthetics, operational noise, environmental impacts and other items as deemed necessary.
e. Study the issue of whether outdoor wood furnaces should be regulated and, if recommended, propose either an ordinance or performance standards for adoption.
f. Amend the Land Use Regulations as necessary to also allow appropriate residential scale hydro generation.
g. Encourage the use of passive solar design in new construction within the Town.
h. Promote awareness of local sources of energy and opportunities to employ renewable energy.

Objective 2: Ensure that the siting of energy and telecommunication facilities do not have an adverse impact on Fayston’s landscape and environment.

Implementation Strategies:
a. The Planning Commission and Fayston Natural Resources Committee should identify and map those areas of the Town that are most suitable for renewable energy and telecommunication facility development and include this information in the Town Plan.
b. Amend the Land Use Regulations as necessary to ensure that all new facilities meet community standards.
c. The Town will participate in Public Service Board (Section 248) review of new and upgraded generation and transmission facilities as necessary to ensure that adopted community standards are

given due consideration in proposed energy facility development. This may include joint participation with other affected municipalities, the Mad River Valley Planning District, and the Central Vermont Regional Planning Commission.

d. New energy facility development within or that may affect the Town of Fayston must conform to Town Plan requirements or adopted community standards for energy facility siting and design to receive municipal support or approval.

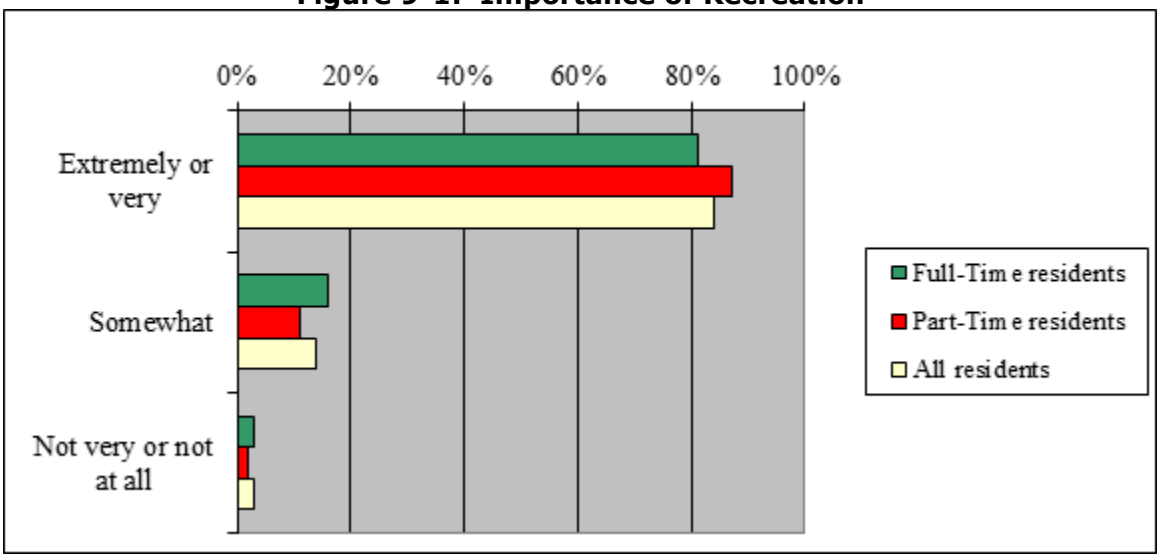
e. In consultation with the Selectboard, the Planning Commission should consider adopting further guidelines to direct local participation in Section 248 proceedings for the review of utility projects located in Fayston or in neighboring communities which may affect the Town. The guidelines should reflect levels of participation or formal intervention in relation to the type, location, scale, and magnitude of a proposed project, and its potential benefits and impacts to the community.

# Chapter 9: Recreation

## 9.1 Introduction

Fayston is fortunate to have an exceptional array of year round, outdoor recreational resources, both within its boundaries and in the neighboring Valley towns, and these recreational opportunities are highly valued. In the 2012 Fayston Town Survey, full-time residents rated recreational opportunities as one of the most important Town assets. Part-time residents rated it, along with scenic beauty, as the most important asset. A large majority of households (83%) stated that they consider recreation to be "very" or "extremely" important (see Figure 9-1). The ability to recreate actively is also an important way in which Fayston residents can maintain healthy lifestyles.

**Figure 9-1: Importance of Recreation**

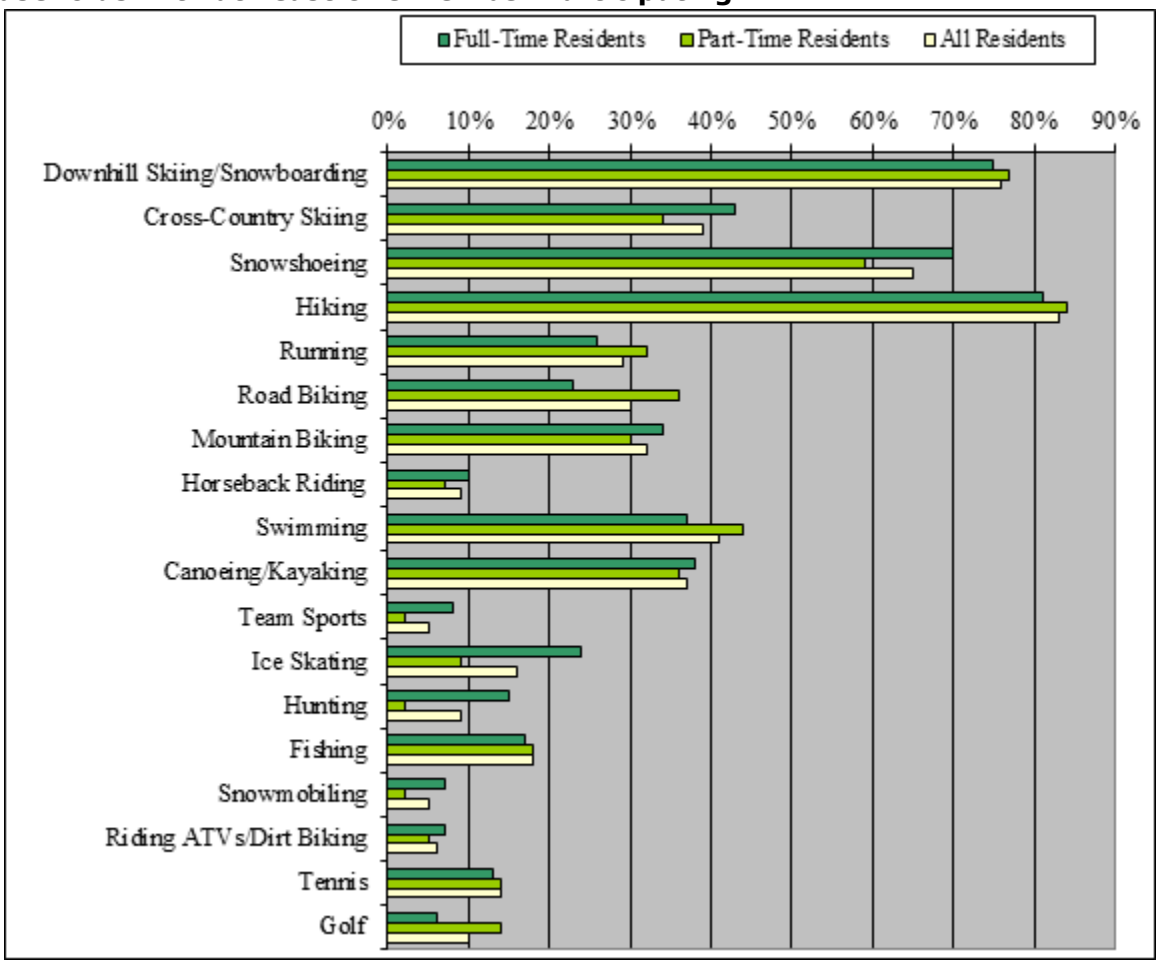



*Source: 2012 Fayston Town Survey*

Fayston residents participate in a wide variety of recreational activities. The most popular are hiking, downhill skiing/snowboarding, and snowshoeing (see Figure 9-2). The next most popular activities are swimming and cross-country skiing. Other popular activities include road biking, canoeing and kayaking, and mountain biking.

The favored activities of full-time and part-time residents are very similar. The only significant differences are that more full-time residents hunt (17% of full-time households versus 5% of part-time households) and snowmobile (11% versus 3%).

**Figure 9-2: Recreation Activities:**
**Households with at Least One Member Participating**




*Source: 2012 Fayston Town Survey*

## 9.2 Recreation Assets

With hiking and other outdoor activities being the most popular, most recreation in Fayston is centered on the use of the Town's undeveloped forests and mountains. Activity is also high at Fayston's two ski areas—Mad River Glen and Sugarbush.

### 9.2.1 Ski Areas

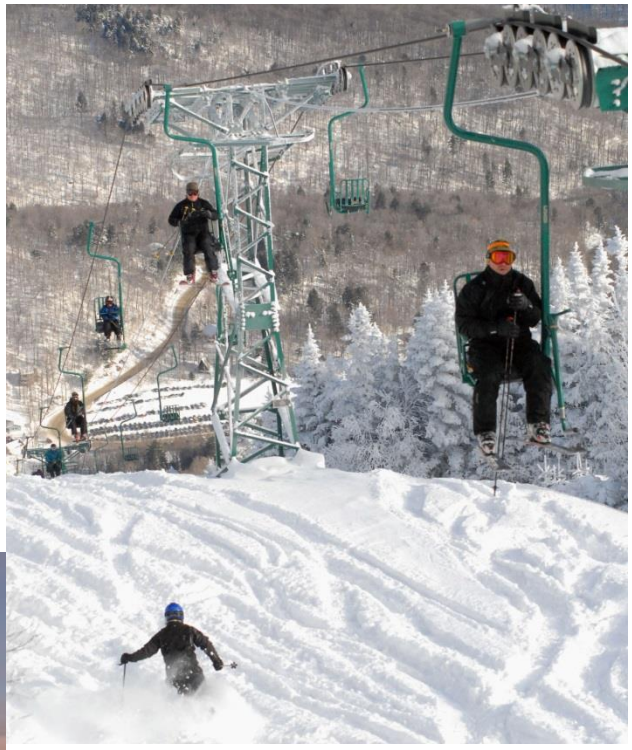
Fayston is home to two of New England's best ski areas: Mad River Glen and Sugarbush. Mad River Glen is one of the most unique ski areas in the county, and is consistently rated for the most challenging terrain in the East and often the country. The area has retained much of its early personality in many respects in that it makes very little snow, its main lift is a single chair (newly rebuilt in 2007), and it does not allow snowboarding. Mad River Glen is a cooperative owned by nearly 2,000 shareholders who

ensure that the ski area maintains its existing character and largely functions as it has historically. Mad River Glen was officially designated as a National Historic Site in 2012.

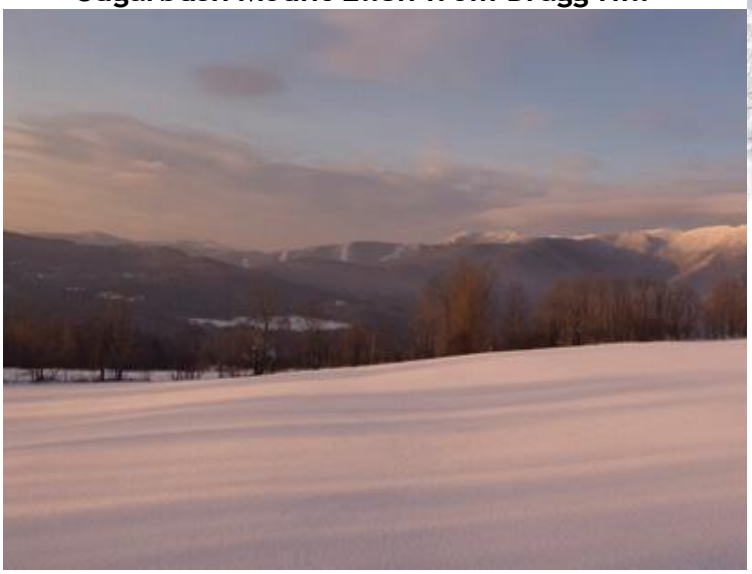
Sugarbush, on the other hand, is a ski area that has recently focused on upgrades to its facilities in order to become more competitive within New England. Sugarbush is significantly larger than Mad River Glen and has two base areas: the Lincoln Peak base area in Warren and the Mount Ellen base area in Fayston. The main focus of Sugarbush's new development has been at the Lincoln Peak base area, which is the larger of the two and where most development has historically been located. However, Sugarbush offers a Mount Ellen-only pass, which draws many skiers to the Fayston side.

Both Sugarbush Resort and Mad River Glen have made their facilities available to the Fayston Elementary School for its ski program. This practice has been extremely beneficial for the Town and well appreciated.

**Figure 9-3: Mad River Glen's New Single Chair**



**Sugarbush Mount Ellen from Bragg Hill**



### 9.2.2 Publicly Owned Lands Used for Recreation

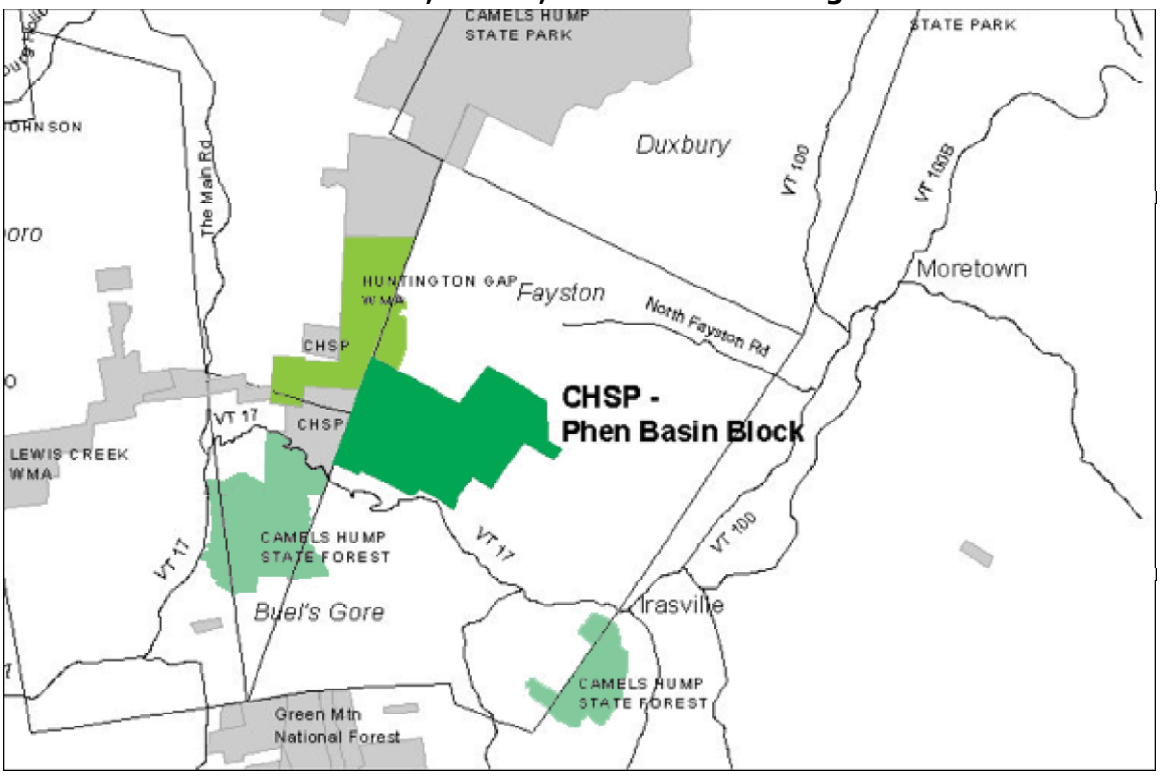
There are a number of publicly owned lands that are open to Fayston residents and visitors for a wide variety of recreation activities. These include Phen Basin, which is part of Camel's Hump State Park, the Howe Block of Camel's Hump State Forest, the Huntington Gap Wildlife Management Area, and the Chase Brook Town Forest.

#### 9.2.2.1 Phen Basin

Phen Basin is a 3,100 acre parcel that is now part of Camel's Hump State Forest and is located to the north of Route 17 below Appalachian Gap (see Figure 9-5). Phen Basin was conserved through efforts of The Vermont Land Trust, The Trust for Public Lands, the Town of Fayston, the Mad River Planning District, and then transferred to the State. The varied terrain includes part of the eastern slope of the Green Mountains, forest, old logging roads, and wetlands. The rich mix of forests and wetlands provides habitat for bear, moose, and songbirds. The Catamount Trail, VAST snowmobile trails, mountain biking and hiking trails are located within Phen Basin.

Phen Basin was the subject of controversy in the early 2000s when the State closed a network of trails being maintained by local mountain bikers. This led to the development of a Stewardship Plan that is designed to balance human use with wildlife preservation. To achieve this, some human activities are limited to specific areas and seasons. Phen Basin continues to be one of the Town's most important recreational areas.

**Figure 9-5: State Owned Parks, Forest, and Wildlife Management Areas**




#### 9.2.2.2 Howe Block of Camel's Hump State Forest

The Howe Block, which is located along the Fayston/Waitsfield town line east of Tucker Hill Road and west of Route 100, is part of Camel's Hump State Forest. The Howe Block is heavily used for mountain biking, hiking, snowshoeing, and cross-country skiing, and contains a relatively large trail network, much

of which has been recently formalized. Official access points with parking are located near the bottom of Dana Hill Road and the top of Tucker Hill Road. There are also numerous other access points from a surrounding network of informal mountain biking trails.

#### 9.2.2.3 Huntington Gap Wildlife Management Area

Huntington Gap Wildlife Management Area (WMA) is a 1,568-acre parcel that is largely located in Huntington, but has 135 acres in Fayston. It lies mainly on the west side of the main range of the Green Mountains between Burnt Rock Mountain and Molly Stark Mountain, including a low saddle known as Huntington Gap, and is adjacent to Phen Basin. The Long Trail, Catamount Trail and a VAST snowmobile trail cross portions of the WMA. Huntington Gap WMA is also open to hunting, trapping, fishing, hiking and wildlife viewing. The WMA is owned by the State of Vermont and managed by the Vermont Fish & Wildlife Department.

#### 9.2.2.4 Chase Brook Town Forest

The Chase Brook Parcel is a 237-acre parcel of undeveloped forested land adjacent to German Flats Road near the Fayston Elementary School. Through the efforts of the Vermont Land Trust and others, it was recently conveyed to the Town from Sugarbush using funding provided by a number of non-profit organizations and individuals. In addition, Sugarbush transferred an adjacent parcel (the VanLoon site north of Chase Brook where the pump station draws water from Chase and Slide Brooks for snowmaking) to the Town for access to the Chase Brook parcel and for parking. In the summer of 2007, the Mad River Path Association (MRPA) built a new foot bridge with Recreation District grant funding across Chase Brook so that Fayston Elementary students and the public in general would have easier access to the trails on the parcel. In 2011/12 the McCullough barn (across from the Fayston Elementary School) was dismantled, a new foundation of poured concrete was installed with a larger setback from German Flats Road and the barn was reconstructed as a Nature Center.

The parcel includes a long section of the Catamount Trail, part of the MRPA's Mill Brook Trail, and mountain biking trails that were formerly part of the Tucker Hill cross country ski network. The parcel contains a mapped deer yard and is frequented by black bears.

## 9.3 Recreational Facilities

With the exception of Fayston Elementary School's gym and playground, which are available to the public during non-school hours, public recreational facilities that are available to Fayston residents are located in neighboring towns.

Given Fayston's small size, and the small size of other Valley towns, it makes most sense for Valley towns to work together to provide joint facilities and programs. As the Valley continues to grow, Fayston may need to continue to work with Waitsfield and Warren to expand existing facilities and to provide new facilities.

### 9.3.1 Playing Fields

Many public and private recreation programs, such as Mad River Valley Little League and Soccer, use the Couples Club field in Waitsfield, which is a private recreation field available to Valley residents and local

elementary schools. The Town of Waitsfield has set aside funding annually in its conservation, recreation and restroom fund to purchase land for playing fields if suitable land becomes available.

### 9.3.2 Swimming

The Mad River Valley's best swimming is generally in swimming holes along the Mad River. Popular locations are the Lareau Swim hole on Route 100 in Waitsfield and Warren Falls in Warren, which is now a part of the Green Mountain National Forest. A number of other swimming holes also exist along the Mad River.

Swimming pools are available at the Bridges and the Sugarbush Health and Racquet Club in Warren, both of which are private clubs that allow non-members on a fee-for-use basis. The nearest public swimming pool is an outdoor pool in Waterbury, and Fayston residents may use the pool at the non-resident rate.

### 9.3.3 Ice Skating

The Skatium, located in the Irasville growth center in Waitsfield, provides youth and adult skating programs. The Skatium receives grant money from the Recreation District to assist its operations. Efforts on the part of the Skatium to develop a viable financial plan should be encouraged to meet important an recreational need in the Valley.

The Town of Waterbury now hosts an enclosed skating rink that is now used by Valley hockey programs.

### 9.3.4 Trail Network

Fayston has an extensive network of trails for hiking, walking, mountain biking, cross-country skiing, riding, and snowmobiling. Many of these trails are part of larger networks, such as the Catamount Trail, the Long Trail, and the Mill Brook Trail. Others are informal and dependent upon the generosity of private landowners. These trail resources are extremely important to both Fayston residents and visitors. Protecting existing trails, providing for additional trails, completing connections within existing networks and providing multiple uses–for hikers, horses, snowmobiles, bikers and skiers–is an important planning issue for the Town. There is now a trail map describing trails in the Mad River Valley; contact the Mad River Path Association to obtain one.

Three of the largest Fayston trail networks are in and around the Howe Block of Camel's Hump State Forest, along Old Center Fayston Road and Center Fayston Road, and in the Chase Brook Town Forest. Other networks in the Mad River Valley include the Mad River Path and trails at Blueberry Lake.

#### 9.3.4.1 Catamount Trail

The Catamount Trail is a cross country ski trail that traverses the Green Mountain ridge from Massachusetts to Canada. It is maintained by the Catamount Trail Association (CTA), which is a non-profit organization. Portions of the trail in Fayston are also heavily used for hiking and mountain biking.

In Fayston, the trail runs roughly parallel to German Flats Road and Route 17 and then through Phen Basin. There are Fayston access points at the Battleground where there is permitted parking and

locations along German Flats Road. The trail can also be accessed via a short spur trail from the McCullough barn site across from the Fayston Elementary School (where there is parking and a new bridge across Chase Brook).

Much of the trail in Fayston runs across private parcels. The CTA has obtained permanent easements from a number of property owners, and ensuring permanent access is one of the CTA biggest challenges. The CTA has stated it would welcome the Town's assistance in helping secure agreements for trail crossings and/or access. There is one short gap in the trail on Maple Ridge Road near the Warren line, where the trail previously used a Class 4 road that was upgraded to Class 3 to accommodate a subdivision.

#### 9.3.4.2 Mill Brook Trail

The Mill Brook Trail is a single track trail with steep gradients that runs parallel to Route 17 from Tucker Hill Road to near the Mad River Barn through mostly hemlock forests. Between German Flats Road and its terminus near the Mad River Barn, it is contiguous with the Catamount Trail. The trail is well used for hiking, mountain biking, snowshoeing and cross-country skiing. Trail heads are located off of Tucker Hill Road, Route 17 at the Millbrook Inn and the Tucker Hill Inn, and German Flats Road across from Fayston Elementary School.

The Mill Brook Trail is managed and maintained by the Mad River Path Association (MRPA), a local non-profit organization. Ultimately, the MRPA would like to connect the Mill Brook Trail to Irasville and Mad River Glen. As with the Catamount Trail, most of the Mill Brook Trail is on private land, and land transfers and subdivisions continue to present challenges to maintaining trail access.

#### 9.3.4.3 Vermont Association of Snow Travelers (VAST) Trails

The Mad River Ridge Runners is a local snowmobiling club that is part of the statewide Vermont Association of Snow Travelers (VAST) that maintains 79 miles of snowmobile trails in Fayston, Duxbury, and Moretown. As with the Catamount and Mill Brook Trails, most VAST trails also run through private land. VAST has been very successful in maintaining good relations with property owners, and thus continued trail access. However, as is the case with other trails, property transfers and subdivisions present ongoing challenges for maintaining an interconnected network.

#### 9.3.4.4 The Long Trail

Fayston is home to six miles of the famed Long Trail, which follows the spine of the Green Mountains from Massachusetts to Canada. The Green Mountain Club, which is based in Waterbury Center, coordinates maintenance of the Long Trail with landowners, public agencies and volunteers. In Fayston, the trail can be accessed from Route 17 at Appalachian Gap, and via the Hedgehog Brook Trail, which runs from Big Basin to the Long Trail.

Through purchases and easements, the GMC desires to permanently protect the trail corridor, and has had a great deal of success within Fayston. Sugarbush has granted an easement from the northern border of the Green Mountain National Forest to near the top of General Stark Mountain, Mad River Glen has donated an easement from General Stark Mountain to Appalachian Gap, and the Big Basin

Forest Trust donated an easement from the Phen Basin line to its northern property line on Mt Ethan Allen. Part of the trail also runs through Phen Basin, which is protected through state ownership.

#### 9.3.4.5 Informal Trails

Fayston has a large network of informal trails on private and public land that are used for hiking, mountain biking, horseback riding, cross-country skiing. Many are along Class 4 town highways, abandoned logging roads, and former cross-country ski trails. Others are well-worn routes through public lands, such as Phen Basin.

Many of these trails are heavily used, some more so than many of the formal trails. However, due to their informal nature, these trail networks are constantly in flux, and may at times be either expanding or contracting. Over recent years, some have been adversely impacted by closures on private property and as a result of subdivisions and new developments; some interconnected networks have been fragmented.

The Fayston Natural Resources Committee is working with other trail user groups and private citizens to acknowledge these trails to keep them open for continued public use.

## 9.4 Hunting

Hunting is part of the traditional way of life in Vermont, including Fayston. The Town is considered prime hunting ground by both local hunters and visitors. Wildlife is plentiful in the wooded hills, where deer, moose, coyote, fox, fisher, turkey, and black bear are widespread. As with other recreational activities, as residential development expands into more remote areas, more land is being posted and less is available for hunting.

## 9.5 Fishing

Many of the streams and brooks in Fayston provide prime habitat for local game fish. Brooks are inventoried by the Fish and Game Department on a regular basis. Stream access is legal on public lands and at bridge crossings, but land owner permission is needed in other areas.

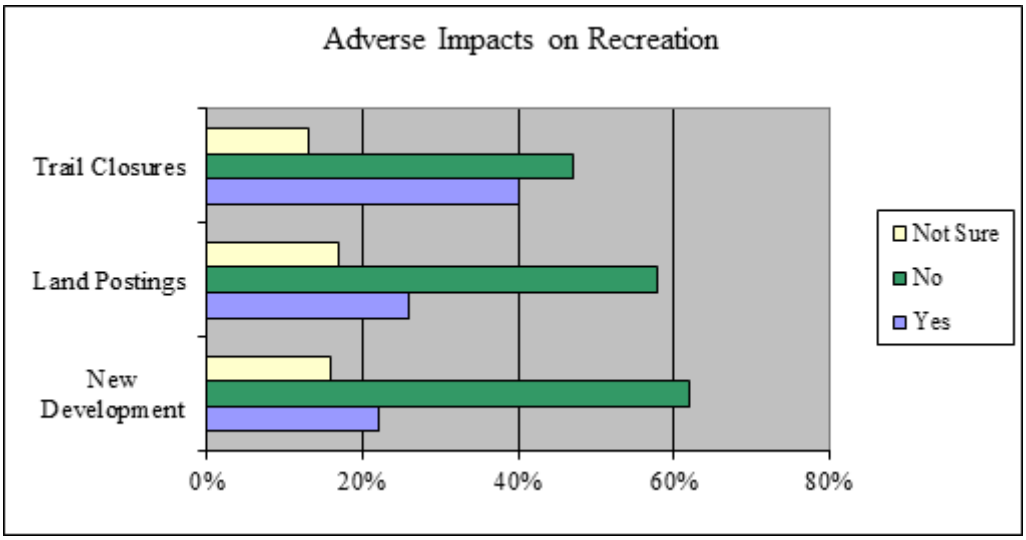
## 9.6 Recreation Issues

As described above, recreational opportunities are highly valued by Fayston residents and as the population increases, the demand for recreational opportunities increases. However, the most popular recreational activities are land-based, and increased development has reduced the amount of land available for the types of recreation that are most desired—from hiking to backcountry skiing to hunting. New development has also resulted in a fragmentation of existing trail networks. For example, the upgrade of a Class 4 road to Class 3 to enable development of the Maple Ridge Road subdivision off of German Flats Road resulted in the loss of a section of the Catamount Trail where skiers must now take off their skis and walk along a section of road. Two other recent subdivision applications proposed to upgrade Class 4 roads and eliminate trail use, but were subsequently modified to provide parallel trails. A number of new developments and subdivisions have also resulted in the closure or relocation of informal trails.

The significance of these issues is highlighted by the 2012 Town Survey results, where one-third or more of all respondents stated that recreational activities have been negatively impacted by new development, land postings, and trail closures (see Figure 9-6). These impacts have been experienced to the greatest extent by full-time residents, who spend the most time and focus many of their activities in Fayston and the Valley.

In addition, other than the playground at the Fayston Elementary School, the Town does not provide any recreational facilities. Fayston is a member of the Mad River Valley Recreation District, through which Fayston residents have access to fields, facilities, and programs in Waitsfield and Warren. (The Recreation District also operates as a grant organization that provides grant funds for recreation activities.) A second important planning issue for Fayston in the future will be how the Town can best provide access to recreation facilities—whether within the Town itself and/or through cooperation with neighboring towns.

**Figure 9.6: Adverse Impacts of Development, Land Postings, and Trail Closures on Recreation**




*Source: 2012 Fayston Town Survey*

## 9.7 Recreation Goals and Objectives

**Goal 1: Maintain Fayston's recreational opportunities for the young and old for all seasons.**

Objective 1: Plan for the growing recreational demand.

Implementation Strategies:

1. Use the 2012/13 Town Survey results to establish recreation needs and priorities.
2. Work with the Waitsfield, Warren, and the Mad River Valley Recreation District to determine Valley-wide needs and to jointly address recreation needs.
3. Develop a plan for meeting established needs and priorities.

Objective 2: Maintain Existing Recreation Assets

Implementation Strategies:

1. In cases where Class 4 roads are upgraded to Class 3, ensure that all recreational uses are maintained or that equal or better substitutes are provided.
2. Use the design review process to maintain the continuity of existing trail networks.
3. Encourage landowners to maintain public access for recreational trails, hunting, and fishing.

Objective 3: Ensure that development and use of recreation trails and other assets do not interfere with wildlife habitat and corridors.

Implementation Strategies:

1. Consult with FNRC and other appropriate parties when planning for new recreation assets; prohibit such development in deer wintering areas, wetlands, and other important natural areas.
2. Prioritize the promotion of the use of existing, non-detrimental, trails and other assets over building new

Objective 4: Expand recreational opportunities.

Implementation Strategies:

1. Continue to participate in the Mad River Recreation District as a way to develop Valley-wide facilities and programs.
2. Support the efforts of other towns, the Mad River Valley Recreation District, and private companies and organizations to develop and establish not-for-profit and for-profit recreation facilities and programs.
3. Support efforts by the Valley's various trail organizations to develop trails and gain easements.
4. Obtain, through purchase or conveyance, land parcels with high recreation value.
5. Use the subdivision process to ensure that new development is consistent with recreation plans and policies (as may be developed as a result of Goal 9.1).
6. Evaluate the use of tax abatements to provide open access and/or easements.
7. Encourage landowners to provide public access for recreational trails, hunting, and fishing.

# Chapter 10: Fayston's Economy

## 10.1 Introduction

In 2011, the Vermont Legislature added an 11th required element to the Municipal Plan:

> (11) An economic development element that describes present economic conditions and the location, type, and scale of desired economic development, and identifies policies, projects, and programs necessary to foster economic growth.

While the Fayston Town Plan has always included sections on economic conditions and policies to foster economic growth, this plan is the first to have a separate chapter on the topic.

The purpose of economic development is to ensure a thriving community capable of supporting a high quality of life for our residents, as well providing community services and municipal infrastructure. Fayston has opportunities to stimulate our economy in a way that preserves its natural beauty and rural character, which are so important to the Town and its residents. Economic areas to be encouraged, in particular, are businesses within the working landscape (forestry, agriculture, and value-added manufacturing of wood and agriculture products), home businesses, hospitality and tourism, and recreation.

## 10.2 The Past

Throughout its history, Fayston has supported land-based businesses, particularly logging, mining, and farming.

When Fayston was first settled by people of European descent in the late 18th century, subsistence farming was the economic mainstay. Because of the Town's rocky, hilly terrain, there were very few larger holdings in the Town. Fayston contains no river valley, only hilly uplands, so even the broadest fields are sloped. Farms were smaller than in neighboring towns, and tended to be more diversified, even in the "farming belt" of Bragg Hill. These smaller subsistence operations depended little on access to markets or population centers. Early commodities that could provide cash or barter to the subsistence farms were potash (created from the ashes of burning the woods as they were cleared), wheat and oats, and sheep for wool and meat. In the first part of the 19th century, the Mad River Valley saw the rise of saw mills, potash processing operations, grist mills, and wool-processing mills. But later in the 19th century, as larger farms in the mid-west began to compete for producing meat, grain and wool, there began a shift to dairy farming. As in other "hill towns" in Vermont, the availability of more readily farmed land elsewhere and changes in the dairy industry led to the closure of all of Fayston's dairy operations by 1986.

Lumbering remained viable throughout the 19th century into the 20th century. There were many sawmills along Shepard Brook and Mill Brook. Mills existed in other areas of Town, including Chase Brook and Frenchman Brook. Timber proved to be the backbone of Fayston's commerce and its only major export. Ward Lumber Company owned a number of tracts throughout the Valley, including a sizeable tract in the Big Basin area, and at one time the Company was one of the largest landowners in

Town. Large logging operations such as Ward helped struggling farmers by giving them winter employment.

In the 20th century, the economy of Fayston and the Mad River Valley shifted, as Americans became enamored with skiing. By the time the logging industry started to decline, the 1947 development of the Mad River Glen Ski area marked the budding of a new industry for seasonal employment of local farmers. Fayston and the rest of the towns in the Mad River Valley were becoming a tourist destination. In the 1930's many Americans were finding solace in rural retreats. Fayston was becoming a second home community. Some residents, such as Dorathea Wigoose, who bought the McLaughlin farm in 1937, were turning farms into guest houses for summer tourists.

Fayston's economy was built on its farming, its forests and the tourist industry. These assets are still part of the economy. But with the building of good roads and the advent of technology, many Fayston residents have also found employment outside of the Town and the Valley. In addition, there has been an increase in the variety of home occupations found in Town.

## 10.3 The Present

According to the 2010 US Census, there are approximately 432 jobs in Fayston. Based on 2012 Town Survey responses, 52% of Fayston employees work for employers at an employer work site.

### 10.3.1 Home-Based Employment

The most significant "growth industry" in Fayston's economy may be in self-employment and home-based businesses. Although data on these jobs is limited, the 2012 Town Survey indicates 34% of the Town's workers now work in home-based employment, and that another 14% telecommute. These figures indicate that the Town's population is becoming less dependent upon "traditional" employment.

### 10.3.2 Covered Employment

Jobs in "Covered" Employment (The term Covered Employment refers to the fact that employees in these businesses are "covered" by unemployment insurance.) are more traditional jobs in which employees work for employers. Just over half of the jobs in Fayston (51%) are in covered employment, and most of these are in very small businesses (see Table 10-1). The largest single employer is the Fayston Elementary School, with approximately 30 employees. Aside from the school, most of the covered employment is in leisure and hospitality (tourism), services, and construction.

While the average income in Fayston is relatively high, it is not an accurate reflection of wages earned in Fayston, as many residents either work outside of Town or are retired. Many of the covered employment positions located in Fayston are seasonal and/or part-time, and while the pay levels in these jobs has been increasing, they significantly lag behind pay levels for covered employment elsewhere in Washington County and/or Vermont (see Table 10-2). The one exception is professional and business services, where annual incomes significantly exceed county and state averages.

**Table 10-1: Fayston Jobs in Covered Employment (2013)**

| | Number of Businesses | Number of Employees | Average Number of Employees |
|---|---|---|---|
| **Construction** | **10** | **12** | **1.2** |
| **Services** | **27** | **163** | **6** |
| Information | | | |
| Professional and business services | 11 | 15 | 1.4 |
| Education and health services | | | |
| Leisure and Hospitality | 5 | 82 | 16.4 |
| Other services | 3 | 12 | 4 |
| **Local government (includes school)** | **1** | **32** | **32** |
| **Total** | **38** | **207** | **5.5** |

*Source: Vermont Department of Labor*

The lowest wages are in leisure and hospitality, which in Fayston, are generally tourism-related jobs. Average annual wages for these positions, many of which are part-time and seasonal, were less than $17,000 per year in 2013. These low wages indicate that increases in tourism will increase demands for workforce housing. While covered employment tends to be low in wages, only about one half of Fayston's residents fall under this category. Non-covered employees tend to make more money, but we don't have the data for these jobs.

**Table 10-2: Annual Wages for Covered Employment (2005)**

| | 2000 | 2005 | 2013 | 2013 | 2013 |
|---|---|---|---|---|---|
| | Fayston | Fayston | Fayston | Washington County | Vermont |
| Construction | $23,682 | $27,042 | $44,041 | $42,092 | $45,431 |
| Services | | | | | |
| Information | | | | | |
| Professional and business services | $33,499 | $52,249 | $74,612 | $60,902 | $56,468 |
| Education and health services | | | | | |
| Leisure and Hospitality | $9,955 | $13,869 | $16,691 | $17,638 | $19,669 |
| Other services | | | | | |
| Subtotal | $20,653 | $23,839 | $34,057 | $41,943 | $38,934 |
| Subtotal | $20,577 | $24,157 | $34,381 | $42,388 | $41,243 |
| Local government (includes school) | $18,018 | $26,657 | $33,221 | $38,576 | 38,208 |
| Total (weighted average) | $20,134 | $24,464 | $34,203 | $43,781 | $42,056 |

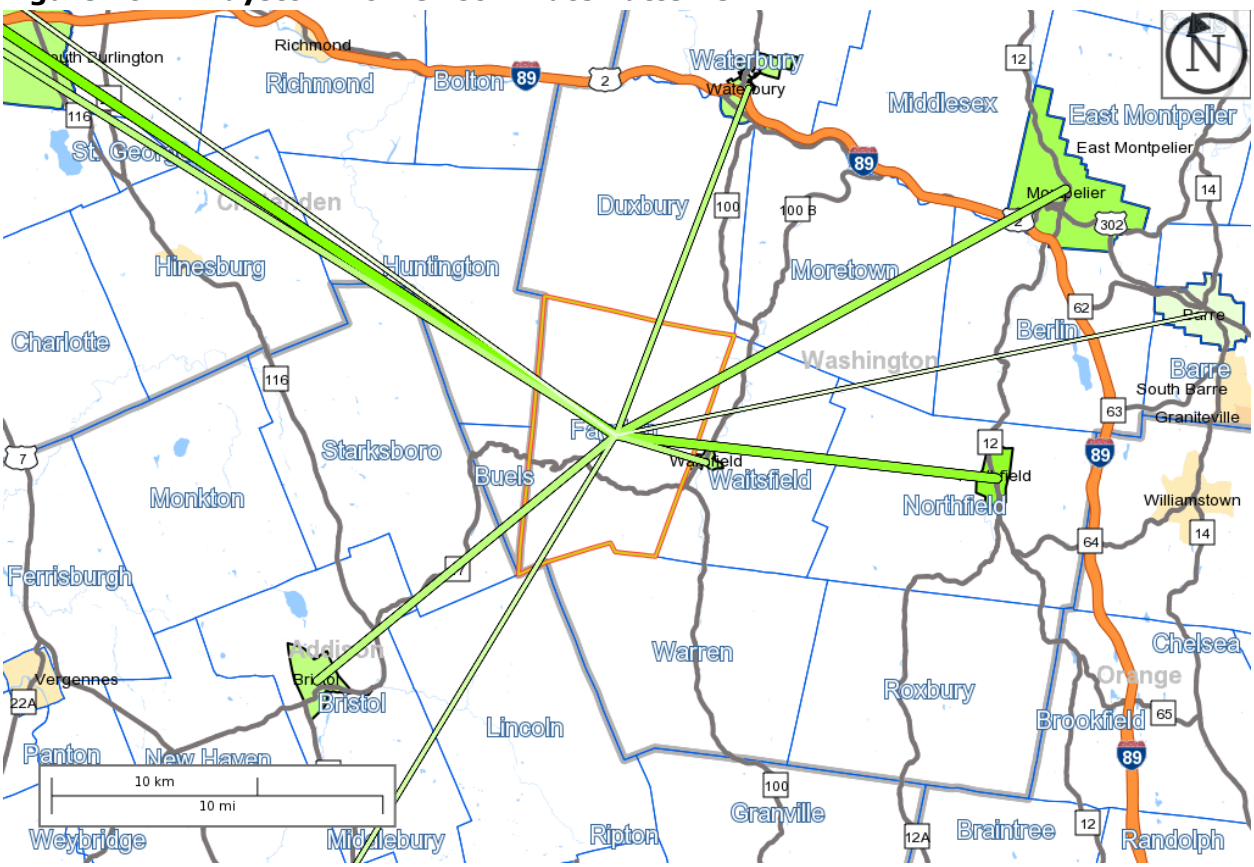
*Source: Vermont Department of Employment & Training*

### 10.3.3 Home Towns of Fayston Workers

Based on the 2000 US Census, 40% of Fayston's workers live in Fayston and 60% commute from other communities. Of those who commute from outside of Fayston, the largest numbers commute from Waitsfield, Warren, and Waterbury (see Figure 4-9). With the exception of Waterbury, relatively few Fayston workers commute from outside of the Mad River Valley.

The 2006 Town Survey indicated that, due to growth in self-employment and home-based occupations, the percentage of residents that worked in Fayston increased from 40% in 2000 to up to 49% in 2006. According to 2010 Census information (Figure 10.1), home locations have changed slightly while the commute patterns have remained similar. This trend has mitigated some of the travel and traffic increases that would have otherwise occurred.

**Figure 10-1: Fayston Worker Commute Patterns**



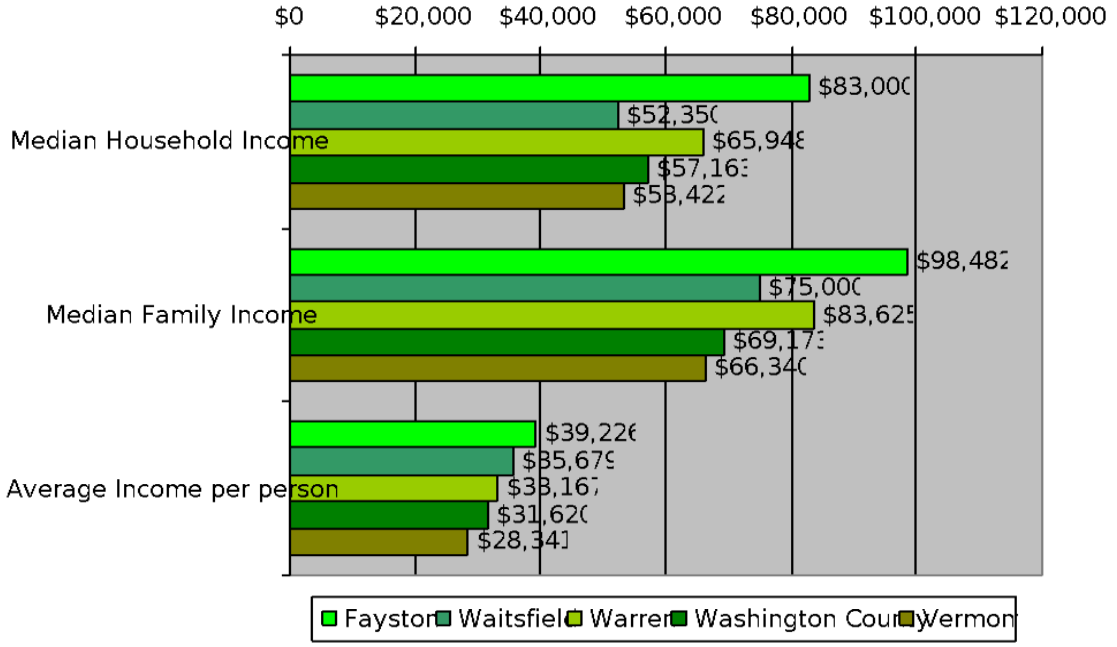

*Source: 2010 US Census*

### 10.3.4 Household Income

Fayston residents have the highest median incomes in the Mad River Valley and significantly higher incomes than in the rest of Washington County and Vermont as a whole (see Figure 10-2). According to the 2010 US Census, which is the most recent source of comprehensive income data, the Fayston median household income was $83,000, compared to almost $66,000 in Warren, $52,000 in Waitsfield and $53,000 in Vermont, and approximately $57,000 in Washington County.

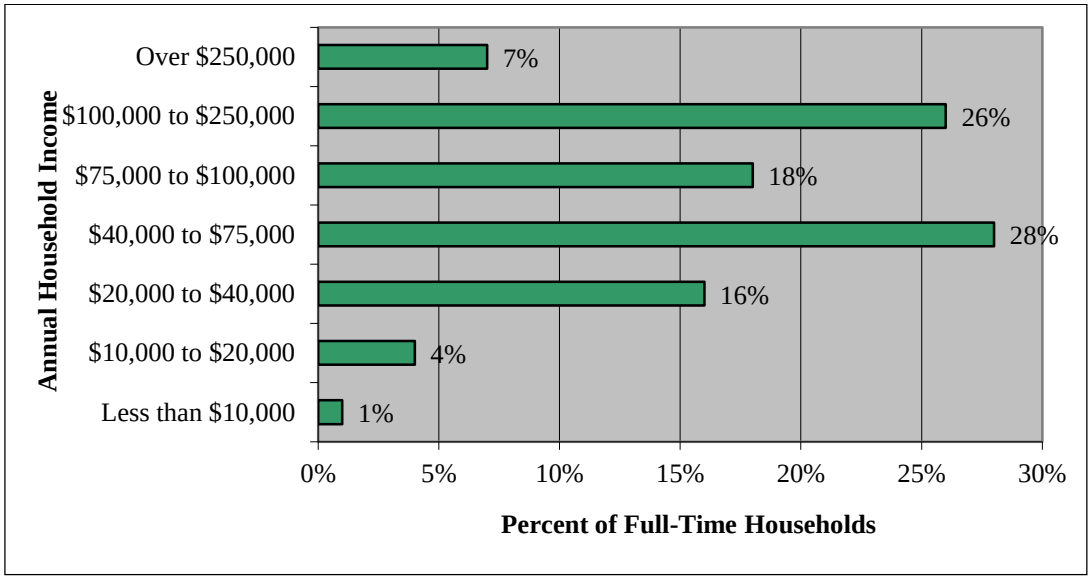
According to the 2012 Fayston Town Survey, the largest proportion of Fayston households earn $40,000 to $75,000 per year (28%) (see Figure 10-3). The second highest number earns $100,000 to $250,000 (26%). The third highest number earns $75,000 to $100,000 (18%), followed by households that earn $20,000 to $40,000 (16%). Approximately 7% of Fayston's household earn more than $250,000 per year, and 5% earn less than $20,000 per year.

**Figure 10-2: Median Household Incomes**




*Source: 2010 U.S. Census*

**Figure 10-3: Fayston Household Income Levels**




*Source: 2012 Fayston Town Survey.*

### 10.3.5 Employment Rates

A high percentage of Fayston's residents—approximately 698, or 52% of all residents, and 74% of adult residents—are employed. The largest numbers of employed residents work in the Valley. Many other Fayston residents work out of their homes. Others commute in small numbers to locations outside of the Mad River Valley, primarily to the Burlington and Montpelier/Barre areas and Waterbury. Based on the 2012 Town Survey results, 60% of the Town's adults are employed full-time and 25% are employed part-time (see Table 10-3). Approximately 10% are retired.

**Table 10-3: Adult Employment**

| | Percent |
|---|---|
| Employed Full-Time | 60% |
| Employed Part-Time | 25% |
| Retired | 10% |
| Other | 4% |

*Source: 2012 Fayston Town Survey.*

Of the employed residents, 52% work for employers at an employer work site, 34% are self-employed and work at home, and 14% are home-based employees (telecommuters) of companies that are located elsewhere.

### 10.3.6 Occupations

The ways in which Fayston residents earn their livings are extremely diverse, and not dominated by any single industry or field (see Table 10-4). The largest economic sectors consist of educational/health services (16%), hospitality/tourism (15%), retail trade (11%), and manufacturing (10%). The largest number of residents earn their livings through a wide variety of professional services (23%). Those in the construction related industries dropped from 11% to 5%, most likely due to the recession and reduction of construction in the area.

**Table 10-4: Professions of Fayston Residents**

| Field | Percent of Employed residents |
|---|---|
| Agriculture/forestry | 1% |
| Construction | 5% |
| Manufacturing | 10% |
| Wholesale trade | 5% |
| Retail trade | 11% |
| Transportation/utilities | 1% |
| Information | 3% |
| Financial/insurance/real estate | 7% |
| Professional/scientific services | 23% |
| Education/health services | 16% |
| Tourism/hospitality | 15% |
| Public Administration | 3% |
| Other | 1% |

*Source: 2010 U.S. Census*

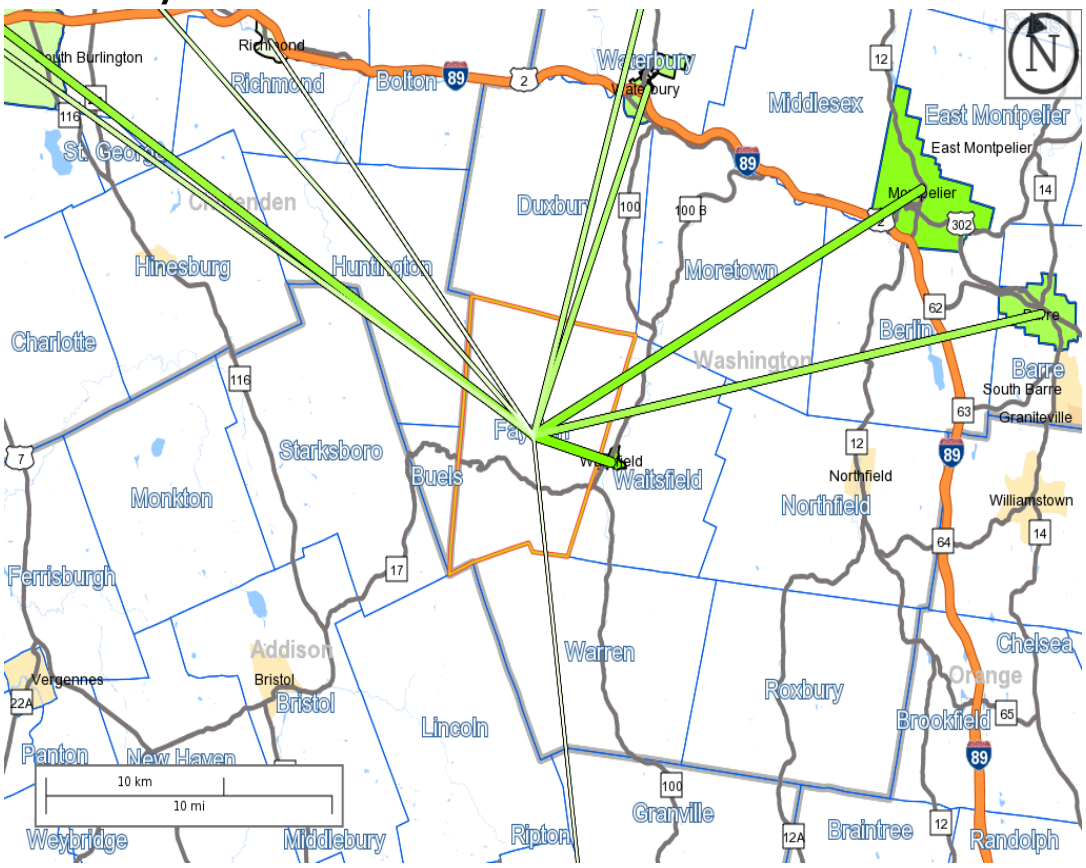
### 10.3.7 Work Locations of Fayston's Employed Residents

As of our 2006 Survey, nearly two-thirds of the full-time employees worked in the Mad River Valley. The largest numbers worked in Waitsfield (25%), followed by Fayston (23%). Beyond the Valley, the largest numbers worked in Waterbury (10%), Montpelier (8%), and Burlington (8%). While there may be slight changes in the percentages, it is expected that they are not radically different in 2012, although commute patterns have been slightly changed by Tropical Storm Irene, which forced the relocation of state workers that worked at the Waterbury Complex. Many now work in Williston, Montpelier and Waitsfield, but we don't know the number of Fayston residents who were affected by this.

Again, part-time jobs held by Fayston residents have been very highly concentrated in the Mad River Valley–approximately 82%. The largest numbers of part-time jobs were in Fayston in 2006 (45%), followed by Waitsfield (16%), and Warren (11%). The largest numbers of part-time jobs outside of the Valley were in Waterbury (11%) and Montpelier (7%).

These 2006 Survey responses were generally consistent with the work trip patterns reported in the 2000 US Census, and indicate that significant shifts did not occur between 2000 and 2006, and most likely have not since. Maps generated from 2010 Census data (Figure 10.4) confirm this.

**Figure 10-4: Fayston Resident Commute Patterns**

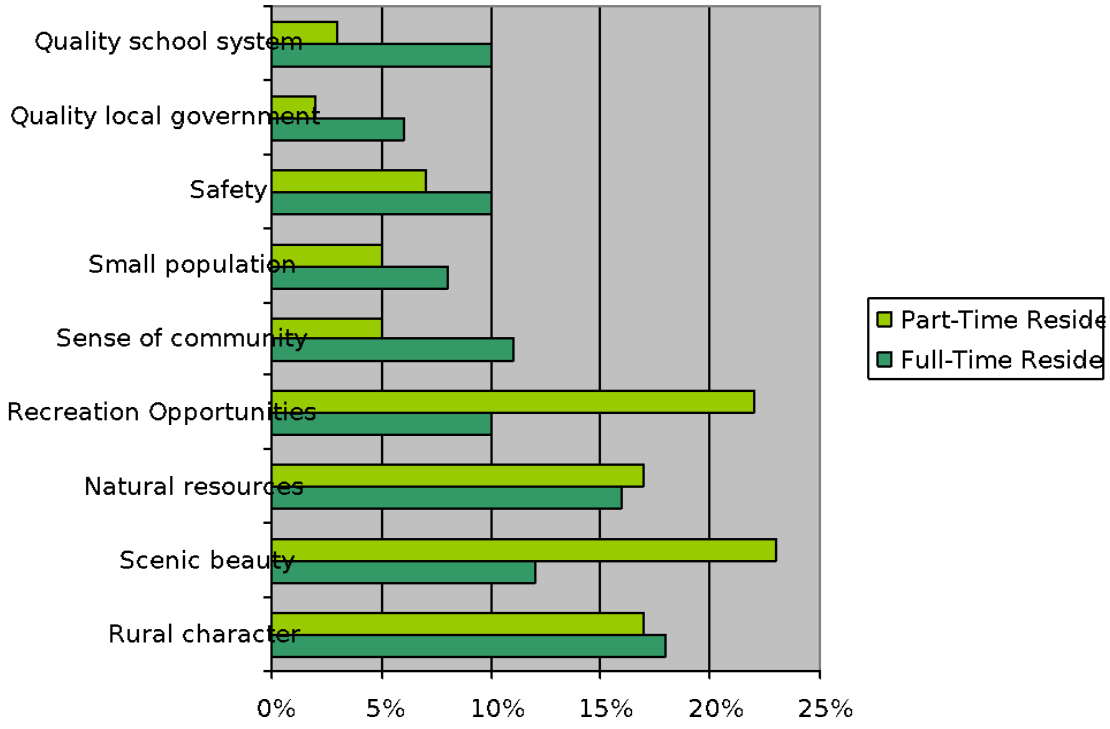



*Source: 2010 US Census*

### 10.3.8 Population Growth and Business Development

As the Town's population continues to grow, albeit slowly, pressure may increase the demand to use more of the Town's land for housing and business development. At the same time, forest land continues to contribute to the Town's economic health by providing for scenic quality, recreation opportunity, and sustainable forestry. Forest land also contributes to the Town's seasonal and year-round residential growth: both seasonal and year-round residents reported in the Town Survey that the Town's rural character, scenic beauty, natural resources, and recreation opportunities, all tied to the forested landscape, are the Town's greatest assets (see Figure 10-5). While the majority of Fayston's jobs and workers are no longer tied directly to the land for their livelihood, the link to the land for residential and recreational pursuits is still very strong.

**Figure 10-5: Fayston' Most Important Asset**




*Source: 2012 Town Survey.*

### 10.3.9 Business Development and Appropriate Areas

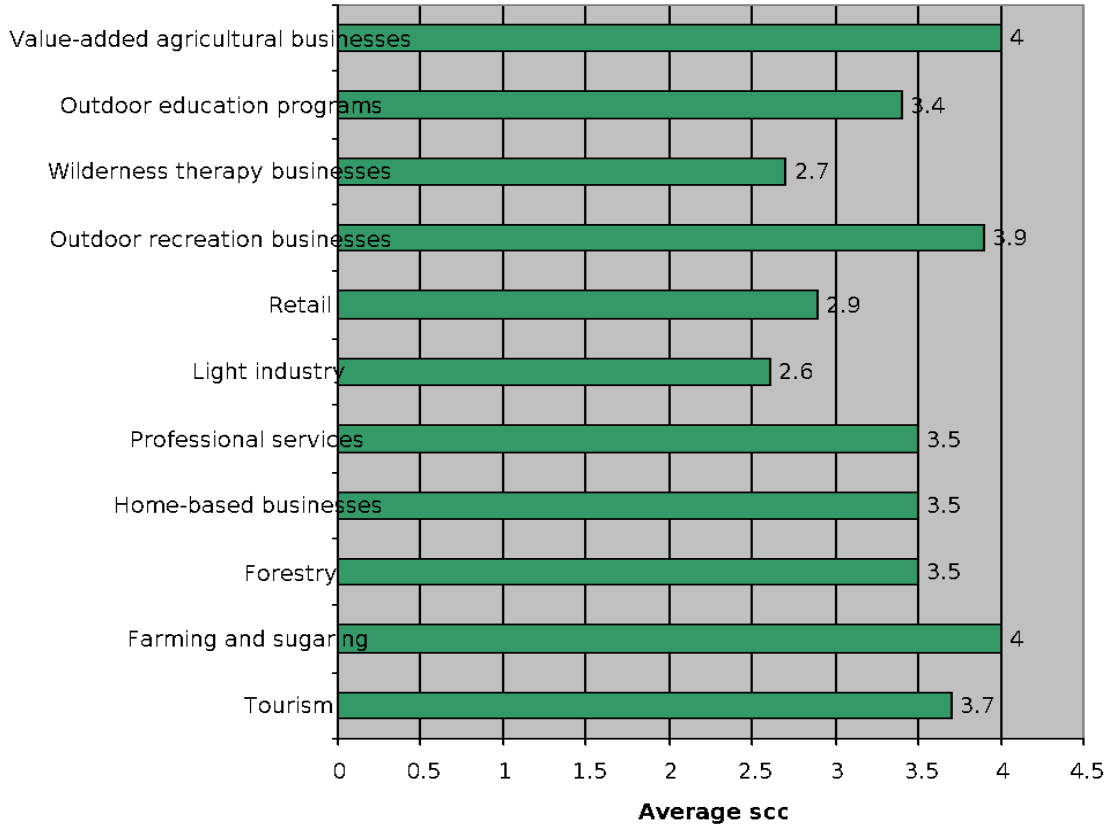
Fayston residents believe that it is important to encourage certain types of business development. When asked to rate the importance of certain types of business development on a scale from 1 to 5, with 1 being "not at all" important and 5 being "extremely" important, residents gave the highest levels of support to farming and sugaring (4.2 out of a possible 5) as well as value-added agricultural businesses (see Figure 10-6). The next types of business receiving the most support were outdoor recreation businesses (rated 3.9 out of a possible 5), tourism (rated 3.7 out of a possible 5), followed by forestry, home-based businesses, and professional services (all of which were rated 3.5 out of a possible 5).

As with most other issues, there are few differences between the opinions of full-time residents and part-time residents. The largest differences were that part-time residents believed that it was somewhat less important to encourage business development, with the largest differences with respect to home-based businesses.

The area that received, by far, the highest level of support for business development was adjacent to Waitsfield's Mad River Industrial Park (83%), followed by along Route 17 (61%), and the Mount Ellen base area (46%) (see Figure 10-7). Support for business development adjacent to the Mad River Industrial Park was uniformly high among full-time and part-time residents (see Figure 10-7). However,

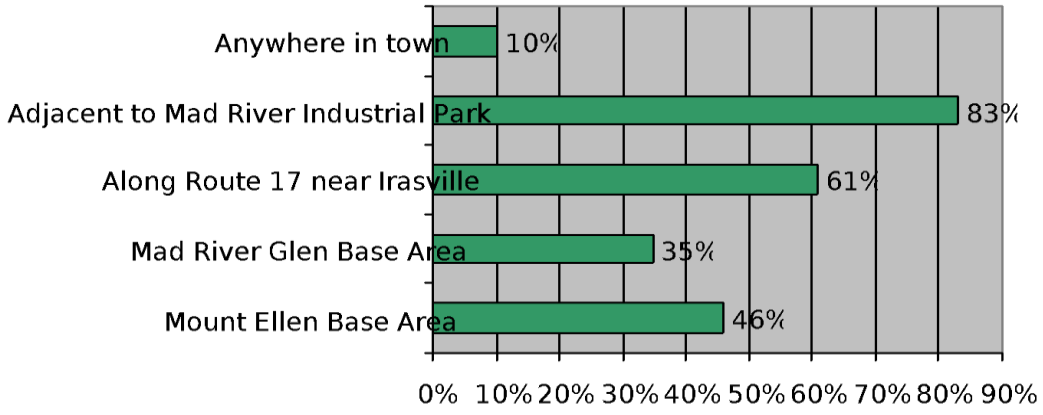
part-time residents support development at the Mount Ellen base area to a much lesser extent than full-time residents (36% versus 56%). Very few support commercial development "anywhere in Town."

**Figure 10-6: Importance of Business Development: All Residents**




*Source: Fayston 2012 Town Survey*

**Figure 10-7: Most Appropriate Areas for Business Development: All Residents**




*Source: 2012 Fayston Town Survey.*

## 10.4 The Future

There are external factors, out of the Town of Fayston's control, that will impact the Town's economic outlook in the future. These include increasing globalization of markets and economies, changes in technology, an aging population, life-style changes, and a change from a manufacturing base to a more service base. According to economists, start-up, innovative, entrepreneurial enterprises are on the increase, while large manufacturers are declining, with a change in the impact on economic growth, which is no longer the end-all be-all that it was in the last two centuries. Instead of improving quality of life, it has often achieved the opposite, with stagnating wages, loss of jobs, increased poverty, and environmental decline. Climate changes will also impact the economic outlook. As the pressure to mitigate the weather impacts of climate change increases, it will be wise for communities and companies to invest in low carbon solutions for heating, electricity, food and transportation. The old paradigm of natural resource intensive industrial production is being supplanted by a new era of creativity, renewable resources, and sustainable products and services.

Another external factor that will affect our local economy is the movement to "buy local." While it can increase sales in our local market, it can decrease opportunities to export products, as other locations around the U.S. implement their own buy local movements.

These paradigm changes are reflected in new trends in Vermont. With the price of oil going up and looming climate changes, Vermonters are beginning to look for low-carbon solutions for supporting infrastructure. While people still commute out of Town for work—and while within Town there are still traditional activities such as logging, sugaring, tourism and recreation—there are also new patterns and businesses emerging. Telecommuting has become more of a norm, and home businesses are becoming prevalent here in the Valley. Farming is making a comeback, with the increased emphasis on eating locally-sourced foods. This movement has brought attention to the renewed possibility and feasibility of agriculture-based small businesses, such as small-scale meat and dairy production, greenhouses, fruits and vegetables, eggs, and ornamentals. In 2011 a local processing and storage facility, the Mad River Food Hub, opened in Waitsfield. These facilities help local producers connect with Valley-wide local markets and move us towards a more sustainable local economy. While Fayston's terrain and soils will continue to be a limiting factor, the trends are showing that with new technologies, creative management and new business models, these factors can be surmountable.

A downside to this movement toward local food production and processing is that the products tend to be more expensive. The reason for this may be the export opportunities that Valley producers have, as well as the number of people who come to visit the Valley from more urban areas. While there is a market for these higher priced goods, it often excludes many local residents who cannot afford to pay those prices on an ongoing basis. Increasing the supply of more affordable basic food items, alongside the artisanal products that are being marketed, is an area that needs exploring.

Fayston is a small town and the smallest part, population-wise, of the Valley. Thus Fayston's economy has been and will continue to be intricately tied to that of the Valley. Fayston's "downtown" is the Village of Waitsfield, providing services, goods, markets and employment for Fayston residents. The resurgence of small diversified farming and agriculture-based small businesses, as well as the tourist and recreation industries, are intertwined throughout the Valley. As we look at Fayston's economy, we need

to be aware of Fayston's place within the bigger picture and work with the other towns and organizations within the Valley to help improve the Town's economic well-being.

### 10.4.1 Economic Outlook

As Fayston potentially moves toward a new paradigm, Town officials and residents need to be prepared, building on the Town's strengths and overcoming its weaknesses.

Fayston's strengths:

- High quality of life and strong sense of community
- Strong ties with the other Valley towns
- Relatively unspoiled environment and rural landscape
- Fayston residents have, in general, high median incomes and are well-educated.
- Generally stable population

Fayston's weaknesses:

- Lack of well-paying jobs in the Mad River Valley
- Shortage of affordable housing
- Transportation inadequacies
- Poor cell coverage, especially in North Fayston
- Need for more cost-effective childcare and eldercare
- Limited availability of land suitable for growing crops
- Lack of a common vision for Fayston's economy

It is clear that the local economy is intricately tied with other issues highlighted elsewhere in this plan, such as land use (locating businesses in appropriate places and preserving Fayston's working lands), housing (making it affordable for the workforce), transportation (for movement of goods and people), adequacy of childcare, etc. Thus it is imperative that Fayston integrate economic policies and programs into a comprehensive community planning effort as well as develop an articulated vision for the Town's economic future.

### 10.4.2 Tourism and Recreation

Fayston's economy continues to be reliant on tourism, particularly that which is related to outdoor recreation. Sugarbush and Mad River Glen will continue to play a central role in our economy, helping to bring dollars into other local businesses, such as restaurants, bed and breakfasts, entertainment, etc. The Town should continue to support both ski areas, and encourage growth in these areas that reflect the Town's rural character and bring benefits to the entire community, and that includes looking at the infrastructure that supports the ski areas. Other assets that help bring in the tourists are our hiking, biking and cross-country ski trails, the local VAST trails, and our rivers and streams. Fayston is also a host to "leaf peepers" in the fall, as well as hunters.

While tourism is a major component of Fayston's economy, it is also the part of the economy where wages are the lowest, and where there could be the largest potential for expansion. Although climate change may gradually affect the ski industry, it is important that we support and enhance some of the

other recreational aspects of the Town, such as the trail system. The new Blueberry Lake trails have already made an impact as Valley businesses are now marketing them as a summer attraction. East Burke has demonstrated the summer potential of this approach in VT with their Kingdom Trails and this type of recreation development should be explored while keeping in mind protection of the environment and scenic, rural quality of the Town. Tourism wages are low in large part because there aren't many people here for most of the year. More year-round visitation translates in to more rooms filled, more people eating out, more tips, etc., all of which may increase tourism-related incomes.

Recreation can be a tremendous tourist industry draw, and Fayston should look at what other parts of Vermont and other States, such as Colorado, New Hampshire and Maine, are doing to enhance their recreational opportunities. Many other places are doing much more than we are to compete both regionally and nationally. However, new recreational facilities, such as enhanced mountain biking trails, would have to be carefully considered. Any expansion of recreational systems would have to be balanced with the Town's desire to conserve our natural resources. Natural resource conservation has helped to maintain the Town's attractiveness for hiking, fishing, etc. Residents and Town officials need to think about whether we want to limit recreation to the more non-invasive activities versus activities that might bring more dollars into our Town and the Valley.

### 10.4.3 Self-Employment

Self-employment includes those who own home-based businesses as well as those who simply work from the home. As stated above, the most significant growth in Fayston's economy was most likely in the self-employment and home-based businesses. The availability of good telecommunications, such as high speed Internet, has enabled this growth in home-based businesses and telecommuting. As oil prices continue to rise and the telecommunication facilities continue to improve, these will remain central to Fayston's economy. It is important, as the Town plans for the future to do our best to support people who want to start and maintain a home-based business that complies with the Town Zoning and Land Use Regulations. This is important not only for the self-employed, but also for workers that come from out-of-town to Fayston home businesses as employees. In addition, it is important to make sure that these home businesses are compatible with the Town's values, as reflected in the Town Survey.

### 10.4.4 Agriculture

As stated above, agriculture is making a comeback in the Town and the Valley. The recent sale of the Bragg Farm through a Land Trust deal to return the land to productive farming is a great example of conserving land by helping to create a viable agricultural endeavor, along with preserving open undeveloped space for scenic view. While the number of people employed in farming remains small, agriculture is important, and will continue to be important, to Fayston's economic activity and the Town's rural character. Increasing interest in agripreneurism (agricultural-related entrepreneurism) will help strengthen Fayston's link to agriculture, especially sustainable agriculture. As stated in the Land Use Chapter, efforts to maintain Fayston's agricultural land base should focus, in part, on protecting its statewide agricultural soils to ensure their availability for future agricultural enterprises.

Fayston's ties to the Valley are ever-important here. There are Vermont-wide programs and services that support Fayston's agricultural efforts. These include the Valley Food Hub, the local Farmers

Market, the Vermont Land Trust, the Farm-to-School Program, and Land Leasing. Our planning efforts should make sure that the Town's farmers have access to these programs.

### 10.4.5 Forestry/Silviculture

Because of the vast amount of forest land within the Town, occupations related to it, such as logging, will continue to play a part in Fayston's economy. As with agriculture, the making and selling of value-added products will increase the economic benefits of working the forest land. Long term planning should focus on identifying and promoting sustainable practices with Fayston's most productive forest lands.

### 10.4.6 Self-Sustainability

While traditional industries remain important, external changes suggest that the Town needs to strengthen its local resources and markets in response to global uncertainty. We are now in a post-growth society, where economic development is not so much about creating jobs as it is about maintaining and enhancing our quality of life. At the core of this is the concept of sustainable economic development, where we look to meet our present needs without compromising the ability of future generations to meet their needs. Economic development that emphasizes sustainability should take precedence over other economic activities that do not. This means that the Town should support economic activities that

- maximize use of local resources in way that does not deplete these resources,
- maintain high standards of environmental health,
- support energy efficiency, including the use of renewable energy,
- employ local residents and pay a livable wage,
- invest in the social fabric of our community and the well-being of our residents, and
- are locally owned and support local markets.

Local economic security, especially in these uncertain times, is dependent on maintaining these principles of sustainability. This is especially important in a rural economy such as Fayston's.

## 10.5 Economic Goals and Objectives

**Goal 1: Encourage business activities that are compatible with and complimentary to Fayston's rural character and its natural resources and are sustainable in nature.**

Objective 1 : Develop a community vision for Fayston's economic development.

Strategies

a. Participate in neighborhood discussions to develop a better sense of community sentiment.

Objective 2 : Ensure that new business development will be compatible with the Town's values, as reflected in our Town survey, and with the character of the neighborhood or area in which it will be located.

Strategies

a. Review the LUR to make sure that the guidelines are specific enough for DRB review.

Objective 2: Ensure that any new business-related development preserves Fayston's rural character and natural features such as ridgelines, open fields, wildlife habitat, wildlife corridors, water quality, and wetlands.

Strategies

a. Review the LUR to make sure that the guidelines are specific enough for DRB review.

**Goal 2: Promote a sustainable and diverse local and regional economy characterized by varied employment and entrepreneurial opportunity.**

Objective 1 : Support and promote self-employment and home-based employment.

Strategies

a. Review the LUR to make sure they are promoting self and home-based employment.
b. Look at potential non-regulatory tools that could also be used.

Objective 2 : Encourage the development of sustainable land-based economic activities (farming, forestry, forest product manufacturing, etc.) and support strategies to improve the economic viability of agriculture and forestry.

Strategies

a. Maintain and expand economic incentives (e.g., current use value appraisal), promote access to local markets and maintain an adequate land base (e.g., through land conservation and land use regulations).
b. Encourage the Town's farmers to access supportive programs, such as the Vermont Land Trust, Farm-to-School Program, Land Leasing.
c. Support the continued incorporation of local agricultural products in the school lunch program.
d. Work with the MRVPD and other Valley organizations to explore expanding local food production.
e. In maintaining the Town's agricultural land, focus efforts, in part, on protecting its statewide agricultural soils to ensure their availability for future agricultural enterprises.
f. Identify the Town's most productive forest lands and promote sustainable silvicultural practices for these lands.

Objective 3: Encourage the continued use of existing business and commercial areas in Waitsfield village and Irasville.

Implementation Strategies

a. Discourage commercial sprawl by retaining the existing Rural Residential District.
b. Continue to revise ordinances to allow suitable businesses as home occupations, while maintaining the residential character of the residential districts.
c. Maintain the Irasville Commercial District as Fayston's only Commercial District.
d. Fayston should continue to encourage the Town of Waitsfield to develop the Irasville Growth Center as the Mad River Valley's downtown commercial center.
e. Encourage any additional commercial development within Fayston to locate at the ski areas.

Objective 4 : Support tourism that is based on the area's natural, recreational, cultural, and ecological assets.

Strategies

a. Support the development of recreation and cultural facilities that contribute to the Valleys attractiveness as a resort destination; expand the system of existing paths and trails and ensure that future development is designed to accommodate connectivity across properties.

b. Explore new types of recreational facilities that could enhance the economy of Fayston and the Valley without denigrating the valuable natural resources that are so important to residents and visitors alike.

Objective 5 : Support regional economic initiatives.

Strategies

a. Support continued use of Irasville/Waitsfield Village as Fayston's de-facto town center, by working with the Town of Waitsfield on their Irasville Master Planning initiative to encourage the location of businesses in the Irasville Growth Center.

b. Encourage the location of commercial activities along Route 17 near Irasville, at the Sugarbush Mount Ellen base area, and adjacent to Waitsfield's Mad River Park.

c. Through the MOU between the Valley towns and Sugarbush, support the implementation of the Sugarbush Master Plan in a manner and schedule consistent with the Town's ability to accommodate additional growth.

d. Support Mad River Glen's master planning in a manner and schedule consistent with the Town's ability to accommodate additional changes or growth.

e. Support business initiatives and events that enhance the Mad River Valley's attractiveness and high quality of life.

f. Support the Central Vermont Economic Development Corporation and encourage that entity to become more responsive to the Town's economic needs.

Objective 6 : Encourage infrastructure improvements that support sustainable economic activity.

Strategies

a. Support the expansion of cellular service to North Fayston, provided that new facilities not diminish the Town's scenic landscape (e.g., the placement of telecommunications must conform to other sections of this plan), to increase the ability residents in this area to work at home and telecommute to other locations.

b. Support the improvement of transit or other ride-sharing services in Fayston and the Valley, connecting them to other areas.

c. Support the enhancement of renewable energy infrastructure, as long as it conforms to other sections in this plan.

d. Look at ways to support the efficient use of energy in businesses.

e. Integrate Fayston's economic planning into a comprehensive planning effort and work to improve some inherent weaknesses that affect our economy, such as need for more affordable housing, more cost-effective childcare and eldercare, and better public transportation, including ride-share programs.