

# **Fletcher Town Plan 2013 through 2018**



*Adopted by the Fletcher Select Board*

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# TABLE OF CONTENTS

SECTION 1. PLANNING AND IMPLEMENTATION PROCESS

SECTION 2. COMMUNITY PROFILE

SECTION 3. NATURAL AND CULTURAL RESOURCES

SECTION 4. HOUSING

SECTION 5. ECONOMIC DEVELOPMENT

SECTION 6. TRANSPORTATION

SECTION 7. ENERGY

SECTION 8. FACILITIES AND SERVICES

SECTION 9. LAND USE

LIST OF MAPS

## Section 1

# PLANNING AND IMPLEMENTATION PROCESS

### Why Plan?

First and foremost, the intent of the planning process is to encourage the appropriate development of land, facilities and services located within the Town of Fletcher, in a manner which will promote the health, safety and general welfare of its residents. A comprehensive plan for the Town provides a framework for the achievement of recognized community goals and objectives. The planning process serves to coordinate public and private actions with these goals and objectives, and the Town plan provides the guide upon which decisions may be based logically and intelligently .

Vermont municipalities are not required to plan, but most do, to protect community interests, to retain a measure of local control, to promote desired forms of growth and development, to target public investment, to protect scarce public resources, and to help build and sustain a sense of community, and a sense of place.

### The Plan: Purpose and Design

The Fletcher Town Plan, prepared under the Vermont Municipal and Regional Planning and Development Act or "the Act" (24 VSA, Chapter 117), presents a description of the town and a vision for its future including a comprehensive look at how the town may grow and prosper in the coming years.

*Fletcher planning, zoning and subdivision regulations started with the town charter in 1781. The original subdivision divided Fletcher into three divisions, with as many as 70 draughts (104 acres) each; some oddly shaped, many triangles (gores) were also laid out. Each original proprietor received a right (three draughts). Failure to clear five acres meant loss of the property right. 1800 acres were designated for support of the schools, universities, churches and ministers. This glebe land was leased, 100 acres for 8 to 12 cents per acre annually. If unpaid, the land was immediately reassigned to whoever could pay the lease. Homes had to be 18 feet on the floor. Four acres were reserved out of each 104 for roads.*

*The original survey was in what Ed Ellsworth calls big Ira Allen acres. The town was laid out as if it were level. Deeds read to the original rights or to stake and stones.*

*By 1850, many deeds were by reference to prior deeds only; the 1870's saw acres "more or less" on many deeds; the acres were smaller (land was simply measured over ground); a 104 acre right became 115, 125 or even 140 acres. Deeds referred to stone walls, 3 inch apple trees or spotted maples. Today some land is recorded by deed and map. Descriptions include drifting fence, stone walls, 40 inch beech tree, present or former neighbors, and acres, "more or less."*

**H. Carlton Ferguson, excerpted from "Fletcher a Planned Community,"  
A History of Fletcher Vermont, 1976.**

Planning is not new to Fletcher. This plan is the most recent product of an ongoing process, which, as noted in the accompanying narrative, had its start when Fletcher was first laid out and chartered as a

town in 1781. Fletcher was one of the first towns in Franklin County to formally adopt a local plan and related regulations. Zoning was initially instituted by the select board in August of 1967 prior to a statutory requirement that planning precede zoning. The first town plan, and a new zoning bylaw based on the plan, were adopted 1972. Subdivision regulations were then adopted in 1974. Since that time local plans and bylaws have been updated and revised periodically to reflect changing conditions and needs. This plan supersedes the plan that was last updated and adopted in 2005.

The plan is laid out topically by section. Each section is followed by goals, objectives and recommendations. The final section outlines proposed implementation measures, including a proposed plan of action. Supporting information is provided in the appendices.

## **The Planning Process**

Because change is inevitable and ongoing, the plan by law must be updated and readopted every five years to remain in effect. It also may be amended at any time to deal with unanticipated or dramatic changes that may be affecting the community.

The select board has the option of submitting the plan to the regional planning commission for regional review and approval. Regional approval would ensure that Fletcher retains all the benefits under the law that are afforded municipalities with approved plans - including the ability to receive state funds for local planning, to assess impact fees, and the requirement that other local, regional and state plans conform with the approved municipal plan.

The plan is most useful when viewed as a living document that offers a path to follow, a vision to be achieved over many years. It's a work in progress that serves as a reference and guide for use by local officials, area residents, and others with an interest in the community.

The plan frames a vision for the town: a vision of its future built on the past, a vision that sets forth goals to be achieved and ways to achieve them. The underlying intent is to bring some order to change, to coordinate independent decisions and actions into a cohesive whole, and to look to the long term to the benefit of the entire community. Turning vision into reality is challenging at best; it requires strong leadership and the efforts of many dedicated individuals. The plan simply offers a beginning - its success lies in the journey ahead.

## **Plan Adoption and Review**

The plan is adopted by the town select board following public hearings as outlined in "the Act". With plan adoption, the town has a general blueprint for growth and development over the next five years and beyond.

Optional Northwest Regional Planning Commission approval, however, ensures that the town retains all the benefits under state law afforded to municipalities having approved plans, including the ability to levy impact fees if so desired, and the requirement that other local, regional and state plans be in conformance with the local plan.

Once adopted, the plan is not cast in stone, it should be reviewed, updated and amended as needed to reflect changing times and circumstances. Plans must be updated and readopted every five years in order to retain legal standing for local use and implementation under state law.

It is the responsibility of the town's planning commission to maintain the plan, and to work with the select board, other town boards, and local citizens to ensure that key recommendations are translated into action.

## **Implementation Techniques**

A variety of tools and techniques are available to implement the plan. The plan forms the legal basis for the adoption and amendment of local zoning and subdivision regulations. Specific tools enabled under state law include but are not limited to expanded site plan review, overlay districting, conditional use criteria and performance standards, planned unit and planned residential development provisions, buffering and setback requirements, impact fee ordinances, official maps, land acquisition, capital budgeting, impact fee ordinances, and special assessment districts.

Other innovative techniques, also may be useful, needed, and worthy of consideration, but because they are not expressly authorized by statute, may also be more susceptible to court challenge. As such, legal counsel should be sought to determine whether such techniques fall within the legitimate authority of the town, and to make sure they are clearly justified and defined, and fairly administered and enforced.

All available techniques should be considered for use by the town as appropriate to implement the goals and policies identified in the plan. Many, including zoning and subdivision, are already in effect, and should be reviewed and updated as needed to ensure consistency with the plan and any recent changes in state statute. Some techniques, especially those requiring substantial administrative, organizational and/or technical capacity, may not be appropriate for use in Fletcher.

## **Participation in Regional and State Efforts**

The plan also provides a basis for local participation in regional and state planning efforts and state regulatory proceedings, including Act 250.

As noted, if the plan receives regional approval, it must be in conformance with regional and state plans. This is a powerful tool that may assist in targeting state funding for locally needed infrastructure and improvements.

Documentation that a project conforms with the local plan is now required under many state grant and funding programs including community development block grants, transportation improvement programs, and the use of Vermont Conservation and Housing Trust Fund monies for local agricultural land preservation, affordable housing and natural resource conservation programs.

The plan also offers a powerful tool for local involvement in Act 250—criterion 10 specifically requires that development subject to Act 250 be in conformance with the local plan. The town planning commission and the town select board have separate party status under all ten criteria of Act 250. The town and the town plan also have status under Vermont Public Service Board (Section 248) proceedings.

Participation in other regional and state planning efforts is recommended as time and available resources permit to ensure that Fletcher's interests, as defined in the plan, are adequately represented. This is typically achieved through membership on the boards of the Northwest Regional Planning Commission, Regional Transportation Advisory Committee, the Northwest Solid Waste Management District, and other planning related advisory groups and organizations. Regular contact with state officials and local legislators is also an important component.

## Consistency with State Planning Laws

The Fletcher Town Plan has been prepared with careful attention to the requirements of Vermont enabling legislation at the time of adoption. This plan for the town is consistent with state planning requirements and goals as outlined in the Act.

State planning goals (under Section 4302) and plan elements (under Section 4382) have been incorporated into the goals and elements of the town's comprehensive plan.

Public participation has been actively sought throughout the planning process through public meetings, and hearings. Representatives from neighboring communities also were contacted to encourage inter-municipal coordination and cooperation.

## Plan Compatibility

It has been recognized throughout this process that Fletcher does not exist apart from its neighbors. The plans of adjoining communities were reviewed as part of the planning process; this plan is harmonious with neighboring municipal plans.

As a growing bedroom community, Fletcher residents need to be aware of development trends in Northwest Vermont (e.g., Chittenden, Franklin and Lamoille Counties), which create secondary demands for housing and related public services in outlying rural communities.

Fletcher has representation on the governing board of the Northwest Regional Planning Commission and Fletcher representative(s) provide local input.

## Proposed Work Program

As noted elsewhere, the planning commission's role does not end with plan development, update and adoption, but continues through all stages of implementation. This may include any or all of the following activities:

- conducting regular reviews of the plan
- updating bylaws and ordinances
- preparing a capital budget and program
- drafting an impact fee ordinance
- assisting with funding efforts
- preparing policy and design manuals
- conducting related planning inventories, surveys and studies
- monitoring growth trends and patterns
- sponsoring community forums
- working with local officials, related groups and organizations, and
- participating in regional and state planning and permitting efforts.

The "Recommendations or Actions" included at the end of each section of the plan represent specific work tasks to be completed in order to implement related goals. It is recommended, given the very real limits of volunteer time and available resources, that the planning commission, in consultation with the select board, prioritizes tasks to be accomplished at the start of each year.

Also, because the planning commission has a variety of ongoing responsibilities, it is recommended that the commission enlist the services of interested citizens and related organizations to the extent feasible to assist in their planning efforts. This may involve the creation of ad hoc committees with representation from a variety of groups, and/or the creation by the town of more formal boards and commissions (e.g., a conservation commission or design review board to assist with project reviews).

The planning commission will need and actively seek the ongoing support of the select board, local officials, and town residents to ensure effective plan implementation.

#### **GOALS:**

- **To provide a coordinated, comprehensive planning process and policy framework that guide decisions made by public officials and private interests, and will promote that which is in the best interests of the residents of the Town of Fletcher and encourage citizen involvement at all levels of the planning process to ensure that decisions having local impact are made with as much local input as possible;**
- **to maintain the rural character of the town, including its resource-based economy, natural environment, cultural landscape, and the rural lifestyle enjoyed by its residents;**
- **to provide for orderly development in suitable locations in order to enhance the quality of life of all Fletcher residents, and to ensure that local taxpayers are not overburdened by the costs of unanticipated, inefficient and unmanaged growth and development; and**
- **to require that all development be pursued with strict regard to the capability of the land to support it.**

#### Objectives:

- 1.1 The planning commission, development review board and zoning administrator will continue to be provided with the administrative, program, and technical support necessary to sustain an effective, comprehensive local planning process, and to carry out their duties as assigned or otherwise mandated by statute.
- 1.2 The planning commission, development review board and zoning administrator will adhere to the highest standards of openness, fairness and honesty in their planning and review efforts, particularly when acting in a quasi-judicial capacity on behalf of the public and the town.
- 1.3 The planning commission will coordinate its efforts with those of town officials, town boards, and other local, regional and state interests as appropriate.
- 1.4 All decisions or actions by public officials or private interests which may affect the Town of Fletcher will be made with due consideration of the goals, policies, and objectives of the Fletcher Town Plan.
- 1.5 Due consideration will be given to the rights of individuals in exercising the legitimate authority of town government, as enabled under state law, to provide for the public good - including the health and welfare of all Fletcher residents.



- 1.6 The planning commission recognizes the rights of all citizens to participate in the planning process, and has a responsibility to actively seek input from those most affected by programs or policies under consideration by the planning commission.
- 1.7 All planning commission and development review board meetings and hearings, except for deliberative sessions when acting a quasi-judicial capacity, shall be open to the public.
- 1.8 The planning commission will make an effort, through the town's newsletter and other available resources, to regularly inform town residents of its activities, and to provide opportunities for public input in its planning process.
- 1.9 Reports, information and other records will be maintained for public inspection and review in advance of any decision to be made in accordance with state law.
- 1.10 Advocate local control through continued support for and promotion of sound, reasonable, locally-based planning, development and review activities.
- 1.11 Represent and advocate local interests, as time and available resources permit, through participation in regional, state, and federal planning, legislative efforts, and/or regulatory proceedings that may affect the Town of Fletcher and the interests of its residents.

Recommendations or Actions:

- Provide legal notice of all public meetings and decisions in accordance with state law.
- Solicit input from those most likely to be affected by proposals or policies under consideration.
- Conduct public forums, surveys and/or other opportunities for public participation in planning efforts as time and available resources permit.
- Provide annual reports of planning and permit activities for inclusion in the town report.
- Provide regular updates of planning commission activities in the town newsletter.
- Provide copies of draft plans, bylaws, amendments, policies, proposals, studies and reports at the town office and online for public review and comment sufficiently in advance of any final recommendation or adoption.
- Establish and maintain a complete set of planning records, including the minutes of all meetings, for public review at the town office.
- Establish and maintain a small library of planning resource and reference materials for use by the planning commission, local officials, and the public as available resources permit.
- Submit a yearly planning program budget request to the town select board for inclusion in the town budget and consideration by voters.
- Seek, in association with the select board, administrative fees, planning funds, grants, and other sources of funding as appropriate to carry out the planning program, including plan implementation efforts.
- Review and update planning commission bylaws and rules of procedure as necessary to ensure openness, fairness and accountability.
- Maintain contact and communication between Fletcher's local officials, boards, and the planning commissions of adjoining municipalities.
- Recommend that one town representative appointed to the Northwest Regional Planning Commission be a local planning commission member.

- Maintain and update the Fletcher Town Plan as the town's official policy document with regard to growth, development and the preservation of Fletcher's rural character. At minimum the plan shall be updated for readopting every five years in accordance with statute.
- Refer to and be aware of the limits of municipal authority when drafting, administering and enforcing local bylaws and ordinances to ensure that the rights of individuals are not unduly or unnecessarily infringed.
- Retain the personnel, resources, and/or expertise needed to adequately and fairly represent, administer and enforce locally adopted bylaws and ordinances.
- Develop, review and update as appropriate municipal programs, bylaws, and ordinances in accordance with plan goals, policies and objectives and relevant state and federal laws.
- Seek regional approval of the Fletcher Town Plan in order to retain related benefits under state law, including the requirement that other local, regional and state plans be compatible with regionally approved municipal plans.
- Participate as a statutory party in state Act 250 and Public Service Board (Section 248) proceedings as appropriate.
- Contact state and federal officials and legislators with regard to proposed policies, programs and legislation of importance to the Fletcher community.
- Maintain municipal representation on regional boards, including but not limited to the Northwest Regional Planning Commission, the regional Transportation Advisory Committee, and the Northwest Vermont Solid Waste Management District.

## Section 2 COMMUNITY PROFILE

### Overview

The town of Fletcher, located in the southeast corner of Franklin County among the western foothills of the Green Mountains, is true Vermont hill country. The Lamoille River, which once separated the southern tip of Fletcher from the rest of town, now forms its southern boundary. Fletcher shares its western border with the town of Fairfax; the towns of Fairfield and Bakersfield lie to the north. The Franklin County line separates the town from Cambridge and Waterville, its Lamoille County neighbors to the south and east.

Fletcher is one of Franklin County's uniquely configured towns, incorporating 38 square miles of rolling hills and valleys, bottomlands, and areas of steep and rugged terrain. The town's topography lends much to its natural beauty, rural character and the quality of life enjoyed by its residents. Historically, however, Fletcher's hills and hollows also served to isolate local residents from their neighbors. Topography limited available transportation routes and defined early settlement patterns. Even today, because of the lay of the land, few roads lead directly to or through town.



### Historic Development

Original inhabitants of the area, including the Abenaki and their predecessors, traveled the Lamoille and Missisquoi Rivers, and followed tributaries inland in seasonal subsistence cycles. Known sites of prehistoric settlement and use are generally located in the vicinity of major waterways in the region, including the Lamoille River drainage.

Fletcher's town charter was granted by Thomas Chittenden in 1781 while Vermont was still an independent republic. Sixty-five original proprietors were responsible for bringing new residents to the area. The first recorded settlement was made by the family of John Fullington, a New Hampshire man who built a log home here in 1787. The following year Fullington embarked with his family to settle in town, but died in transit following a meal of bad turnips. Mrs. Fullington continued on to make her home in Fletcher with her four children, and lived to the ripe old age of ninety-five.

Others soon followed. The town was officially organized in 1790, and the first town meeting was held on March 16th of that year. By 1791, when the first census count was taken, 47 people lived in town. Early families in Fletcher depended on the land for their livelihood. Most either worked farms and related enterprises, including logging, cider and syrup operations; farmsteads grew up along a developing network of roads. Large tracts of land were cleared, first for subsistence, then for commercial sheep and dairy farming. By the end of the nineteenth century, only the town's steepest and rockiest slopes remained forested.

Since Fletcher was located a considerable distance from existing markets, small industries and businesses were established to serve the needs of a growing community. These included potash and lye manufacturers, sawmills, tanneries, bucket and blacksmith shops, a wheelwright shop, a brickyard, starch factories, cider presses, skimming stations and creameries, and a number of stores. Ice harvesting for refrigeration was a lucrative business prior to electrification; up to 27,000 blocks of ice were cut from Halfmoon Pond in one year. Small hamlets, including Fletcher Center, Binghamville, and East Fletcher, grew up in strategic locations. Fletcher Center was the center of local government and commerce for much of the town's history. The first store opened here in 1820. Another store built in the Center in 1839 (which burned in 1979) also served for many years as the post office, town clerk's office, and town library. Binghamville developed from 1830 on as a traditional mill town, with Stone's Brook providing a source of power for sawmills that remained in operation until 1927.



By 1880, Fletcher had been divided into ten school districts to serve the needs of local children. Schools were located in convenient locations around town. Telephones arrived in Fletcher in 1908 through the Farmers Mutual Telephone Company. New England Telephone expanded into the area in the 1930s. Electricity first reached Fletcher in 1923 when the Fairfax Falls generating station was constructed. East Fletcher was hooked up in 1939 through the Vermont Electric Cooperative; Binghamville and surrounding areas were not electrified for another year or so.

By the mid-1800s, Fletcher's settlement pattern and road network were well established. Fletcher was served by several stage coach routes until these were replaced by a rail line completed through the east side of town in 1877. East Fletcher grew as a station stop on the Montpelier and St. Johnsbury line (now the Lamoille Valley Rail Trail), and during the height of the railroad years had a weigh station, stockyard, and general store which sold grain and goods carried in by rail.

The same improvements which served to spur and support community growth also exposed Fletcher residents to the wider world, and to inevitable change. Fletcher's population initially peaked around 1850, when it numbered 1,084 (not to be reached again until the modern era). The Civil War

years marked the beginning of a steady population decline, which continued well into the twentieth century. Fletcher's hill farmers, finding it increasingly difficult to make a living from rocky slopes, went west for cheaper, more productive land, or to urban areas for more gainful employment.

As the twentieth century progressed, the coming of the automobile and changing farming technologies and balance sheets encouraged more people to move on. Farms, fields and isolated stretches of road were abandoned and many former fields have reverted to forest, and others have given way to houses.

As the number of farms decreased, so too did the number of businesses supported by the farming community. Fletcher Center, Binghamville and East Fletcher lost their importance as local commercial, manufacturing and rail centers in relation to growing regional centers in St. Albans and Burlington. One room schools and post offices were closed and consolidated while today Fletcher has one elementary school and one store, both located in Binghamville, and no local post office.

Residents who chose to remain in Fletcher adapted and persevered for many reasons, including strong ties to the land, family, community, and a way of life particular to the area. Beginning in the 1960s, they were joined by newcomers migrating north in search of affordable land and a more rural lifestyle. The town's long standing population decline finally reversed, and the repopulation of the town has continued unabated for the last several decades.

Fletcher remains a relatively isolated, rural, resource-based community. The farms still in operation have grown to absorb neighboring lands, and stand out as the principal land-based industry in town. The town's woodlands continue to support maple syrup production and a commercial logging industry. Sand, gravel and rock quarrying operations are scattered throughout. Small, home-based businesses also contribute to the local economy.

Fletcher also increasingly serves as bedroom community for people who choose to make their home in town, but work elsewhere. Located within easy commuting distance of St. Albans, Milton and the greater Burlington area, much of Fletcher's recent growth may be attributed to its proximity to these employment centers. Many town residents no longer depend directly on the land for their livelihood, but their ties to the community are no less strongly held. Most residents appreciate Fletcher's rural setting, and have learned to adapt to the realities of rural life. The town's natural amenities also attract a seasonal community at Metcalf Pond.

Fletcher continues to grow and develop at a significant pace. The impacts of growth on the town's rural character, community services and facilities have been a concern locally since the 1960s. Due to the keen foresight of town officials and residents, Fletcher was one of the first communities in Franklin County to begin an ongoing process of planning for its future. This process continues today through periodic updates to the municipal plan and zoning and subdivision bylaws (2002).

To better implement the plan and bylaws, in 2002 the town shifted from a Zoning Board of Adjustment (ZBA) to a Development Review Board (DRB). This change affords the town improved efficiency in planning and policy implementation; a more consolidated and comprehensive planning and review process.

## Population Base

As illustrated in the Table 2.1., by 2000, Fletcher's population surpassed the historic peak population of 1,084 reached in the mid-1800. As of the 2010 US Census, the town's total population totaled 1,277 (2.67% of the county total). The population density, according to the 2000 U.S. Census figures, is calculated at 31 persons per square mile, up from 28.5 per square mile in 1990 and 16.4 in 1980.

	1970-1980	1980-1990	% Change	1990-2000	% Change	2000-2010	% Change
<b>Vermont</b>	511,456	562,758	10.0%	608,827	8.2%	625,741	2.8%
<b>Franklin County</b>	34,788	39,980	14.9%	45,417	13.6 %	47,746	5.1%
<b>Waterville</b>	470	532	13.2%	697	31.0%	673	-3.4%
<b>Cambridge</b>	2,019	2,667	32.10%	3,186	19.5%	3,659	14.8%
<b>Fairfield</b>	1,493	1,680	12.5 %	1,800	7.14%	1,891	5.1%
<b>Fairfax</b>	1,805	2,486	37.7%	3,765	51.5%	4,285	13.8%
<b>Bakersfield</b>	852	977	14.7%	1,215	24.4%	1,322	8.8%
<b>Fletcher</b>	626	941	50.32%	1,179	25.3 %	1,277	8.3%

Table 2.1: Population Comparison (Source: US Census Data)

The rate of local populations growth between 2000 and 2010 (8.3%) was over one and a half times that of the county (5.1%), and near three times that of the state (2.8%). This is due in part to Fletcher's relatively smaller base population, but it is also indicative of the effect of prevailing outside growth pressures on Fletcher and other adjoining communities such as Fairfax and Bakersfield which result from their location within the greater Burlington commutershed.

Historically, much of Fletcher's growth could be accounted for through a natural increase in the population, wherein the number of births exceeded the number of deaths. As indicated in table 2.2, between 1970 and 1990, however, a net influx of people into the community was largely responsible for the more substantial population increases experienced during these decades. This trend had reversed by 2000, with natural increase once again representing the majority (56.5%) of Fletcher's population growth.

Year	Total Population	10-year Change	Pct Change	Pct Natural Increase
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<b>1970</b>	456	57	14.3%	89.1%
<b>1980</b>	626	170	37.3%	17.1%
<b>1990</b>	941	315	50.3%	33.3%
<b>2000</b>	1,179	238	25.3%	56.5%
<b>2010</b>	1,277	98	8.3%	42.9%

Table 2.2: Components of Population Increase, 1970 - 2010 (Source: US Census; VT Dept of Health, Vital Statistics)

If accurate, population projections can be invaluable to the planning process. Existing population projections are significantly out of date, because they are based on 1990 census data. Although the 1990 data illustrated the low, moderate and high projections, each figure significantly exceeded the realized population in 2010; the low projection exceeded the real population by 27.5 percent. This fact presents a basic level of skepticism regarding any subsequent projections, if they existed. For these reasons, the existing projected population data has not been fully applied to this plan.

	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>
<b>High</b>	1,391	1,698	1,990	2,346
<b>Mid</b>	1,325	1,572	1,809	2,076
<b>Low</b>	1,259	1,446	1,628	1,806
<b>Realized</b>	1,179	1,285	1,277	N/A

Table 2.3: Population Projections, 2000-2015 (Source: VT Health Care Authority, June 1993)

## Population Characteristics

### Age Distribution

As Fletcher's population has increased, its age structure has remained fairly constant. The town's population is aging, as noted by an increase in the median age from 35 in 2000 to 40 in 2010. While the town's population as a whole has aged, the proportion of individuals 65 and over increased slightly, from 6% in 2000 to 7.3% in 2010.

The data in table 2.4 also indicates that the percentage of children under 18 years of age has decreased by 3.1%. Given the anticipated overall growth in population, increases in all age groups can be expected. This suggests a growing need for community services and facilities, including day care and educational services; elderly services, facilities and housing. The largest component of the population will continue to be those in their wage earning years, who contribute to the community by generating income.

	1980	1990	2000	2010
<b>Under 18</b>	30%	31%	29%	25%
<b>18 to 64</b>	62%	63%	66%	66.8%
<b>65 and Over</b>	8%	6%	6%	7.3%
<b>Median Age</b>	28.6	31.5	35	40

Table 2.4: Age Groups 1980-2009 (Source US Census, 1980-2000; ACS 2005-2009)

### Educational Levels

According to 2000 Census information, over 86% of Fletcher residents over the age of 25 were high school graduates, and over 26% held college degrees (bachelor's or higher). This number continues to steadily rise—according to 2010 Census over 87% of Fletcher residents over the age of 25 were high school graduates. The number also increased for the percentage of college graduates in 2010 to more than 31%. As shown in the accompanying table, Fletcher's population is fairly well educated relative to Franklin County and Vermont residents.

	Pct HS Graduates	Pct College Graduates
<b>Fletcher</b>	86.4%	26.1%
<b>Franklin County</b>	82.6%	16.6%
<b>Vermont</b>	86.4%	29.4%

Table 2.5: Educational Levels, Population 25+ years (Source US Census, 2000, 2010)

### Income Levels

Comparative income information for the years 1990, 2000 and 2010 is provided in table 2.6 below. As of the last Census, Fletcher residents had higher per capita, median household and family incomes than those reported for the county, and a smaller percentage of Fletcher's population lived below the poverty line. The Town per capita median household and family income values were also higher than those of the state. Fletcher reported a lower percentage of its population below the poverty level than did the state of Vermont over all.

The 2010 Census indicates that 9.0% of Fletcher residents live below established poverty levels—including 15.7% of children under the age of 18, and 5.3% of persons aged 65 and over.

**Per Capita**

**Median Household**



	1990	2000	2010	1990	2000	2010
<b>Fletcher</b>	\$11,314	\$20,498	\$33,350	\$30,074	\$46,146	\$64,276
<b>Franklin County</b>	\$11,678	\$17,816	\$24,700	\$28,401	\$41,659	\$52,398
<b>Vermont</b>	\$13,527	\$20,625	\$26,876	\$34,780	\$40,856	\$49,406.00

Table 2.6: Income Level Comparisons (Source: US Census 2000, 2010)

### Tax Base

As all communities in Vermont, Fletcher relies heavily on its property tax base to fund needed community facilities and services. The local grand list thus provides information not only about properties in town, but also about tax burdens and trends that may change over time as the community grows and develops.

The total number of parcels listed increased by 12.44% between 2000 and 2010, suggesting that a significant amount of land subdivision and development occurred during this period. By far, the greatest increase in parcel numbers was due to residential development. The number of year-round residential homes on 6 acres or less increased by 22.86%, while residential properties of more than 6 acres increased by 33.95%. Over half of Fletcher's year-round homes are built on less than 6 acres, reflecting the pattern of very low density residential development characteristic of a rural community. Over the same period of time vacation properties regardless of acres, experienced a notable decline in number, in part due to conversion to year-round use.

Overall, the number of farm parcels experienced a decline, while woodland parcels have recuperated from previous reductions, and the town has not gained industrial property.

The grand list comparison illustrates recent changes in the relative value of properties included on the town's grand list. By 2000, residential properties (year-round, including mobile homes) accounted for 75% of the total listed value, up from 60% in 1990, and 49% in 1980. During the same period the relative value of vacation, forested and agricultural properties declined, and the value of commercial and industrial properties remained insignificant. As noted, there are no listed industrial properties in town, and two commercial properties account for less than 0.5% of the local tax base.

This confirms that the town is largely and increasingly dependent on its residential tax base to fund needed community services and facilities.

<b>Parcel Type</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>	<b>Pct Change (1980-90)</b>	<b>Pct Change (1990-00)</b>	<b>Pct Change (2000-10)</b>
<b>Residence, ≤ 6 Acres</b>	70	111	175	210	58.6%	57.7%	20.0%
<b>Residence, 6+ Acres</b>	75	133	162	219	77.3%	21.8%	35.19%
<b>Mobile Home, w/o land</b>	6	6	11	5	0.0%	83.3%	-54.54%
<b>Mobile Home w/ land</b>	24	36	43	37	50.0%	19.4%	-13.95%
<b>Vacation, ≤ 6 Acres</b>	56	54	48	46	-3.6%	-12.5%	-4.17%
<b>Vacation, 6+ Acres</b>	20	20	17	18	0.0%	-17.6%	5.88%
<b>Commercial</b>	0	0	1	2	0.0%	100%	100%
<b>Industrial</b>	0	0	0	0	0.0%	0.0%	0.0%
<b>Utilities</b>	0	2	3	2	200%	50.0%	-33.33%
<b>Farm</b>	22	25	24	22	13.6%	-4.2%	-8.33%
<b>Woodland</b>	34	26	31	36	-23.5%	19.2%	16.13%
<b>Miscellaneous</b>	105	107	104	101	1.7%	2.9%	3.85%
<b>Total Parcels</b>	412	520	619	692	26.6%	19.0%	11.79%

Table 2.7a: Grand List Comparison, 1980-2010 (Source: Grand List Abstracts)

<b>Parcel Type</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Residence, ≤ 6 Acres</b>	198	206	211	210	215
<b>Residence, 6+ Acres</b>	208	210	213	219	217
<b>Mobile Home, w/o land</b>	9	8	5	5	5
<b>Mobile Home w/ land</b>	37	36	35	37	37
<b>Vacation, ≤ 6 Acres</b>	46	47	47	46	46
<b>Vacation, 6+ Acres</b>	17	17	17	18	17
<b>Commercial</b>	2	2	2	2	2
<b>Industrial</b>	0	0	0	0	0
<b>Utilities</b>	2/1	2/1	2	2	2
<b>Farm</b>	19	19	20	22	19
<b>Woodland</b>	36	35	36	36	36
<b>Miscellaneous</b>	88	95	96	100	100
<b>Total Parcels</b>	668	682	684	692	696

*Table 2.7b: Grand List Parcels, 2007-2011 (Source: Fletcher Grand List, 2007-2011)*

A comparison of Fletcher's tax base with those of surrounding communities is given in Table 2.8. The aggregate fair market value (AFMV) of Fletcher's grand list is lower than that of most surrounding communities, due in part to the lack of commercial/industrial and large scale residential development in town. As a result, the average tax on R-1 properties (residential on less than 6 acres) is generally higher than most.

Town	Effective Rate (\$/100)	Effective R-1 Tax	Average Rate (\$/100)	Average R-1 Tax
<b>Bakersfield</b>	2.14	\$2,397	1.72	\$3,928
<b>Fairfax</b>	1.79	\$1,648	1.42	\$2,977
<b>Fairfield</b>	2.05	\$2,067	1.72	\$3,974
<b>Cambridge</b>	1.97	\$2,302	1.61	\$4,833

Table 2.8: Tax Base Comparison, 2001 (Source: VT Dept. of Taxes, Annual Reports)

In 1995 Fletcher had the highest effective total tax rate (\$2.24), and the highest school tax rate (\$1.73) in the county, despite the fact that following a reappraisal, property was listed at 101.91% of fair market value (VT Dept. of Taxes, 1996). 2011 saw a tax rate of \$0.5566-municipal and \$1.4960-school-total \$2.0526.

The majority (82%) of listed property in Fletcher is owned by town residents; 1.8% is in corporate ownership, and 5.2% is owned by non-state residents. Remaining properties are owned by Vermont residents who reside elsewhere in the state for all or part of the year. These include many of the seasonal camps around Metcalf Pond, some rental properties, and undeveloped land.

This suggests that local development to date has been locally driven, and not tied to corporate, out-of-state or other in-state landed interests, as is occurring elsewhere (for example in Cambridge, home of the Smuggler's Notch Ski Resort). Fletcher is not, however, immune to outside forces. Continued growth in the St. Albans and Burlington areas, may significantly increase the demand for new housing in surrounding communities such as Fletcher.

## Recent Development Trends

The number and type of zoning permits issued each year, listed in the accompanying table, give an indication of the amount and type of development occurring in Fletcher. Not all permitted development is constructed, and not all types of development require permits (for example farm structures were granted exemptions from local zoning by the state in 1994). However, permit information is useful in looking at local development trends.

Fletcher has developed parcel maps, which makes it easier to identify and locate specific subdivision and development trends. Permitting activity further validates the fact that land use is largely residential. The pattern of development in Fletcher to date has been largely low density, single or multiple lot subdivisions of land along existing rights-of-way (including some Class 4 roads) for year-round residential use. If this pattern is maintained through the next decade, Fletcher's open land will continue to be subdivided for residential use, reinforcing its growth as a bedroom community. Based on recent permit activity, locally and in nearby communities such as Fairfax, Fletcher can also expect to receive an increasing number of applications for larger-scaled residential subdivisions, as market and

local soil conditions (for septic systems) permit.

Type	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Single Homes</b>	15	10	15	8	8	7	4	8	1
<b>Mobile Homes</b>	2	0	3	3	2	1	3	0	0
<b>Camps</b>	0	0	1	0	1	0	0	0	0
<b>Additions/ Sheds/ Garages</b>	18	42	24	25	18	30	23	23	20
<b>Other</b>	38	42	43	52	27	7	15	12	16
<b>TOTAL</b>	73	94	86	88	56	45	45	43	37

Table 2.9: Permit Applications (Source: Fletcher Town Reports, 2003-2011)

**GOAL :** To pursue a course to best understand the community, resident population and existing conditions.

Objectives:

2.1 The most current data available will be pursued and applied, to best base planning activities.

Recommendations or Actions:

- Current and recent trends will be periodically reviewed by all necessary municipal officers and/or discussed with town residents.

## Section 3

# NATURAL AND CULTURAL RESOURCES

### Overview

Fletcher is a rural community, with a particular “sense of place” that has developed over time through the integration of the town’s natural, cultural or built environment. This blending, unique to each community, gives rise to special qualities and a distinct character, which is recognized and valued by local residents, but not always easily defined or preserved. Increasingly, many towns are losing their sense of place, their uniqueness, their character and their identity through nondescript patterns of development, including lower density residential sprawl in rural areas. On doing so, these communities lose many of the very qualities that make them attractive places in which to live and work. Further, what resource-based economy exists is continually being challenged as the town continues to shift into a bedroom community.

Giving due consideration to Fletcher’s natural and cultural features, and the qualities of life these afford, is of major consequence for the continued growth and development of the town. Protecting that which is unique or special about the town promotes quality development, increases property values, has direct economic benefits, and may form the basis for a shared, positive local image and greater sense of community.

Fortunately, Fletcher retains much of what makes it an attractive place to live and work.

In this section we note important natural and cultural features found in Fletcher which contribute to its rural character and sense of place are noted, along with related goals, policies, and objectives concerning their protection, preservation and/or enhancement.

### Natural Features

Fletcher’s most prominent natural features and attributes are locally recognized. Others are less apparent, but nevertheless important to the health of the environment and the community.

According to the Vermont Land Use/Land Cover (LULC) Datum, 1997, Covers in Fletcher have been identified and summarized into the following categories:

- **Forest** - Deciduous, Coniferous and Mixed forests;
- **Agriculture** - Row Crop, Hay Pasture and Other Ag/Mixed Open;
- **Water** - Surface Water;
- **Developed** - Residential, commercial, Transportation/Utilities and Other Urban;
- **Wetland** - Forested and Non-Forested Wetland; and
- **Other** - Barren Lands and Brush Transitional.

### Climate and Air Quality

Climate represents the normal or average weather conditions that are characteristic of an area over a long period of time. Typical weather conditions are an important part of the planning and design process because they affect such things as soil erosion, plant growth, air quality, storm water runoff and flooding, groundwater levels, road maintenance, and access to solar or wind energy.

Vermont's northern climate is dominated in winter months by cold dry air from Canada, and in the summer by warm moist air from the Gulf of Mexico. Occasionally the state also feels the effects of damp, cold air moving inland from the north Atlantic. Vermont experiences violent thunder and windstorms with shifting weather patterns; tornadoes and hurricanes are rare but episodes of heavy rainfall and flooding may occur during these periods.

Fletcher also tends to receive more precipitation in the form of rain and snow than towns in the Champlain Valley. Average annual precipitation is adequate for most needs, although short periods of drought and flooding and heavy snowfalls are not unusual.

Fletcher's climate is especially pleasant in the summer months when the average daily temperature fluctuates around 80 degrees. Winter months, when temperatures may fall well below 0° F, present a different set of circumstances. Buildings must be constructed with sufficient insulation and heating to fend off the cold, and with the structural integrity and roofing to withstand heavy snowfalls. Winter snows also contribute to expensive winter road maintenance costs.

The freeze-thaw cycles that bring spring sap runs also buckle poorly drained foundations, pavements, and roads; and "mud season" may result in nearly impassible dirt roads and driveways. The adversities and real costs associated with living in this northern climate can be lessened, however, with the proper planning, siting and construction of new development and infrastructure (for example, the siting of buildings to maximize solar and minimize wind exposure). And the benefits, including the variety that comes with the changing of the seasons, are many.

Given the lack of industrial development in town, local air quality concerns are limited mainly to pollutants generated by vehicles, heating systems (e.g., wood stoves), and some agricultural practices. The cumulative effect of these sources will increase with additional growth and development, and may have greater impact on local air quality in the future. These types of low-level emission sources are coming under increased scrutiny statewide.

## **Bedrock Geology**

Geologic events of the distant past have directly affected Fletcher's topography, soils and drainage patterns, which in turn have influenced patterns of local development. Fletcher is underlain by bedrock formed from sediments and volcanic materials deposited some 600 million years ago, which were then altered and hardened from the heat and pressure of mountain building. Over the millennia, the weathering and erosion of less resistant rock resulted in the Fletcher's existing relief. Locally, bedrock consists mainly of highly metamorphosed greywacke, phyllite, gneiss and schist associated with Green Mountain formation.

Geologically speaking, northwestern Vermont has been relatively inactive in recent decades. Over the long term this region is susceptible to earthquake activity centered mainly to the north and west. Seismic events, such as the April 20, 2002 magnitude 5.1 earthquake centered 15 miles southwest of Plattsburgh, NY show that the region is susceptible to quake activity. On a more local level, occasional shifts in underlying bedrock have resulted in minor tremors that have been felt locally, but have caused no damage.

## **Surficial Geology**

Periods of glaciations, the most recent ending approximately 11,000 years ago, also dramatically affected the look and lay of the land. Glacial materials deposited during periods of advance and melt including glacial tills, outwash sands and gravels, and lake bottom sediments cover underlying bedrock to varying depths. These are the parent materials from which most of Fletcher's soils have developed. Also found on the surface in isolated locations are organic peat and mucks that have accumulated in upland lowlying areas, along Black Creek south of Metcalf Pond, and more recent flood deposits along local rivers and streams.

Glacial tills consist largely of unsorted, poorly drained materials. Exposed bedrock, boulder surfaces, and shallow soils are common, particularly in the hilly and mountainous upland areas of town. The suitability of tills for forestry, farming, and development varies widely depending on depth to bedrock, slope and drainage. Till soils often have fragipan layers which impedes drainage. Where tills are thin, water is allowed to infiltrate into underlying bedrock and recharge local ground-water supplies.

Level terraces of well sorted, well drained sands and gravels deposited during glacial melt are found mainly along the Lamoille River valley, including an extensive area south of Binghamville. Smaller kame terrace deposits are scattered throughout town. These deposits are often good sources of sand, gravel and groundwater, are fairly good farmland, and are well suited for development. As such, they represent an important resource to the town that may be subject to competing but not always compatible uses.

Lake bottom silts and clays, located in the vicinity of Fletcher Center and at greater depths in the Binghamville area, are poorly drained and generally unsuited for most types of development. Well log data suggest, however, that when left intact, these clays may cap and provide some protection to underlying bedrock aquifers.

## **Earth Resources**

No commercial mineral deposits have been located in Fletcher; however outcrops near West Fletcher and Binghamville have been quarried for crushed stone. Sand and gravel deposits scattered throughout town also have been worked over the years.

There is a growing demand throughout the county for sand and gravel for use in construction and road maintenance. As larger deposits are depleted, smaller deposits may become more economically viable, and more important to the town. These deposits are a valuable resource.

The environmental and social impacts of quarrying and extraction operations also need to be considered prior to development.

Many adverse impacts can be minimized through appropriate site planning, development and reclamation.

## **Geologic Features**

Also of note are two geologic features located in Fletcher that were identified as part of a statewide natural resource inventory conducted in the 1970s. The West Fletcher Esker, a 400 acre glacial



feature of statewide significance, extends 1.5 miles along a tributary of Wilkins Brook. Sections of this sand deposit have been subject to extraction, but it retains its integrity as a significant glacial feature.

The second feature is a naturally occurring Rock Cave located in the vicinity of Metcalf Pond. This cave, surrounded by forestland, is historically renowned as a fugitive hideout.

## Topography

As noted, Fletcher's topography and drainage patterns reflect the differential erosion of underlying bedrock, and the effects of more recent glaciation. The result is a geologically mature, hilly, sometimes mountainous landscape cut by small stream valleys. Because topography provides natural barriers to movement and often influences the accessibility and use of land, topographic information is important in planning for different types of land use, transportation routes, and the location of public facilities and infrastructure.

Elevations in Fletcher range from lows of 430 to 440 feet above mean sea level (msl) along Black Creek and the Lamoille River, to 2,140+ feet atop Fletcher Mountain, east of Route 108. Most development in Fletcher, including Binghamville and Fletcher Center, is located between 500 and 700 feet, along the valleys and hollows that cut through surrounding uplands. Scattered, low density development is found above 1,000 feet.

One of the most important factors controlling the potential use of land is slope or steepness. Slope is an important consideration not only because of associated constraints including drainage, erosion, and bearing capacity, but also because of the damage that may result from slope destabilization. Major causes of slope destabilization include vegetation removal and undercutting of slope faces. Slope destabilization may result in accelerated runoff and soil loss, septic system failure, foundation shifts, and in the extreme, landslides and building collapse.

Land which is nearly level is generally suitable for most types of uses, including farming, industrial, commercial, and large-scale residential development. For this reason, agriculture often comes into conflict with other competing uses for available land. Steeply sloping land is generally best suited for low density, nonstructural uses, including timber production, wildlife habitat, and outdoor recreational activities. Any use of steep terrain requires careful land management. According to state soils data, 32% (7,761 acres) of the town consist of topography greater than or equal to 25% slope. This means that a significant amount of land area is unsuitable for structural development.

## Upland Areas

Areas of higher elevation (here defined as 1,000' or more) include most of the town's mountains, ridgelines and hilltops, such as Gilson Mountain, many of which are highly visible from public vantage points and contribute significantly to the scenic beauty of the town.

Drainage divides, steep slopes, shallow soils and exposed, fractured bedrock are also common in upland areas, which allow for upland drainage groundwater recharge, wildlife habitat, forestry and outdoor recreational activities, but make these areas highly sensitive to most forms of development. As such, upland areas deserve adequate protection from improperly sited and potentially harmful development.

Fletcher's drainage includes a complex network of streams, rivers, overland, and subsurface flow. Locally, Fletcher lies within two drainage basins: the Missisquoi River basin, including Black Creek and the headwaters of the Fairfield River which drain northward; and the Lamoille River basin, including Wilkins Brook, Stones Brook and local tributaries which flow south into the Lamoille River. The major drainage divide runs roughly northwest to southeast through the middle of town. Both basins lie within the Lake Champlain watershed. Fletcher is unusual in that most of the town's drainage originates locally; apart from the Lamoille River, many local headwaters are located in upland areas above 1,000 feet. This affords Fletcher the opportunity to examine water quality more closely since most local streams originate within its jurisdiction. The Vermont Environmental Board has occasionally enacted more stringent rules which have altered some development plans.

Local drainage patterns are related to slope conditions and are therefore also an important consideration in planning and environmental impact assessments. If slopes are altered, so is drainage, which can affect the amount and direction of water runoff, soil erosion, and water quality. If drainage patterns are changed through channelization, pond, or dam construction, slope conditions also may be altered, again affecting patterns of runoff, erosion, and sedimentation.

## Soils

Soil is perhaps the most important physical factor governing the use of land in rural areas. Most soils in Fletcher, having developed from materials deposited during glaciation, represent a 10,000 year investment that has resulted in a very valuable and limited resource. Soils are classified on the basis of their structure, form, composition, and suitability for various types of development.

The most widely used classification system is that of the US Natural Resource Conservation Service (formerly the Soil Conservation Service). The NRCS has produced detailed soil survey maps for Fletcher, which is included in their publication *Soil Survey of Franklin County, Vermont*, issued in 1979. Components of the survey including suitability ratings for agricultural, forestry and on-site sewage disposal systems have since been updated. A map depicting soils particularly suited for agriculture and on-site septic systems is included for planning purposes (see appendices). Detailed soil survey information and/or site tests should be referred to when determining the capability of a particular soil for a proposed use.

In the context of land use planning, four soil characteristics are of primary concern: bearing capacity, erodability and stability, drainage, and resource value. These characteristics generally depend on particle size (sand, silt, and clay) and water content. Poorly drained, fine-grained (clay) soils have the greatest limitations for most types of development, especially for anything that requires on-site sewage disposal. In contrast, coarse grained, well drained sandy soils, though somewhat dry for agriculture, are best suited for residential, commercial, industrial, and other related types of uses. New septic designs have been adopted by the State of Vermont, although more costly to install and maintain, thus reducing the limitations on development.

**“Primary agricultural soils”** as defined under Act 250, Vermont's Land Use and Development Law, include soils which, based on their chemical and physical properties, are considered especially suited for agricultural use. These are subdivided into “prime” soils having very high potential for and few limitations for agricultural use, and “good” or secondary soils of statewide significance that have good potential but may have one or more limitations that restrict crop selection or require more management.

In the rolling hills and mountains of northwestern Vermont, primary agricultural soils, and “prime” soils in particular, are a very limited and valuable resource. Agriculture depends on the availability of high quality soils, in large enough acreage (a critical mass), to make crop production economical. However, many of the best agricultural soils are also well suited for other types of development, including the subdivision of land for the construction of houses and related infrastructure. Fletcher is no exception; new homes in town have been built on some of Fletcher’s best farmland.

The conversion of good farmland effectively takes it out of production over the long term, and reduces an already limited resource base. In Fletcher much of the best farmland, located in valleys along local roads and drainage, remains in production. Historically, more agricultural land has been abandoned to shrub and forest than has been lost to development; however given the importance of agriculture to the community, now and in the future, farmland conversion and fragmentation remains a local as well as regional and statewide concern. It is necessary to retain sufficient acreage of all types of agricultural soils for sustainable production for the continuation of agricultural practices in Fletcher. The proper care and management of agricultural soils (e.g., through the use of accepted or best management practices as defined by the state), is also important to ensure long term, sustainable use.

“**Primary forestry soils**” also have been identified by NRCS and the state according to their productivity for commercial forestry. Similar concerns exist regarding the development and fragmentation of commercial forestry soils; though these soils are more widespread, and are often found in the more remote upland locations in town. Primary forestry soils include many soils, which, because of slope and drainage, are not suitable for intensive development. This reduces development pressures on this resource base, but even low density development, including seasonal camps, may result in fragmentation and limited access to good forestland.

In all, few soils in Fletcher are suitable for high density development, especially given the lack of a centralized sewage disposal system. Limited areas of good development soil (e.g., Windsor-Missisquoi soils) are located on sandy terrace deposits in the vicinity of and to the south of Binghamville. Traditionally these soils have been used for farming and logging. More recently they have been subdivided for residential development. They also are a potential source of sand and potable groundwater. Given these soils’ suitability for different, often competing uses, and the amount of development pressure in this area of town, careful planning is needed to resolve existing and potential land use conflicts.

Other types of low density development in Fletcher are dependent on the ability of soils to accommodate on-site septic systems. Site analyses are necessary to ensure that septic systems will function properly and are regulated by the State of Vermont Agency of Natural Resources.

## **Surface Waters**

Fletcher’s principal surface waters include Metcalf and Halfmoon Ponds, the Lamoille River, Black Creek, Wilkins Brook, Stones Brook, and the upper reaches of the Fairfield River. These waters, as well as other local streams and brooks, provide drainage for surrounding lands, important wildlife habitat, recreational opportunities, scenic views and individual water supplies. Any of these functions may be impaired by land uses within local watersheds, particularly in the vicinity of stream banks and shorelines.

Given that most drainage in Fletcher originates locally from upland areas of town, Fletcher is in an especially unique position to protect and enhance the quality of its surface and ground water resources

for multiple use, and in particular for public water supplies and recreational uses. Pristine headwaters, located in the upper reaches of watersheds, have low assimilative capacities and are thus extremely sensitive to sedimentation and pollution. Inappropriate development within riparian zones and shore land areas may also significantly impair water quality, habitat for fish and other aquatic life, and public use of local waters.

**Metcalf Pond** is the town's most notable surface water feature. Located between steep, forested slopes in the north central part of town, Metcalf Pond is a naturally occurring pond roughly 71 acres in size, and has a maximum depth of 25 feet. The pond drains through a southern outlet, which serves as the source for Black Creek.

The pond's watershed has been mapped at 801 acres, 96% of which is undeveloped. Forested land extends over 84% of the basin. There is a significant amount of shore land development. Seasonal camps served by private, dirt roads and individual septic systems line the southern and parts of the western shores, as well as year round homes. Steep slopes and wetlands have limited development along much of the remaining shoreline, associated wetlands are found along the north shore and at the southern outlet.

Metcalf Pond is public water regulated by the state. Public access is limited to a small, undeveloped parcel of town land located along the road at the south end of the pond. The pond has been identified by the state as a warm water fish habitat. Fishing, boating, and swimming are popular activities locally. Metcalf Pond and the surrounding hillsides, including "the Gore" to the north, are also visually appealing, and comprise a prominent, widely recognized scenic feature.

Water quality is generally good, and supports existing uses. There are problems with Eurasian Milfoil, an introduced aquatic weed first documented locally in 1984. Infestations are currently being controlled by manual harvesting. Local residents also have complained of reduced water clarity due to algae and siltation, resulting primarily from localized non-point sources of pollution. Increase development around the pond, including new or expanded seasonal structures or the conversion of seasonal homes to year round uses, could impair water quality further if shore lands are not properly managed and protected. Given steep slopes and poor soil conditions around the pond, on-site sewage disposal and runoff have been of particular concern. For these reasons, the town has included shoreland-residential district in its local zoning bylaw.

**Halfmoon Pond** is a smaller (21 acre), naturally occurring water body located south of West Fletcher. The pond's outlet feeds into Stones Brook. Halfmoon Pond is also public water regulated by the state, and a designated warm water fish habitat, but at present there is no access that permits public use. The pond's watershed area is 194 acres, of which 80% remains undeveloped. Most of the watershed (70%) is forested; roughly 20% is in agricultural use. One farmstead and a small number of homes are located in the vicinity. The shore land remains largely undeveloped and wetlands are located around the southwest end.

Halfmoon is considered "threatened" for Eurasian Milfoil infestation. The pond, as designated Class B water, falls under the state's management goal to support a variety of public uses, however it is not known whether existing water quality will support these uses. Halfmoon Pond played an important role in Fletcher's history, supporting a local ice harvesting industry, and it remains an important aesthetic resource to the town today. It would serve the public interest for the town to negotiate limited public access to these waters, while taking into consideration legitimate landowner concerns regarding liability, trespassing, and vandalism.

Fletcher is one of three Franklin County towns that border the Lamoille River; as noted, much of the southern half of the town drains into this river through Stones and Wilkins Brooks, and other local drainages. The Lamoille River is a river of statewide significance for municipal and individual water supplies, power generation, fisheries and wildlife habitat. It is also a culturally significant historic, recreational and scenic corridor. Currently the river in Fletcher is bordered by farmland; there is no direct public access.

**Black Creek, Wilkins and Stones Brook** also are important locally. The headwaters of all three are within the town. Black Creek flows south from Metcalf Pond, feeding a significant wetland area that supports a variety of wildlife. Though this land is in private ownership, much of it is currently managed for timber. In Cambridge the creek turns northward and reenters East Fletcher along Route 108, then flows northward through wetlands, deeryards and farmland into Bakersfield and Fairfield.

The headwaters of Stones Brook, located along the drainage divide south of Metcalf Pond, also feed wetland areas to the east of North Road. One of the region's larger deer wintering areas is located along this brook in the southwest corner of town. Historically Stones Brook provided power for local mill operations in Fletcher Center and Binghamville before winding its way south to the Lamoille River. Old dam sites and millponds are still evident. Evidence of glacial outwash, including the West Fletcher Esker, is located along the upper reaches of Wilkins Brook, which also eventually drains into the Lamoille River.

Other local streams and brooks, including the headwaters of the Fairfield River in the northwest corner of town, and headwaters on the northern slopes of Gilson Mountain, which feed the East Fairfield water system, serve important functions beyond local drainage. Pristine headwaters flowing into larger streams and rivers contribute significantly to their improved water quality and the variety of functions they support. Many local waters are ephemeral and very sensitive to disturbances resulting from housing, forestry, agriculture and other forms of development.

As previously observed, most of the town's drainage originates locally, therefore Fletcher is in a position to protect and enhance the quality of its surface waters. The headwaters that contribute to East Fairfield's public water supply and already included in a Source Protection Area (SPA) designated by the state and shown on the accompanying maps (see appendices). These areas in particular should receive protection through local regulation.

## Groundwater

A large majority of Fletcher residents depend on groundwater for their individual water supplies. At present, there are no public water supply systems in town. Fletcher's aquifer recharge areas include many upland areas where bedrock is exposed (as evidenced by the number of springs that flow seasonally), and sand and gravel deposits, which allow for a significant amount of infiltration. Groundwater is generally abundant though depth and quality vary from place to place depending on local geology and sources of contamination.

Contaminants of particular concern include road salt, agricultural chemicals, leaking fuel tanks and failing septic systems. Once groundwater is contaminated, it is very difficult and expensive to clean up. Because of the low density of settlement in Fletcher, groundwater contamination, when it occurs, is limited and isolated.

There is concern regarding groundwater contamination in the Binghamville area, including the potential contamination of the school's water supply, which is tested regularly. Given the higher density of settlement in this area, continued reliance on on-site septic systems, sandy soils, and increased development activity, any future community water supply to serve this growing area will require an abundant source of potable groundwater. It therefore makes sense for the town to identify, designate, and protect such a source before it is developed for other purposes.

## Ecologically Sensitive Areas

Ecologically sensitive areas include those areas of town that serve important environmental or ecological functions, and are especially sensitive to development activity. Given their nature and significance, these areas should receive special consideration for local protections.

**Wetlands** are not typically suited for development, but serve a variety of other important functions, including flood regulation, water purification and wildlife habitat. They also add to the scenic quality of the rural landscape. The National Wetlands Inventory (NWI), conducted by the U.S. Fish and Wildlife Service in the 1970's, identified 782 acres of palustrine (upland) wetlands in the Town of Fletcher. This information is dated and by no means definitive, since wetland boundaries fluctuate from season to season. It does, however, give some indication that wetlands are an important part of Fletcher's landscape.

Major wetland complexes are located along Black Creek, Stones Brook, and along the shorelines of Metcalf and Halfmoon Ponds (see appendices). Wetlands are also scattered through upland areas where drainage is poor, or beavers have been at work. For development and permitting purposes, wetland boundaries are delineated through survey plats.

Many wetlands in Fletcher (those designated as Class II wetlands) are now protected by the state, and the town is required to report when development activity is proposed within or adjacent to them. Wetlands are also important locally, and may receive additional protection under local regulations, for example through buffering requirements, as appropriate.

**Flood plains** include areas along streams and rivers that experience frequent flooding and for obvious reasons are poorly suited for most types of development. "Open space" uses, including agriculture, forestry, and outdoor recreation are most suited to these areas. The Town of Fletcher has adopted floodplain regulations as part of its zoning bylaw, which conforms to federal requirements for participation in the National Flood Insurance Program (NFIP). Restrictions are intended to protect life and property, and to allow property owners to obtain flood insurance, and mortgages, at affordable rates. These regulations restrict development in 100-year flood zones, as mapped on federal Flood Hazard Boundary Maps (FHBMs) available for review at the town clerk's office.

**Shore land and riparian areas**, including the shores of Metcalf and Halfmoon Ponds, and the banks of the Lamoille River, are also particularly sensitive to development for a variety of reasons, including the potential for flooding, runoff, erosion and related impacts to water quality. These areas receive some protection under Fletcher's current bylaws. Special management zones, to include setbacks and vegetated buffers of sufficient width are recommended.

Fletcher's environment supports many types of wildlife habitat, including upland areas, wetlands, forests, streams and ponds, which in turn support a variety of wildlife. Protecting habitat resources, often

accomplished through the protection of other features and values, is critical to sustain local wildlife populations and to maintain and enhance local biodiversity. The protection of wildlife habitat in support of traditional hunting and fishing activities, other forms of outdoor recreation, and to maintain biodiversity, has been identified as a local concern. The primary threats identified include habitat encroachment, fragmentation, water pollution and over hunting.

**Certain critical habitat areas** have been identified for protection by the state. These include winter deeryards, critical bear habitat, and habitats of rare or endangered species or natural communities.

To date, five deeryards (5,955 acres +/-) have been identified in Fletcher (see map "Critical Areas" in appendices). The largest is located in the southwest corner of town in a forested area between Fairfax and River Roads, which extends westward into Fairfax. Development south of Binghamville, and in parts of Fairfax, has begun to encroach on this area. The second largest deeryard is located on the western slopes of Fletcher Mountain along the valley of Black Creek, east of Route 108. Other smaller deeryards are found in eastern sections of town, mainly along Black Creek. These areas provide winter shelter and browse for deer, and are critical to the long term survival of the local deer population.

The state has established the **Gilson Mountain Wildlife Management Area** on the north slopes of Gilson Mountain through the transfer of rights on 380 acres of private land. Limited public access is permitted, but to date no wildlife management plan has been developed for this area.

The upland areas of Fletcher east of Route 108 are considered important bear production habitat. This region, which consists mainly of contiguous and remote forestland, is part of a larger area that supports relatively high densities of cub producing females. Other upland areas in the eastern half of town are considered important seasonal bear habitat, which include feeding areas and travel corridors. The black bear is a sensitive indicator of the health of Vermont's forest; these areas are considered critical to the black bear's long term survival in Vermont.

To date, no rare, threatened or endangered plant or animal communities have been identified in Fletcher. This is in part due to the fact that no extensive field inventories have ever been conducted in town. If such communities are located in the future, appropriate measures should be taken for their protections.

A cursory survey of the area around Metcalf Pond, conducted as part of a 1992 biological study for the Vermont Non-game and Natural Heritage Program, found no additional species of statewide significance, but did uncover sizable populations of several uncommon ferns and a small population of the rare parasitic plant, squawroot. Aquatic flora at the north end of Metcalf Pond include carnivorous plant species particular to boggy area, including old reports of uncommon mixed bladderwort.

Recently there have been an increasing number of moose sightings in Fletcher, particularly in the wetland areas south of Metcalf Pond and wintering in upland woodlands which is indicative of the expansion of the moose population statewide. There also have been occasional, insufficiently documented reports of the catamount in our eastern hills.

Maintaining adequate habitat for the protection of local wildlife requires not only the protection of core habitat areas from fragmentation and encroachment, but also the protection of travel corridors, which connect these core areas and allow for seasonal and local movement of wildlife populations.

As suggested previously, habitat conservation provides multiple benefits to the community by reinforcing other local objectives such as protecting soils and water quality, flood control, retaining farmland, forests and other types of open space, and providing local educational and recreational opportunities.

## Cultural Features

Cultural features are community resources that help us understand our shared past. These include archaeological sites, historic sites, structures and settlements, and larger cultural landscapes that reflect the character of a particular place, time, or lifestyle. Fletcher's cultural resources offer a link to the past, help define the town's present character, and provide a context for future growth and development. As such, the town's cultural features lend much to its identity, character, and sense of place deserve consideration for preservation. The following includes a brief description of the town's cultural resource base; it is not intended to represent a complete inventory.

## Archaeological Resources

Archaeological resources include both prehistoric and historic sites, which often are no longer visible on the land. These include prehistoric settlements, hunting and fishing camps, trails, quarries, and burial grounds, as well as remnants of historic use, such as old foundations and cellar holes, dams, kilns and forges, unmarked cemeteries, and roads.

Archaeological sites, when found intact, provide a wealth of information about past ways of life; but because they are not readily apparent, these sites may be easily disturbed or destroyed. It is often not the artifacts themselves (arrowheads, pots, etc.) that are important though these may attract interest for their historic or commercial value, but rather the context in which they are found.

The Vermont Division for Historic Preservation (VDHP) maintains information of known sites, which is provided on a need to know basis (to avoid scavenging). For planning purposes they have described more broadly defined "sensitive areas" in which archaeological sites are known or expected to occur. In Fletcher, sensitive areas have been delineated along the Lamoille River and its tributaries, and along the upper reaches of the Fairfield River in the northwest part of town. Delineations following two hundred foot setbacks along existing drainage ways are common; however, given the movement of streams and rivers over time, many early sites may be located farther away. Development proposals in these areas should be reviewed with particular attention given to the possibility of buried sites. Assistance with the identification, protection and/or excavation of sites is available from VDHP staff.

## Historic Resources

Historic resources, including historic sites, structures and districts, are more easily identified and surveyed. An initial survey of the town conducted in 1981 by the VDHP identified many structures, which have historic significance, as well as the two historic districts of Binghamville and Fletcher Center. More detailed survey information is available at the town office.

The **Binghamville Historic District** is listed as "an outstanding example of a typical mill town" that has undergone relatively little change in the 20th century. Architecturally the village contains mid-19th century to early 20th century 1-story frame houses with clapboard siding and gabled roofs. The Binghamville Church located at the intersection of two roads, stands as a focal point that defines the



village center. Older houses are located on small village lots and are oriented in relation to each other and the road, with minimal setbacks. Stone's Brook, which provided the source of power for the sawmills located along its banks, is identified as the outstanding natural feature in this district. In 1981 the Binghamville Historic District contained no nonconforming buildings. Since that time a store and a few more modern homes have been located here, but the district retains much of its original character.

The **Fletcher Center Historic District**, once Fletcher's primary commercial center, includes the Fletcher Union Meeting House (Grange or Community House) and a number of historic structures near the intersection of the Fairfax and Cambridge roads. This too reflects a traditional settlement pattern of structures on small lots, oriented to each other and the road.

The **Fletcher Union Meeting House**, originally constructed in 1871, is listed on the National Register of Historic Places, and is now maintained by the Fletcher Historical Society as of November, 2010. Their current plans are to continue with the efforts that have been made to keep the building going and incorporate some new ideas. In recent years, the Meeting House has been used for town meetings and community events, but the building's use is limited due to the septic system. Poor septic conditions also have limited amount of new development in Fletcher Center.

Not identified on the state's survey, but nevertheless of historic as well as local importance, are Fletcher's four cemeteries; the **Pioneer Cemetery** (Fletcher Center), the **Fletcher Cemetery** (in Binghamville), the **Bailey Cemetery** (on the Will George Road), and **River Road Cemetery**. The Fletcher Cemetery is the only remaining active cemetery. The Pioneer Cemetery is actively maintained while the other two historic cemeteries are showing signs of long term neglect. Farms and farm buildings were identified by local residents in the municipal survey as having historic significance. Also not inventoried, but increasingly considered of historic importance, are landscape features associated with past or abandoned uses, including old foundations and cellar holes; dams, quarry and mill sites; stone walls and wire fences marking old field and property boundaries; stone posts, "witness trees" and other boundary markers; and old orchards, sugar bushes, woodlots, and logging sites. Unfortunately, these features often are not viewed as having any value and are readily disturbed, removed or demolished.

## The Working Landscape

As a rural community, Fletcher's rural character is most visually defined, and its history most evident, in its working landscape represented by small, compact settlements such as Fletcher Center and Binghamville surrounded by open countryside. It was noted in the previously 1981 Department of Historic Preservation Survey that the incremental changes, which are affecting Fletcher's historic buildings, are overshadowed because as individual structures they are dominated by their agricultural setting. Greater concern expressed by local residents in prior surveys, including the 1981 historic preservation survey and in the municipal survey, was not the condition of existing buildings. It was, rather, the development of open space, in particular a concern that the rapid rate of new construction, rising tax rates, and the lack of adequate zoning regulations would encourage the further subdivision of farm and forest land. It is evident that Fletcher's working landscape, as identified by its residents, has economic, fiscal and cultural significance, and contributes significantly to the rural and scenic character of the town.

Since 2000 there has been a significant increase in both multiple and single lot subdivisions in Fletcher. More specifically, single lot subdivision is the most widely applied form of subdivision in Fletcher. New construction has been located mainly on large lots, carved from larger farm holdings.

Until recently most new homes were located away from roads, mainly in wooded areas. This altered traditional set back patterns, but also served to conceal new development from the casual observer. Recently, however, subdivision along main routes in Fletcher has had noticeable visual impact. This suggests that certain landscape elements are more adversely affected by new development than others, and that the impacts of new development can be minimized through appropriate sighting and design.

Efforts to counteract the challenges that face the working landscape can only be achieved through multiple approaches, whether provided on a state, federal or local level. Currently there exist only a few mechanisms, which may enable property owners to work their land for viable economic returns. Land trusts and the Current Use Program are the two most widely applied programs.

Land trusts (usually private organizations or occasionally municipal entities) develop agreements with property owners to purchase particular rights of ownership, such as air, mineral or development rights. This tool is intended as a more permanent approach to maintaining the working landscape. Currently there are four conservation easements on privately owned land in Fletcher.

Conversely, the Current Use Program provides a flexible option for property owners. The state, in an effort to encourage conservation and sound management of farm and forest lands, instituted the current use program in which enrolled parcels are taxed according to the use rather than fair market value. Interestingly, Fletcher is the second highest in enrollment, in Franklin County. Through this program, the state reimburses municipalities for the balance in tax revenue, negating any fiscal municipal impacts for conserving developed natural resource lands. A lien in favor of the State of Vermont is assessed on any property enrolled in the program.

## Scenic Features

A Design Issue Committee put together by the Vermont Agency on Natural Resources identified six types of “sensitive” landscapes that deserve special consideration in planning, design and project review, along with associated guidelines (Vermont’s Scenic Landscapes: A Guide for Growth and Protection, VANR, 1991). These landscape types, as viewed from public vantage points, include the following:

- **Foregrounds of distant views**
- **Steep slopes**
- **Shorelines**
- **Ridgelines and hilltops**
- **Open fields and meadows**
- **Historic settlements and gateways**

Examples of each type are readily apparent in Fletcher, as noted in the accompanying photographs taken around town.

## Fletcher's Most Prominent Scene Features

Specific scenic features identified by Fletcher residents included views of Mount Mansfield from a variety of vantage points; views of other mountains, hilltops and ridge-lines throughout town; views of wooded hillsides, farmland and open space (including the Tinker and Mayotte Farms); the two ponds; and scenic views from the major roads in town, including the Fairfield and the Fairfax/Cambridge roads (TH 1 and 2). With appropriate sighting and design, even the most sensitive landscape types may be developed and still retain much of their intrinsic character. Landowners and developers should be encouraged to use creative development techniques, including open space and community design that respect traditional development patterns and enhance the rural character of the community. Even small subdivisions of four or five lots (the size of many local hamlets) may incorporate traditional patterns.

Most importantly, the town should develop guidelines and amend its bylaws and ordinances as needed to allow for and promote innovative, yet traditional, patterns of development, sighting and design. Given the real fiscal benefits of protecting Fletcher's rural landscape, including its historic features and open spaces, it may also benefit the town to consider other types of conservation and tax incentive programs which would provide information and assistance to interested property owners, while at the same time achieving a number of community goals.

### GOALS:

- **To require that all development within the town be pursued with strict regard to the capacity of the land to support it;**
- **Discourage development in areas which are hazardous to human health and safety, or which are otherwise unsuited for this purpose;**
- **To protect and enhance resource lands in the Town of Fletcher, including productive farm and forest lands and available earth resources, in order to maintain an adequate land base to sustain agriculture, farming and forestry operations and to secure needed supplies of sand and gravel for the benefit of existing and future generations;**
- **To ensure and encourage continued, careful stewardship and responsible use of Fletcher's land resource base in a manner which sustains its traditional, productive use;**
- **To protect, conserve and maintain access to Fletcher's significant natural areas and unique or irreplaceable natural features for environmental, ecological, educational and/or recreational purposes; and**
- **To protect the Town's rural setting and unique sense of place, including its cultural heritage, scenic resources and traditional working landscape of small hamlets and villages surrounded by open countryside.**

### Objectives:

- 3.1 Site disturbance for the construction of buildings, roads, basins and other improvements will be kept at a minimum. Natural vegetation will be maintained to the extent feasible. Storm water and erosion control plans may be required as appropriate.

- 3.2 Development on slopes greater than 15% will be carefully performed in order to minimize site disturbance and the potential for erosion and runoff. Slopes in excess of 25% will be protected from development.
- 3.3 Development should be sited so as to avoid significant, adverse impacts to and be buffered from important natural or manmade features, including but not limited to shallow or highly permeable soils, steep slopes, ground and surface waters, wetlands and/or floodplains.
- 3.4 Prevent water resource degradation or pollution by protecting groundwater resources, public water supplies and wellhead protection areas. No development will be permitted in designated wellhead and/or source protection areas, which will contaminate an existing or potential source of public water supply.
- 3.5 The use of Accepted Agricultural Practices (AAPs) or Best Management Practices (BMPs) for land and Accepted Management Practices (AMPs) for silviculture and associated management plans, as defined, administered and enforced by the Vermont Commissioners of Agriculture and Forests, Parks and Recreation, are encouraged locally to ensure sustainable use of the town's resource lands.
- 3.6 Use valuation of farm and forest land and fiscally sound tax stabilization programs to maintain resource lands in active production will be supported.
- 3.7 Encourage the identification of earth resources (sand, gravel, quarried bedrock) to be identified and reasonably developed in the public interest.
- 3.8 Extraction and related processing operations will be permitted only when it has been demonstrated that there will be no undue adverse impacts on the town or its residents. Potential conflicts between current land use and proposed extraction operations will be minimized. Strict standards for the operation, maintenance and restoration of extraction sites may be established as appropriate based on the unique conditions of the area affected. The full restoration of extraction sites will be ensured through the submission of local approval of site restoration plans and the provision of adequate surety to guarantee the completion of the restoration plan at the operator's expense.
- 3.9 New development will recognize, reflect and be compatible with traditional patterns and forms of development, be designed to complement its context and setting, and to maintain and enhance the town's historic, scenic and rural character.
- 3.10 Adaptive reuse of historic structures, including barns and other agricultural outbuildings, is encouraged and will be supported as feasible through provisions in local bylaws and available incentive programs.
- 3.11 Structures, including telecommunication towers, shall not be placed on ridgelines or hilltops. With the exception of telecommunication towers, structures shall not extend above the elevation of the crown line of mature trees. Telecommunication towers may be permitted to extend above the crown line only to the minimum extent required for functional operation.
- 3.12 Utility lines and associated rights-of-way are to be developed and/or extended in a manner which minimizes adverse impacts on to the town's scenic and land based resources.

- 3.13 Town Highways and public rights-of-way are to be maintained in a manner which, to the extent feasible, preserves and enhances their scenic and historic features. The impact of development on scenic roads will be minimized through appropriate sighting, landscaping and screening.
- 3.14 Outdoor lighting, if demonstrated to be necessary for security and/or visual interest, will be designed and installed in relation to the local setting and surrounding uses, and will not project glare upward or onto adjoining properties.
- 3.15 The introduction of pollutants, permanent encroachments and exotic and/or nuisance species to the public waters of the town will be prevented. The water quality of public waters used for drinking and/or recreational use should be monitored on a regular basis to protect public health.
- 3.16 Encourage and protect naturally vegetated buffers around bodies of water.
- 3.17 Access to public waters for recreational use should be provided in a manner which avoids environmental impact and enables use of public waters.

Recommendations or Actions:

- Exclude steep slopes, shallow soils, high water tables, public water supplies, wetlands and floodplain areas from development consideration as appropriate.
- Amend or update Fletcher's Zoning Bylaws and/or Subdivision Regulations, when necessary, to:
  - Protect East Fairfield's designated source protection area;
  - Specifically protect agricultural and forestry resource lands for long term, sustainable use;
  - Incorporate basic erosion control and storm water management standards;
  - Encourage management plans, to include a goal of wildlife enhancement, for all publicly owned and/or supported conservation lands within the town;
  - Incorporate appropriate protections for scenic resources;
  - Encourage the adaptive reuse of historic structures, including barns and other agricultural outbuildings;
  - Consider minimal historic and/or design guidelines for new development within and adjacent to the historic districts of Fletcher Center and Binghamville;
  - Incorporate minimum performance, lighting, landscaping and screening standards.
- Investigate the feasibility of a public water supply source to serve the Binghamville area.
- In association with landowners, develop a local land evaluation and site assessment system (LESA) to identify and prioritize important farm and forest resource lands for protection.
- Continue to support town/state tax stabilization programs and consider town programs, including the use value appraisal of enrolled and sustainable managed farm and forest land.
- Support landowner preservation of local farm and forest lands through available state and federal programs.
- Review land trust and similar applications for conformance with the goals and policies of the town plan.
- Support the formation of a local conservation commission and/or land trust to assist with the identification, inventory, management and protection of important resource lands within the community.
- Inventory and map potential sand and gravel resources in GIS format to help guide and review future land use and resource extraction decisions in these areas.
- Develop watershed management plans and monitoring programs for Metcalf and Halfmoon Ponds.

- Investigate the possibility of public access to Halfmoon Pond and the Lamoille River; participate in the development of the Lamoille River as a scenic and recreation corridor.
- Conduct a mapped inventory of critical wildlife habitat areas in town.
- Request completion of and participate in the development of a state wildlife management plan for the Gilson Mountain Wildlife Management Area.
- Support the efforts of Fletcher Historic Society to preserve and maintain the Fletcher Union Meeting House for public use.
- Develop a maintenance program for town cemeteries that are currently in a state of disrepair.
- Support the Fletcher Historic Society to preserve and promote the town's history.
- Conduct a scenic road inventory of major town roads (SA1, SA2); consider local designation of scenic roads.
- Develop, in association with community groups, a local beautification for public lands and rights-of-way, including a tree planting program to maintain shade and canopy trees.
- Recognition of local, state or federal historic significance of various buildings could be a key tool to retaining the town's historic identity.

## Section 4 HOUSING

### Overview

Shelter, a roof over one's head, is a basic need of everyone in the community. For this reason, one of the main goals of planning is to ensure sound, healthy and affordable housing for all residents, now and in the future. In rural communities such as Fletcher, housing contributes significantly to the town's appearance, its ability to attract other forms of growth, and the local property tax base. Insufficient housing stock often results in increased housing demand and cost, which in turn limits the availability of affordable housing and shifts the burden of providing shelter to adjoining towns.

On the other hand, housing that is poorly planned, sited, designed and constructed can overburden public services, destroy natural resources and cultural amenities, and require significant maintenance over time. Planning to meet community housing needs requires a look at the characteristics of local households and housing needs, the condition and availability of housing stock, housing affordability and anticipated need.



### Household Characteristics

The way the local population is organized into households affects the demand for housing, community services and employment opportunities. Locally and nationwide the size of households has declined dramatically since the 1970s, in part due to families having fewer children, the breakup of extended family households, an increase in the number of single-parent households, and also the number

of elderly who wish to remain in their homes.

As shown in Table 4.1, a decrease in the average household size generally corresponds with an increase in the number of households. The number of households in Fletcher, and statewide, is increasing more rapidly than the population, which contributes to the demand for additional housing.

The household size has continued to decrease through the year 2010. New household arrangements often require new housing arrangements. A growing number of smaller households will increase the demand for smaller housing units. At present there is no housing in Fletcher which is designed specifically to meet the needs of an aging population. Housing options in the community for those on fixed incomes and/or in need of assistance are limited.

	1980	1990	2000	2010
<b>Total Households</b>	207	330	428	497
<b>Family</b>	78.7%	76.7%	75.9%	74%
<b>Married, with children</b>	42.5%	39.7%	35.3%	25.20%
<b>Married, without children</b>	33.3%	26.4%	31.1%	36.20%
<b>Single householder, with children</b>	1.0%	7.3%	4.2%	9.3%
<b>Non-family</b>	21.3%	23.3%	24.1%	26%
<b>One person</b>	11.1%	14.5%	18.5%	17.9%
<b>One person, 65+ years</b>	N/A	5.4%	4.7%	5%

Table 4.1: Household Types (Source: US Census)

## Housing Stock

In 2000, Fletcher had 510 units and in 2010 Fletcher had the smallest housing stock (569 units) of the Franklin County Towns. The relatively few number of units, however, belies the dramatic growth in housing that the town has been undergoing since the 1970s. Between 1970 and 1980, Fletcher's housing stock increased by 46.1%; it grew another 41.3% between 1980 and 1990; it grew another 20.2% between 1990 and 2000, however, it only grew 11.6% between 2000-2010. Local zoning permits for new residential development for 2000-2005 have averaged seven (7) per year; down from the 11 per year average between 1995 and 2000 and 8 per year from 2005-2010.

As noted in preceding sections, because Fletcher is located within expanding Burlington and St. Albans "commuter sheds," the town has become an attractive bedroom community for those who work



elsewhere. As noted elsewhere, many towns' people are concerned that a high rate of housing growth may negatively impact municipal and educational facilities and services. However with the cost of fuel rising in the last five (5) years to record levels, the commuter sheds may become less attractive.

Also Fletcher's housing stock consists mostly of detached, single family dwellings; only 9 structures include 2 or more dwelling units. Housing units in 2000 through 2010 had an average of 6 rooms. Mobile homes make up 9% of the local housing stock, and provide an affordable alternative to other types of new construction. At present there are no mobile home parks, condominiums, group quarters (e.g., retirement homes), town houses, apartment buildings, or subsidized housing units in town. There is however a growing trend to add an accessory dwelling (apartment) to current single family dwellings.

	1980	1990	2000	2010
<b>Total Units</b>	288	407	510	569
<b>Total Occupied</b>	208	330	428	497
<b>Owner Occupied</b>	174	287	378	440
<b>Renter Occupied</b>	34	43	50	57
<b>Total Vacant</b>	80	77	82	72
<b>Seasonal</b>	61	62	77	62
<b>Single, detached</b>	182	338	443	519
<b>2 Units</b>	4	6	2	4
<b>3,4 Units</b>	4	3	4	0
<b>5+ Units</b>	2	0	0	0
<b>Mobile Home / Trailer</b>	34	55	53	51
<b>Avg.# Rooms/Unit</b>	5.9	5.8	6.0	6.0

*Table 4.2: Changes in Local Housing Stock, 1980-2010 (Source: US Census)*

Given that the housing stock consists predominantly of owner-occupied single-family homes, rental opportunities for smaller units are limited. In 2010, rental units comprised only 10% of housing.

Seasonal homes account for the majority of vacant housing in town; at any given time, very few units are available on the market for sale or rent. A vacancy rate of 5% is considered sufficient to take care of short term housing demands; at the time the last census was taken, only two units were available for rent. According to local realtors, generally fewer than 5 to 10 units are listed for sale in Fletcher at any given time. This lack of available housing locally has likely contributed to the increased amount of new construction experienced in recent years.

Recent amendments to Vermont's enabling legislation require towns to allow as a conditional use the development of small apartments or mother-in-law apartments as accessories to single family dwellings. This reflects the growing interest and need statewide to provide for alternative housing arrangements.

Fletcher does not have a local housing or building code, and no detailed inventory of housing conditions has been made to date. Given that the majority (68.3%) of Fletcher's housing stock has been built since 1970, and is therefore 40 years old or less, it is assumed that the majority of housing is generally in good repair.

Like most Vermont communities, however, Fletcher also has a significant number of dwellings (144) that were constructed prior to 1940. This is indicative of both the historic value of the housing stock, as previously noted, and also the potential need for repair and rehabilitation. Apart from structural concerns, older homes often have problems with heating insulation, efficiency and ventilation, wiring, lead paint, asbestos and inadequate water supplies and septic systems.

## **Housing Affordability**

The affordability of housing is in part determined by household income. Between 1979 and 1989, 1989 and 1999, 1999 and 2010 Fletcher's median household income increased by 112%, 153% and 40.5%; while the median value of housing during the same periods increased by 124%, 34.3%, and 105% respectively (US Census). This suggests that locally, household incomes have not always kept pace with the costs of housing. Affordability, however, is a relative measure. Under state and federal guidelines, housing is considered affordable when households at or below the median income level pay no more than 30% of their gross income on housing costs.

Data from the 2010 Census indicates that the median housing costs for home owners was \$1,327 per month, while the median for renters was \$663.00 per month. Typically, homeowners spend less of their income on direct housing costs than do renters; but they spend more on indirect costs, including repair, maintenance and taxes. In 1989, 9.6% of Fletcher homeowners and 34.4% of renters were spending 30% or more of their household income on mortgages and rent, excluding other housing costs. Also, 9% of Fletcher households reported incomes below the poverty level.

In 2010, 35.6% of Fletcher homeowners and 26.5% of renters were spending 30% or more of their household income on mortgages and rent, excluding other housing costs. Also, 6.4% of Fletcher families reported incomes below the poverty level. This suggests that, for a segment of Fletcher's population, and for renters in particular, housing is becoming less affordable as the value and costs of housing increase in relation to household income.

As noted, no subsidized units for low income or elderly residents currently exist in Fletcher; however, in 2003 the State of Vermont enacted Act 68, an income based taxation for school taxes on a primary house and two acres with the State reimbursing the Town for the lost revenue. While helpful to many residents it is somewhat detrimental to building lots larger than two (2) acres as the amount of land attached to a house affects affordability. Over half of Fletcher's residential properties are on six or more acres. Large lots in part reflect prevailing soil and site conditions, local residents' desire for privacy and a general pattern of low density residential development that is characteristic throughout town. Large

lots, however, often needlessly fragment land, taking it out of use for other purposes such as farming and forestry, and serve to increase the overall cost of housing.

The property tax burden to residents also makes local housing less affordable, especially for those on fixed incomes; however, the State of Vermont currently offers an adjustment of the school taxes based on household income on primary homes and two acres. Given that Fletcher is a small community, without a viable commercial or industrial tax base, land based and/or residential properties bear most of the burden of paying for municipal facilities and services. In 2010, year-round residential properties made up 77.5% of the total value of Fletcher's grand list. According to 2011 information from the Vermont Department of Taxes, Fletcher had the third fewest number of R-1 parcels (residences on less than 6 acres), and the second highest average R-1 tax in the county.

Given Fletcher's current fiscal situation, the lack of centralized facilities and services, and the distance from major employment centers, the town can be expected only to provide for affordable housing to meet local, rather than regional, needs.

Any long term growth management program considered by the town to remedy the fiscal impacts of recent residential development should also make provisions for the development of new types of housing which may require fewer services, including accessory apartments, additional rental units, and possibly elderly housing in order to help meet local needs.

Any local strategy to provide affordable housing, particular for special needs populations (elderly, handicapped, low/moderate income, etc.), should include the elements outlined below.

Programs and organizations are available locally, such as the Lake Champlain Housing Development Corporation (LCHDC), which can assist municipalities and/or landowners in developing, funding or managing affordable housing units.

#### **GOALS:**

- **To ensure the availability of safe, attractive and affordable housing for all Fletcher residents; and**
- **To promote the development of new housing which avoids environmentally sensitive areas and resource lands, maintains traditional land use patterns, reinforces existing or creates new, integrated residential neighborhoods, and provides a diversity of housing types.**

#### Objectives:

- 4.1 Housing should be safe and sanitary, energy efficient, visually attractive, and satisfy the day-to-day living requirements of its inhabitants.
- 4.2 Fletcher will plan to accommodate a diversity of housing types, including its fair share of affordable housing, based on identified local need and the town's ability to support it; and strive to maintain existing affordable housing stock where feasible.
- 4.3 Programs which assist low-income residents to weatherize, retrofit and rehabilitate existing residential units are encouraged.

- 4.4 The rate of housing development shall not exceed the ability of the town to provide and maintain associated infrastructure and services.
- 4.5 All new housing sites will be encouraged to minimize impacts to resource and conservation lands, and designated natural, cultural, scenic features and productive agricultural land.
- 4.6 Clustered forms of residential development, including planned unit development (PUDs) and/or open space subdivision techniques, will be encouraged and may be required as appropriate to maintain the town's agricultural and forest resource base, to protect rural and scenic character, to avoid impacts to natural resources and conservation lands, to allow for traditional "hamlet" forms of residential development, and related infrastructure and services.
- 4.7 The acceptable density of residential development will be determined based on topography and other physical constraints, access, proximity to village centers, land use priorities within the designated district and the ability to efficiently and economically provide and maintain related infrastructure and services. High density, multifamily residential development should be located within existing and/or expanded village areas and reinforce traditional patterns of residential development.
- 4.8 Housing developed as affordable housing should include affordable long-term housing units and serve a mix of moderately low to very low income groups based on identified community needs. Housing developed as "elderly housing," should be designed specifically to accommodate the needs of elderly residents. The development of affordable and/or elderly housing may be considered for density bonuses and/or waivers as appropriate and authorized under local bylaws and ordinances.
- 4.9 Accessory apartments within existing single family dwellings or accessory structures to such dwelling which are intended for use by family members, elderly and/or disabled persons will be permitted if it is shown that basic supporting infrastructure is of sufficient capacity.
- 4.10 No distinction will be made between mobile or manufactured homes and other types of single family dwellings for purposes of planning and zoning, except within designated historic and/or design control districts in accordance with state law.

Recommendations or Actions:

- Continue to monitor Fletcher's current bylaws and ordinances to eliminate any provisions and or practices that are intended primarily to (or in effect) exclude affordable housing.
- Regulate the sighting and conversion of seasonal homes to ensure adequate access and on-site septic disposal, and to ensure that undue burdens are not placed on the municipality for the provision of associated services and facilities.
- Continue to allow for the development of a small mobile home parks in appropriate locations under subdivision and conditional use review.
- Support and participate as appropriate in regional housing programs, including those administered by the state, the Lake Champlain Housing Development Corporation and other housing non-profits which provide for housing development and rehabilitation for special needs populations.



## Section 5 ECONOMIC DEVELOPMENT

### Overview

The term “economy” for purposes of municipal planning refers to resources, production, jobs, income and activities in the town and region that contribute to the economic well-being of local residents, businesses and industries. Economic planning can assist in providing jobs commensurate with the skills and aims of local residents, a more balanced tax base to meet community needs, the protection of important economic resources, and the provision of services and products to support the local community. Poorly planned economic development can adversely affect the local environment, strain municipal services, cause dislocations of businesses and labor, and adversely impact community character.

Fletcher’s local economy remains predominantly rural, agrarian, and resource based. Planning for other forms of economic development in small, relatively isolated communities such as Fletcher, which have limited infrastructure to support business, retail and industrial growth, is a challenge; but such planning can help highlight local needs, strengths and opportunities.



### Economic Base

#### Labor Force

Fletcher’s labor force in 2010 (including persons 16 years and over in the work force) numbered 784, of which 720 (91.8%) were employed. This represents a ten year increase in the employed population of 7.5%, due in large part to the influx of working aged residents. The town’s labor force in 2010 was nearly evenly divided along gender lines (53.9% male, 46.1% female); however women

experienced lower rates of unemployment (5.5%, as opposed to 10.4% for men). Fletcher's overall unemployment rate at that time (8.2%) was slightly higher than that for the county (7.0%) and state (8.1%); all significant increases from 2000. Nearly 73.1% of families with children under six years of age had both parents, or in the case of single parent families, one parent, in the work force. This suggests a real need for day care services for young children, locally or near places of employment. According to the Census LED data the vast majority of Fletcher's employed residents (99% in 2009) worked outside of the community. This, by state standards, qualifies Fletcher as a bedroom community. Fletcher residents are highly dependent on the regional economy for employment opportunities.

Fletcher's labor force is relatively well educated and well trained. As noted in the accompanying tables, the top three occupational categories in 2010, representing 74% of the local labor force are: management, business, science, arts and professional; natural resources, construction and maintenance; sales, office; and production, transportation and material moving occupations. The primary industries in which local residents worked in 2010 included educational services, health care and social services; manufacturing; and agriculture, forestry, fisheries, hunting, and construction.

### Local Employment

According to US Census data, in 2010 17% of Fletcher's labor force and 8.1% of Franklin County's labor force was self-employed.

Occupational Category	Fletcher	Franklin County	Vermont
<b>Management, business, science &amp; art</b>	43.1%	32.1%	38.5%
<b>Service occupations</b>	13.1%	17.1%	18.1%
<b>Sales and office occupations</b>	15.0%	22.3%	23.0%
<b>Natural resources, construction, maintenance</b>	19.6%	13.4%	10.2%
<b>Production, transportation, &amp; material moving</b>	9.3%	15.0%	10.2%

5.1: Occupational Comparison, Pct of Labor Force, 2010 (Source: 2010 Census)

Fletcher's economy remains predominantly agrarian, which contributes significantly to its rural character. As noted in Table 5.2, a relatively greater percentage (fourth highest category at 9.6%) of Fletcher's local employment continues to be in resource based industries, including farming and, to a lesser extent, commercial forestry. Despite shrinking numbers, farming and related activities remain the mainstay of the local economy. Dairy, beef, horse and other livestock farming, the production of lumber, firewood, maple syrup, honey and eggs, and related farm service and equipment sales contribute significantly to local wages, incomes and to the larger cash economy of the town.

<b>Industry Category</b>	<b>Fletcher</b>	<b>Franklin Co</b>	<b>Vermont</b>
Agriculture, forestry, fisheries and hunting and mining	9.6%	5.4%	2.7%
Construction	11.3%	7.1%	6.8%
Manufacturing	14.7%	15.0%	10.4%
Wholesale trade	3.5%	3.5%	2.13%
Retail Trade	6.1%	11.0%	12.2%
Transportation and warehousing and utilities	2.6%	4.4%	3.03%
Information	0.6%	1.4%	1.6%
Finance, insurance, real estate and rental and leasing	6.5%	3.9%	4.7%
Professional, scientific, management, administrative and waste management services	3.8%	8.5%	9.1%
Educational, health and social services	20.1%	23.2%	27.6%
Arts, entertainment, recreation, accommodation and food service	3.3%	5.5%	10.1%
Other services (except public administration)	4.23%	3.8%	4.7%
Public administration	5.1%	7.36%	5.0%

*Table 5.2: Industry Comparison, Pct of Labor Force, 2010 (Source: 2010 Census)*

Home-based and other small businesses also make up a substantial portion of the local economic base. Nearly 30 Fletcher-based businesses are listed in the local directory, including farm and wood related enterprises, construction, welding, pottery, furniture and automotive repair, computer and bookkeeping services, day care, and other professional and personal services. A general store, bed and breakfast and antique store, sawmill, garage, salvage yard and other types of small wholesale or retail businesses also contribute to the local economy.

## **Economic Outlook**

The national and state economies are now recovering from the recession of 2007-2008 that has affected local residents both directly and indirectly.



Of particular concern for Fletcher's resource-based economy are national and regional trends affecting the agriculture and forestry industry. Economic forces, largely beyond local control, will continue to affect the long term economic viability of local farming and timber operations.

Fletcher does not have the population base or infrastructure (municipal water and sewer, three phase power, transportation infrastructure) to support large scale commercial and industrial development. Increasingly, however, the focus statewide is on the promotion, development and expansion of small businesses (20 employees or less) to generate jobs.

As a small, rural bedroom community, the town will remain tied to the regional economy for high quality, high paying jobs, and for many needed goods and services. Fletcher nevertheless can support its existing economic base and promote increased diversification through:

- The protection of the towns natural resources in support of sustainable, resource-based industries, including commercial farming and forestry, and also related tourism and outdoor recreational opportunities;
- Provisions for the diversification of resource-based industries into other related or complementary forms of production, including value-added enterprises;
- Support for home occupations and home-based businesses;
- Support for compatible cottage or light industries in appropriate locations which require minimal services and facilities; and
- Promotion of locally produced goods and services that will benefit area residents and contribute to the larger cash economy.

These forms of economic development can be supported locally through provisions for their appropriate development in local bylaws (farming activities are currently exempt from local regulation); through tax incentives, particularly in support of the resource-based economy; and through the promotion of local businesses, products and services, for example through business guides, directories, community fairs, bulletin boards, farmer's markets and on-line services.

In decades to come (beyond the scope of this planning period) if the town's population base has grown sufficiently to support a viable local market area and labor force the town may consider investing in additional, more costly improvements to local infrastructure (e.g., community water and sewer systems, high speed internet and utility line upgrades, road improvements) that are necessary to attract and support higher density and higher impact forms of development. At present, however this is fiscally unrealistic.

#### **GOALS:**

- **To promote and sustain the local agricultural and forestry economies;**
- **To promote and sustain local foods in terms of agricultural production**
- **To encourage a diverse and stable local economy through promotion of business activities, including home based businesses, of a type and scale which:**
  - **Contribute to the local economy and tax base;**
  - **Are compatible with the town's rural character and quality of life;**
  - **Promote value added production; and**
  - **Provide employment opportunities and needed goods and services to the benefit of all Fletcher residents.**

#### Objectives:

- 5.1 Positive incentives and other available means to keep farm and forest lands in sustainable production will be implemented as feasible.
- 5.2 The development of support businesses, cooperatives and value added manufacturing will be encouraged as a means to stimulate the agricultural and forestry economy.
- 5.3 Right to farm provisions will be respected; the town will not act upon nuisance complaints having to do with normal farming operations using accepted or best management practices unless a specific health risk is demonstrated.
- 5.4 The development and expansion of home occupations, home-based businesses and cottage industries will be encouraged and accommodated as appropriate under local bylaws.
- 5.5 The development of rural recreation, tourist and communication/information-based businesses that will take advantage of and have minimal impact on Fletcher's rural character and environment will be encouraged.
- 5.6 Any commercial and industrial development proposed for Fletcher must be of a type and scale that is in keeping with the rural character of the town.
- 5.7 The development of compatible commercial businesses will be encouraged in suitable locations, in particular to provide for locally needed goods and services and to protect the vitality and importance of the village of Binghamville as the community's commercial center. The clustering of related and compatible commercial uses is encouraged; strip commercial development along public highways is to be avoided.
- 5.8 Compatible light industry, which requires no centralized services or facilities, will be accommodated as appropriate under local zoning bylaws.

Recommendations or Actions:

- Support tax stabilization and other programs that provide incentives to landowners to maintain large tracts of agricultural land in sustainable use.
- Incorporate right to farm policies in the local permitting process.
- Inventory and survey home-based occupations and businesses within the community to identify needs and resources to encourage growth compatible with the rural landscape.
- Continue to encourage the development of small business in Binghamville area, with emphasis on businesses that are compatible with the village setting.
- Review local taxing policies to identify opportunities for making the town a more desirable location for small business.

## Section 6 TRANSPORTATION

### Overview

Transportation planning is vital to any community, even a rural, relatively isolated community such as Fletcher. The local transportation network provides for the movement of people and goods within the town to places beyond its borders. Patterns of growth, development and land use are strongly tied to the network, which is maintained at considerable public expense.



Traditionally, in our automobile oriented culture, transportation planning has been concerned mainly with roads, specifically their design, construction, maintenance, and sufficiency. In recent years, planning in this area also includes consideration of other aspects of the road network, including its scenic, recreational, environmental and cultural components, relationship to adjoining land uses, and other types of transportation and infrastructure, including recreation paths and ridesharing opportunities.

It is unlikely that in the foreseeable future Fletcher residents will be any less dependent on the automobile to get around. There is, however, growing interest among residents of rural communities in road and bridge design, maintenance and access issues, programs to reduce commuting expenses, and in the development of recreational opportunities located close to home.

Recent federal and state initiatives have decentralized the transportation planning process, giving more responsibility to local government working in close association with regional planning commissions, to determine transportation priorities for available state and federal funding. Good local planning and the active participation of town officials are essential to this effort.

## Travel Patterns

A majority of Fletcher residents work, shop and obtain needed services outside of the community. US Census data from 2010 indicate that for workers 16 years and older (numbering 784), only 11.1% worked at home or walked to work. Sample commuter flow data indicate that of 713 total work trips to places of employment, only 16.5% were within Fletcher's borders, and only 38.7% were within Franklin county (mostly to St. Albans, Fairfax and Bakersfield). According to 2009 Local Employment Dynamics (LED) Census data the largest share of work trips (80%) had Chittenden County destinations; another 5.7% ended in Lamoille County.

Although census data does not track travel patterns related to retail commerce, Burlington, St. Albans, Essex and Morrisville have been identified by citizens as primary shopping destinations.

Public transit is not available in Fletcher for commuters. It is notable, however, that despite the large number of commuters traveling from Fletcher each day, especially to points south, few share rides. According to 2010 Census data 72.8% of Fletcher commuters drove to work alone and only 16.1% carpooled.

Fletcher residents will continue to be highly dependent on their vehicles and the local and regional road network to meet their needs for employment, goods and services. For this reason attention needs to be given to both the local and regional road network in planning for the needs of the community.

## Road Network

### Existing Conditions

Given local topography the phrase "you can't get there from here" generally sums up the road network in Fletcher, though the recent addition of road signs as part of the E-911 program has made navigating around town somewhat easier. For residents of East Fletcher or the Buck Hollow Road to get to Binghamville or Fletcher Center, they have to go around mountains and through neighboring towns.

East Fletcher residents have easy access to other parts of the county via Route 108, the only state highway in town. This route, however, is located away from more populated areas of town, and is not used much by most Fletcher residents. Regional roads of more importance locally include Routes 104, 104A, and 128, reached through Fairfax, which provide the easiest access to I-89 and points north and south.

As shown in the accompanying table and transportation map (see appendices), there are approximately 44.5 miles of traveled, public roads in Fletcher which are maintained year-round, and approximately another 8.7 miles of road that are maintained seasonally or not at all. For planning and funding purposes, the road network is described using statutory and functional classifications.

The road network also incorporates intersections, access points (curb cuts) and related infrastructure, including but not limited to bridges and culverts, swales and guardrails.

Roads	Surface	Mileage	Class	Function	Aid
Route 108	Paved	3.05	State Hwy	Major Arterial	Federal, Primary
TH 1, 2 & 3	Paved	12.5	Class 2	Major Collector	Federal, Secondary
TH 15/4 & 32	Gravel	9.12	Class 3	Minor Collector	State
TH & Yr-Round	Gravel	19.98	Class 3	Local	State
TH & Other	Gravel	8.7	Class 4	Access	None

Table 6.1: Fletcher Road Classifications (Source: VT Agency of Transportation)

### State Routes

Fletcher's road network includes approximately 3 miles of state highway - Route 108. As part of the state's road network, this road is designed to state specifications, and is eligible for state and federal funding. Route 108 is considered a major artery, intended mainly to move traffic through the region. Average annual daily traffic along Route 108 through Fletcher, is estimated around 1,200 trips per day.

Route 108 through Fletcher is scheduled for resurfacing in the near future. Though this road is the responsibility of the state, local officials have input with regard to needed improvements through the regional transportation planning process. Other needed improvements identified in the 2004 Regional Transportation Plan include general preservation of the character of the road, access management along the corridor, limited lane widening and shoulders on sections having poor visibility or alignment, and "share the road" signs which designate Route 108 as a regional bicycle route.

### Town Roads

Fletcher's town road network includes three major collectors, TH 1, TH 2, and TH3, which carry the largest volume of internal traffic and also provide links to state roads in neighboring communities. These Class 2 town roads are included in the regional road network; TH 1 and TH 2 also are included in the state's secondary system.

Town Class 3 roads, TH 15 (and a portion of TH 4), and TH 32 serve as minor collectors, which also provide connections to neighboring communities.

TH 1	Fairfax Rd/Cambridge Rd (East)
TH 2	Fairfield Rd/Cambridge Rd (West)
TH 3	Buck Hollow Rd
TH 4	North Rd/Pond Rd
TH 15	Taylor Rd
TH 32	Rushford Rd

*Table 6.3: Selected Town Highways and Road Names (Fletcher Transportation Map)*

The majority of roads in town are gravel roads, which are maintained by the town for year-round use and serve mainly to provide access to adjacent collector roads. Class 3 roads make up the bulk of the local road network, for which the municipality has primary responsibility. Some state assistance for repair and maintenance is available, based upon an annual road plan; however, the maintenance and upkeep of Class 3 roads accounts for the largest share of the town's road budget. Class 3 roads require significant local public investment.

Fletcher also has jurisdiction over a number of Class 4 roads. The primary responsibility for the upkeep of Class 4 roads under Fletcher's current road policy lies with adjoining landowners. Some Class 4 roads are untraveled, impassable, and/or unmaintained. To date, no legal trails, in which the town retains rights-of-way but has no legal maintenance requirements, have been designated within the community.

### **Needed Improvements**

Less data is available for the local road network than for other roads, but through the Road Surface Management System (RSMS), road and culvert inventories were completed in 2003.

The intersection in Binghamville is awkward in part due to its geometry. Four way stop signs were placed there in 2005, to improve safety in that intersection.

The town participated in upgrading one class 4 road (Rugg Road) to class 3 status as it became heavily used by residents year round. Standard practice dictates that the initial cost of upgrading class 4 roads to class 3 is borne by adjoining landowners, however, the long term costs for maintenance are the responsibility of the town.

These considerations pertain as well to the municipal acceptance of development roads. Specific policies regarding road acceptance should be developed; any road acceptance or reclassification must also be done in accordance with the legal process for the laying out of public highways.

A more comprehensive list of needed improvements should be identified through an update of road inventory. These may then be prioritized in an overall road management plan, and associated costs included in a capital budget and program. In this way scarce resources may be used most effectively. Assistance with the development of a Road Surface Management System (RSMS) that is adapted for local needs is available through the Vermont Local Roads Program and the Northwest Regional Planning Commission.

### **Other Considerations**

Road improvements, and the laying out and development of new public and private roads, should be done so that they are in keeping with Fletcher's rural and scenic character. Fletcher's back roads contribute much to its rural character and scenic beauty, as evidenced by the increasing number of motorists and bicyclists touring through town.

To date there have been no scenic inventories or designations of local roads in town. Given the importance to the community of maintaining Fletcher's rural character, a scenic road survey may be in order, particularly along major routes (TH 1, TH 2). Additional standards relating to the design and layout of new roads, and the repair and maintenance of existing roads for better incorporation in the landscape also should be developed. It is recommended that all new roads and driveways:

- Follow existing topography and linear features (e.g., tree lines, rights-of-way, stone walls,) wherever feasible;
- Avoid cutting through open areas or scenic vistas;
- Be designed to minimize access points (e.g., through shared driveways and/or development roads) particularly on collector roads; and
- Not be overly designed for their intended use and volume of traffic.

The repair and maintenance of existing roads and related infrastructure should also accommodate natural and cultural features within and /or adjacent to the right-of-way (e.g., historic structures, tree lines and stonewalls).

### **Access and Parking**

Access onto Fletcher roads from adjoining properties is typically a single driveway and curb cut per parcel for residential lots and poorly defined access areas/curb cuts for public and commercial uses. Private, minimally maintained dirt roads provide access to camps along Metcalf Pond, and may be contributing to runoff and sedimentation.

A growing number of subdivision roads are being developed in town in accordance with common standards (e.g., 50 foot rights-of-way), which are probably excessive for the volume of traffic generated from these developments. The over-design of access roads in rural areas is common, and often required in anticipation of possible acceptance by the town, but the over-design of roads may also adversely affect both rural and village character, increase speeding, and result in unnecessary expense.

The town should review its access policies in local bylaws and ordinances to ensure that the number of curb cuts, particularly along major collector roads (TH 1, TH 2, and TH 3) is minimized, and clearly defined. Access points, roads, and driveways should be shared by neighboring parcels; inter-

parcel access should be required where feasible, off-road connections linking adjoining parcels for pedestrian and vehicular traffic should be required where feasible (e.g., through designated easements and rights-of-way), in order to maintain the functional integrity of the local road network.

Farm and logging roads, maintained by private landowners, provide access to interior, landlocked holdings. Temporary access across adjoining private land for logging operations, which may be granted by the select board under state law, has been an issue in upland areas of Fletcher. Because of the environmentally sensitive and often highly visible nature of these areas, landowners should be encouraged to use or share existing access routes and rights-of-way wherever feasible. Provisions also should be made for the reclamation of temporary roads into these areas once operations are completed.

Public parking areas in town, like their associated curb cuts, are generally poorly defined and maintained. Three areas have been identified as needing improvements: additional parking space and upgrades at the town office, the Fletcher Union Meeting House, and the parking area at Metcalf Pond. Given the intent to eventually relocate and build a new town office, adequate pedestrian and vehicular access and parking space should be incorporated in the site design. It is strongly recommended that all parking areas intended to serve the public be shared where feasible, be located to the rear of or adjacent to buildings, and be adequately screened and buffered from adjoining land uses.

### **Rail, Air and Bus Service**

The Lamoille Valley Railroad Line (LVRL) no longer runs through East Fletcher, though it was rail banked by the state in 2004. The federal rail banking program reserves the right-of-way for future rail use, if it again becomes feasible, while providing for interim uses such as recreation paths. When this takes place Fletcher will be linked to a network of regional, state and international trails currently under development.

Fletcher residents now have access to passenger and freight rail service through the New England Central Railroad, located in St. Albans. At present the “Vermont,” the state subsidized Amtrak line from St. Albans, to Washington D.C., runs once a day, leaving St. Albans in the morning.

Most air services required by Fletcher residents are available at the Burlington International Airport which is conveniently reached via I-89. Fletcher residents also may schedule international flights through Mirabel and Dorval airports outside of Montreal. Non-scheduled passenger and freight service is also available at the Franklin County Airport in Highgate and at the Morrisville-Stowe State Airport, in Morrisville.

Limited long distance commercial bus service is available through Vermont Transit in St. Albans, and the greater Burlington area.

### **Public Transportation**

At this time there is no bus or van service that serves the needs of the general public. Past regional transit studies have indicated that there is not enough demand or ridership within Franklin County to support a fixed-route system; however, since 2005 the CCTA provides transportation from St. Albans, Georgia, Milton to Burlington. Currently, people with special needs may qualify for transportation assistance through social service providers and volunteer organizations. The town also contracts school bus services for the transport of local students.

### **Ridesharing**



Ridesharing, including car and vanpooling, helps to significantly reduce the expense and negative aspects of automobile oriented transportation for both the rider and society as a whole. Given the number of Fletcher residents that commute to work, local participation in existing ridesharing programs should be encouraged through local advertising and the designation or development of a small, centrally located park-and-ride lot. Often a church or store is willing to donate some of its parking space for use by commuters. State maintained park-and-ride lots are available for use by Fletcher residents in Cambridge, Georgia and St. Albans.

### **Recreation and Pedestrian Paths**

At present there is no municipally developed and maintained recreation, bike or pedestrian paths in town. As noted, a number of local roads are used for recreational use, including Class 4 roads, which provide access to Fletcher's countryside for hunting, mountain biking, hiking and cross-country skiing. These, however, are not linked together in any formal trail network. Paved roads in town increasingly are being used by bicyclists, including organized touring groups. A network of snowmobile trails in town is privately maintained by local clubs and the Vermont Association of Snowmobile Travelers (VAST) through agreements with local landowners. This may serve as a useful model for other forms of recreation path development in the community.

Given the costs of maintaining the local road network, sidewalks and trail development have received little consideration. Paved roads, popular with tour groups, also could be designated as bike routes under share-the-road policies. This may require minor improvements, such as the widening of shoulders along segments having poor visibility in order to ensure road safety but may provide further tourist opportunities and attractions. Funds for this type of activity are limited and competitive; however, as noted, the Lamoille Valley rail line, if converted to a regional recreation trail, will provide Fletcher residents with local access to a much larger trail network.

There are no sidewalks in Fletcher at present, however given the increasing amount of development in and around Binghamville, sidewalks may be warranted in this area at some time in the future. A study of existing and projected need could aid local officials in identifying feasibility and determining approximate costs and available sources of funding.

### **GOALS:**

- **To ensure reasonable, functional and orderly development of local transportation systems for multi-modal use as feasible and appropriate;**
- **To maintain and improve the town highway system for safe use in an efficient and cost-effective manner, while preserving, as feasible, associated cultural and scenic character of the road system; and**
- **To improve and expand alternative, non-automobile transportation and transit modes as feasible, including the promotion of ridesharing programs.**

### Objectives:

- 6.1 The primary objective of the town highway program will be the provision of a safe, efficient, and convenient road network for use by local residents and the traveling public.
- 6.2 The function and safety of the town highway system will be maintained through appropriate access management techniques, including limitations on the number of access or curb cuts permitted. Shared access is encouraged and may be required as appropriate.

- 6.3 New road construction and major improvements to existing roads is to balance capacity and safety needs with the need to minimize cultural, scenic, resource and environmental impacts and to ensure that rural roads and infrastructure are not overbuilt to urban or otherwise inappropriate standards.
- 6.4 Carpooling or vanpooling by local commuters to reduce transportation costs and impacts is encouraged.
- 6.5 Land use and development activities should not adversely impact traffic safety and the condition of town roads and rights-of-way.
- 6.6 Parking areas for commercial and public buildings where feasible will be sited adjacent or to the rear of structures, and be buffered and screened as appropriate. Shared off-street parking is to be encouraged and may be required as appropriate.
- 6.7 State proposed and initiated transportation improvements in Fletcher should be considered in accordance with the goals, policies and objectives of the town plan.
- 6.8 The town will not accept any private rights-of-way into the town highway system unless it is demonstrated that there is clear public benefit, and the costs to upgrade the road to standard are not borne by the town.
- 6.9 Access roads, to the extent feasible, shall share rights-of-way with other utilities and infrastructure, follow contour lines, and in scenic areas (e.g., open lands, slopes, ridgelines, hilltops), be sited, constructed, and screened so as to minimize their visibility from public vantage points.
- 6.10 Year-round dwellings are to be sited on land which has access and/or frontage on Class 3 highways or better, unless otherwise permitted by the development review board.
- 6.11 The Town of Fletcher will provide no services on Class 4 town roads beyond those required by statute.
- 6.12 Class 4 roads may be maintained by landowners, with select board approval, only to the degree necessary to provide simple access to property. If future conditions warrant, Class 4 roads may be considered for upgrade to Class 3 roads in accordance with state law. Costs associated with upgrade are to be borne by adjoining landowners as appropriate.
- 6.13 No permanent access roads shall be permitted in the forest district except as needed to access essential public services, including utility rights-of-way.
- 6.14 All private roads and rights-of-way shall be constructed to standards set forth in the road policy. All expenses, legal and otherwise, shall be borne by the applicant in the process of laying out and constructing proposed development roads and related infrastructure.
- 6.15 The shared use of town roads for bicyclists will be encouraged to the extent that it does not create a safety hazard.
- 6.16 The town will support the development of the LVR right-of-way for recreational use.

Recommendations or Actions:

- Schedule necessary road improvements as identified in the plan.
- Maintain and apply a basic road surface management system (RSMS) for use in scheduling and budgeting needed road repairs, and major improvements.
- Develop minimal access management and circulation guidelines for vehicular and pedestrian traffic, to be incorporated in local ordinances and bylaws for use in access, curb-cut, site plan and subdivision review.
- Continue to require that all new roads, driveways and intersections meet minimum safety and design standards through access, curb-cut, site plan and/or subdivision review; update existing standards as appropriate.
- Update policies and procedures in accordance with state law for the public maintenance and/or acceptance of private roads, to be applied only in cases where there is substantial public benefit.
- Actively review and participate in any state efforts to improve Route 108, including related rights-of-way and infrastructure, within the town of Fletcher.
- Secure a reliable, cost effective long term source of sand and gravel for use on town roads.
- Make needed improvements to municipal parking areas at the town office and Metcalf Pond.
- Incorporate provisions to accommodate pedestrian and bike traffic as appropriate in subdivisions and site plan review.
- Continue to study the feasibility of a sidewalk to improve pedestrian and bicycle access to the elementary school and the Binghamville area.
- Conduct a scenic inventory of major town roads and consider for scenic road designation as appropriate.
- Consider the designation of on-road bike routes in town (e.g., SA 1, SA 2), including the adoption of “share the road” policies and signing.
- Encourage Vermont Agency of Transportation to support the development of a widened shoulder for bicycles along Route 108.
- Encourage municipal representation to the Regional Transportation Advisory committee (RTAC) to coordinate transportation planning, road maintenance and improvements with adjoining towns, and to ensure that the interests of the town are adequately addressed by the region and state.

## Section 7 ENERGY

### Overview

Energy in the form of electricity (from many sources), fossil fuels, and other renewable sources, is essential to most every aspect of daily life. Historically, human and animal power, wood and waterpower served Fletcher's earliest homes, farms and industries. With the introduction of electricity in the 1920s generated by the newly constructed dam at Fairfax Falls, and the extension of utility lines throughout town into the 1940s, Fletcher was hooked into an expanding power grid. And, with the advent of the automobile and other petroleum-based machinery, fossil fuels became ever more important.

Over the years the use of outside sources of energy, primarily electricity and fossil fuels, increased to the point where today, dependence on these energy sources is taken for granted. The costs and the vulnerability of these sources are increasing significantly, particularly if associated environmental costs are factored into the equation. Energy costs are already a major expense in government, business and personal budgets. Successfully reducing costs and dependencies on nonrenewable resources is, in the long term, to everyone's benefit.

Following the 1970s oil crisis many Vermont communities appointed local energy coordinators and energy committees to develop municipal energy plans. Fletcher still has a municipal energy coordinator, but, as in most towns, energy planning has not been a priority for many years; however with the increasing fuel prices this is fast becoming a priority.

The Vermont Legislature in 1992 established a general energy policy to ensure, to the extent practicable, that the state can continue to meet its energy needs in a manner that:

- Is adequate, reliable, secure and sustainable;
- Assures affordability and encourages economic vitality;
- Assures the efficient use of energy resources and cost-effective demand side management; and
- Is environmentally sound.

In the VT Comprehensive Energy Plan, this general policy is reflected in proposed efforts to develop locally based renewable resources, increase efficiencies in energy use, and plan for alternate or multiple energy sources, including a long term shift from high impact, nonrenewable to low impact, sustainable sources. Also emphasized is the importance of energy affordability in support of economic growth, and to ensure the availability of energy supplies for those most at risk.

The importance and cost of energy to the local community, to town government, businesses, and residents, and associated impacts on transportation and community structure, suggests that renewed planning for energy efficiency, sustainability, and affordability may be of benefit at the local level as well.

### Energy Supply

### **Electricity**

Fletcher is served by two of Vermont's larger electric utility companies; Green Mountain Power (GMP) which serves mainly the southern half of town, including Binghamville and Fletcher Center; and the Vermont Electric Cooperative (VEC) based out of Johnson, which supplies electricity to the northern end of town, including Buck Hollow Road, East Fletcher and seasonal homes around Metcalf Pond.

The generating sources of electricity for these utilities vary since they are hooked into the national power grid (through the New England Power Pool or NEPOOL). Nuclear, hydro, and oil/gas plants generate most of the state's electricity. Wood-fired plants are supplying a small but increasing amount of in-state generating capacity.

At present, due to increased efficiencies, conservation efforts, and a sluggish economy, electric companies have kept pace with demand. Vermont Yankee, Vermont's Nuclear Power Plant, was scheduled for relicensing in 2012; however, Vermont and Entergy are in court to decide whether it will continue to operate. As noted there is concern regarding Vermont utilities' heavy reliance on nonrenewable and/or outside energy sources and associated costs.

Electric power is transmitted statewide through the Vermont Electric Power Company (VELCO), a private corporation owned by Vermont retail utilities, which maintains interconnections with NEPOOL, Hydro Quebec, and the New York Power Authority. GMP and VEC own and maintain sub-transmission (34K) lines, connected to VELCO through substations and distribution lines to serve local customers.

There are no bulk transmission lines or substations located in Fletcher. Power in town is transmitted mainly through single-phase circuits. Three-phase power, which generally has been the most efficient way to supply large amounts of electric power for industrial uses, is available in Fletcher only along a small stretch of the Buck Hollow Road. The existing distribution system should serve Fletcher's needs into the near future. The expansion of transmission and distribution lines into unserved areas can be costly and disruptive. The health effects of electromagnetic fields (EMFs) generated by power lines, though ambiguous, are also of growing concern, and should be considered in the sighting of any new lines, particularly transmission lines. Perhaps of more significance to local users are issues of power reliability and quality. Reliability in rural areas is difficult, given the length of distribution lines, difficult terrain, and exposure to harsh weather conditions. Historically, power outages have been common; however improved line and corridor maintenance in recent years has substantially increased the reliability of local service.

The quality of power (e.g., with regard to voltage drops, spikes, leakage, etc.) remains a concern, particularly given the effects on computers and other microprocessor-based devices, which are especially sensitive to voltage fluctuations. Voltage fluctuations and leaks also have been found to affect dairy farming operations including farm equipment and animals, which may significantly reduce production.

Electric utilities, because they are now permitted to maintain geographic monopolies, are regulated by the Public Service Board. As such, they have imposed obligations to serve the public; meet certain standards with regard to the terms, conditions and quality of service; and most recently, to promote energy efficiency and conservation.

Federal regulations (e.g., the 1992 Energy Policy Act) allow for the development of a competitive market place for wholesale electricity. As a consequence, electric utilities are restructured and deregulated. Deregulation allows consumers to shop around for electricity from generators, including

small, independent producers. This is expected to result in increased competition and lower rates; while in many areas only one distributor provides services.

### **Fossil Fuels**

Fossil fuels used locally, mainly for transportation, equipment operation and heating, include gasoline and diesel fuel, heating oil, kerosene, and bottled or tank propane gas. These types of fuels are available through regional suppliers and at the local general store. Pipelined natural gas, available in the western part of Franklin County, does not reach Fletcher.

Fuel suppliers are not regulated as are electric utilities with regard to distribution, costs or public benefit, but may be subject to other environmental or industry standards. Vermont is at the end of the line for the delivery of petroleum products, which in the past has resulted in slightly higher costs. There are longer-term concerns regarding a growing reliance on fossil fuels as primary energy sources, particularly given the environmental impacts and costs.

### **Renewable Sources**

Renewable energy resources available locally, some on a limited basis, include biomass (e.g., wood), solar (passive and active), micro hydro, geothermal and wind power.

Given Fletcher's forest resource base, wood is the most plentiful and available of these locally. There are several suppliers of firewood in town, and many landowners manage woodlots for personal use. The increased use of chunk wood for residential heating, and chip wood for the heating of public buildings and power generation, has been promoted by the state as a primary means of reducing dependency on fossil fuels, and keeping energy dollars within the local economy. New wood stoves and furnaces are now subject to EPA air quality standards, and as a result burn more cleanly and efficiently. They are also easier to operate and maintain. In order to promote increased reliance on these technologies, however, forest resources have to be carefully managed for sustainable, long term production.

The availability and use of solar energy depends largely on the sighting, orientation and construction of buildings. The use of passive solar techniques in design and construction can significantly reduce space and water heating costs, even in Vermont's cloudy and cold northern climate. Active solar technologies, including the use of photovoltaic to generate electricity, have been less widely accepted due to their relatively high costs. A number of Fletcher residents who now live off grid have found it more cost-effective, however, to install collection and storage systems (e.g., panels and batteries) than to extend lines needed to hook into the grid. It is anticipated that as technologies become more refined, available and accepted, and other forms of energy become more costly, solar power will become increasingly cost competitive.

Wood and solar resources offer the most potential for the development of local, sustainable energy supplies. Micro-hydro is available in certain locations in Fletcher (e.g., at former dam or mill sites), but if this is being used for power production, it is on a very limited, individual basis. This is also true of wind power. Interest in wind power is increasing and there are several wind projects being pursued across Vermont.

### **Energy Demand**

The total demand for energy is expected to increase statewide based on continued population growth and related growth in residential, commercial and industrial sectors of the economy.

Given Fletcher's limited amount of commercial development, it is reasonable to assume that the majority of energy demand in town is for residential purposes, including related transportation demands. Local "commercial" demand is generated mainly from dairy and sawmills operations. There is also a municipal demand for energy, which though relatively small, is important for planning purposes.

### **Transportation Use**

There are no local supporting data per se, but fossil fuels for transportation are most in demand. As noted elsewhere, given Fletcher's rural nature, the fact that 73% of its residents work out of town, and most also shop in other local and regional centers, Fletcher residents rely heavily on motor vehicles to get around. According to 2010 Census data, 79.3% of Fletcher residents owned two or more cars (compared with 65% of Franklin County residents, and 59.1% of state residents). Of those employed, 88.9% drove cars to work, and 72.8% of these drove alone. Only 6.1% of Fletcher residents carpoled to work. The average drive time for commuters was 30.8 minutes while the state average is only 21.76.

Energy demand for transportation is influenced by road type and location, proximity to services and facilities, the structuring of routes for school buses, and the sighting of new residential development. Statewide there are proposals to shift to other forms of transportation to reduce costs, including increased public transportation, the use of electric vehicles and bicycles, and alternative fuels. These have limited near-term application in Fletcher given its low population density, number of commuters, and the length of the average commute. Increased ridesharing options, the encouragement of local businesses including home-based business and telecommuting opportunities and the regulation of development patterns through zoning and subdivision regulations may have greater potential for reducing local transportation needs and associated energy demands and costs.

### **Residential Uses**

Keeping homes warm through long, cold Vermont winters creates a major demand for energy, resulting in significant heating costs to local residents. According to 2010 sample Census data, Fletcher residents are much more reliant on wood as their primary heating source (38% of occupied houses) than are county (16%) or state (15%) residents. This may be due in part to a ready, affordable local supply of firewood. At present, wood is the cheapest energy source given cost per heating unit (BTU). The wood pellet stove, which uses a wood byproduct made of sawdust and wood shavings, is gaining in popularity due to its ease of use and low cost. Another 52% of homes use fuel oil or kerosene for heating. More expensive, but more efficient and cleaner burning propane is the primary heating source in 21% of Fletcher homes. No homes use electric space heating, which is one of the most expensive and least efficient sources of heat.

Also as noted, passive and active solar technologies, which greatly reduce heating costs, have been incorporated into a number of Fletcher homes, however no specific data is available. Also, no data is available to document other types of local residential energy demand for water heating (a major energy use), lighting, cooking, drying, air conditioning and appliances.

### **Commercial/Industrial Uses**

Locally produced agriculture accounts for the greatest energy demand in this sector. Electric costs, for lighting and processing equipment, are significant. Modern agriculture is reliant on fossil fuels for the cultivation of crops and the transport products, and indirectly for the manufacture of many of the fertilizers and chemicals used on the farm.

At the state level proposals have been made to promote more efficient energy use in farm buildings and operations including less consumptive fertilizing and crop management techniques, and the

use of digesters to capture methane as a renewable energy source. The comparative costs of new methods and technologies have in large part determined that they only have a practical application on large farms due to the savings on electric, bedding and selling the extra electricity.

### **Municipal Use**

Energy expenditures comprise an increasing portion of town and school budgets. In 2010 energy costs made up 1.3% of the town's administrative budget (for electricity and fuel oil), 34.6% of the garage/equipment budget (for diesel fuel, fuel oil and electricity), and 25.6% of the school's operation and maintenance budget (for electricity and fuel oil) (2010 Town Report). Transportation, in the form of road maintenance and repair, accounts for the greatest share of the town's energy costs; while school transportation costs, included in a busing contract, are not itemized separately.

### **Land Use**

The way buildings are sited and constructed can greatly affect the amount of energy needed to access and operate them. The dispersed rural settlement pattern characteristic in Fletcher contributes to the need for well-maintained roads and the local dependence on cars. This will not change in the near future, but promoting the concentration of development in areas of town that can support it (e.g., in Binghamville) may help optimize the efficient delivery of services and provide a basis for greater commercial and mixed use development to support the local population.

The planning commission and development review board have opportunities through subdivision and site plan review to encourage energy efficient siting and design as appropriate to:

- Concentrate development through clustering (PUDs), particularly within a locally designated growth center;
- Minimize transmission and distribution lines, roads and access points; and
- Encourage greater use of renewable energy resources through siting, landscaping, and screening policies.

Currently programs exist within the state that aid with education, planning, construction and overall efficiency rating of existing homes or those under construction. Efficiency Vermont is the largest and most widely known organization; while Champlain Valley Office of Economic Opportunity provides a weatherization program for qualifying individuals and families. Although not required tactics, these programs and practices are encouraged and may provide incentives to consumers.

### **Energy Affordability**

The affordability of energy is a real concern for many Vermonters. Given the basic need for heat, light, and transportation, it is essential to ensure that those most at risk including the elderly on fixed incomes, the disabled, and low-income residents, have access to energy supplies. Several assistance programs are available through participating utilities (e.g., WARMTH, SHARE), the state, and private nonprofit programs, however, depend all or in part on federal funds which have been significantly reduced due to the recession.

Of particular interest statewide are a federally funded weatherization assistance program, administered through the Vermont Office of Economic Opportunity, which offers home energy audits, energy conservation and efficiency products and installation and retrofit services without charge to qualified Vermonters; and also the Low Income Home Energy Assistance Program (LIHEAP), which provides emergency heating assistance to low income residents. There is no specific information available to determine the benefit of these programs to Fletcher residents.



The affordability of energy is also a consideration for continued economic sustainability and growth in Fletcher particularly for the farming community.

Information regarding other programs to reduce energy costs through increased efficiencies, including programs targeted to homeowners, schools, and industry, is available through the Vermont Department of Public Service. Many of these programs are not widely advertised or known to area residents. The town could assist in publicizing available programs through modest educational and outreach efforts.

#### **GOALS:**

- **To reduce the use of and dependence on expensive, outside, nonrenewable energy sources which entail significant societal and environmental costs;**
- **Support the use of locally grown food products;**
- **To promote energy efficiency, availability and affordability through conservation, cost effective investment, and the sustainable management of locally available renewable energy resources;**
- **To reduce energy costs as a proportion of municipal expenditures; and**
- **To promote development in a manner which increases energy efficiency and access to renewable energy resources, and reduces energy costs.**

#### Objectives:

- 7.1 Energy conservation, the use of renewable energy resources and the use of available demand side management programs will be considered to increase energy efficiency and reduce costs in town buildings and operations as appropriate.
- 7.2 Energy efficiency will be included as a factor in municipal construction, purchases and use. Life cycle costing will be used by the town in evaluating capital expenditures as appropriate.
- 7.3 Educational opportunities that further energy awareness for school students, local officials and townspeople are encouraged.
- 7.4 The sustainable use of local renewable energy resources will be encouraged to replace outside, nonrenewable energy resources.
- 7.5 Ridesharing, and/or the development of bike and pedestrian paths and park and ride lots to reduce transportation energy costs will be encouraged and may be required as appropriate.
- 7.6 Existing wood energy resources should be developed as appropriate through the protection and sustainable management of the forest resource base.
- 7.7 Home occupations and home-based businesses, which reduce transportation energy consumption and expense, will be encouraged as appropriate under local bylaws.
- 7.8 Programs to assist low-income residents with meeting or reducing energy costs, including weatherization, rehabilitation and affordable supply programs will be supported as appropriate.

#### Recommendations or Actions:

- Conduct regular energy audits of all municipal buildings.
- Review and update as needed existing policies, bylaws and ordinances to protect renewable energy resources and access for their sustainable use.

- Manage town forestlands for saw logs and firewood, particularly to provide for town residents most in need of affordable energy.
- Continue to appoint town energy coordinator to serve as a contact for community outreach and information. Support energy awareness curriculums in the school.
- Encourage energy rating for new and existing construction.
- Support and participate as appropriate in the development of a regional public transit system through the Northwest Vermont Public Transit Network.

## **Section 8**

### **FACILITIES AND SERVICES**

#### **Overview**

Facilities and services are provided by a municipality for the benefit of its residents, but at considerable cost to local taxpayers. Those facilities and services supported by the community as a shared responsibility, including local government, education, health, recreation, infrastructure, and public safety, are easily taken for granted. At the same time, the type and quality of services available depend in large part on the community's desire and ability to support them financially and through volunteer efforts.

In small, rural communities such as Fletcher, which are dependent largely on the local property tax to finance the public realm, the ability of the community to support a broad range of municipal services is limited. Because Fletcher is a growing bedroom community with a large commuter population, the ability to provide services through volunteer efforts is also increasingly limited.

For these reasons, the focus in town has been to provide the basics: accessible local government, which relies largely on elected and appointed officials, some of whom volunteer their time; a quality education for local students, which also involves a significant amount of volunteer labor; maintaining the town's road network; and providing for public health and safety to the extent the town can afford. Other "amenities" provided by larger municipalities may not be available, needed or even desired; the facilities and services that are available in Fletcher reflect the rural character of the town, the community's fiscal abilities, and the dedicated efforts of its residents.

#### **Public Buildings**

The town of Fletcher owns and maintains three public buildings: the Fletcher Elementary School, the town office, and the town garage, as noted in the accompanying table and map (appendices). These three facilities are funded primarily through property tax revenues. The Fletcher Union Meeting House (the Grange) and the Binghamville Church are the two other facilities in town, which, through privately owned, support public functions.

##### **Fletcher Elementary School**

The elementary school, located on the School Road just south of Binghamville proper, was originally constructed in 1962. In 1988 an addition was added to accommodate a growing elementary student population including the addition of a kindergarten class, and to meet state educational requirements. A modular building was added as a temporary classroom to accommodate growing enrollment. Because of the school's small population, the standard state education projection formula produces unrealistic results. This makes it inadequate for Fletcher Elementary projections.

There were 144 students enrolled at Fletcher Elementary for the 2012/2013 school year. The school now houses grades K-6, and has an overall capacity of approximately 200 students, though varying

class sizes may affect classroom capacities (12-20 students) for particular grades. The school is near capacity. The school is sited on 9 acres; 10 or more acres will be required should the school need to expand. Capital improvements are done on an annual basis as needed. No major upgrades are needed at this time. A capital account is being considered for Fletcher Elementary. Minimizing facility cost is an ongoing concern.

In an effort to reduce costs, streamline resources and expand educational opportunities, the Fletcher and Fairfax school districts researched the possibility of merging the two districts. On November 8, 2011, both Fletcher and Fairfax voted against a merger. Although both towns chose not to merge at this time, this, as well as other options, will need to be re-examined in the future as pressures to reduce costs and improve efficiency increase.

The elementary school includes 6 regular classrooms and one special education classroom, a library, which is also open for small meetings, an AV room and conference room, office space for administrative and health personnel, and storage and maintenance rooms. The school building also includes a multipurpose gymnasium/cafeteria which is used by the community for town meetings and social events, and is available for a fee (to help cover utility costs) in the evenings for nonpublic events. The school grounds include a playground, and recreational fields.

### **Fletcher Town Office**

The town office is currently located on privately owned land on the Fletcher-Cambridge Road in Fletcher Center. The town office, which includes office space, the town vault for record storage, and a meeting room, is used for town administration (clerk, listers, zoning, etc.), town ballot votes, and for meetings, and public hearings held by town boards, including but not limited to the select boards, planning commission, and development review board.



The Town Office has outgrown its current location with storage space reaching its limit, and meeting space is often cramped. The parking area does not have the capacity to handle increased parking on meeting and polling days. The Zoning Administrator, who holds regular office hours, works without a desk or designated work area. Structurally, the current facility will need improvements and a workable water system. The Planning Commission and Select board are examining different options for the Town Office as new information becomes available. This examination has been ongoing for quite some time with no resolution so far. An emphasis on creating a center of town, as well as efficiently meeting the Office's needs, will be a focus while exploring our options. Public input is strongly requested. At the 2010 Town Meeting it was voted to begin a capital fund for the Town Office.

### **Town Garage**

The Fletcher Town Garage is located at the end of Oustinoff Road approximately one-quarter mile from the Fletcher Elementary School on 6 acres, more or less. The site consists of a 6,000 square foot structure. This building has septic and water. Another building, used for the storage of salt is 20 feet x 30 feet, and closed on three sides. The sand and salt mixture is stored outdoors.

The Old Town Garage collapsed February, 2011 under snow load and the site continues to be used for garbage pickup and recycling activities. This site is 0.25 acres and the parking lot in front of the building is owned by the Fletcher Union Meeting House located across the road.

### **Fletcher Union Meeting House**

The Fletcher Union Meeting House, also known as the Grange or Community House, is located in Fletcher Center and as discussed previously, is one of the town's most notable and readily recognized historic buildings. Originally constructed as a church, the Meeting House has been used for public gatherings, town meetings, and community events throughout the years. Long maintained by the Fletcher Grange, the building is now owned and managed by the Fletcher Historical Society, a private nonprofit incorporated in 2008 to promote the building's restoration, maintenance and continued use.

Fletcher residents recognize the historic value of the Meeting House, and its importance to the community. Each year since 1990 the town has contributed \$1,500 from the general fund in support of restoration and maintenance. Through fundraising and grants in recent years, several major restoration projects have been completed. These include a new roof, repairs to the foundation and chimneys, siding, painting, and insulation.

### **Binghamville Methodist Church**

The Binghamville Church, centrally located in Binghamville on 2 acres of land, also has considerable historic significance and value to the community at large. Many church sponsored events, including church suppers and ice cream socials, are open to and attended by Fletcher residents. A fund drive was held to help pay for a new roof which is now complete and repairs have been made to the clock. The foundation will need repairs in the near future. At present the building is privately owned, operated, and maintained by the Regional Methodist Church Conference.

## **Public Lands**

The Town owns several parcels of land. A parcel of land bordering Metcalf Pond, including a small undeveloped stretch of shoreline within the road right-of-way, provides access to the pond. An additional 1.5 acres across the road is designated for public parking. Camping and fires are not permitted. Another parcel of land bordering Metcalf Pond is privately owned, but subject to a conservation easement requiring public access.



The Town could develop policies with regard to the management and sale of town owned land. The Select Board has performed title searches and other research to determine proper bounds and ownership and sold one piece with disappointing results.

The state owns rights to 380 acres on Gilson Mountain, accessed through Fairfield, which comprise the Gilson Mountain Wildlife Management Area. This land is under the management of Vermont Department of Fish and Wildlife, but to date no management plan has been prepared. The land is open to area residents for hunting and other recreational uses.



Many Fletcher residents perpetuate the traditional Vermont norm of allowing access to their lands for hunting, fishing, hiking, cross-country skiing and other recreational pursuits, as well as some farming and forestry. Fletcher residents are under tremendous hunting pressure from neighboring towns due to the lack of public lands and many residents have resorted to posting. As also noted elsewhere, a network of snowmobile trails is maintained by local clubs in association with VAST. These forms of access to private land provide significant opportunities for recreation for area residents.

The town maintains two of the four cemeteries in town, Bailey Cemetery and the River Road Cemetery, which are no longer in use but have historic value. Maintenance and upkeep is accomplished largely through volunteer efforts. The only active cemetery, the Fletcher, Binghamville Cemetery and the Pioneer Cemetery near the Community House, are owned and maintained by cemetery associations.



The town benefits from parcel mapping, which identifies the location and extent of public and private lands in town for planning purposes. With this tool the Town could develop policies with regard to the purchase, management or sale of Town owned land.

A community land trust continues to be a future goal of the Planning Commission. It could help to protect and preserve important resource lands for the town. There is growing interest in preserving and maintaining forest and agricultural lands on a State and Federal level.

## Public Services

### Educational Services

As noted, Fletcher elementary students (K-6) receive their education locally at the Fletcher Elementary School in Binghamville. Contrary to state trends, Fletcher Elementary annual enrollment is increasing.

The Fletcher School District is currently a member of the Franklin West Supervisory Union, which provides supervisory and administrative services. The school district is overseen locally by the Fletcher School Board, consisting of five elected school directors.

The school district currently employs a staff of thirty-three, including full-time principal and teaching aids; a guidance counselor and librarian; and three support/maintenance staff. School programs include vocal and instrumental music, art, and physical education. The school also offers a hot lunch program for its students. The school depends upon a high level of volunteerism and community involvement for many of its programs. In January of 1996 a local “Success by Six” program, now called Building Bright Futures, was initiated at the school. The program offers playgroups for ages infant to 6 years, kindergarten readiness programs and various community events.

#### **Fletcher Elementary School Mission Statement**

*The Fletcher School and community mission is to provide a safe, accepting and stimulating environment where all children are encouraged to develop the academic, social and team work skills necessary to become competent, caring and productive citizens of the 21st century.*

The busing of Fletcher elementary students is provided by the school district under an annually negotiated contract.

Since Fletcher has no high school and is not a member of a union school district, Fletcher’s secondary students are tuitioned out to high schools of their choosing. Secondary enrollments have been on the rise, and are expected to continue to increase. The majority of students attend nearby BFA Fairfax, while a smaller number of students attend the Lamoille Valley High School, and schools in the Burlington area.

Fletcher residents have more control over the costs of elementary education; however, the school system must meet a number of state mandates in order to retain PSA approval.

There are no adult or alternative educational opportunities available within the community; however Fletcher residents may attend classes at the Community College of Vermont (CCV) and the Northwest Technical Center, both located in St. Albans; the Johnson State College in Johnson, or a number of colleges in the Burlington area, including the University of Vermont. Other educational opportunities are evolving through the use of technologies including Vermont Interactive Television and on-line computer services.

### **Road Services**

The second most costly service provided by the municipality is road management and maintenance. As discussed in more detail under the transportation section, Fletcher maintains over 44 miles of roads within its borders. The summer and winter maintenance of roads is the responsibility of one full-time road foreman, one full time crew member, and one part-time (as necessary) crew member.

An equipment replacement schedule has been in place now for several years. A listing of present road equipment and the anticipated replacement dates is included annually in the Town Report. Estimated amounts of road material used per year include 3,500 yards of sand, 7,000 yards of gravel, and 80 tons of salt. People have asked that winter roads be as clear as possible, which has increased the amount of salt used in recent years. The amounts listed here may vary significantly in any given year depending upon the weather (e.g. heavy snows, flash flooding). The town currently gets sand and gravel from local sources (Waterville, Fairfield) depending upon availability and price. Although the State has ruled that salted sand does not need to be covered, Fletcher's salt storage shed is watertight due to an upgrade in 2004.

The town also purchases asphalt for the maintenance and upgrade of its paved roads. The town paved its section of Buck Hollow Road (Fairfax and Fairfield sections were already paved). This project was on the town's agenda for years, and with its completion, will eliminate the need to send the road crew to grade this remote section of road several times each year. It also makes the road more uniform from town to town. Rug Road has been upgraded to a class 3 road. Many other projects will be addressed as funding becomes available.

### **Administrative Services**

Fletcher is governed by a local select board consisting of five elected members. The select board meets on a regular basis, and members receive nominal payment for their services. The town employs a full-time, elected Town Clerk (and Treasurer) to manage the town office, records and accounts. The position is assisted by a part-time Clerk. Financial records for the town are checked by three elected town auditors.

The town also employs a part-time Zoning Administrator, selected by the Planning Board and approved by the select board, to administer and enforce its zoning and subdivision bylaws. Septic regulations are governed by the State and the town's health ordinances are administered separately by the town's health officer, who is appointed by the state.



The town has a five member planning commission and a five member development review board, both of which are appointed by the select board. These boards meet monthly, or as needed, and receive some administrative support from the Assistant Clerk and the Zoning Administrator. Planning, zoning and subdivision records are maintained in the town office. The town's grand list is maintained by an elected board of three Listers. The town last completed an in-house reappraisal of all listed property in 2005.

Town officers include a number of other elected and appointed officials (e.g., justices of the peace, animal control officer, fire warden, constable, emergency coordinator, pound keeper, inspector of lumber, weigher of coal, fence viewers, etc.), whose duties vary with their positions. Although some of these positions are now more in name only than substantive, local officials provide much needed services to the community, often at their own expense.

Town government of Fletcher, as in many rural Vermont communities, depends largely on local residents who are willing to volunteer their time and talents. Though Fletcher is a growing bedroom community it continues to be fortunate in having residents who are willing to serve in the town's and the public's interest. The Town of Fletcher's tradition of local volunteerism has in the past and will in the future continue to be a valuable resource in meeting the town's long term needs.

Fees for other organizations, including assessments from the Northwest Solid Waste Management District, the Northwest Regional Planning Commission, fire and rescue services, and a number of other organizations which the town supports also come from the administrative budget. The town collects permit fees, and other nominal fees to help offset the costs of administration.

### **Public Health and Safety**

Fletcher, as a small, rural, isolated community, has little ability on its own to support public health and safety services. The enhanced 911 program has been active for several years now, and the town is divided fairly evenly geographically for emergency services, which are provided by neighboring towns. An annual retainer is paid to both Cambridge and Fairfax, for both fire and emergency medical services. It also pays for back-up services from AmCare of St. Albans. A number of Fletcher residents actively serve on fire and rescue squads.

Fletcher has one elected constable, but law enforcement in town is generally the responsibility of the state police and the county sheriff. The town also has an elected safety officer and an elected animal control officer.

The town owns a large generator for emergencies, which is currently housed at the school.

### **Water and Sewer Services**

At present there are no municipal, community or public water and sewer systems in Fletcher. All Fletcher residents, farms, and businesses are served by individually owned systems, which are the responsibility of the owner to install and maintain.

The town and state do not currently regulate individual water supplies. Fletcher residents are responsible to comply with any regulations if implemented. Groundwater is the source of most local water supplies. Water is obtained from drilling and shallow wells and springs.

Given Fletcher's topography and surface geology, sufficient uncontaminated sources of groundwater are generally available. The depth to the permanent water table varies from place to place. Very rarely do deep wells run dry. Shallow wells and springs are more subject to infrequent seasonal droughts.

The state regulates onsite sewer systems for all new development. State standards allow all systems existing prior to the new zoning law to be grandfathered. This would not include any system that has failed. System failures, when documented, must be dealt with through the state and local health officer.

Fletcher residents are expected to comply with any town, state, or federal water and sewer regulations that apply presently and that may apply in the future.

### **Solid Waste Management**

Under state regulations passed in recent years (Act 78), municipalities are now responsible for the waste generated within their borders. In response to the passage of these regulations, Fletcher was one of several Franklin County communities to form the Northwest Vermont Solid Waste Management District (NWVSWMD) in 1987. The town appoints a supervisor to serve as a voting member of the District's governing board, and pays an annual assessment to help offset administrative costs.

The District has taken a collective, regional approach to planning for the reuse, recycling and ultimate disposal of the solid waste generated by its member municipalities. It has a regional landfill in Sheldon. District municipalities in 1994 approved the purchase of the proposed site in Sheldon; this purchase was completed in September 1995. Studies and design work necessary for permitting also have been completed. State certification was obtained in 1997, however landfill capacity will be developed only as it becomes cost-effective to do so.

In recent years the District has actively pursued revenues more tied to waste generation, including surcharges on waste (added to tipping fees) to fund activities included in the District plan, and to reduce the burden on local property taxes. As a result the annual per capita assessment rate has dropped, from \$2.81 in 1994 to \$1.00 since 1996. The District serves as an information center, and provides waste collection and educational services, as well as a regulatory function. The District's ordinance was amended to include mandatory recycling, effective since 1997. Provisions regarding illegal dumping and burning are also in place.

Locally, trash pickup and curbside recycling services are available on an individual basis through private haulers. The District offers a regional solid waste and recycling drop-off, located in Fletcher at the Old Town Garage site, and sponsored periodic household hazardous waste collections; residents may also use drop-off sites in Bakersfield and Georgia.

### **Communication Services**

Fletcher is served by Fairpoint for its local phone service, and by a number of long-distance providers. The phone services available to local residents have increased markedly in recent years, but at additional expense to the consumer. Fletcher has three local phone exchanges (849 and 827 in Franklin County and 644 from Lamoille County) and a recently expanded local calling area that includes surrounding towns and much of the region, but excludes the Burlington area. Cell phones are common, but because of Fletcher's topography, do not work well in certain locations.

The town is also served by a number of post offices, none of which are located in Fletcher. Although Fletcher does not have "last line identity" from the U.S. Postal Service at this time, it would be beneficial to pursue it. Residents would be able to reference their own town in their address (e.g., "Fletcher" instead of East Fairfield or Cambridge) while keeping the same zip code for sorting purposes. The advantages of last line identity include less duplication in street names and addresses, greater ease in locating an address, and perhaps most importantly, community identity.

Town officials presently communicate with local residents through formal means (hearings, town meetings, etc.) and through a well-received monthly newsletter which can be accessed at: <http://www.fletchervt.net>. Zoning Bylaws and Subdivision Regulations (as of July 2002), are available for viewing online at [fletchervt.net](http://www.fletchervt.net)

At present very few commercial and national internet service providers are available in the local area. Given the potential importance of online services to local businesses and area residents, affordable local access is necessary. Rural high-speed internet access is currently becoming more widespread and is available to some Fletcher residents (mostly westerly of the Town Office).

Due to Fletcher's topography, relative isolation and low population density, there are limited television and radio services available to residents. Most households in Fletcher have antennas or satellite dishes. There is no local community cable access. The nearest Vermont Interactive Television site, which is often used for long distance training, educational services, and statewide public hearings, is located in St. Albans. The nearest radio stations serving the local community are also located in St. Albans, and the reception varies around town.

The development of new or expanded telecommunications facilities, including radio, television and telephone towers are permitted based on Fletcher's zoning bylaws. Development is subject to conditional use review by the Development Review Board. Development guidelines include, but are not limited to: tower construction shall be set back from property lines and public rights-of-way; be located so that visibility is minimal; and be located at pre-existing sites where feasible. While the need for telecommunication facilities is obvious, the development must be done in a manner that is aesthetically pleasing as well as functional.

### **Childcare Facilities**

Although not a service provided by the community, childcare can be a community issue. Childcare can be a growing concern for existing and prospective families, whether in regards to finding quality services or the costs associated with securing these services.

According to State data, Fletcher currently has five registered childcare homes and one childcare center (preschool), with a total capacity of 45 full-time children and 28 part-time children. The 2010 U. S. Census indicates that there are 225 children from birth to age 12 in Fletcher. Data on other options such as stay at home parents, family care providers, unregistered homes, or other in home childcare options is not available. The question remains whether the needs of the remaining children are being met.

**GOAL: To meet the needs of the community in a fiscally responsible manner with appropriate public facilities and service that support residents' livelihood and lifestyles.**

Objectives:

- 8.1 The rate of growth shall not exceed the ability of the town to finance, provide and maintain associated facilities, services and infrastructure.
- 8.2 Growth and development in excess of planned rates of growth shall not overburden town services and facilities, nor adversely impact the town's environment and rural character.
- 8.3 Public and semi-public facilities will be located to reinforce traditional settlement patterns, and to avoid or otherwise minimize impacts on resource and conservation lands and natural, cultural and scenic features. New buildings intended for broad-based public access and use, including new governmental and educational facilities, will be centrally located within or immediately adjacent to existing village areas in order to concentrate public functions, reinforce village character, and strengthen community identity (see attached land use map).
- 8.4 The sighting of infrastructure, utilities and related access will minimize physical and visual impacts on resource, conservation and open space lands. The extension of utility lines (water, sewer, power, cable, phone), and related easements and/or rights-of-way will follow natural contours, and be shared where feasible. Stream and wetland crossings are to be avoided where possible. The burial of utility lines will be required as appropriate to minimize visual and environmental impacts and reduce long term maintenance costs.
- 8.5 Ensure development or the regulation of development in Fletcher does not negatively impact the availability of safe and affordable childcare.
- 8.6 Opportunities for a quality education, including associated services and facilities, will be provided for all Fletcher students in relation to anticipated growth in school enrollments, associated costs, and available funding for education.
- 8.7 The town will ensure the supply of safe drinking water and adequate wastewater disposal through the administration and enforcement of local health and on-site sewage regulations.
- 8.8 Emergency response and public safety services, including fire, ambulance and policing services will be provided through cooperative agreements with neighboring towns, agencies and/or private organizations as appropriate, based on available funding. Volunteer efforts, including volunteer

service and community-based programs, will be supported as appropriate.

- 8.9 All new development will be located and sited to be accessible to emergency response vehicles.
- 8.10 Public recreational areas and facilities for the use and enjoyment of Fletcher residents will be provided in convenient and suitable locations to the extent available funding and resources permit. The maintenance and improvement of existing facilities will receive priority.
- 8.11 Important outdoor recreational resources, including conservation lands, public waters and rights-of-way, will be protected from incompatible land use; continued public access to recreational resources will be encouraged and may be required under site plan and subdivision review. Access to private lands for public recreation will be encouraged to the extent that landowner rights and interests are upheld.
- 8.12 Recreation lands and facilities will be incorporated into proposed residential and multiple use subdivisions as appropriate to meet the needs of the intended resident population.
- 8.13 A system for the reuse, recycling and proper disposal of solid wastes will be provided in association with the Northwest Vermont Solid Waste Management District, of which the town is a member, and the district's adopted solid waste management plan.
- 8.14 The town will encourage affordable local access to telecommunication services, including on-line services, and support upgrades in telephone and electric services to meet telecommunication needs, to the extent feasible.
- 8.15 Telecommunication facilities shall be located only in areas specifically designated for these uses, and shall be co-located on existing sites unless such sites are demonstrated to be unsuitable or unavailable.
- 8.16 A regular newsletter to inform local residents will continue to be produced and distributed through the town via mail and on-line services as finances and volunteer efforts permit.
- 8.17 The use of "last line identity" by the US Postal Service, in which all Fletcher residents will be able to use the town's name in their mailing address, is strongly supported to reduce the potential for locatable address duplication within zip code areas under E-911, and to strengthen community identity.
- 8.18 Existing equipment should be kept in good shape before purchasing additional equipment. Communications equipment should always be working or fixed immediately
- 8.19 Establish a consistent method of selling lots that come into Town ownership.
- 8.20 Establish a conservation commission.

Recommendations or Actions:

- Develop a capital budget and program for the financing of public facilities and infrastructure as part of an overall growth management strategy.
- Continue to maximize the use of state, federal and other funds, and to explore alternative funding mechanisms to finance needed facilities and services.

- Develop an overall “village plan” for the Binghamville area as the town’s designated growth center for community and economic development.
- Identify and protect a public water supply source design to serve the Binghamville area.
- Continue to monitor population and school enrollment fluctuations in order to address future facility and capital needs in an efficient and well-planned manner.
- Explore opportunities for acquiring additional land adjacent to the school to accommodate future expansion.
- Find opportunities to better use the Fletcher Elementary School as a community resource; develop and expand existing library holdings at the Fletcher school for community use.
- Update zoning regulations, specifically health related and onsite sewage regulations, to reflect minimum state regulations.
- Provide financial support for educational opportunities for town health officer.
- Continue to investigate options for the cost effective provision of emergency services and police protection as appropriate; support the development of a local community watch program.
- Support a community emergency response plan for hazardous materials incidents as required by the state, as available funding and resources permit.
- Continue to negotiate with Fairfield for emergency response coverage in the northern sections of Fletcher.
- Make needed improvements to the Metcalf Pond beach and parking areas; acquire additional public access to Metcalf; provide other amenities (e.g., picnic tables, trash cans) as appropriate.
- Continue to support the efforts of the Fletcher Historical Society to restore the Union Meeting House (Grange) for community use.
- Continue to participate in regional solid waste planning, recycling and disposal efforts as a member of the Northwest Vermont Solid Waste Management District.
- Continue to support E-911 locally
- Petition the US Postal Service for the use of “last line identity” (the use of “Fletcher” as the resident town) in local mailing addresses.
- Explore a community-wide on-line system
- Support the Fletcher internet presence (<http://www.fletchervt.net>, which also provides links to the public Google group and Facebook page).
- Maintain the inventory all public lands to assess most appropriate use (firewood, wildlife habitat, recreation, education, sale, etc.); develop management plans as appropriate.
- Support efforts to maintain parcel mapping to strengthen community services such as permit review, listing and tax services and general planning efforts and plan for the development of a small town green or common and public bulletin board to be centrally located in the Binghamville area.
- Develop and support a volunteer program to maintain Fletcher’s historic cemeteries.
- Develop policies to govern the selection and timing of sale of town owned properties.

## Section 9 LAND USE

### Overview

Land use is more often than not the most difficult planning issue faced by most communities. Through effective planning, a reasonable balance can be maintained between the public interest and the interests of private landowners.

Land use planning integrates all other aspects of the planning process: defined goals, policies, and objectives; physical factors and limitations; historic patterns of development; projected and accepted rates of growth; existing and proposed facilities and infrastructure; and the ongoing need to provide housing, jobs, services and a quality environment for present and future generations.



The primary objectives of Fletcher's town plan are:

- To ensure that the rural character of the town including its resource based economy, natural environment, cultural landscape, and the rural lifestyle enjoyed by its residents is maintained;
- To provide for orderly development in suitable locations to accommodate anticipated and desired forms of growth at rates which do not over burden the ability of local taxpayers to provide for needed facilities and services; and
- To require that all development be pursued with strict regard to the capability of the land to support it.

Land use is a critical component of each of these objectives. The following provides a description of existing land use in Fletcher, a description of the types of land uses appropriate for Fletcher, and recommendations for facilitating the appropriate use of land through planning in order to meet the Town's objectives.

<b>LAND USE/LAND COVER</b>	<b>Acres</b>	<b>Percent</b>
Residential	382.634	1.55%
Commercial	0.444	0.00%
Other Urban	0.444	0.00%
Transportation/Utilities	404.831	1.64%
Deciduous Forest	10,044.344	40.81%
Coniferous Forest	2,514.377	10.22%
Mixed Forest	5,557.784	22.58%
Forested Wetland	468.737	1.90%
Non-Forested Wetland	245.258	1.00%
Row Crop	2,315.115	9.41%
Hay/Pasture	1,406.578	5.72%
Other Agricultural	2.398	0.01%
Barren Lands	122.779	0.50%
Water	1,144.683	4.65%
<b>Fletcher Total</b>	<b>24,610.406</b>	<b>100.00%</b>
<b>FLOOD PLAINS</b>	<b>Acres</b>	<b>Percent</b>
100 Year Flood Zone	919.690	3.74%
500 Year Flood Zone	168.150	0.68%
<b>Flood Zones Total</b>	<b>1,087.840</b>	<b>4.42%</b>

Table 9.1: Land Use and Cover (Source: LULC, 1993)



## Existing Land Use

The Town of Fletcher covers approximately 24,608.75 acres. The various land uses/land covers that comprise this total acreage are listed in the table above and are illustrated in the Current Land Use Map in the appendix. The most prevalent land cover by far is forest, comprising approximately 79% of Fletcher's total acreage. In contrast, the acreage devoted to agricultural uses comprises only about 10% of Fletcher's land base, and residential use comprises only about 1% of the land base.

## Current Land Use Regulations

Fletcher's current zoning bylaw has been in effect since October 25, 2002. The bylaw establishes six different land use districts. These are:

1. The Village District
2. The Rural Residential Agriculture District
3. The Conservation District
4. The Forest District
5. The Shoreland-Recreation District
6. The Flood Hazard Overlay District

### The Village District

The Village District includes all lands within and adjacent to the historic settlements of Binghamville and Fletcher Center, as depicted on the zoning map attached in the Appendix. This district is meant to encourage the development of village areas as the focus of social and economic activities in the community and to provide for residential, commercial and other compatible development that serves the needs of the Town. Development consistent with the purpose of this district should occur at densities and reflect uses which will maintain the traditional social and physical character of the villages, including their historic and scenic resources, and which will not exceed the capability of the Town's lands, waters, services and facilities to absorb such densities.

### Rural Residential/Agricultural District

The Rural Residential/Agricultural District includes lands within 1,500 feet of Class III, or better, roads. These lands are intended to be used primarily for residential, agricultural, and forestry uses. Compatible commercial and recreational activity is also supported. Development densities must be in keeping with the physical capabilities of the land and the availability of planned community facilities and services. Development methods to preserve the rural character and protect the agricultural resources of these areas are encouraged.

### Conservation District

The Conservation District includes most upland areas and other conservation lands not included in other zoning districts. The remote nature of these lands, extreme topography and/or significant physical limitations on any type of building make these areas of town poorly suited for future community growth and development. This district is also specifically intended to protect the scenic and important natural resource value of such lands for forestry, ground and surface water recharge, wildlife habitat, and outdoor recreation. Very limited, low-density development is anticipated in this district.

### **Forest District**

The Forest District includes all lands eleven hundred feet or more in elevation on Wintergreen Mountains, and all lands on Gilson Mountain 1400 feet elevation and above. Included in this district are the upland roadless areas on Fletcher Mountain; all lands east of Route 108, but not including the area within 1500 feet of the road, which is in the Rural Residential / Agriculture District. This district serves to protect remote lands which are essentially undeveloped, lack direct access to public roads, are important wildlife habitat, are currently used for commercial forestry and/or have high potential for commercial forestry use, and have severe physical limitations for development. Conditional use review is required for all uses other than forestry or agriculture as a means of ensuring the integrity of the resources in this district and preventing undue burdens on public services.

### **Shoreland-Recreation District**

The Shoreland-Recreation District includes all lands within five hundred (500) feet of the shoreline of Metcalf and Halfmoon Ponds. This district protects areas which have present or potential capability for water-based recreation. Development in this district must be carefully controlled to protect water quality and scenic beauty.

### **Flood Hazard Area Overlay District**

The Flood Hazard Area Overlay District includes identified areas subject to a one percent or greater chance of flooding in any given year (i.e., 100-year flood plains) as depicted on the Federal Insurance Administration's current set of Flood Insurance Rate Maps (FIRMs) for the Town of Fletcher. This district is meant to prevent increases in flooding caused by development in flood hazard areas, to minimize future public and private losses due to floods, and to promote the public health, safety and welfare. This district is also required for continued Town eligibility in the National Flood Insurance Program.

## **Further Recommendation**

Review implementation of the zoning bylaws that were passed in 2006, and modify the zoning bylaws when it appears necessary in order to maintain a reasonable balance between the interest of the private land owners and the public interest.

### **GOALS:**

- To maintain a reasonable balance between the limitations imposed on land use in the public interest, and the rights of individual landowner;
- To preserve Fletcher's rural character;
- To promote the efficient use of land, the continuation of productive forestry and farming through the development of land in a manner which protects the environment and preserves important natural, cultural and community resources, while at the same time providing sufficient space in appropriate locations for farming and forestry, residential, recreational, and commercial and industrial uses and supporting public services, facilities and infrastructure.
- To encourage and support federal and local conservation efforts.

### **Objectives:**

- 9.1 Just compensation will be made in the event that any reasonable use of property is denied under local regulations; restrictions imposed on land use will be based on clearly defined community goals and objectives.

- 9.2 Infrastructure and site improvements associated with new development, will be reviewed as appropriate under local land use regulations. The costs of such infrastructure are to be borne by the developer; provision of adequate surety to guarantee proper installment and completion may be required.
- 9.3 The types and patterns of land use within the community should be tracked and mapped on a regular basis for purposes of planning, zoning, listing, and growth management.
- 9.4 Development is to be excluded from areas which are particularly unsuited for it, including those areas which have natural development limitations, and limited or no access.
- 9.5 Land use and development densities will reflect topography, site conditions, proximity to town roads and commercial centers, and requirements for the economic and efficient provision of public services. Higher densities of development will be accommodated only where they can be properly served.
- 9.6 Land use districts have been designated for purposes of planning and zoning. Proposed land use and/or development activities within each district will be shown to be compatible with the stated purpose and intent of that district and all related plan goals, policies and objectives.
- 9.7 Land subdivision within all districts will be designed to ensure that the pattern of future land use and development does not adversely impact significant natural, cultural or scenic features, or result in the further fragmentation of resource and conservation lands.
- 9.8 Strip forms of development along town roads will be prevented. New development will maintain traditional, clustered forms of land use and development (e.g., farmsteads, hamlets, villages) with access to existing town roads.
- 9.9 The clustering and/or sighting of development to replicate traditional, concentrated patterns of development, to protect rural and scenic character, and to maintain contiguous tracts of resource, conservation, and open land is encouraged in all districts, and may be required in association with other conservation techniques as appropriate. Clustering may take the form of traditional planned residential or planned unit developments (PUDs) and/or more innovative farmland protection and open space subdivision designs.
- 9.10 Designated village areas are intended for higher densities and mixed forms of development to be located within and/or immediately adjacent to existing villages of Fletcher Center and Binghamville, in a manner which reduces the costs and impacts of development, reinforces the traditional, integrated, compact village form, maintains a distinct built edge, and which strengthens community identity and character.
- 9.11 All structures intended for broad-based community access and use should be centrally located within or immediately adjacent to Fletcher's historic village centers to maintain and reinforce their traditional public function, identity and associated sense of community.
- 9.12 The Binghamville area in particular is designated as the town's growth center for higher density, mixed forms of community and economic development and supporting infrastructure particularly for multi-family housing, municipal and other public buildings, and small businesses, services and facilities which cater to the public. Associated infrastructure will support and reinforce traditional patterns of development.
- 9.13 The rural district is intended to allow compatible forms of rural development, while protecting the town's rural character. An overall pattern of low to moderate density development, in

appropriate locations based on site and access conditions, will be maintained in the rural district. Home based businesses, cottage industries and other small businesses typical of rural areas, which require minimal supporting infrastructure and limited public access will be subject to site plan and/or conditional use review as appropriate.

- 9.14 The forest district is intended specifically to protect the town's productive forest and agricultural resource lands and related industries. Incompatible forms of development, which hinder or interfere with resource uses, or result in the fragmentation of resource lands will not be permitted within these districts. All uses except forestry, undeveloped outdoor recreational activities, and specifically designated essential public services and facilities are excluded from the forest district. Within the agricultural overlay district, all uses in underlying districts, except for agriculture and forestry, will be subject to conditional use review to ensure that they are sited and/or developed in a manner, which maximizes the amount of land retained for productive agricultural use.
- 9.15 The conservation district includes land, which is not easily accessible and/or marginal for development, and is intended to protect Fletcher's upland areas as well as other significant natural and scenic resources as defined in the plan. Compatible forms of low-density development, including appropriately sited residential development, may be allowed in conservation districts under conditional use review.
- 9.16 The flood hazard overlay district is intended to protect life and property within federally designated flood hazard areas as depicted on Flood Hazard Boundary Maps. Uses are to be limited to non-structural, open space uses including farming, forestry, education and outdoor recreation.
- 9.17 The shoreland/recreation district is intended for the appropriate management of shore land areas of Metcalf and Halfmoon Ponds to protect water quality, and to provide limited access to and recreational use of public waters. All structural development, including seasonal homes and their conversion to year-round homes and public recreational facilities, are to be subject to conditional use review. Setbacks and buffering will be required as appropriate.

#### Recommendations or Actions:

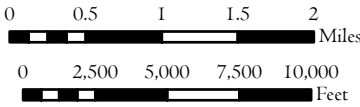
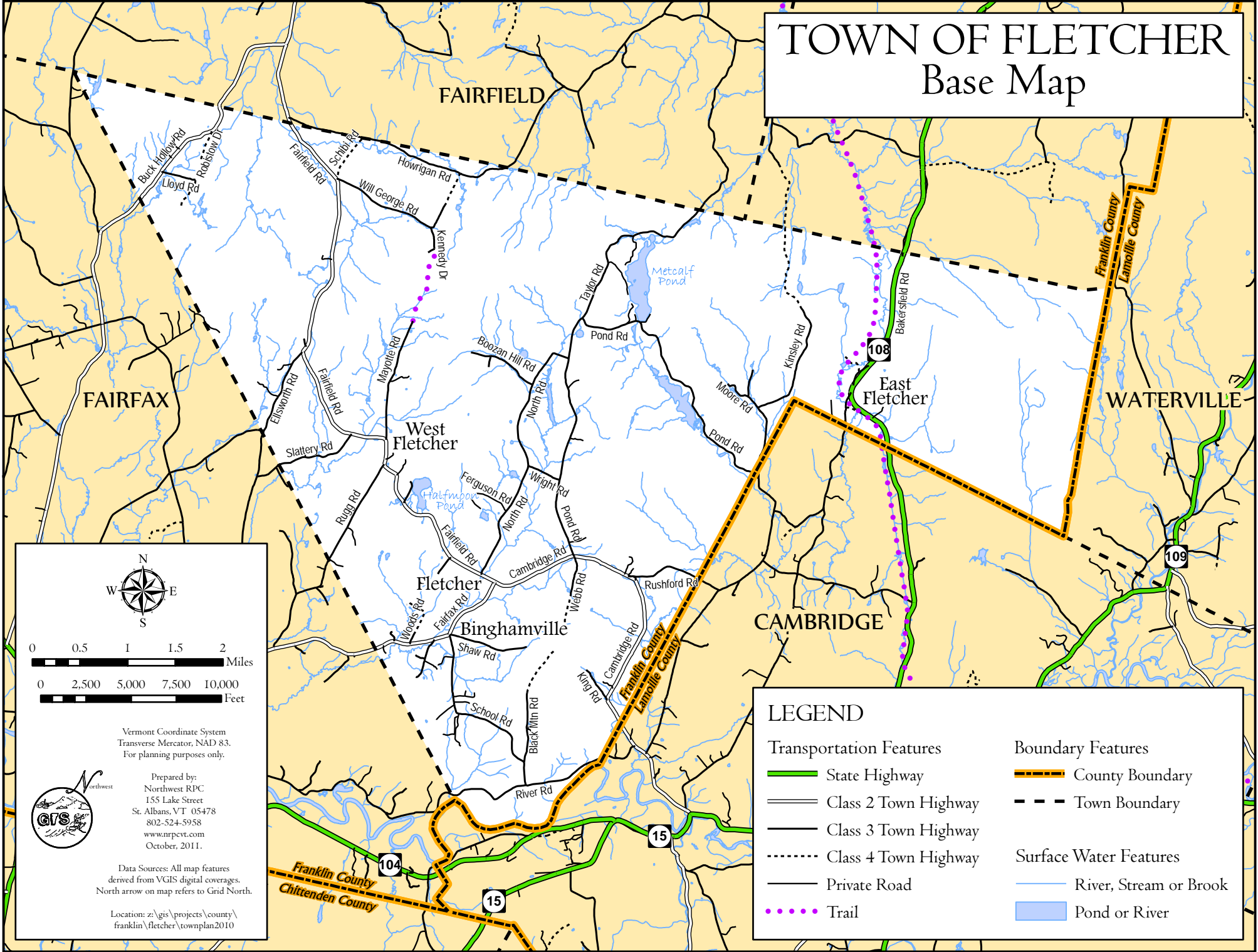
- Conduct land use inventories and update GIS-based land use maps at regular intervals at minimum with the state release of new orthophotography.
- Utilize GIS-based parcel maps to track changes in land use and subdivision patterns; to provide available parcel-based natural, cultural and land use information to individual landowners, and to identify and inform affected landowners of proposed changes in land use designations.
- Review and update bylaw provisions, including district land use designations, for conformance with the updated town plan. Also review for simplicity, clarity, ease of use, and effectiveness.
- Encourage creative clustering and siting of new development, particularly for application within rural, conservation and resource districts, to maintain contiguous tracts of agricultural and forest resource lands in sustainable production, and to protect the town's open space, as well as rural and scenic character.
- Establish setbacks from surface waters to be applied within all zoning districts.
- Require municipal and other community buildings as appropriate to be located only within or immediately adjacent to traditional village areas in order to reinforce their roles as the community's physical, cultural and social centers.

- Specifically review and update as appropriate bylaw provisions for essential public services, public facilities, commercial uses, telecommunication facilities, home occupations, home-based businesses and cottage industries, accessory apartments, the conversion of seasonal to year-round housing, site plan review criteria and performance standards, and on-site sewage provisions.

LIST OF MAPS:

- Base Map
- Transportation System
- Current Land Use
- Proposed Land Use
- Facilities & Utilities
- Agriculture Land Use
- Critical Areas

# TOWN OF FLETCHER Base Map



Vermont Coordinate System  
Transverse Mercator, NAD 83.  
For planning purposes only.



Prepared by:  
Northwest RPC  
155 Lake Street  
St. Albans, VT 05478  
802-524-5958  
www.nrpcvt.com  
October, 2011.

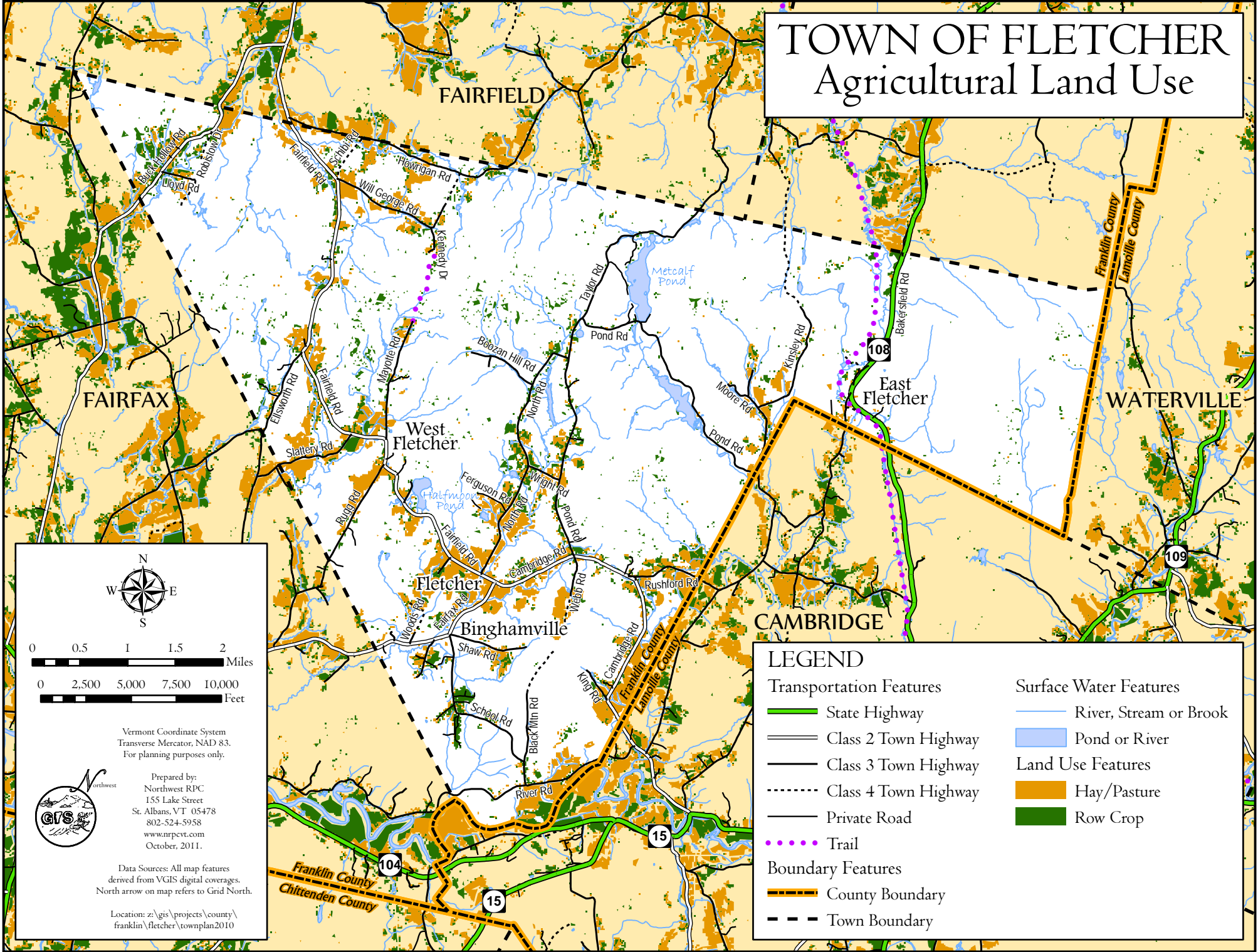
Data Sources: All map features  
derived from VGIS digital coverages.  
North arrow on map refers to Grid North.


Location: z:\gis\projects\county\  
franklin\fletcher\townplan2010

### LEGEND

<b>Transportation Features</b>	<b>Boundary Features</b>
State Highway	County Boundary
Class 2 Town Highway	Town Boundary
Class 3 Town Highway	
Class 4 Town Highway	<b>Surface Water Features</b>
Private Road	River, Stream or Brook
Trail	Pond or River

# TOWN OF FLETCHER Agricultural Land Use

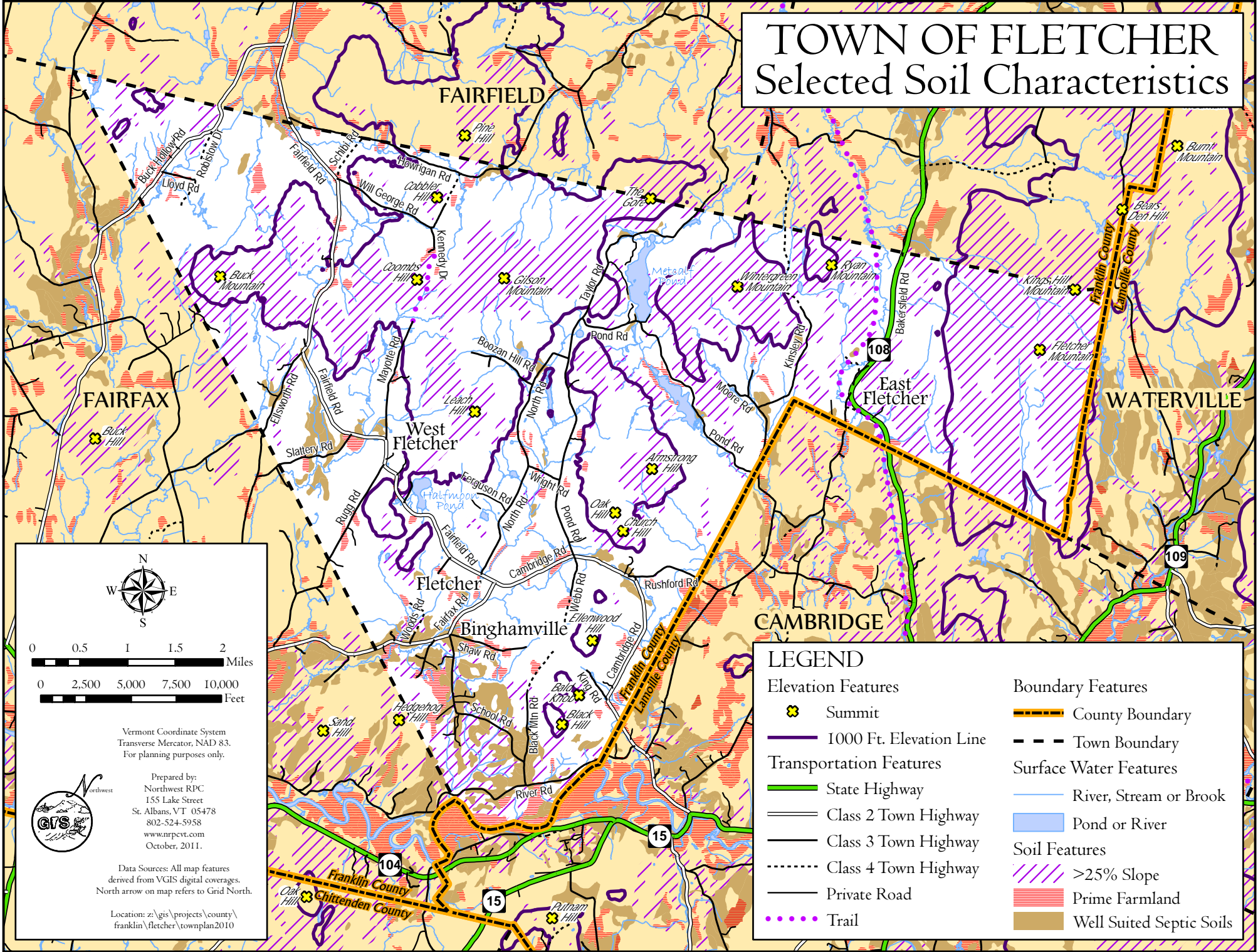


  
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 Vermont Coordinate System  
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**LEGEND**

State Highway	River, Stream or Brook
Class 2 Town Highway	Pond or River
Class 3 Town Highway	<b>Land Use Features</b>
Class 4 Town Highway	Hay/Pasture
Private Road	Row Crop
Trail	
<b>Boundary Features</b>	
County Boundary	
Town Boundary	

# TOWN OF FLETCHER Selected Soil Characteristics



0 0.5 1 1.5 2 Miles  
0 2,500 5,000 7,500 10,000 Feet

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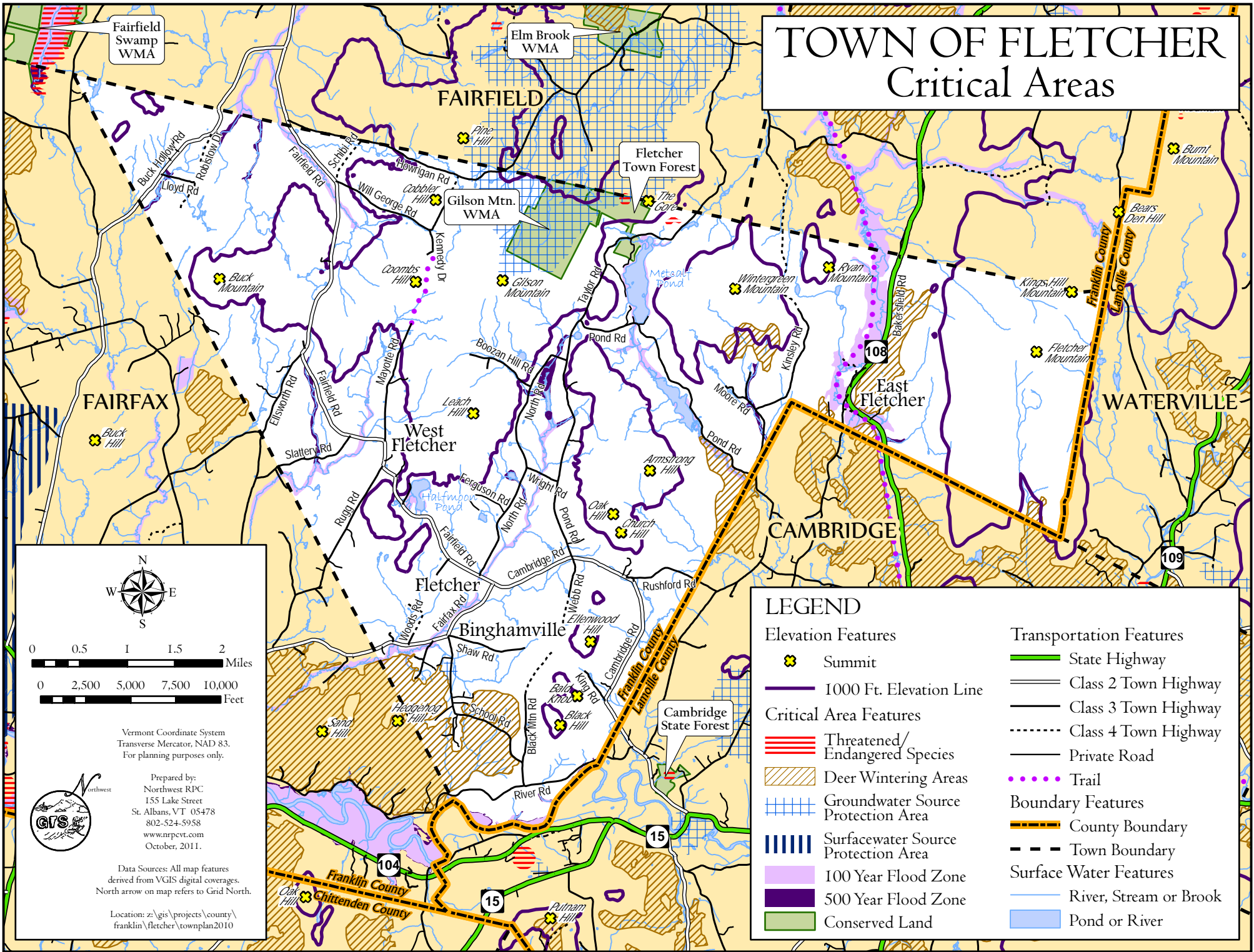
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### LEGEND

<b>Elevation Features</b>	<b>Boundary Features</b>
★ Summit	--- County Boundary
— 1000 Ft. Elevation Line	- - - Town Boundary
<b>Transportation Features</b>	<b>Surface Water Features</b>
— State Highway	— River, Stream or Brook
— Class 2 Town Highway	▭ Pond or River
— Class 3 Town Highway	<b>Soil Features</b>
--- Class 4 Town Highway	▨ >25% Slope
— Private Road	▨ Prime Farmland
••••• Trail	▨ Well Suited Septic Soils



# TOWN OF FLETCHER Critical Areas



Fairfield Swamp WMA

Elm Brook WMA

FAIRFIELD

Fletcher Town Forest

Gilson Mtn. WMA

FAIRFAX

WATERVILLE

West Fletcher

East Fletcher

CAMBRIDGE

Fletcher

Binghamville

Cambridge State Forest



Vermont Coordinate System  
Transverse Mercator, NAD 83.  
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Location: z:\gis\projects\county\  
franklin\fletcher\townplan2010

## LEGEND

### Elevation Features

- Summit
- 1000 Ft. Elevation Line

### Critical Area Features

- Threatened/Endangered Species
- Deer Wintering Areas
- Groundwater Source Protection Area
- Surfacewater Source Protection Area
- 100 Year Flood Zone
- 500 Year Flood Zone
- Conserved Land

### Transportation Features

- State Highway
- Class 2 Town Highway
- Class 3 Town Highway
- Class 4 Town Highway
- Private Road
- Trail

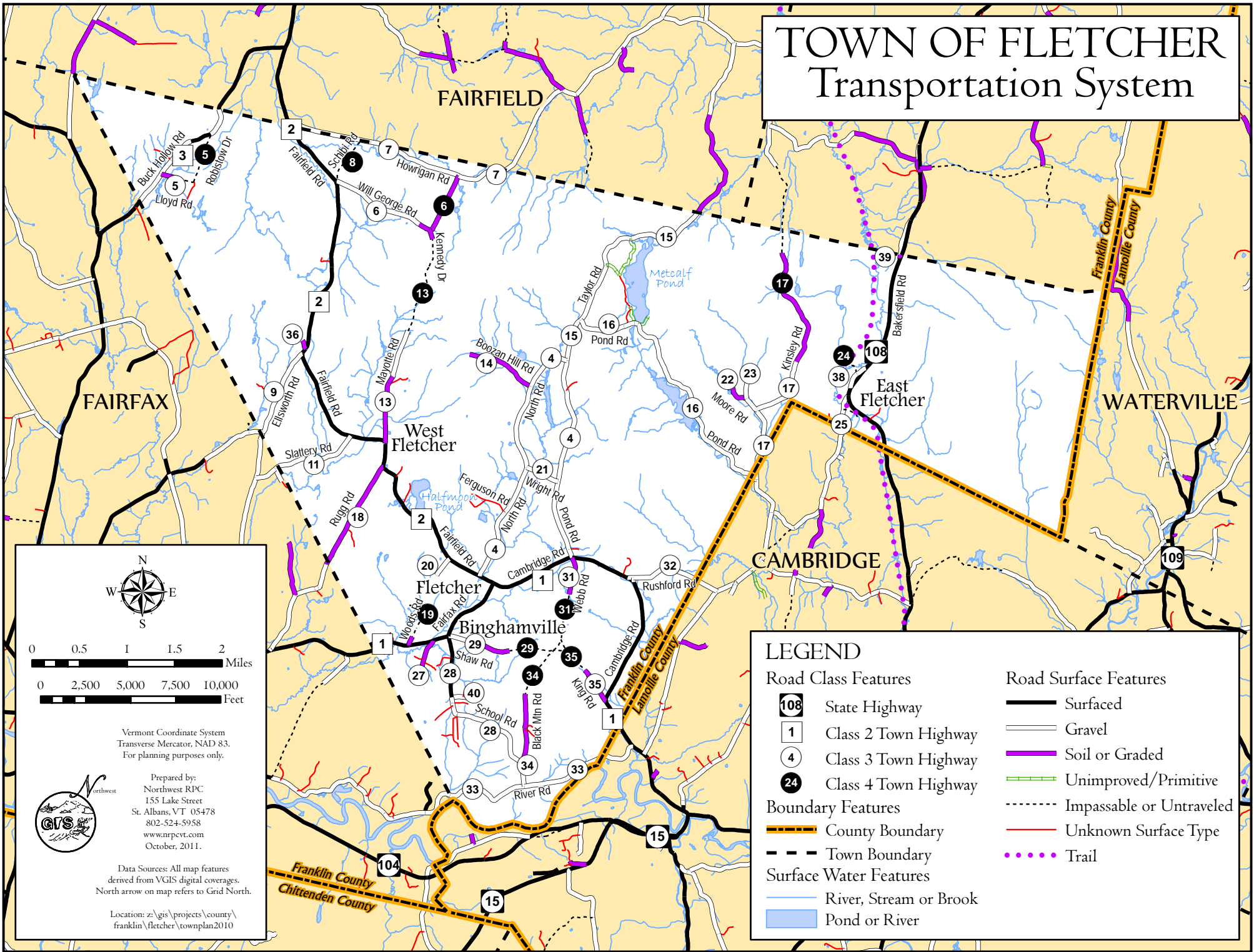
### Boundary Features


- County Boundary
- Town Boundary

### Surface Water Features

- River, Stream or Brook
- Pond or River

# TOWN OF FLETCHER Transportation System

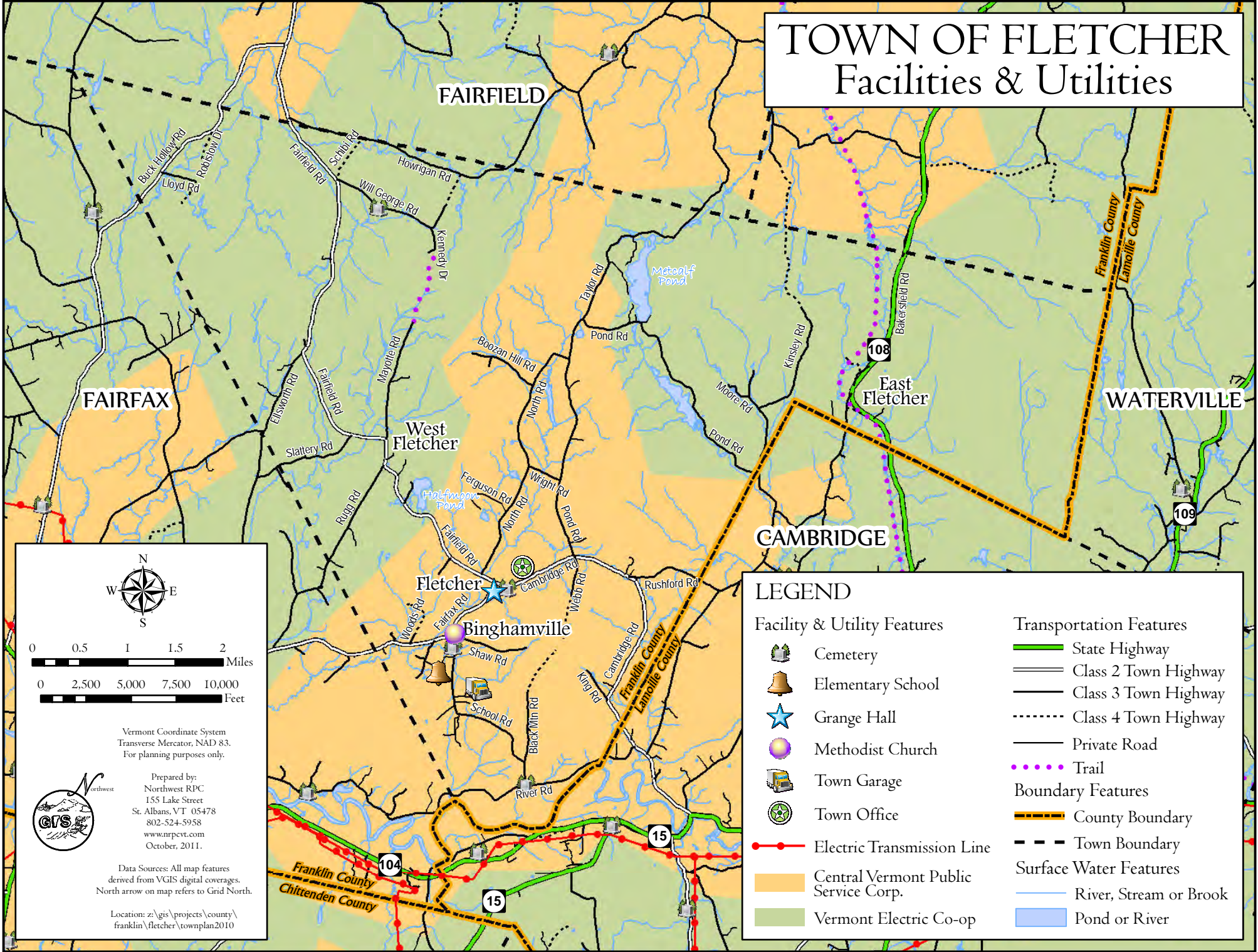


  
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**LEGEND**

<b>Road Class Features</b>	<b>Road Surface Features</b>
State Highway	Surfaced
Class 2 Town Highway	Gravel
Class 3 Town Highway	Soil or Graded
Class 4 Town Highway	Unimproved/Primitive
<b>Boundary Features</b>	Impassable or Untraveled
County Boundary	Unknown Surface Type
Town Boundary	Trail
<b>Surface Water Features</b>	
River, Stream or Brook	
Pond or River	

# TOWN OF FLETCHER Facilities & Utilities



Vermont Coordinate System  
 Transverse Mercator, NAD 83.  
 For planning purposes only.

Prepared by:  
 Northwest RPC  
 155 Lake Street  
 St. Albans, VT 05478  
 802-524-5958  
 www.nrpcvt.com  
 October, 2011.

Data Sources: All map features  
 derived from VGIS digital coverages.  
 North arrow on map refers to Grid North.

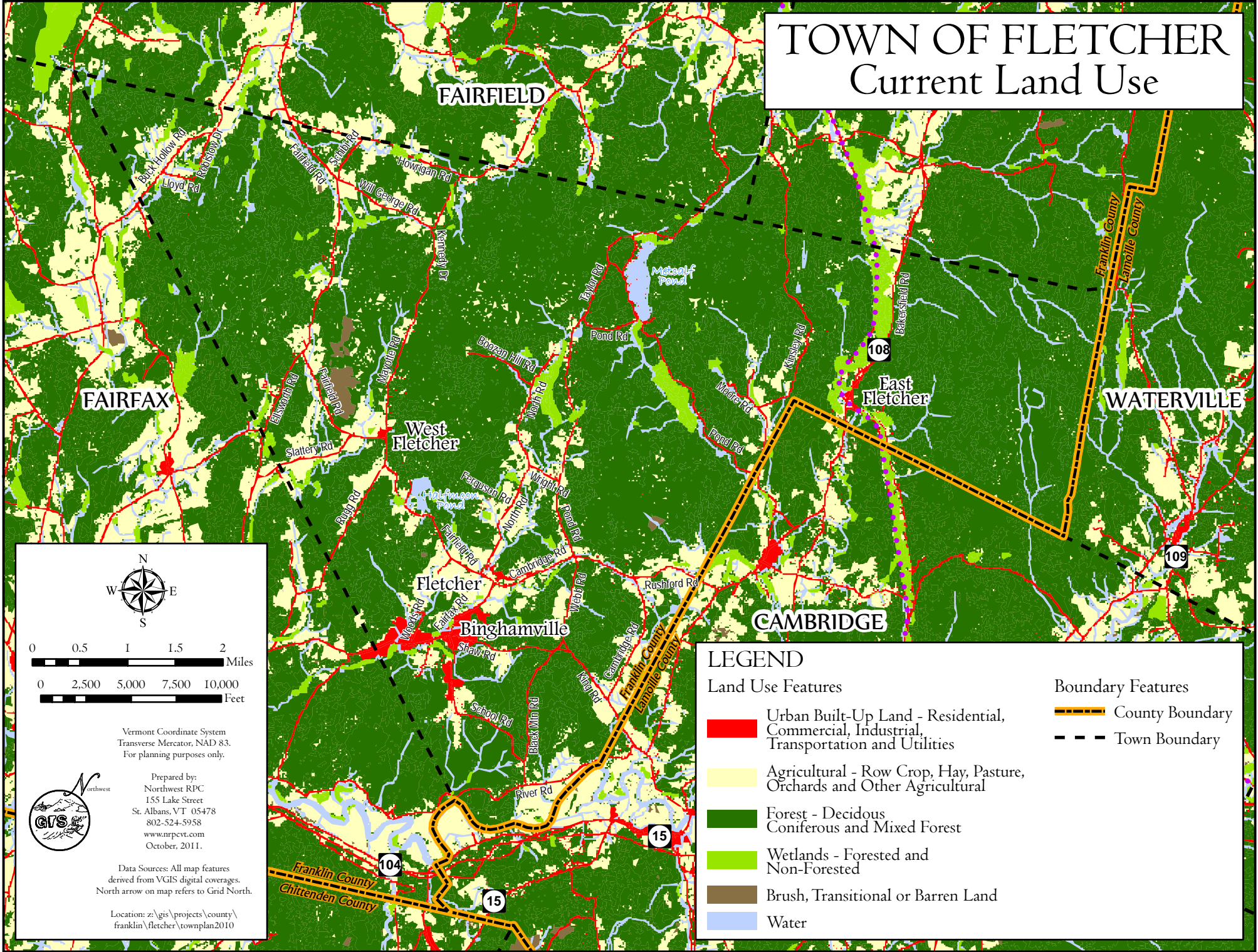
Location: z:\gis\projects\county\  
 franklin\fletcher\townplan2010

### LEGEND

Facility & Utility Features	Transportation Features
Cemetery	State Highway
Elementary School	Class 2 Town Highway
Grange Hall	Class 3 Town Highway
Methodist Church	Class 4 Town Highway
Town Garage	Private Road
Town Office	Trail
Electric Transmission Line	<b>Boundary Features</b>
Central Vermont Public Service Corp.	County Boundary
Vermont Electric Co-op	Town Boundary
	<b>Surface Water Features</b>
	River, Stream or Brook
	Pond or River

# TOWN OF FLETCHER

## Current Land Use



FAIRFAX

FAIRFIELD

WATERVILLE

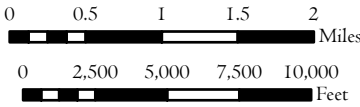
CAMBRIDGE

West Fletcher

East Fletcher

Fletcher

Binghamville



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### LEGEND

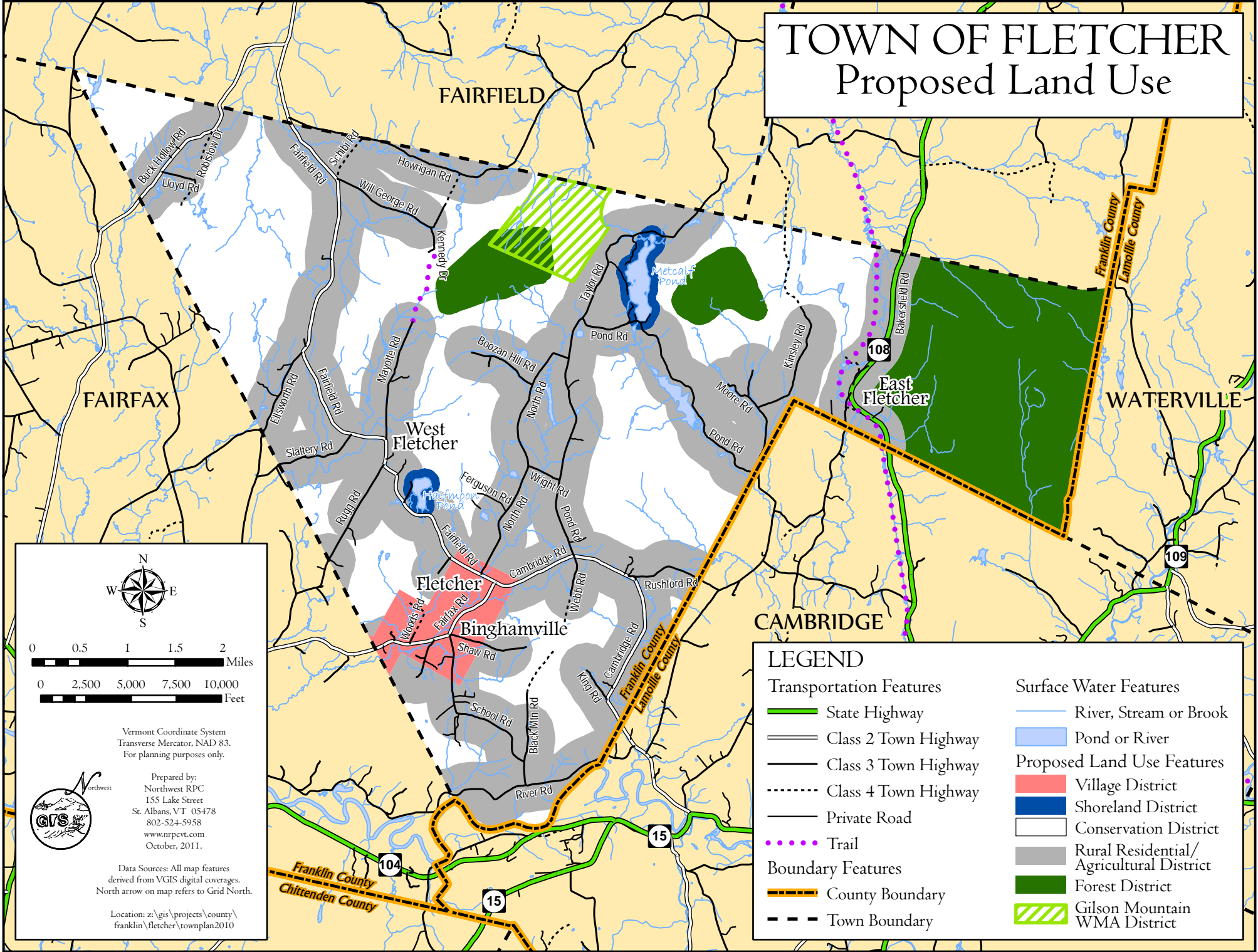
#### Land Use Features


- Urban Built-Up Land - Residential, Commercial, Industrial, Transportation and Utilities
- Agricultural - Row Crop, Hay, Pasture, Orchards and Other Agricultural
- Forest - Deciduous Coniferous and Mixed Forest
- Wetlands - Forested and Non-Forested
- Brush, Transitional or Barren Land
- Water

#### Boundary Features

















- County Boundary
- Town Boundary

# TOWN OF FLETCHER Proposed Land Use



  
 0 0.5 1 1.5 2 Miles  
 0 2,500 5,000 7,500 10,000 Feet  
 Vermont Coordinate System  
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### LEGEND

<b>Transportation Features</b>  State Highway  Class 2 Town Highway  Class 3 Town Highway  Class 4 Town Highway  Private Road  Trail <b>Boundary Features</b>  County Boundary  Town Boundary	<b>Surface Water Features</b>  River, Stream or Brook  Pond or River <b>Proposed Land Use Features</b>  Village District  Shoreland District  Conservation District  Rural Residential/ Agricultural District  Forest District  Gilson Mountain WMA District
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