INTRODUCTION

Purpose of Dummerston Town Plan

The Dummerston Town Plan is designed to provide guidelines for planning the future of the Town of Dummerston so that community actions, whether private or public, will 1) conform to the wishes of its citizens, 2) avoid the adverse and sometimes irreversible effects often associated with purely random development, and 3) be in harmony with the planning measures of the State, the Windham Region, and neighboring towns.

The Town Plan is to be used by public officials, businesses, landowners, and residents in a number of ways:

1. To recommend future community programs, actions, and studies that will help to ensure a continuous planning program.

2. To provide a framework for zoning and any other bylaws or ordinances the Town may adopt.

3. To guide local decision-making in the review of development proposals, including site plan, conditional use, and subdivision reviews.

4. To serve as a basis for responding to development proposals requiring Act 250 permits or any other similar State or Federal review proceedings.

5. To provide a source of information about the Town.

How the Town Plan Was Developed

Dummerston's first Town Plan was drafted and adopted in 1971 and was readopted five years later. The Planning Commission began this update of the Town Plan in the Winter of 2004. The Plan is designed to comply with the standards of Title 24 (Vermont Statutes Annotated) Chapter 117 with respect to the content of the Plan, consistency with Vermont's planning goals, and compatibility with the Town Plans of nearby towns and the Windham Regional Plan.

The Dummerston Planning Commission has provided the principal direction for the update of the Town Plan. The Commission has received input from a townwide survey in 2002, the Dummerston Conservation Commission, town officials, and volunteers. The Town also received technical assistance from the Windham Regional Commission for planning services and for a series of new maps.

In developing the Plan, the Planning Commission updated a community profile outlining Dummerston's history and compiling up-to-date statistics on population, housing, economy, and fiscal conditions. The Planning Commission

oversaw the production of a new proposed land use map. Members analyzed existing land uses, including community facilities and important resource production lands. Through this process community needs and options were identified. The policies and action steps that were developed reflect the needs of Dummerston for the next five years. The August 2004 amendments to the Land Use statement and proposed Land Use map are the first phase of changes recommended by the Planning Commission, which will be accompanied by a technical update of the zoning bylaw. The Planning Commission intends to study and recommend further changes to reflect the needs of the Town.

Process for Adoption, Modification and Updating

Formal adoption of the Town Plan will take place after public hearings of the Planning Commission and Selectboard. The Plan is adopted by a majority vote of the Selectboard. A Town Plan expires five years from the day of adoption.

Planning is an ongoing process. Once adopted, the Town Plan will need review every few years in order to account for new information about the Town and new public needs and desires as expressed by the citizens of Dummerston. This review is one of the main responsibilities of the Dummerston Planning Commission. A Town Plan can be modified and formally amended (through public hearings) at any time during the five-year period.

Interpretation of the Town Plan

In situations where the interpretation of the Plan is needed or required it will be the task of the Dummerston Planning Commission, in cooperation with the Dummerston Selectboard, to conduct the review.

Throughout the text of this Town Plan many of the policy statements and action steps include imperative verbs. “Should” or “may” means that a requirement is encouraged but not mandated, whereas “must” or “shall” means that the Town has strong intentions of ensuring a requirement is accomplished. “Policy” is defined herein as a guideline for achieving short-term and long-term town goals.

DUMMERSTON COMMUNITY PROFILE

History

The first record of a white man's visit to the area was that of Colonel Joseph Kellogg. In his journal he tells of his scouting party from Fort Dummer ascending Black Mountain on November 30, 1727, to view the surrounding country for Indian smoke signals. The first recorded European-American settler in Dummerston was January 2, 1752.

The following information regarding the Native American population is taken from *Vermont, The Green Mountain State* by Walter Hill Crockett.

There were two great native confederacies in eastern America, the Algonquin and the Iroquois, which were arrayed in hostile camps. The former confederacy was the more numerous, and controlled a greater area than the latter. But the Iroquois were better organized and were fiercer warriors than their rivals.

The Algonquin confederacy stretched from Newfoundland to the Rocky Mountains, and from Churchill River to Pamlico Sound. The northeastern division embraced the tribes inhabiting eastern Quebec, the Maritime Provinces and eastern Maine. The eastern division was made up of tribes dwelling along the Atlantic coast as far south as North Carolina. An important subdivision of the Algonquin nation was known as the Abnakis, and it is with this group that the Indian history of Vermont is chiefly concerned. The name is said to mean Eastlander, or people of the East. The Abnakis were called Tarranteens by the early English inhabitants. At an early period the Abnakis became firm friends of the French, and were allies of that nation as long as France controlled Canada. As the white population of New England increased, the Abnakis gradually withdrew to Canada.

The Iroquois confederacy included the Mohawk, Oneida, Onondaga and Seneca tribes, and was often called the Five Nations. After the admission of the Tuscarora tribe, in 1722, the confederacy was known as the Six Nations. When first known to Europeans, this confederation occupied the territory extending from the western watershed of Lake Champlain to the western watershed of the Genesee River, and from the Adirondack Mountains southward to the territory of the Conestoga on the Susquehanna River. With the coming of the Dutch, the Iroquois secured firearms, which had made possible their defeat by Champlain, and thereafter they extended their conquests rapidly.

The Algonquin tribes were primarily hunter gatherers, and had only the rudimentary political institution of chief and followers. The Iroquois had entered the agricultural stage. They had settled habitations and cultivated fields. They had extensive apple orchards, made sugar from the maple, and raised corn, beans, squash, and pumpkins. The Iroquois had a carefully devised constitution, well adapted to secure confederate authority in matters of common interest, and local authority in matters of local interest.

Several writers speak of Vermont as the beaver hunting grounds of the Iroquois. Although for a while they were able to menace the French in Canada, their hold was soon weakened by the French power, and finally abandoned. With the weakening of the Iroquois control, the Abnaki Indians again came into possession of the land.
During the early period when New England and New York were being settled, an Algonquin tribe called the Mohicans (meaning "wolf") occupied both banks of the Hudson River, their territory extending north almost to Lake Champlain.

In 1672 the Province of Massachusetts Bay, now the state of Massachusetts, granted a township to John Pynchean, Mr. Pearson and others at "Squakheag", later Northfield, Mass. The Township of Northfield was laid out on both sides of the Connecticut and enclosed an area of 6 miles by 12, extending several miles into the present states of Vermont and New Hampshire, which was thought to be in the province of Massachusetts, the northern boundary of which had not yet been determined.

A few months later, in 1673, people from Northampton, Hadley and Hatfield started the settlement of Northfield, the first settlement in the vicinity of Windham County.
Previous to this settlement, and up to the year 1713, officials of the Province of Massachusetts Bay had granted other tracts of land farther south that were believed by them to be within their provincial limits, on many of which permanent and thriving settlements had already been established. In 1713 the boundaries between the Province of Massachusetts Bay and the Colony of Connecticut were determined. This resulted in the discovery that 107,793 acres of the land granted by the Province were actually within the boundaries of the Colony. Massachusetts officials, wishing to retain all the granted lands as part of their Province, entered into an agreement with Connecticut on April 15, 1715 (source—Vermont History Calendar) in accordance with which it was determined "That the said Colony of Connecticut should have 107,793 acres of land as an *equivalent* to the said Colony for lands allowed and granted to belong to the said Province that fall to the southward of the lately run between the said Province (Mass.) and the Colony (Conn.)."

Though this established the *southern* boundary of Massachusetts, it was still uncertain just how far its territory extended north. The *equivalent lands* were located in four different places. This land now belonged to Connecticut and, being separated from the colony by Massachusetts, was of no practical value to its owner. So a public auction was held to dispose of part of the 107,793 acres of untamed land north of Massachusetts.

The auction took place on April 24th and 25th, 1716, and a tract of 43,943 acres (situated above Northfield on the west bank of the Connecticut River within the

bounds of the present towns of Putney, Dummerston and Brattleboro) was sold to William Dummer, Anthony Stoddard, William Brattle, and John White. The tract was called Dummer after the oldest proprietor. It was considered to be in New Connecticut. When the settlement of the line between New Hampshire and Massachusetts was made in 1741, this tract fell within the limits of New Hampshire.

Governor Benning Wentworth issued grants for this tract incorporating it into three different townships, giving them the names of Putney, Fullum and Brattleborough. A charter from New Hampshire dated Dec. 27, 1753, was issued to Stoddard and 56 others for the middle tract of 19,360 acres named Fullam (Fullum, Fullhum) and Dummerston, the latter being preferred by the residents, in honor of former Lieutenant-Governor William Dummer.

In 1760 George III ascended to the throne of England and took a political interest in the American colonies. He favored Tory policies which supported New York's claim to all the land westward from the west bank of the Connecticut River. So in 1766 the town, still officially Fullum, was rechartered by Governor Tryon of New York as part of his territory. This created monumental problems for those who were striving to conform to New Hampshire Grant obligations—and excessive taxes from New York's tyranny. Many homes were destroyed or confiscated by New York officials. Later it was decreed that New York's eastern boundary was 20 miles east of the Hudson River. This returned the Grants to their proper independent status under New Hampshire control. (It was not until 1937 that town officials, after much consideration and research, decided to seek a new charter. The State of Vermont added to the original charter its official seal granting the change of name from Fullum to Dummerston.)

The first recorded house in Dummerston was a log structure, built in 1754 by John Kathan and family, although they had resided in Dummerston since January of 1752. John Kathan and his wife, Martha Moore, came from England in the year 1729 and probably resided in Worcester, Massachusetts before coming to Dummerston. The house was located on the brook north of Putney Depot, then a part of Dummerston. The first bricks used in town were made by John Kathan. The foundation of the dam of the sawmill can still be seen, having been below the water line for over 160 years. Indians burned the mill in 1773. Following John Kathan and his associates, other settlers continued to arrive, many coming from Deerfield Valley, having had their homes destroyed by hostile Indians.

The settlement numbering 189 in 1771, it was thought best to have some form of government. On January 21 a call was issued by 14 of the settlers, warning all the freeholders to meet at the house of Isaac Miller on the first Monday in March, to act on some articles of the warrant. This meeting was probably held in the room now used as a kitchen by the family of John E. Walker, the ell part of which is the oldest framed house now standing in town. The first article was to

appoint individuals to be officers, moderator and clerk and, to carry out specific tasks, "to choose a spot to set the meeting house." This was the beginning of the format of town government that has been followed ever since. The construction of a Meeting House was begun in 1773. Until it was completed and heated in 1775, town meeting continued to be held in various houses.

The meeting house was also intended for religious observance, and a minister was hired. The town by way of taxes supported the meeting house and the minister. Payments were divided into three units of "grain, neat stock, and hard mony", according to the individual's ability to pay, each unit to be paid at a specified time. In 1804 the support of the Church was changed from taxation to voluntary giving. On September 13, 1813 the Town Meeting members voted to give the building to the Congregational Society, with the conditions that the Society keep it in good repair, and that they allow Town Meetings to be held there. When in 1842 the present Church building was erected and the original meeting house taken down, a section of the basement in the new building was set aside for town use. Meetings were held there until the population outgrew the space provided, at which time the Grange Halls became meeting places.

Dummerston celebrated the 250th anniversary of the 1753 signing of its charter throughout 2003 and spring of 2004 with
events, projects and programs enjoyed by all.

Geography

The Town of Dummerston, approximately 30 square miles (19,200 acres) in size, is located in Windham County in southeastern Vermont. The Town is bordered by five Vermont towns—Brattleboro, Marlboro, Newfane, Brookline, and Putney—and by Chesterfield and Westmoreland in New Hampshire. Brattleboro is considered the Region's major growth center, providing the bulk of services and employment for Dummerston residents.

The physical characteristics of Dummerston are dominated by two rivers: the Connecticut River, which forms the eastern boundary to the Town, and the West River, which flows through Dummerston before joining the Connecticut River in Brattleboro.

The topography of Dummerston is varied, being relatively flat in the Connecticut River Valley and quite hilly elsewhere in the Town. The highest point is Black Mountain (382 meters or 1253 feet), a dominant landmark located between the river valleys in the southern part of Town. Smaller hills include Prospect Hill, Dummerston Hill, and Wickopee Hill.

State Routes 30 and 5 are the main roads serving the community. Dummerston is served by I-91 both at the south and north ends of town (Exit 3 in Brattleboro and Exit 4, which is partly in Dummerston and partly in Putney). Dummerston is located only a few miles north of Route 9, the major east-west corridor linking Brattleboro with Bennington and Keene, New Hampshire. The East-West Road

from Route 30 to Route 5 is also an important road used by both local and regional commuters.

Population Growth and Projections

Overall, Dummerston's population has steadily increased since 1940, as shown in Table 1 below. The most significant increase in population occurred during the period 1960-1970 (48.51%). The following decade (1970-1980) saw less growth (21.54%). By 2000, the population of Dummerston had grown to 1,915 permanent residents.

Table 1. Historical Population Data -- Town of Dummerston, VT

Year	Population	Change	% Change
1940	615	--	--
1950	790	175	28.5
1960	872	82	10.4
1970	1,295	423	48.5
1980	1,574	279	21.5
1990	1,863	289	18.4
2000	1,915	52	2.8

Source: U.S. Bureau of the Census, 2000

The towns surrounding Dummerston have also experienced increased growth in the last decade. Table 2 compares Dummerston's growth with that of other nearby towns, Windham and Cheshire Counties, and the State of Vermont. According to the Vermont Office of Policy, Research and Coordination, this population growth is primarily a result of net migration.

Table 2. Population Trends in Nearby Towns and Comparative Areas (1990-2000)

Town/Area	1990	2000	% Change
Dummerston	1,863	1,915	2.8
Brattleboro	12,241	12,005	-1.9
Marlboro	924	978	5.8
Vernon	1,850	2,141	15.7
Guilford	1,941	2,046	5.4
Newfane	1,555	1,680	8.0
Brookline	403	467	15.9
Putney	2,352	2,634	12.0
Chesterfield, NH	3,112	3,542	13.8
Westmoreland, NH	1,596	1,747	9.5
Windham Co.	41,588	44,216	6.3
Cheshire Co. NH	70,121	73,825	5.3
State of VT	562,758	608,827	8.2

Source: U.S. Bureau of the Census, 2000

Table 3 represents population projections for Dummerston, which are based on data from the 2000 Census. The projections indicate a small but increasing population decline in Dummerston over the next 15 years.

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Table 3. Population Projections -- Town of Dummerston

	1990	2000	Population Projection			
Year	Census	Census	2005	2010	2015	2020
Count	1863	1915	1919	1898	1869	1839

Source: Dummerston Population Projections, 2005-2020, Vermont Department of Aging and Disabilities.

Housing

Dummerston is primarily a residential community. Most of Dummerston's residents are permanent and live in single family detached dwellings. Vacation or seasonal homes account for about 8% of the total housing stock. Table 4 compares the number and percent of permanent and vacation/seasonal housing units.

Table 4. Year-round and Vacation Housing Units, 1990 and 2000

	1990	2000
Permanent	778	820
Vacation/Seasonal	79	73
Total	857	893

Source: The Windham Regional Commission's Profile for the Town of Dummerston.

Since 1990, the total number of housing units has increased by 36 units, representing a 4% increase over the ten year period. Between 1980 and 1990, the number of housing units grew by 146 units, or 21%. Neighboring towns had the following percent change in number of housing units for the period 1990-2000: Brattleboro (2%), Putney (3%), Marlboro (5%), Brookline (2%) and Newfane (0%). Dummerston's vacation/seasonal housing supply has decreased since 1990. The likely cause of this is the conversion of this type of housing to permanent year-round housing.

When comparing Census data with local Board of Listers data it should be noted that there is some discrepancy. The grand list figures differ from the 2000 Census figures principally because the Bureau of Census counts living units while the Board of Listers counts taxable structures. For example, a multi-family structure with three apartments would be counted as 3 living units by the Census and as 1 taxable unit by the Board of Listers. Table 5 includes the total number of permanent and vacation homes as recorded by the Board of Listers for tax purposes.

Table 5. Dummerston Grand List Housing Statistics

	1990	1992	1999	2003
Permanent Homes	658	669	712	678
Vacation Homes	95	93	84	67
Total	753	762	796	745

Source: Dummerston Board of Listers, Grand Lists for 1990, 1992, 1999, 2003.

Between 1970 and 2000, the average household size dropped from 3 to 2.41 persons, reflecting a national trend in smaller household units.
The 2000 Census provides other up-to-date statistics on housing types and age of housing, as shown in the following tables.

Table 6. Housing Types in Dummerston

Housing Type	Count
1 unit detached structure	765
1 unit attached structure	6
2 - 4 units in structure	35
10 or more units in structure	15
Mobile homes	72
Total Housing Units	893

Source: U.S. Bureau of the Census, 2000.

Of the 893 housing units at the time of the 2000 Census, 796 were occupied and 97 were unoccupied. Of the occupied units, 642 were owner-occupied and 154 were renter-occupied. Of the 97 unoccupied units, there were: 5 for rent, 8 for sale, 2 rented or sold but not occupied, and 73 seasonal units.

Table 7. Age of Housing

Year built	Number of Houses	Percent
Prior to 1939	239	27
1940-1959	104	12
1960-1969	139	16
1970-1979	173	19
1980-1989	145	16
1990-2000	93	10

Source: U.S. Bureau of the Census, 2000.

Economy

Dummerston has evolved from an agrarian community with the majority of its residents engaged in farming, forestry, mining, and various forms of entrepreneurship within the Town, to a community where most residents work in neighboring towns. Brattleboro is an important employment center as well as a provider of necessary services and shopping for Dummerston residents. Some Dummerston residents work locally for the Town, for small commercial enterprises, or are self-employed, with either small businesses or home occupations.

According to the 2000 Census, median household income in Dummerston in 1999 was $46,121. This figure takes into account income derived from wages and salaries, self-employment, farm employment, Social Security, public assistance, and retirement. Of the employed persons 16 years old and over in Dummerston, 76% are private wage and salary workers, 12% are self-employed,

and 12% are either local, state or federal government workers. The following list of occupations demonstrates a full range of job types in Dummerston.

Table 8. Occupations of Employed Persons Aged 16 and Over Town of Dummerston

	Number	Percent (%)
• Management, professional and related occupations	453	47
• Service occupations	124	11
• Sales and office occupations	236	22
• Farming, forestry, and fishing	17	2
• Construction, extraction, and maintenance occupations	104	10
• Production, transportation, and material moving occupations	156	14
Total employed persons 16 and over	1,090	100%

Source: U.S. Bureau of the Census, 2000

According to the Vermont Department of Employment and Training, Dummerston reported 44 work sites, employing a total of 269 people, with average wages of $27,463 for 2000. Although these figures provide some insight to the employment picture of Dummerston, this data refers to employees and their wages in firms subject to unemployment laws. Workers not necessarily included are the self-employed, elected officials, employees of certain non-profit organizations, unpaid family members, some agricultural workers and railroad workers.

Town Government

The government of the Town of Dummerston derives its authority from its general charter and from the Vermont Constitution. There are five selectmen for the Town. Three serve for three-year terms. Two serve for two-year terms. Selectmen are responsible for the general supervision of the affairs of the Town and must see that all duties imposed by Vermont State Statutes upon towns and school districts are performed.

The Town functions through the active participation of its residents and volunteer groups. Residents serve on various boards and committees and either join or financially support various associations in Town. The Town employs four road workers and provides wages to the following elected officials: Town Clerk, Town Treasurer, Selectboard, Auditors, and Listers; and to the following appointed officials: Zoning Administrator and Health Officer. The Dummerston Town School District employs 42 individuals involved with administration, teaching, support services, and health services.

The Dummerston Planning Commission consists of eight members who are appointed by the Selectboard. The Commission is responsible for the following: writing the Town Plan and keeping it up-to-date; determining measures to implement the Town Plan; writing bylaws and any changes thereto; hearing all applications for site plan approval, planned residential and planned unit developments, and rights-of-way; and performing any pertinent planning studies.

The Dummerston Zoning Board of Adjustment (ZBA), also appointed by the Selectboard, consists of five members. The ZBA is responsible for hearing all zoning appeals of the decisions of the Administrative Officer, variance requests, and conditional use applications.

The Dummerston Conservation Commission was established by the Selectboard in 1990. The Commission is comprised of nine members and is responsible for the protection and management of natural resources and cultural resources in Town. For a complete listing of elected and appointed officials, see the latest Dummerston Annual Report.

A number of ordinances and bylaws are in force in the Town of Dummerston, including: Wireless Telecommunication Facilities Ordinance, Trailer Park Ordinance, Traffic Ordinance (speed limits), Road Acceptance Ordinance, and Zoning Bylaws (including flood hazard regulations). A Sewage Ordinance, regulating the design and placement of on-site septic systems, was adopted by the Selectmen in 1993, then rejected by the town through a special town meeting.

Local Revenue and Fiscal Conditions

Local revenue is generated through property taxes, state funds, permits and licenses, fees and charges for services, and other miscellaneous reimbursements. Property taxes generated a total of $2,109,874 in 1993, $2,498,862 in 1998, and $3,532,840 in 2003.

Expenditures were disbursed as follows (by Town department):

Table 9. Dummerston Annual Expenditures—1993, 1998, and 2003

	Year Ending		
Town Department	6/30/93	6/30/98	6/30/03
General Government	$86,612	$124,770	$148,924
Public Safety	53,814	52,332	83,033
Emergency Management			24,890
Public Works	330,541	390,958	438,971
Health and Welfare	7,528	8,260	8,800
County Tax			14,772
Miscellaneous	12,231	15,909	17,488
Subtotal	$490,725	$592,229	$736,878
Elementary School	1,446,413	1,836,366	2,837,467
Brattleboro Union H.S.	471,681	592,897	708,765
Windham SE Sup. Union	61,819	72,193	103,313
Subtotal	$1,979,913	$2,501,456	$3,649,545
TOTAL	$2,470,638	$3,093,685	$4,386,423

Source: Annual Reports, 1993, 1998, and 2003

Identity of the Town

The town consists of three separate village communities: West Dummerston, Dummerston Center, and Slab Hollow. West Dummerston has one Church now used as a private residence, a fire station, the old West Dummerston Grange building now used as a performing arts center, a library, one store, and a post office, all of which serve as focal points for community life. The West Dummerston School was consolidated into the East School in 1995, and the West School is now the Dummerston Community Center, which houses the library and serves as a community meeting place. Dummerston Center has a church, a fire station, the Grange, the Town Office, and the Historical Society. Slab Hollow, which in years past had a post office and some industry, now is just a community of homes. Neither West Dummerston nor Dummerston Center has the retail stores or small businesses that would make these villages even more a focus of community life. Many of the residents of Dummerston work and shop in Brattleboro.

Maintaining the Town's sense of itself as a unique community may become a challenge in the years to come because of regional pressures. One factor that will affect the town is the likelihood of pressure for increased business development along Route 5, particularly extending up from Exit 3 of I-91. A second factor that could affect the identity of the town is the increased traffic along the East-West and Middle Roads. These roads bisect Dummerston Center

and one of them, the East-West Road, is already named a “minor collector” in the regional transportation maps because of its use by regional commuters. Increased traffic through the Center will adversely affect the quality of village life there.

GOALS OF DUMMERSTON

The following goals shall serve to guide Dummerston in its overall planning process. These goals are statements of the end results or conditions desired by Dummerston. They are expressions of the community's economic, environmental, cultural and social values.
In developing this list of goals, the Dummerston Planning Commission included goal statements from previous Town Plans adopted by the community, and considered the Vermont Planning Goals as set forth in the Vermont Municipal and Regional Planning and Development Act (Chapter 117 ß 4302). The stated goals shall serve as the foundation of this Town Plan and are further clarified and defined by policies and action steps found in the TOWN PLAN ELEMENTS AND STATEMENTS.

In planning for the future of Dummerston, it is a goal of the Town:

1. To engage in a comprehensive planning program that establishes a policy framework and guides community decision making and action.
2. To maintain a strong and effective local government based on broad citizen participation and officials who generally serve without compensation.
3. To cooperate with surrounding communities to ensure mutual provision of basic needs and a sound economy.
4. To consider the use of resources and the consequences of growth and development in the Region and the State, as well as in the Town of Dummerston.
5. To promote a land use settlement pattern that serves to maintain Dummerston's rural character.
6. To discourage incompatible and uncoordinated development activity that will jeopardize public and private investments.
7. To protect existing residential areas from incompatible commercial or industrial activity.
8. To encourage a strong, stable, and balanced rural economy that provides satisfying and rewarding employment opportunities to meet the needs of Dummerston's residents.
9. To provide for the public health, safety, education, and general welfare of the community.
10. To help meet the housing needs of Dummerston residents, who represent a wide range of income levels.
11. To provide an efficient system of community facilities and services to meet future needs.

12. To encourage the efficient use of energy and the development of renewable energy resources.
13. To provide for safe, convenient, economical, and energy-efficient transportation systems that respect the integrity of the natural and social environment.
14. To maintain and improve the quality of air and water.
15. To protect significant natural areas and locations of special educational, scientific, historical, architectural, archaeological, and scenic significance.
16. To encourage and support the continued use of lands for agriculture, forestry, wildlife habitat, and diversified recreation.
17. To maintain the Town's identity as a unique community and to be alert to regional trends that could affect this identity.
18. To consider the recommendations of the *Connecticut River Corridor Management Plan*, prepared by the Connecticut River Joint Commissions (May 1997), and whether these recommendations should be implemented in Dummerston.

TOWN PLAN ELEMENTS AND STATEMENTS

COMMUNITY FACILITIES AND SERVICES

Community facilities are those either owned or maintained by the Town of Dummerston, and include structures, lands, and equipment. Community services are those provided either directly by the Town or by others under contract with the Town. (Transportation facilities and education facilities are described in their own chapters, which follow.)
In order to anticipate facilities and service problems and take advantage of opportunities for service efficiencies, this chapter and the Transportation and Education chapters identify capital needs and projects over the next 5 years. A capital need or project is any major, non-recurring expenditure, such as land or road equipment purchase, or building construction or improvement. These differ from regular, ongoing operating and administrative expenses, such as salaries, utilities, and road maintenance.

Town Property

The Dummerston Town Offices, located in Dummerston Center, house the Town Clerk's office, a meeting room, and office space shared by the Selectboard, Board of Listers, Zoning Board of Appeals, Planning Commission, Conservation Commission, Civil Defense/Emergency Planning Committee, Auditors, Board of Civil Authority, and other civic or community groups. Adjacent to the Town Offices is the Dummerston Historical Society building, which was originally a one-room schoolhouse. It is now used for Historical Society meetings and displays.

The Town Garage, also located in Dummerston Center, provides storage for all Town Highway Department equipment, including sand and salt for roadwork. The Town jointly owns a crusher (and screener) with the Town of Putney.

The Dummerston Community Center, located in West Dummerston in the former school building, houses the town library and provides meeting space for community groups. An outdoor adventure school uses the Community Center for office and organizing space.

Recreation facilities owned and maintained by the Town consist of the parking area adjacent to the Covered Bridge Prospect Hill, a playground at the Dummerston School, the old West School playground at the Dummerston Community Center, a town trail (Prospect Hill Trail), and Class 4 roads.

The Selectboard owns and is responsible for maintaining Town cemeteries.

Fire Protection and Emergency Services

The West Dummerston Volunteer Fire Department (an independent corporation) was formed in 1949 and initially owned a portable pump and 1,000 feet of hose which were hung in the old Church horse sheds so a pickup truck could load it and be off to a fire. In 1950, a pickup truck was purchased and converted to a fire truck. Soon after a fire pool was built on land donated by Frank Leonard, with a capacity of 14,000 gallons of water.

In 1965, a substation was completed in Dummerston Center on land donated by Harold and Rena Reed. Money for this project was raised by the Evening Star Grange. In 1972, a new fire station was constructed in West Dummerston on land acquired from Sylvio and Mary Forrett. By 1986, the Fire Department had five fully equipped trucks and an emergency truck along with 30 active members. Today, the Fire Department's inventory includes four pumper trucks, one rescue truck, and one pick-up truck. One of the pumper trucks was purchased new in 1998.

The Fire Department is a non-profit entity and successfully operates only because of the dedication of the personnel, who volunteer their services. Only 16 members of the Department are considered active firefighters. The Department is a member of the Southwest Mutual Aid. This association enables the Fire Department to receive firefighting assistance or back-up service from other member fire companies. The Town provides monetary support to the Fire Department, which owns the buildings and owns or leases equipment discussed above.
The Rescue Squad is part of the Fire Department. The unit, formed in 1964, is made up of nine members. The many awards presented to the Dummerston Rescue Squad testify to the quality of service and ability of its members.

The Town also contracts with Rescue, Inc. for emergency medical and ambulance services. Dummerston maintains representation in the regional Civil Defense and Emergency Planning Committee, which responds to any radiological incident at Vermont Yankee Nuclear Plant that may affect an area within the ten mile emergency planning zone for Vermont Yankee, located in Vernon. (A portion of Dummerston is located within that ten-mile zone.) An emergency plan is in place and regular practice exercises are conducted, as required by state and federal governments.

Police Protection

Police protection is provided by the Vermont State Police stationed in West Brattleboro. The Town also has a contract with the Windham County Sheriff's Department. Adequate police protection is expected to be a growing concern as the Town and Region grow, and as increased traffic is generated.

911 Emergency Service

In 1999, following an extensive effort to name all roads (both public and private) and establish street addresses for all houses, 911 emergency calling service was brought to Dummerston and the rest of Vermont. While Vermont was one of the last states to obtain universal 911 emergency service, we have one of the most advanced 911 systems in the nation. "Caller ID" identifies callers and provides the 911 dispatcher and emergency personnel with information on how to get to the residence. This system has already saved lives in the state.

Solid Waste Disposal

The Town does not provide refuse collection. Residents, businesses, and public facilities may contract with one of several private waste haulers for weekly pick-up or bring their refuse to the District Convenience Center/Transfer Station operated by the Windham Solid Waste Management District (WSWMD) in Brattleboro with the purchase of a yearly permit. Refuse incineration in backyard barrels or in wood stoves is prohibited by Vermont regulations because it generates air pollution.

Dummerston is one of eighteen municipal members of the WSWMD that currently operates a Convenience Center/Transfer Station and Materials Recovery Facility (MRF) on Old Ferry Road in Brattleboro. Dummerston has been a voting member of WSWMD since the District's formation in 1987. According to the 1990 Phase II Report on Waste Quantities and Management Options by the Windham Regional Commission, it is estimated that Dummerston generated 1,750 tons of solid waste in 1987 out of a District total of 39,550 tons. Recent WSWMD figures indicate that Dummerston generated 126 tons of trash and 48 tons of construction/demolition materials in 2003. WSWMD also estimates that Dummerston recycled 120 tons of paper and 52 tons of commingled glass, tin, aluminum, and plastic in 2003.

Since the closing of the Brattleboro landfill in 1995, a transfer station has been set up at the site of the capped landfill. Materials managed by WSWMD include daily trash, batteries, tires, appliances, metals, bicycles, lawn mowers, yard waste, glass, newspaper, cans, bulky goods, recyclable plastic, and other nonresidential wastes. Some materials are processed by the District, with a private contractor handling the remainder of the District's waste. WSWMD also operates the SWAP program, in which people can drop off or pick up reusable products (televisions, furniture, lumber, etc.). A storage building for SWAP was completed in 2000, providing more protected storage of goods. The facility is staffed on Saturdays.

The facility also receives and recycles fluorescent lamps, household batteries, and automobile tires. PCB-containing fluorescent ballasts are collected and shipped to a licensed recycling facility out-of-state. The district typically sponsors a Household Hazardous Waste collection day annually at three

locations in the District. Paints will be accepted on a regular basis at the Convenience Center. The Vermont Agency of Natural Resources (ANR) has certified the WSWMD facility for the regular collection and storage of paints.

Dummerston currently has one recycling facility located at the Town Garage. A second site at the gas station on Route 30 was closed in the fall of 2003 due to excessive dumping of non-recyclables. Recycling in Dummerston increased 30% between 1999 and 2003.

The District attempted to site a new, lined landfill in the district in the early 1990s and considered the primary site for in-depth study to be the "D-4" site in East Dummerston. In response, on November 8, 1993 Dummerston held a non-binding referendum that asked residents "Should the Selectboard of the Town of Dummerston accept the siting of a municipal solid waste landfill within the town at the currently proposed sites (known as D-4 and D-5) and negotiate a host agreement with respect thereto?" The vote was No - 446 (against the siting), Yes - 42 (in support of the siting), and one abstention. In September of 1995 the District Board voted not to pursue the D-4 site "for the foreseeable future," and the entire landfill siting process is currently on hold.

Libraries

The Lydia Pratt Taft Library is located in the Dummerston Community Center. The only town library, it is named for a former teacher, Lydia Pratt Taft, whose last wish was that the small library of books she had used as a teacher at the Bridge School in West Dummerston become part of a village library. For many years the books were moved from home to home of new volunteer librarians until after 1921, when the Grange members renovated the cloak room at the West Dummerston Grange to be used as a library. The library became inactive in 1974, but reopened in 1979 and receives several thousand dollars of town support annually. Invested endowments as well as donations also provide library support. In 1995 the library moved into the Dummerston Community Center—the old West School.

The Southeast Regional Library, formerly located on Route 5 in Dummerston, was closed in 2001. Many Dummerston residents use Brooks Memorial Library in Brattleboro; an annual fee must be paid by non-Brattleboro residents to get a library lending card.

Health Care and Human Services

Most of the health and medical needs of Town citizens are met through the Brattleboro Memorial Hospital, Grace Cottage Hospital, Keene Clinic, or private medical professionals. Social service agencies are funded annually by the voters of Dummerston. These include Retired Senior Volunteer Program, The Gathering Place, Council on Aging for Southeastern Vermont, Women's Crisis Center, Grace Cottage Foundation and Vermont Adult Learning. It appears at present

that adequate health care services are available to meet the needs of the Town's residents.

Town Policies:

1. The Town is required by law to provide for responsible management of solid waste, either on its own, or as a member of a solid waste management district. Participation in the Windham Solid Waste Management District should be continued.
2. Proposals for development must include adequate provision for disposal of wastes, including separation and collection of recyclable materials.
3. The Town shall ensure that no privately owned and/or operated landfills, incinerators, or hazardous waste facilities are developed in Dummerston, and that any proposed publicly owned and/or operated landfills, incinerators, or hazardous waste facilities be subject to approval by a majority of Dummerston voters.
4. Growth and development in Town should take adequate account of the capacities of Dummerston's community facilities and services.
5. Any construction or expansion of community facilities and services should support development in Dummerston's villages so as to minimize growth in outlying areas and development along Dummerston's roadways.
6. The construction or expansion of community facilities and services as well as public utilities should take place with minimum impacts on natural and cultural resources of the community and the community's residents.
7. The Town should not take over privately owned facilities such as roads, water systems, or sewage systems unless such would be in the interest of the Town.
8. Larger developments shall provide a water supply sufficient for fire protection purposes.

Action Steps (The responsible party is listed following each action step):

1. Examine on a regular basis the adequacy of Dummerston's community facilities and services. Consider the need for increased or decreased facilities and services and explore with surrounding towns the feasibility of cooperative facilities and services [Selectboard].
2. Form an ad-hoc committee to examine the adequacy of police protection in the Town [Selectboard].

TRANSPORTATION

Dummerston's network of roads includes town roads, plus state and federal highways. State Routes 5 and 30 serve as Dummerston's main arteries for both daily commuting and through-traffic, and they serve both residents and visitors. Both routes run generally in a north-south direction. Some residents in the southwestern corner of Dummerston use Route 9 to gain easier access to Brattleboro.

Interstate 91 passes through Dummerston following the Connecticut River Valley, providing direct access to Dummerston's road network near the Putney town line. Other interchanges are located south in Brattleboro. The tracks of the Boston and Maine Railroad follow the shores of the Connecticut River.

With commercial development expansion to the south in Brattleboro, Route 5 through Dummerston is being used more and more. Traffic counts indicate that there has been a steady increase in annual average daily traffic along Route 5. Route 30 is also seeing increased expansion of use, primarily due to increases in permanent population in West River Valley towns as well as expanded facilities at ski resorts, particularly Mount Snow and Stratton Mountain.

The East-West Road, Rice Farm Road, Black Mountain Road, Kipling Road, and Middle Road are serving as links between Routes 5 and 30. As Putney Road in Brattleboro becomes more congested, increased traffic on these alternate routes to and from the north end of Brattleboro may be expected. Other roads in Town, most of which are gravel, accommodate much of the locally generated traffic and serve as collectors to Routes 5 and 30.

Table 10. Dummerston Road Classification

	Town Highway Class				
	Class 1	Class 2	Class 3	Class 4	Total
Mileage	0	12.37 paved	49.07 gravel	3.44 gravel	64.88

State highways 16.32

Interstate 91 (approx.)..... 5.35

Total highway mileage in Dummerston..... 86.55

Source: Agency of Transportation (See 19 VSA ß 302 for definitions)

Dummerston has a total of 44 bridges, of which 12 are maintained by the State and the remaining 32 are owned and maintained by the Town. Many of these bridges are structurally deficient and in need of repair. Dummerston's Covered Bridge was completely restored and brought up to sufficient standards for most uses during 1997 and 1998, with a dedication on June 20, 1998. The Iron Bridge spanning the West River is also considered a valuable historic asset to the Town. This bridge is currently closed and in drastic need of repair. Options for restoring the Iron Bridge are currently being considered.

Traffic flow through Dummerston is an ongoing concern and problem. The increase in east-west traffic through Dummerston can be expected to continue. The Town must also concern itself with Route 5, being an extension of Putney Road in Brattleboro. Traffic flow and safety of individuals as well as land use change on Route 5 are problems that need to be addressed. Excessive speed on Dummerston's town roads is of particular concern.

Routes 5, 30, and Interstate 91 constitute Dummerston's main travel corridors. Located along the roadsides of these travel corridors are certain amenities such as the Connecticut and West Rivers, open and active farmland, and forested slopes and ridge tops. Residents and visitors derive enjoyment from these natural and pastoral landscapes. The scenic beauty of rural Dummerston is vital to tourism and the recreation industry. These industries are playing an increasingly large and important role in the economic base of this region.

Many of Dummerston's local roads provide vistas of high scenic value. These routes are enjoyed by motorists, pedestrians, and bicyclists. This is true even when the scale of the road and character of the corridor might not seem to be important to the Town as it is not uncommon in Dummerston to find narrow dirt roads lined by stone walls, large trees, fences, historic villages and other sites.

Presently, the majority of Town-maintained parking facilities are located at Town-owned buildings. The State of Vermont transferred ownership of the Covered Bridge parking site to the Town in 2003. The State continues to own several parking sites in Dummerston; these are principally used for recreational access to the Connecticut and West Rivers.

The Dummerston Highway Department employs four road workers who are responsible for maintaining Dummerston's local roads and road equipment. The Highway Department has four dump trucks with sanders, two one-ton trucks, one screening plant and one crusher, both owned with Putney, and assorted pieces of small equipment. The town has a ten-year Capital Budget with the intent of replacing one item of major equipment or building repair per year.

A private airport, owned by Station Road Enterprises, serves only small, single engine aircraft.

Town Policies:

1. Dummerston roads and bridges should be adequately maintained to ensure safety.
2. Construction of new roads or road improvements should be carried out in strict conformance with Dummerston's Town Road Specifications.
3. The Town should coordinate with the Agency of Transportation and neighboring towns in planning for road and bridge improvements along Routes 30 and 5, the Interstate, and all bridges, to ensure adequate road and bridge capacities without damage to the rural environment of Dummerston.
4. The retention of Class 4 roads and legal trails for recreational use is encouraged. Any town roads Class 4 or of legal trail status should be made available for recreational purposes, to the extent possible without causing property damage or resulting in nuisances to surrounding landowners.
5. The retention of current Class 3 through-roads for public use shall be encouraged.
6. Community services that provide transportation to the elderly and physically handicapped should be encouraged by the Town.
7. The development of pedestrian and bicycle paths or lanes as alternative and safe modes of travel should be promoted and encouraged in general and in particular with the expansion of any highway.

Action Steps (The responsible party is listed following each action step):

1. Consider the need for additional public parking facilities for access to certain recreational areas in Town, especially along the West and Connecticut Rivers and their tributaries. If needed, acquire land and ensure that the use of any such area does not impair the visual, architectural, or historical significance of the surrounding area [Road Foreman and Selectboard].
2. Review and update road and bridge condition status annually to reflect the priority of needed improvements. Make recommendations for short and long-term improvements [Road Foreman and Selectboard].
3. Identify scenic vistas along Dummerston's travel corridors [Conservation Commission].
4. Determine whether Dummerston should designate scenic roads (either local or State) under the Scenic Highway Law (19 VSA ß 1019), to ensure

that future road maintenance and construction activities are carried out in a manner that is consistent with the scenic quality of the area [Planning Commission].

5. Monitor motor fuel availability and costs, and determine how these factors may affect the future of public transit in Dummerston [Planning Commission].

6. Consider Town Road Specifications to make them better fit the needs and requirements of rural roads in Dummerston [Planning Commission, Selectboard, and Road Foreman].

7. Develop strategies for controlling excessive speed on Dummerston's roads and highways [Selectboard]

EDUCATION & CHILDCARE

Education is valued and supported by the Dummerston community. Our schools play an essential role in preparing our students to become knowledgeable, responsible, and caring adults. As are other schools in the Windham Southeast Supervisory Union, the Dummerston School is developing an Action Plan focused on improving student performance. These plans are part of the quality component of Act 60. Dummerston has an Action Planning Committee that is made up of teachers, citizens, and School Board members dedicated to charting the course for improved learning for all our students. Dummerston's Action Planning Committee will provide specific assessment information so that community members can compare testing data from year to year. Action Planning is key to continuous school improvement. It allows for a mapping out of tasks that will result in improved student performance for all students and enable quicker and more reliable interventions when needed.

Dummerston teachers provide a scholastically challenging and educationally enriched environment based on the collaboration of faculty, staff, School Board directors, parents, and community volunteers. This collaborative effort is what provides the momentum to sustain the quality of education that we have in Dummerston.
Dummerston recognizes that it is critical to ensure accessible, affordable and quality childcare as an integral component in sound educational and economic planning. Many if not most Dummerston families with children under the age of five lead lives that require full or at least part-time child care outside their homes.

Overview of Dummerston's Education system
In 1995 construction was completed on the East Dummerston School to accommodate grades K-2 upon closing of the West School. The Dummerston School now includes grades K-8. In the 2003-2004 school year, 184 students were enrolled in Dummerston, while 83 Dummerston students attended Brattleboro Union High School.

The Dummerston School Board is responsible for the quality of education in Dummerston. One resident is elected by the town to represent the town's interests on the Brattleboro Union High School Board.
It is the intent of this Town Plan to ensure that high priority is given to the education of our children. Our public schools must produce graduates who are prepared to meet the challenges that await them.
Dummerston also recognizes the educational needs of its youngest population, and the need for affordable and quality day care options. There is currently one licensed day care center and 3 registered family child care homes in Dummerston. The town library provides educational opportunities for

pre-school children with its pre-school hour and arts activities and the Bookmobile provides books and materials over the summer months.

Interestingly, the number of children under the age of 5 in Dummerston decreased by 43% between 1990 and 2000, which mirrors the general trend in Windham County. In addition, it is clear that many Dummerston residents avail themselves of day care in Brattleboro and elsewhere. It is therefore assumed that access to child care in Dummerston should improve over the next decade, if the current facilities remain available.

Town Policies:

1. Dummerston's capacity to continue to provide quality education should be taken into account in the Town's response to new development in the town and region.
2. The town should support the Action Planning process, which provides for improving student performance as well as accountability to standards established through Act 60.
3. Creative methods should be sought to improve public education without increasing expenditures.
4. Efforts should be made to improve literacy at all age levels.
5. School facilities should continue to be made available to community groups for evening or weekend programs, for recreational programs, and for adult educational programs throughout the year.
6. Dummerston's capacity to continue to provide quality child care for its youngest population should be taken into account in the Town's response to new development in the town and region.

Action Steps (Responsible party is listed following each action step):

1. Evaluate on an ongoing basis the transportation policy for Dummerston students [School Board].
2. Investigate the possibilities of obtaining a more beneficial state-aid-to-education formula for Dummerston [Selectboard, School Board].
3. Maintain an inventory of all child care programs in the town and their capacity [Planning Commission].
4. Investigate the possibility of providing a property tax abatement for child care providers [Selectboard].
5. Continue to support opportunities in Dummerston for child care providers to enhance their programs [School Board, Selectboard, Library].

6. Investigate the possibility of using the Dummerston School for child care in the coming years, if the overall population of school age children continues to decline as projected [School Board].

ENERGY

Importance of Energy Planning

Energy is an important factor in the economic, environmental, and social well-being of Dummerston. The cost of energy in Dummerston, including residential, commercial, and governmental use (heating, electricity, transportation, etc.) is estimated to be more than $1 million per year. Because a large majority of this energy is imported from outside of the Town and Windham Region, most of the money spent on energy does not directly benefit the local economy. Efforts to reduce use of energy sources from outside the Town or shift reliance to locally produced energy can strengthen the local economy.

From an environmental standpoint, energy is the root cause of many of our most significant problems, both short and long-term. Any efforts to reduce the use of energy and shift to environmentally benign energy sources will benefit the Town's environment.

Energy policies have traditionally been the responsibility of State, Federal and international bodies, with relatively little role for local governments. While Dummerston can do little to shift these broader policies, we can influence energy use and production on a local level. We hope here to address actions for reducing energy use that can be taken on a local level.

Overview of Current Energy Use

Dummerston's energy use patterns closely match those of Vermont, which are shown in Table 11. In Dummerston, natural gas is not available, so the proportion of oil, propane, and electricity might be slightly higher than that shown for the entire State.

Table 11. Vermont Energy Consumption and Expenditures, 1990

Fuel Type	Consumption (trill Btu/yr)	Total Cost (mill $/year)	% of Total Consumption	% of Total Expenditures
Oil	62.54	570	64.6	50
Electric	16.96	468	17.5	41
Wood	7.87	35.5	8.1	3
Natural Gas	5.52	31.7	5.7	3
Propane	3.46	42.5	3.6	4
Coal	.45	1.53	.5	<1
Solar	.06	.33	<.1	<.1

Source: Vermont Comprehensive Energy Plan, 1991.

Home heating and automobiles account for the greatest energy use in Dummerston. In 1997, there were 796 occupied housing units in Dummerston,

and average energy use per home in New England was $1,647. Thus, total household energy use in the Town can be approximated at $1,311, 012 per year.

Because there are very few industries or businesses in Dummerston, nearly all workers who live in the Town commute to work. Most commute a minimum of six miles each way (to Brattleboro); some travel much further (to Keene, Greenfield, etc.) According to the U.S. Bureau of the Census (2000), 885 people commute to work alone and 119 carpool, for a total of 1004 commuting vehicles. If mileage for these vehicles is typical of State averages, transportation fuel use amounts to approximately 10,600 miles per vehicle per year, or $795 per year ($1.50/gallon assumed). The Town total is therefore approximately $798,180 per year.

Energy use for the Town government is much easier to quantify, since the Town budget includes energy line items. Energy line items for selected recent years are shown in Table 12.

Table 12. Annual Energy Costs for Dummerston Facilities and Services

Energy Line Item	FY90	FY96	FY98	FY02	FY03
TOWN GOVERNMENT					
Elec - Mun. Bldg	$1114	$1438	$1413	$1491	$1887
Oil - Town Gar.	812	546	664	689	529
Elec -Town Gar.	600	1011	1044	1150	1179
Equip. - gasoline	9758	2567	1931	498	0
Equip. - diesel	8456	11379	9779	9698	16069
Subtotal	$20740	$16941	$14831	$13526	$19664
SCHOOLS					
Electricity	$12699	$17889	$10854	$25142	$25308
Propane	240	0	0	0	0
Fuel Oil	5441	8023	13504	$11256	15236
Subtotal	$18380	$25912	$24358	$36398	$40544
TOTAL	$39120	$42853	$24358	$49924	$60208

Notes: School transportation contracted out, fuel cost part of overall fee.
Source: Dummerston Annual Reports

Potential for Energy Savings Through Conservation and Efficiency Improvements

With a total energy expenditure in the Town in excess of $1 million, there is considerable opportunity for savings from various energy conservation and improved efficiency measures such as using vehicles with better gas mileage, carpooling, replacing incandescent lights with fluorescent, and installing high-performance windows to reduce heat loss. Because most of the energy use in Dummerston is for private uses (home heating, commuting, etc), savings would accrue primarily to residents and policies to bring about those savings would be difficult to implement. Public education is one of the most effective strategies to bring about savings through energy conservation and improved efficiency, though there are some specific policies that can also help.

Energy Resources in Dummerston

Energy resources within Dummerston are all renewable resources: wood, solar, hydro, and wind. Currently, only wood is used on a relatively wide scale; an estimated 231 housing units use wood as the primary heating source (1990). Greater use of wood heat, however, could have adverse environmental consequences, since wood combustion produces considerable air pollution. If all residents using wood heat were to switch to state-of-the-art wood stoves that meet U.S. Environmental Protection Agency emission limits or to pellet stoves (most pellet stoves operate with emissions lower than even the best wood stoves), wood heating could increase with no increase in pollution.

Dummerston had a hydroelectric facility on the West River that operated from 1903 to 1968. Originally built by the Brattleboro Gas Light Company (later merged into Central Vermont Public Service Company), the 238-foot-long timber crib dam was 36 feet high. Two separate generating units existed at the facility: an older 320-peak kW unit, and a newer 500-kW unit, which was installed in 1934. During the last ten years of operation, the facility generated approximately 1.5 million kWh per year—enough electricity for roughly 200 households (at 1992 CVPS electricity consumption rates of 7,645 kWh/year).

Unfortunately, the dam and hydroelectric facility always had problems. The biggest problem was that the facility was built on an inside curve of the river. Sand continually filled the turbine inlet ports, resulting in premature damage and high maintenance costs. Vandalism was also a problem, especially after the facility became more automated and required less constant operator control. Finally, in 1968, part of the timber dam gave way, and the costs of repairs could not be justified, particularly in light of the new nuclear power plant soon to come on-line in Vernon. Also, efforts were underway to restore Atlantic salmon to the Connecticut watershed, so Vermont Fish and Wildlife officials had an interest in not seeing the dam rebuilt.

There are currently only two windmills known to be installed in Dummerston, and these are small wind-electric machines owned by residents. In general, small, individual wind-electric systems have not proven cost-effective, largely because of the maintenance costs and resultant down-time. The most cost-effective wind-electric systems are so-called "wind farms"—groups of many windmills installed in one location. A sizeable wind farm is located in Searsburg and operated by Green Mountain Power.

Of the energy sources available in Dummerston, solar energy offers the greatest untapped, long-term energy potential. Solar energy can be used in a number of different ways, but the most likely for widespread use are passive solar heating, natural daylighting, and solar electric generation (photovoltaics). In new home design, passive solar can decrease heating requirements by more than 50 percent. Today, the use of photovoltaics is cost-effective only for situations where utility power is more than a quarter- to half-mile away. There are several homes in Dummerston that are not connected to the utility grid and rely solely on photovoltaics for electricity.

Vision of a Shifting Energy Economy

Long-term projections of energy production and use foresee dramatic changes in the way we use energy. Petroleum production in the United States peaked around 1970, and world petroleum production will peak by the mid-21st century. As supplies dwindle, costs will almost certainly rise.

Perhaps more significantly, there is a trend toward factoring the "societal costs" into the price of energy. Although a gallon of gasoline currently costs about a $1.65 at the pump (about the same as a gallon of spring water in many stores), society bears a much higher cost for that gallon of gasoline, according to some estimates. Health costs alone due to the pollution generated from gasoline use amount to $93 billion per year in the United States, according to the American Lung Association—or about $1.00 per gallon. Society also pays for environmental clean-up, military protection of petroleum sources, and disposal of radioactive wastes. Some have argued for higher energy taxes or a carbon tax to reduce emissions of gases into the atmosphere and pay for some of these societal costs.

The bottom line is that these pressures may significantly increase the cost of conventional energy sources within the next ten to twenty years, and Dummerston should plan for such a possibility through the adoption of policies that will reduce our dependence on these energy sources.

Town Policies:

1. Promote high levels of energy conservation and solar design features in new construction projects that come under review by the Dummerston Planning Commission.
2. Encourage the use of facilities that employ renewable energy sources, such as solar water heaters (as defined in 32 VSA ß3845), by exempting such facilities from real and personal property tax.
3. Encourage the use of forest resources for heating and energy generation in a manner that sustains the resource base, maintains proper safety standards, and has minimum impact on the environment.
4. Encourage commercial and light industrial businesses to install co-generation facilities that provide both heat and electricity.
5. Incorporate strategies to reduce transportation energy use whenever possible in the planning process. For example, promote cluster housing, encourage locally based employment and telecommuting, plan bicycle and pedestrian commuting paths, and provide for public transit in development projects (e.g. by providing space for bus stops in cluster housing and commercial projects).
6. Locate energy generation facilities and transmission corridors to minimize impacts on the environment and on historic, recreational, and scenic facilities and sites.
7. Reduce outdoor lighting through the types of fixtures and timing devices.

Action Steps (The responsible party is listed following each action step):

1. Develop a packet of educational materials on energy conservation that can be made available to residents, including those seeking building permits [Planning Commission].
2. Increase public awareness of energy conservation and renewable energy sources. The Town might want to establish an ad hoc Energy Committee [Selectboard].
3. Consider energy efficiency when purchasing new or used Town equipment and reduce municipal energy use by improving energy efficiency of Town buildings [Selectboard, School Board].

SURFACE WATERS

Dummerston's rivers and streams are a valuable resource for the Town. Historically, the major streams provided drinking water for people and livestock, fishing, and "mill privileges." Due to the natural rise and falls of the stream beds, Mill Brook, Salmon Brook, and Crosby Brook all supplied the needed power to run saw, grist, shingle and other mills.

Today, rivers and streams are important in a variety of other ways. They provide valuable wildlife habitat, natural areas, and recreational opportunities, and they harbor historic resources including archaeological sites. Both the West River and the Connecticut River are part of the Connecticut River Atlantic Salmon Restoration Program and contain a diversity of fish species. Salmon and Canoe Brooks have brook, rainbow, and brown trout.

The West River, Connecticut River (where it flows by Dummerston), and most streams in Dummerston are classified by the State of Vermont as Class B waters. This classification means "suited for bathing and recreation, irrigation and agricultural uses; good fish habitat; good aesthetic value; acceptable for public water supply with filtration and disinfection." Stickney Brook is Class A from its headwaters to where water is diverted to Pleasant Valley Reservoir. This watershed in Dummerston serves as Brattleboro's public water supply. Several of Dummerston's rivers and streams occasionally flood. The Town of Dummerston has adopted flood hazard regulations as part of its zoning in order to protect these areas from unsuitable types of development.

Due to the importance of these surface waters, it is critical that they are protected. Protecting surface water quality includes stream bank management, overseeing point source discharges of wastes, and controlling non-point sources of water pollution (for example, agricultural run-off, illegal dumping and erosion from logging or construction).

Ponds and wetlands are biologically productive ecosystems and serve a variety of functions: retaining storm water runoff, reducing flood peaks, delaying flood crests, protecting groundwater quality, improving surface water quality by storing organic materials, chemically breaking down or removing pollutants, filtering eroded sediment, and providing habitat for a wide diversity of plants and animals, including waterfowl, birds, mammals, amphibians, and reptiles. These areas are an indispensable and fragile natural resource. They also provide open space adding to the overall scenic landscape of Dummerston.

The most effective way to ensure the continuation of wetland values is to protect those areas that remain. Several state and federal laws and regulations (including U.S. Army Corps of Engineers permits) provide protection for

wetlands. The Vermont Wetland Rules require state review (Conditional Use Determination) of Class 1 and 2 wetlands prior to the issuance of a local zoning permit.

The Water Resources Map shows all surface waters in Dummerston and identifies all shoreland areas, flood hazard areas, and wetlands. Shoreland areas are defined as lands falling within 500 feet of the West and Connecticut Rivers, within 250 feet of larger brooks (Fall Brook, Stickney Brook, Canoe Brook, Crosby Brook, and Salmon Brook), and within 100 feet of smaller brooks that flow year-round. These are lands that require a high level of protection from development.

The *Connecticut River Corridor Management Plan* prepared by the Connecticut River Joint Commissions (May 1997) provides an excellent discussion of the issues affecting shoreland areas, including land along the Connecticut River. As well as providing useful background information, this Plan includes numerous recommendations that could be incorporated into planning efforts in Dummerston.

Town Policies:

1. Continuous areas of undisturbed vegetation along rivers and streams should be encouraged, thereby protecting shorelines, wildlife habitat and scenic quality.
2. Through zoning and other regulations, the Town should restrict development in;
   - watersheds characterized by steep slopes and shallow soils
   - watersheds of public water supply and
   - flood hazard areas.
3. New development within or adjacent to shoreland areas must be designed to stabilize river and stream banks and cause minimal damage to the stream environment. Any such development should be so conducted that surface waters do not become silted, contaminated or otherwise degraded.
4. A naturally vegetated buffer strip between development and surface waters should be maintained.
5. Any storing or transporting of chemicals or other hazardous material should be done in such a manner so as to have no adverse effects on streams or other sources of water.
6. The use of road salts and other chemicals adjacent to sensitive areas, such as wetlands, stream crossings, and steep slopes, should be minimized.

7. Any alterations to ponds and wetlands must be in compliance with local zoning and all State and Federal laws.

Action Steps (The responsible party is listed following each action step):

1. Identify significant bodies of water for reclassification or Outstanding Resource Waters designation by the State Water Resources Board [Conservation Commission].
2. Encourage monitoring along stream and river segments to study general water quality [Conservation Commission].
3. Review zoning standards that protect ponds and wetlands [Planning Commission].
4. Establish a reliable wetlands inventory by verifying the National Wetlands Inventory [Conservation Commission with assistance from Planning Commission].
5. Develop a notebook for public use at the Town Office and Pratt Library that contains all relevant information including local, State, and Federal regulations concerning surface waters in Dummerston [Conservation Commission].

GROUNDWATER

Groundwater provides the primary supply of potable water for Dummerston residents and businesses through individual, drilled wells. There are several private water supplies that serve multiple families (for example, that owned by Charette along Route 5 which serves a trailer park with at least 10 connections).

Potential groundwater sources can be determined by sand and gravel deposit maps, but detailed groundwater mapping is the only way to determine precisely areas of recharge, storage and transmission. No mapping of this sort is currently available.

Groundwater occurs in the unconsolidated sediment of streams and buried valleys, and in bedrock fractures. Groundwater in bedrock fractures is highly susceptible to contamination. While unconsolidated sediment can usually filter out organic pollution contained in water, the same water can travel for miles through rock fractures without appreciable purification. Once contamination occurs, control and abatement are extremely difficult.

Threats to the quality of groundwater in Dummerston may include septic tanks and leaching fields, along with hazardous cleaning products, paints, lawn and garden products, and automobile products. Even properly functioning septic systems typically introduce nutrients (nitrogen and phosphorous) into the groundwater. Other potential sources of groundwater degradation include, but are not limited to: acid rain, pesticides, contaminated runoff from roads and driveways, salt storage areas, road salting, fuel-storage tanks, and illegal dumping.

Town Policies:

1. All sewage disposal systems should be designed and constructed in a manner that will have minimum impact on the environment.
2. Land uses within wellhead protection areas should be limited to those uses which pose no threat of contamination to the potable water supplies.
3. Development should be restricted in areas that become known for supplying large amounts of recharge waters to aquifers.
4. Small quantity commercial generators of hazardous waste (less than 200 lbs. per month) should be encouraged to have storage and disposal plans which demonstrate that water contamination risks have been minimized.
5. In order to conserve the Town's water resources and to minimize the cost of public water supply and waste disposal systems, development should be planned, designed and operated to minimize consumptive water demands.

6. Unless otherwise approved, subdivisions shall provide a water supply large enough to serve all the units within the subdivision as well as to provide for fire protection.
7. Any new water supply system or waste disposal system should not deplete or contaminate any existing water supply system.

Action Steps (The responsible party is listed following each action step):

1. Educate town residents about the need to protect groundwater and surface water and regulatory options for doing so [Planning Commission, Conservation Commission].
2. Explore the development of measures that will adequately protect groundwater and surface water. [Selectboard, Planning Commission].
3. Investigate the potential need for a community septic system or sewage treatment facility—for example in West Dummerston and Slab Hollow [Selectboard, Planning Commission].
4. Address the need for establishing water conservation measures in residential dwellings and for commercial and industrial uses [Planning Commission].
5. Investigate the need for cataloging and regulating storage tanks, particularly underground storage tanks [Fire Department, Conservation Commission].
6. Explore the feasibility of systematic testing of town surface and ground water so that pollution control and regulatory measures can be based on sound data [Planning Commission, Selectboard].
7. Encourage research on and use of innovative waste disposal systems which are environmentally responsible, energy efficient, and would reduce the consumption of water [Planning Commission, Conservation Commission].

MINERAL RESOURCES

Metamorphic rock, known as the Waits Formation, underlies Dummerston and extends through West Dummerston, Prospect Hill, and Dummerston Center. It is characterized by mica schist, impure marble, and quartzite. Three hundred fifty million years ago, as the tectonic plate drifted northward, magma surged upward from deep within the earth and began to cool, forming granite. Some of these granite formations are visible along Route 30, and this granite exposed by weathering formed Black Mountain and the quarries along the West River.

Other plutonic rocks (igneous rocks formed deep below the surface of the earth) were folded, pushed, and eroded to form the Standing Ponds Volcanics found just south of Dummerston Center running in a north-south direction. Most of East Dummerston is sitting on a combination of metamorphic rocks including impure marble and slate. The old slate quarries along Route 5 north of Houghton Road are good evidence of these deposits.

One hundred seventy five million years ago, the continents moved into their current locations. The processes of erosion and mountain building continued. Mount Monadnock shows the height of the land before erosion. Then in recent geological past the glaciers came in four separate ice ages. The latest ice age occurred 10,000 years ago and covered Vermont in ice two miles thick. As the ice began to melt, portions of Dummerston became covered with water. The part of Dummerston along the Connecticut River and West River was an ancient lake called Lake Hitchcock. When the lake drained into the ocean, great deposits of sand and gravel (formed by water moving over rock) were left along the West River and Connecticut River.

Sand and gravel deposits, important as current or potential sources for fill, aggregate, and road construction materials, are Dummerston's major mineral resources. Granite and slate are not presently being excavated. Significant clay deposits exist in the Connecticut River Valley, and material is occasionally removed from these sites.

Most of the sand and gravel for Dummerston comes from the Moore Farm. This pit is approximately 6 acres in size and Dummerston shares its use with the Town of Putney. This pit is projected to provide sand and gravel for the next 10-15 years.

Another sand and gravel pit is located east of the Moore Farm location on the east side of Interstate 91. This pit, owned by Charles Simeon, is approximately 16 acres in size. This sand is excavated and sold to Dummerston and surrounding towns. Mr. Simeon also has a 5 acre pit on Station Road. There is a sand and gravel pit located behind Allard Lumber Company in Brattleboro bordering Interstate 91. This 6 acre pit is almost depleted.

Town Policies:

1. Excavation or removal of earth and mineral deposits that provide aquifer recharge or are located in known environmentally sensitive areas should be avoided.
2. Mineral extraction should be carried out in a manner that minimizes noise and any adverse impacts on scenic quality, ground and surface waters, air quality, adjacent properties, traffic on local roads and bridges, wildlife habitat, and the general character of the area.
3. Valuable mineral resource areas should not be developed in a manner that would preclude any future use of the mineral resources.
4. Following any extraction of resources, the land must be reclaimed and rehabilitated to a usable state, in a manner that prevents erosion and siltation. The reclamation is the responsibility of the landowner. The Town of Dummerston should play a particularly active role in reclamation at any sites where material is extracted.

Action Steps (The responsible party is listed following each action step):

1. Determine whether any mineral deposits provide aquifer recharge or are in environmentally sensitive areas [Conservation Commission and Planning Commission].
2. Consider a zoning amendment that includes conditional use review of all proposed mineral extraction operations, requiring operations to meet strict health, safety and environmental performance standards, and submission of an excavation plan and site restoration plan [Planning Commission].

WILDLIFE RESOURCES

Wildlife is a resource most people enjoy. Due to a moderate climate and a greater diversity of plant species than are found in more northern or mountainous sections of the State, Windham and Windsor Counties have a greater abundance of many wildlife populations than elsewhere.

Over the years wildlife populations in Dummerston have seen great changes. Historically salmon ascended the West River to spawn. Since each wildlife species requires its own unique habitat, as the vegetation has been changed either by humans or naturally, a shift in wildlife population results. In the 1840s, when 80% of the land was cleared, the deer populations were quite low. In the 1950s, there was an overpopulation of deer caused mostly by the regrowth of the forest. In addition, the eradication of its natural predators by humans left the deer population without a check on its growth. The deer population numbers declined until the 1990s due to the migration of coyotes east and the hunting of does. In addition, wildlife populations have changed as a result of humans' introduction of animals to our area. The turkey was re-introduced in the 1960s and is now thriving in Dummerston. In the 1960s there was an overpopulation of porcupine and the fisher was reintroduced. However, now both species are in decline.

While some populations have increased, as a whole our wildlife community is declining. Many have noticed the decline of the brown thrasher, golden wing warbler, whip-poor-will, and the Nashville warbler. The population of all migratory fowl is down and there is also a worldwide decline of many species of frogs.

Dummerston is fortunate in being able to preserve some ten or more rare and endangered species of plants and animals. Black Mountain is an area unique to all of the Northeast; among its many features, it hosts the Three Birds Orchid, Spotted Wintergreen, Orange Grass, and Whorled Milkwort. The West River hosts an endangered mussel, the brook floater (*Canada burnet*), and has some of the few remaining sites of flood plain forest.

At the present time the greatest threat to our wildlife is fragmentation of the land by development. As land becomes fragmented, populations such as bear, coyote, fisher, bobcat, moose, and many songbirds can suffer.

Deer wintering areas provide relief from harsh climatic conditions by providing protection from deep snow, cold temperatures and wind chill. These habitats are characterized by a high degree of softwood cover, a favorable slope, south or westerly aspects, generally moderate elevation and low levels of human disturbance in the winter. Thirteen known deer winter ranges are located in the Town, involving 12% of the Town's total land base. An individual wintering area may provide shelter for deer that come from a summer or fall range ten or more times its size. Consequently, changes in the winter range may affect deer population not only in Dummerston but also adjacent towns.

Rare plants and animals contribute to the natural resource heritage of Dummerston. The Vermont Natural Heritage Program has identified and mapped rare plants and animals in Dummerston. These areas and deer wintering areas are mapped on the Natural and Cultural Resources Map.

Town Policies:

1. When development is being carried out, fragmentation of forest blocks should be minimized, connecting links between such blocks should be maintained, and existing road systems should be used. Cluster development should be encouraged where it can accomplish these objectives.
2. Deer wintering areas should be protected from development and other uses that threaten the ability of this habitat to support deer.
3. Rare and endangered plants and animals and natural communities should be protected and preserved.

Action Steps (The responsible party is listed following each action step):

1. Work with the Vermont Biodiversity Project Program staff to conduct a systematic survey of Dummerston in order to update the community's inventory of special natural features [Conservation Commission].
2. Consider zoning amendments that provide additional protective measures for fish and wildlife areas and areas of special natural features. Such measures could include performance standards, additional buffer strip requirements, and requirements for low density development and/or cluster development [Planning Commission].

RECREATION AND SCENIC RESOURCES

Dummerston typifies the scenic, rural character that is found and valued throughout much of Vermont. Our outdoor environment is appreciated by residents and visitors alike. We find satisfaction in the "feel" of our town. Surveys by the Planning Commission have found that residents like our town the way it is—and for the most part, they want it to stay as it is. This rural character also attracts visitors to Dummerston, who enjoy these resources. Protecting Dummerston's scenic views, starlit night skies, and quiet, rural character are high priorities for the town.

The mix of recreational opportunities available to Dummerston residents and its visitors is varied and rich. They range from highly organized commercial enterprises to informal bike riding. Dummerston formerly had ski areas on Rte 30, Prospect Hill and Black Mountain. Two campgrounds, KOA and Hidden Acres, are located in the eastern part of Town. A miniature golf course, open to the public, is located at Hidden Acres, and there is a golf driving range next to the Dummerston School. The Green Mountain Girls Camp, located in the western part of Dummerston, is available, at no cost, to eligible girls living in Town. Fruit and vegetable picking is also an important recreational activity for some families during the summer and early fall.

Since most of Dummerston is comprised of forest land, it is not surprising that the forest is used for recreation throughout the seasons. In the winter, cross-country ski trails exist on many private lands. They often merge to form a loosely defined network. The Black Mountain Snowmobile Club has developed a more organized network of trails for its members. During appropriate seasons, hunting for deer, turkey, grouse, and raccoon are enjoyed by many. Especially in the spring, Prospect Hill (which is owned by the Town) and Black Mountain (partially owned by The Nature Conservancy) are good hiking and picnicking areas. Dutton Pines State Park, a 12 acre parcel along Route 5, is mainly used by nearby residents for biking and walking and by motorists as a rest and picnic area.

Dummerston residents have access to several main streams and two rivers that provide opportunities for recreation in the warmer months. On the Connecticut River, one access point (14 acres) is owned and maintained by the Vermont Department of Fish and Wildlife. This point is very close to the Dummerston-Putney town line. Another access point just south of Dummerston in Brattleboro is located at the end of Old Ferry Road. From these points recreationists can go fishing, water skiing, rowing, or paddling. Along the West River there are numerous swimming holes and two public access points: the utility substation lands near the previous Botanical Castings, and Vermont Department of Fish and Wildlife lands south of the Covered Bridge. In addition, others enjoy the river for canoeing, kayaking, fishing, tubing, and rafting. These activities are dependent upon water levels and therefore upon timing of water releases from

the Townshend Dam. Stickney Brook provides opportunities for picnicking and swimming as well as sightseeing. Falls Brook offers excellent hiking opportunities.

Public recreational facilities in Dummerston are scattered throughout the Town. The Dummerston School has a wonderful playground that was designed and built by residents in 1997. There are extensive sport fields at the school that are used for soccer, softball, and baseball, and the gymnasium is used for basketball, square dancing and teen dances. The Dummerston Community Center (previously the West School) has a smaller playground, and in recent years residents have built an ice skating rink in the winter. The Dummerston Center Grange Hall is used for annual suppers, and theater productions. The West Dummerston Grange Hall changed hands and became West Dummerston Arts in 1998, a facility that offers art classes and performing arts programs. The Dummerston churches also host suppers and the traditional Apple Pie Festival. The Common is used for concerts by the Dummerston Historical Society and by Morris Dancers. Dummerston roads, many of which are scenic, are used by runners and cyclists. The East-West Road is an often chosen route. Route 30 and Middle Road are used for biking and running as well as for Rollerblading and skis on wheels. Public safety is a concern with all these recreational uses on local and state roads.

For much quieter recreational pastimes there is the Lydia Pratt Library in West Dummerston, which is a wonderful asset to the community. Other recreational opportunities exist for exploring and photographing historical sites such as villages, buildings, bridges, cemeteries, stone walls, and old cellar holes.

Town Policies:

1. With any road improvements along Routes 5 and 30, provisions should be included for cyclists and pedestrians.
2. Town roads should provide safer conditions for recreational use.
3. The quality of existing recreational areas, particularly the West River swimming holes and Dutton Pines State Park, should be improved.
4. Prospect Hill should be maintained and improved as a recreational area to be used and enjoyed by Dummerston residents.
5. As a component of the recreational appeal of the town, it is desirable to maintain stone walls and trees along roads.
6. New development in Dummerston should not detract from the town's rural character.
7. As a part of the site plan review process, the Planning Commission may impose restrictions on light pollution (including both light beamed off a property and light beamed or reflected upward into the night sky).

8. Municipal street lighting should be used only when deemed essential for safety and shall be limited to full-cutoff fixtures.

9. Noise pollution from commercial or industrial developments should be minimized. As part of the review process, the Planning Commission and/or Zoning Board of Adjustment may place strict limits on noise generation, restrict the hours of operation, or require the construction of mitigating noise barriers. For operations of unknown noise impacts, the Planning Commission may require a noise modeling study as part of the approval process.

10. To protect ridgeline views, communications towers should be prohibited from Conservation and Resource Reserve districts.

Actions Steps (The responsible party is listed following each action step):

1. Examine speed limits and other safety measures on town roads that are used for recreation [Selectboard].

2. In conjunction with affected landowners, explore the possibility of greenway trails [Planning Commission, Conservation Commission, and Selectboard].

3. Work with appropriate local officials and groups to:
   - Identify heavily used public recreational areas and recommend actions for improvements;
   - Suggest erosion control treatments for the river banks at the Covered Bridge;
   - Explore more extensive use of Dutton Pines State Park;
   - Design a display area(s) for Town and regional recreational events;
   - Provide information to landowners on the range of options available for controlling recreational use of private land;
   - Identify any new recreation areas that could be purchased by the Town or acquired by gift [Conservation Commission and Planning Commission].

5. Encourage the annual clean-ups of the most popular recreational areas in Town [Conservation Commission and other citizen interest groups].

6. Modify Dummerston's Zoning By-law or establish a separate outdoor lighting ordinance to establish strict limits on outdoor lighting [Planning Commission].

7. Modify Dummerston's Zoning By-law or incorporate into a new Sign Ordinance regulations to more clearly limit light pollution and light trespass from signage [Planning Commission].

CULTURAL RESOURCES

Of special importance to the Town are buildings, structures and areas of historical, educational, cultural, scientific, architectural and archaeological value. They include only those properties whose owners have given permission for inclusion. Most of these areas are privately owned, and permission to use them may be required. Places of particular interest in this regard have been mapped on the Natural and Cultural Resources Map. They include:

1) Historic villages of West Dummerston, Dummerston Center, and Slab Hollow and their approaches;
2) Flaherty House
3) Dummerston Center Schoolhouse (Historical Society)
4) Dummerston Center Grange (Evening Star)
5) Rudyard Kipling House (Naulakha)
6) Ellsworth Bunker House
7) Congregational Church, Dummerston Center
8) Asa Knight Home, Dummerston Center
9) Randall Place (Beebe House), Dummerston Center
10) Alexander Kathan House (Sweet Tree Farm, formerly the Ranney Farm)
11) Camp Arden
12) Green Mountain Camp
13) Covered Bridge
14) Iron Bridge
15) Scott Farm
16) Prospect Hill Pasture
17) All Cemeteries
18) Black Mountain Natural Area
19) Stickney Brook Ledges
20) Dutton Pines State Park
21) Walker Farm
22) Enoch Cook Farm
23) West Dummerston Baptist Church

Also significant are the several dozen Bicentennial homes throughout the Town that were identified in 1991 as part of Dummerston's Bicentennial Celebration.

Town Policies:

1. The above recognized Cultural Resources shall be used and treated in a manner that will enhance, and not depreciate, the value of the site or area.

2. Land use activity that preserves the historic and architectural character of the Town—for example in West Dummerston Village, Dummerston Center, and Slab Hollow—is encouraged.

3. Development or actions that would adversely affect historic structures and sites, including their destruction or alteration, or the introduction of nonharmonious elements, is discouraged.
4. The Covered Bridge and Iron Bridge should be maintained as working historic resources, if possible. The Selectboard should seek the approval of the voters before taking any final action on West River crossings.
5. The rehabilitation of significant historic structures whenever they have become obsolete for their original use is encouraged. New and compatible uses should be found that will allow them to continue as a visual and cultural asset to the Town.
6. Public use and/or ownership should be sought to preserve significant historic structures.

Action Steps (The responsible party is listed following each action step):

1. Update the Town of Dummerston Historic Sites and Structures Survey (1974) to include additional structures and sites of historic significance in the Town. Encourage involvement by the Historical Society [Planning Commission].
2. Investigate the value and impact of nominating Dummerston Center to the State and National Registers of Historic Places [Planning Commission with assistance and cooperation from the Historical Society].
3. Work with the Historical Society to inform and educate residents and the general public about the history and value of historically and culturally important buildings, structures and sites in Dummerston [Planning Commission and Conservation Commission].
4. Identify and recognize other sites, areas and buildings having educational, cultural, scientific, architectural or archaeological significance [Conservation Commission].

AGRICULTURE

Agricultural land, or farmland, can be defined as presently or potentially productive crop, pasture or range lands. Agricultural enterprise is defined as business activity directly related to agriculture. Usually farmland is cleared, although some forestry practices may be considered agricultural, such as the cultivation of maple sugarbushes. Natural and human-influenced factors determine viability of farmlands, both economically and in the ability to produce crops. Soils, slope and climate conditions are examples of natural factors. Accessibility by roads, distances to services, development and markets, and proximity to other agricultural land are human-influenced factors.

The U.S. Soil Conservation Service (SCS) defines prime agricultural soils as those that have the best combination of chemical and physical characteristics for producing food, feed, forage and fiber crops, and that are also available to these uses. Prime agricultural soils present more options for agriculture than do other soils, though some operations do better in other soils (apples, for example, grow better in soils with a shallow hard-pan layer).

Dummerston's Farmlands

Dummerston's farmlands include parts of the fertile Connecticut River Valley as well as hill farms. Varied farm operations are carried on in Dummerston, including fruit orchards, vegetable farms, Christmas trees, sugaring, sheep, beef and dairy operations. Some of the Town's farmland is no longer actively used for agriculture and is often maintained as open land.

Since 1980, the Use Value Appraisal Program has given farming and forestry some continuity. The Program allows farmland to be taxed at its value for producing agricultural crops, instead of its value for development purposes. The State of Vermont reimburses communities for property tax revenue that is lost due to enrollment of land in the Program. Participating landowners must pay the balance of property taxes due to the community.

In the late 80s, Dummerston undertook a Land Evaluation and Site Assessment (LESA) to evaluate farmland in Town. This is a technique developed by the SCS to objectively rate farmland based on soils and other features. A total of 300 points is possible, the best parcels having the highest scores. The Land Evaluation portion of the total score counts for a possible 100 points. Soil types are given numerical values, up to 100, based on their potential to support agriculture. The Site Assessment can contribute up to 200 points of the total possible 300. Site Assessment criteria used in Dummerston included: acreage of agricultural lands, number of contiguous acres of agricultural lands, adjacent land uses, land use of agricultural land on the parcel, scenic quality, and on-site investments. The system is designed to be flexible, allowing towns or regions to develop individual scoring systems within this framework.

Sixty-six parcels (66) representing about 1,720 acres were selected and scored by a Town Committee. The scores ranged from a high of 273 to a low of 129.

LESA scores are presented on the Important Farmland and Forest Land Map. The information provided from the LESA is a first step in cataloging the quality and extent of Dummerston's agricultural base.

Significance of Farmland

Because of our ongoing need for nourishment, the significance of farmland extends beyond our society's real estate marketing system for defining its value. The market conditions that currently make the Northeast a poor place to farm economically reflect differences in transportation, labor costs, water availability, and crop subsidies that favor producers in other parts of the country or world. Changes in these conditions could make agriculture more economically viable in the Northeast. We should maintain our capability to produce food locally. Farmland is a non-renewable resource; once gone it cannot easily be recovered. Further, farmland not only benefits us economically through food production, but is also an important part of our cultural heritage and landscape.

Agricultural land maintains the traditional settlement pattern of densely settled villages surrounded by open land, a pattern that is treasured by residents and visitors, and has proven to be an efficient arrangement for utilities and transportation. The continued use of Dummerston's farmland for active agricultural purposes has an indirect economic benefit to the community, in that active agricultural land incurs few public service costs. Although there is much suitable agricultural land in the Region, only 15% of the mix of food consumed in New England is produced here.

Farmland is especially vulnerable to conversion to non-farm uses. Characteristics of best farmlands make them highly desirable for development—level topography and deep, well-drained soils that are easy to work. It is often easier for development to overcome site limitations, such as slope and poor soils, than it is for agriculture to do so. Residential development is generally not compatible with farming because residents are often offended by odor and noise generated by agricultural operations.

The Connecticut River Valley contains some of the best agricultural soils in the State. Dummerston's location within this Valley gives statewide significance to at least some of its farms. For Dummerston and other New England towns, the key factor in maintaining agriculture will be an economic climate that rewards farmers. The preservation of agricultural land is important for maintaining future farm diversity, preserving options for future generations and maintaining rural character.

Town Policies:

These policies shall be used in guiding and evaluating development projects in the Town and region.

1. Programs should be encouraged that support landowners with farmland recognized as important (through the LESA process) to Dummerston. When possible, important farmland should be devoted principally to

farming or to uses compatible with the maintenance of the farm property for agricultural use.

2. Farms, agricultural land, and agricultural enterprises must be maintained to ensure a viable agricultural community.

3. Non-agricultural development, such as single-family residential dwellings, should be designed and located so as to minimize any adverse impacts on farming operations and agricultural enterprises.

4. The construction or extension of public services and utilities by the Town (e.g. roads, sewer, recreational areas), by the region (e.g. landfills), by the State (e.g. highways), or by private utilities (e.g. energy generation and transmission facilities) should be allowed only where such activity will not discourage agriculture and agricultural enterprises.

5. When an important farm operation goes out of business or out of agricultural use, new farmers or leaseholders should be sought to continue the farm operation as an economic and cultural asset to the Town.

6. The preservation of primary agricultural soils through positive incentives such as land use assessments, tax stabilization, and acquisition of development rights by conservation organizations such as private nonprofit land trusts, should be encouraged.

7. Agricultural demonstration and test projects, consumer or producer cooperatives, and farmers' markets should be supported.

Action Steps (The responsible party is listed following each action step):

1. Actively maintain a Farmland Protection Committee to inventory active agricultural use (both farmer-owned and farmer-leased), to supplement the already completed LESA report and to investigate all applicable techniques for protecting farmland in Dummerston. [Selectboard and Planning Commission].

2. Consider an agricultural lands overlay zone as an amendment to the zoning bylaws, the purpose of which would be to protect active agricultural lands from the impacts of non-agricultural uses, and to preserve locally important farmlands for future agricultural use. [Planning Commission].

3. Maintain and pursue various means of funding a Town Farmland Protection Fund, the purposes of which are: (1) to purchase interests in threatened agricultural lands, including but not limited to options for purchase, rights of first refusal, leases, fee simple purchase, and development restrictions; and (2) to subsidize property taxes of working

farms or in other ways support agriculture. [Selectboard and Planning Commission].

FORESTRY

Historically, forests have played a vital role in Dummerston, from the making of potash to the sawing of shingles, and as a source for firewood and lumber. Many sawmills were located along Dummerston's small streams.

Today, all but two mills are gone, but the forest continues to offer a wide range of timber products, the production of maple syrup, firewood, and wildlife habitat. Forests also contribute substantially to Dummerston's quality of life and well-being. These benefits include recreation, scenic beauty, and the role forests play in the natural cleaning of the air and as a vital component in the natural water cycle.

Forests and woodlots comprise close to 80% of the land cover in Dummerston. Forest types include northern hardwoods, hemlock, eastern white pine, black birch-oak-hickory, a native red pine forest on Black Mountain, and mixed woods consisting of hemlock or white pine with mixed hardwoods. Most forestland is in private non-industrial ownership. Dutton Pines State Park, a 12-acre pine stand owned by the State of Vermont, is managed for recreational day use.

The condition of Dummerston's forests and woodlots varies from poor to excellent. Years of "take the best and leave the rest" have left some forestland with an abundance of low quality trees. Insects such as gypsy moth, pear thrips, and hemlock looper have taken their toll. The American chestnut blight and beech bark disease have also affected forest species composition.

Dummerston currently has ten official Tree Farms as designated by the American Tree Farm System. These are actively managed forestlands. To qualify for Tree Farm certification, a tree farmer must 1) own 10 or more acres of forestland, 2) manage for the production of timber and other forest products, and 3) protect the forest from fire, insects, disease, and destructive grazing. These lands also must be inspected every five years to ensure the property is being properly managed. However, all currently certified Tree Farms are undergoing a recertification under new standards. The recertification process is scheduled for completion in June 2004. In some parts of Vermont, private forestland is being certified through standards established by the Forest Stewardship Council (FSC). Wood products derived from such forests may yield higher prices or reach markets not available to non-certified wood products. Currently, there were no FSC-certified forests in Dummerston.

Since 1980, the Use Value Appraisal Program has given forest management in Dummerston some continuity. The Program provides reduced property tax assessment for qualifying forestland owners. The State of Vermont reimburses communities for property tax revenue that is lost due to enrollment of land in the Program. Participating landowners must pay the balance of property taxes due to the community. In 1999, 76 parcels of land in Dummerston, representing 6,577 acres or roughly one-third of the town's 19,000 total acres, were actively being managed through enrollment in the Program. In recent years the program

has been underfunded, and there is concern that it could be eliminated. Another important regional resource is the Woodland Owners Association, Inc., an organized group of woodland owners in Windham County that provides forest tours, guest speakers and a newsletter promoting good forest management.

Town Policies:

1. Forest landowners should be encouraged to explore long term sustainable forest management—including FSC certification—that will improve wildlife habitat, forest production, recreation opportunities and aesthetic values and that will benefit current and future generations.
2. New development must not eliminate needed and adequate access to forestland.
3. Fragmentation of Dummerston's forests should be minimized when new development is planned.
4. At a minimum, logging operations should use acceptable management practices for maintaining water quality on logging jobs as indicated in the water quality booklet written by the Department of Forests, Parks, and Recreation, 1987 (Available at the Town Office).

Action Steps (The responsible party is listed following each action step):

1. Target important forest properties, which are currently unmanaged. [Conservation Commission].
2. Assist landowners with the following [Conservation Commission]:
   - Provide information on the Current Use Value Appraisal Program, the Tree Farm Program, and FSC-based certification;
   - Encourage forest management consultation with the Windham County forester, Woodland Owners Association, Inc., or private consulting foresters.
   - Provide names of professionals capable of helping landowners 1) assess forest land access sites and 2) avoid subdivision and development that will cause unnecessary fragmentation of forest property.

COMMERCE AND INDUSTRY

Economic development in the Windham Region has evolved since the 1960s from the traditional bases in agriculture, natural resources (forest products), and manufacturing of durable goods (i.e. lumber, furniture, and machinery) to new bases in service industries (including tourism, health, and education) and high-technology manufacturing. The service industries have the highest percentage of employees and wages for the County. While agriculture has diminished in the past years, Windham County still accounted for over 18 percent of the State's total number of employees in this sector (1990). Current unemployment rates are low with increasing demand on employers to find qualified workers to fill positions. The Economy section of the Dummerston Community Profile, earlier in this Plan, provides additional economic statistics for Dummerston including income and occupation data.

While it is common to think of Dummerston as primarily a labor pool for Brattleboro, Dummerston has a wider diversity of employment opportunities and greater number of employers than is generally appreciated. The local economy is based primarily on services, small businesses, tourism, agriculture, forestry, and home occupations. Home occupations are those activities that can be carried on within a minor portion of a residence in a village or rural setting. Mineral resources, such as granite and slate, are not presently being extracted. Sand and gravel resources are being extracted.

Outlook for Dummerston

State economists predict that most job growth in the next decade will come from service and trade industries, which will benefit from tourism as well as growth in resident population. Manufacturing industries are projected to show slight improvement. This will be led by smaller manufacturers that have been able to specialize in products less susceptible to import competition.

The per capita income in Dummerston is $23,742 (1999 Vermont Indicators Online). Service and retail sectors of the economy are lower paying and may be dependent upon stimulants Dummerston may not wish to encourage. Population growth is required to sustain certain service-based industries, and such growth can put a strain on community services, resulting in increased property taxes to enlarge schools or build and maintain new roads. Overdependence on tourism makes the Town dependent upon the vagaries of the economy, climate, and the tourist population.

Dummerston must, however, provide employment for its residents in order to remain a thriving community. Citizens cannot complacently rely on Brattleboro and other towns to provide the majority of employment opportunities. If they did, Dummerston would suffer the same deprivation as Brattleboro, should one of that city's major employers go out of business. The Town supports agriculture, forestry, and other forms of light commercial and industrial, institutional, or recreational endeavors. The Town should also support small-

scale development which meets the needs of local residents and the traveling public.

Telecommunications technology provides an opportunity to sustain relatively full employment for residents without undue dependence on the lower paying and more volatile sections of the economy. Vermont, because of earlier far-sighted regulatory decisions, is poised to become one of the first states with a fully developed telecommunications network, which would enable it to be a leader in an industry that is growing at a rate five times faster than the overall U.S. economy. It would be wise to maintain the momentum created by the 1984 regulatory agreement, and to extend the early advantage in development of communications infrastructure. Many large employers are finding that it is cost-effective to encourage employees to work from their homes, linked to the office and customers via computer and/or communications networks.

Achieving a Balance

It is important when outlining a strategy for Dummerston's economic growth to focus on the broader notion of community development as the underlying theme. Community development relates to community well-being and the quality of life for residents. Indeed, community development may be at odds with economic development when the desire to increase income, employment, or the fiscal strength of the community occurs at the expense of other valued community attributes such as open space, clean air, historic character, or community safety. For this reason, Dummerston's economic development goals must be evaluated within the broader context of community in order to achieve consensus as to the appropriate path for future economic development.

Town Policies:

1. The Town shall support the development of small businesses, including cottage industries, home-based work, and entrepreneurial ventures, that preserve and revitalize Dummerston's small town rural character and that do not cause adverse impacts to community facilities or natural resources.
2. Appropriate new businesses shall be encouraged to locate in Dummerston. Recruitment efforts should focus on companies providing jobs that are stable and year-round, that provide competitive wages and skills training programs, that are environmentally conscious, and that support efforts to provide childcare, maternity and paternity leave, and flex time.
3. Dummerston's existing businesses, and the expansions and extensions thereof, including home businesses, should receive assistance and support when needed. Assistance can be through local permit guidance, community facilities and services improvements when appropriate, or other more direct financial aid.

4. Special efforts should be made to support those agricultural and forest products industries that convert native raw materials into value-added products.
5. Tourism should be sought for Dummerston that aims at those activities that draw on the character of Dummerston itself: its beauty, culture, history, wildlife, and outdoor recreation.
6. The State of Vermont should be supported in its progressive regulation posture in building a statewide fiber-optic telecommunications system.
7. Communications towers should be integrated into existing structures wherever possible, so as not to detract from Dummerston's scenic character.

Action Steps (The responsible party is listed following each action step):

1. Review zoning regulations and other town ordinances and propose improvements, where applicable, to provide economic development opportunities and appropriate development review standards [Planning Commission].

HOUSING

The Community Profile chapter of this Town Plan provides background data on Dummerston housing statistics, including housing growth and change in housing stock. This Housing section deals with housing trends and projections as well as affordable housing.

In order for Dummerston to maintain an adequate housing supply and to meet the housing needs of Dummerston's residents, planning for housing must become an ongoing process. As the permanent population grows, Dummerston must effectively deal with the community, social, and economic impacts of the housing development that will follow.

Trends and Projections

Historically, housing in Dummerston has been concentrated in the villages and dispersed over large areas in the surrounding countryside. Most housing development in the last twenty to thirty years has occurred only in these outlying areas. With a few exceptions, most houses have been built along existing roads. Very little if any village development has occurred. The continued implementation of this pattern over time could likely change the rural nature of Dummerston and cause certain impacts to the Town. Some of these changes and impacts include:

- The subdivision and development of productive agricultural or forest lands, resulting in a net loss in this natural resource base.
- The inability of some landowners to continue managing their lands as productive agricultural or forest lands, including the management of wildlife habitat, because of incompatibility with residential land uses.
- Increasing costs of delivering community services such as fire protection, police protection, emergency/rescue services, school busing, and road and bridge maintenance.

Housing is the most predominant form of local land development in Dummerston. Because Dummerston is located very close to Brattleboro and is considered a desirable place to live, the Town will come under more and more pressure for residential development. The lack of municipal water and sewer facilities will probably cause housing to continue to be scattered, with one or two houses built here and there. Small subdivisions of 10 lots or less are also likely to occur in Dummerston. The continued conversion of seasonal homes to year-round housing is also seen as a possible housing trend.

Affordable Housing

In a definition widely used by banks, housing authorities, and State agencies, housing is considered affordable when it costs no more than 30% of the gross income of a household earning the area median income. Housing costs for renters usually include rent and utilities (heat, hot water, trash disposal, and electricity), and housing costs for homeowners include principal, interest, property taxes, and property insurance.

Table 13. Housing Data for Dummerston

(from Vermont Housing Data)

Population in owner occupied housing (2000)	1622
Population in rented housing (2000)	293
Number of households (2000)	796
Average household size (2000)	2.41
Total workers 16 years of age or over (2000)	1079
Median household income (1999)	$46,121
Number employed (2002)	1130
Number unemployed (2002)	10
Unemployment rate (2002)	1%
Per capita income (1999)	$23,742
Total housing units (2000)	893
Vacant housing, seasonal use (2000)	73
Vacant housing, for rent (2000)	5
Vacant housing, for sale (2000)	8
Average house price (2002)	$145,525
Mobile homes (2000)	72
Average mobile home price, with land (2002)	$40,000
Average mobile home price, without land (2002)	$35,000
Median gross rent for houses (2000)	$578
Medial gross rent for mobile homes (2000)	$446

The median household income for a family of 4 in Dummerston is $48,027 (1999 VT Dept. of Taxes). Using the previously mentioned formula, such a household could afford to purchase a house costing approximately $150,000, assuming a 10% down payment, a 7% mortgage interest rate, a 30-year mortgage and $400 a month in taxes and insurance.

The costs of developing housing combined with the high cost of raw land may mean that the free market cannot provide affordable housing in Dummerston. If the Town wishes to accommodate the housing needs of a diverse population, then public or private programs may be needed to assist the free market to meet this community need.

Town Policies:

1. The Town shall encourage the provision of safe, environmentally responsible, and energy efficient housing that respects the physical limitations of the land.
2. New housing should be compatible with the rural nature of Dummerston's historic villages and hamlets. The Town should encourage the reuse of older buildings within villages whenever possible.
3. Since seasonal homes are often converted to permanent homes with plumbing, the Town considers seasonal homes (excluding camps) by the same standards as permanent homes.
4. Whenever appropriate to the Town's rural character, the capability of the land, and the efficient provision of services, housing developments shall be encouraged to employ cluster planning, thereby encouraging the efficient use of land, avoiding strip development, and providing for the preservation of important resource lands.
5. A diversity of housing types (low cost single family housing, rental housing, multi-family housing, elderly housing, and mobile homes) should be planned for, and coordinated with the adequate provision of community utilities, facilities, and services.
6. Existing affordable housing should be maintained rather than converted to other uses.
7. The Town should support affordable residential development proposals of non-profit organizations (such as the Brattleboro Area Community Land Trust) as well as those of private-sector developers. Town support may include, but is not limited to, reduction of permit fees, donation of public lands or buildings, and density bonuses. When public donations are granted, all efforts should be made to guarantee the long-term affordability of the housing.

Action Steps (The responsible party is listed following each action step):

1. Consider using public resources (such as the Vermont Community Development Program) to provide financing to lower income residents to repair and maintain their housing [Selectboard].
2. Investigate whether any public land or buildings could be used for the development of affordable housing [Selectboard].
3. Employ the services of existing non-profit organizations (such as the Brattleboro Area Community Land Trust) for the administration of affordable housing [Selectboard].
4. Further studies of the social and economic impact of the Town Plan will be undertaken in a effort to develop policies that will allow housing for a diverse population in Dummerston [Planning Commission].

LAND USE

Dummerston covers approximately 18,560 acres of land. An estimated 79% of this acreage is woodland, 7% is cropland, 7% is pasture land, and 7% is site developed for housing and commercial/industrial uses (1992 Grand List Abstract, Form 411).

Land use in Dummerston is characterized by large rural areas in which compact settlement exists chiefly in West Dummerston, Dummerston Center, and Slab Hollow. Elsewhere homes and commercial establishments are located along rural routes in a linear pattern.

Woodlands are predominant in Dummerston and cover a vast acreage of land. These forestlands provide the scenic backdrop for the Town and provide wood products, game for hunting, maple products and recreation. Most forestland is in private, non-industrial ownership. Approximately 6,600 acres—mostly forested—are actively managed under the Vermont Current Use Value Appraisal Program. Approximately 8411 acres – both forest and farmland – are conserved in Dummerston (1997 data).

Agricultural lands are located principally in the Connecticut River valley with some hill farms to the west. Fifteen working farms still exist, with operations chiefly in livestock, orchards, vegetables, hay, and maple sugaring.

Physical limitations will continue to exert major control on the use of land in Dummerston. Soils and steep slopes have played a dominant role in the Town's pattern of settlement. Where soils are shallow, unstable, and impermeable or subject to wetness or erosion, land development becomes extremely difficult to accomplish. Steep slopes from 15-25%, alone or in combination with unsuitable soils, can present severe limitations for road building, structural footings, septic systems, and underground piping. See Physical Limitations Map.

Flooding occurs frequently in the spring as the result of rapid runoff caused by heavy rains and snowmelt. When a water body can no longer accommodate increased discharge, water is carried on the flat valley floors or floodplains adjacent to the surface waters. Flood hazard areas are mapped on the Water Resources Map. Any development within these flood hazard areas must either be flood-proofed or elevated above the base flood elevation.

In order to encourage a pattern of residential, commercial, industrial and recreational development that conforms to the goals and policies outlined in this Town Plan, a land use classification has been developed. This classification has been in place for a number of years. In 1979, voters adopted an official zoning map as part of the Dummerston Zoning Regulations designed to implement this land use plan. The Future Land Use Map changes the previous land use classes by eliminating one class, combining two classes and adding two classes. Following are the proposed land use classes: Forest Reserve, Reserve,

Conservation Resource, Rural Residential, Rural Commercial, Village, Hamlet, and Commercial/Light Industrial.

Land Use Districts

Forest Reserve

This district, comprising approximately 105 acres, contains the West Dummerston Village water supply watershed area. The lands in this area are essentially undeveloped, predominantly forested, and seriously limited for development. Currently no principal buildings are located within the Forest Reserve.

Town Policies:

1. This area should be protected from any development or activity that would contribute to contamination of ground or surface waters, to erosion or siltation, and to damage to the scenic and natural character of the area.
2. The most appropriate land uses are low-intensity, such as recreation or open space. Residential use should only be allowed at very low densities to minimize impact on water resources.

Reserve

This district contains lands, which are extensive, essentially undeveloped areas mostly without access to an improved public road and to necessary public utilities and community facilities and services. They are predominantly forested with substantial physical limitations for development. They include lands that have high natural, recreational, scenic or other special resource values or which have serious physical limitations for development. These lands are not yet committed to residential or commercial development at intensities that would preclude effective use of their resources or maintenance of their natural character.

Town Policies:

1. Reserve areas should be used for forestry, agriculture, low-intensity recreation, and open space. They should be withheld from intensive development until there is a demonstrated public need for their development, and until public utilities and community facilities and services can be provided to these areas at a reasonable cost.

2. Reserve areas should only be developed for residential use at densities low enough to protect their resource values and to perpetuate the settlement pattern that has traditionally characterized such lands.

Conservation Resource

This district includes those areas that are fragile environmentally and

aesthetically and/or areas that contain natural resources such as animal habitats, cultural resources, farms or forests that should be protected for sustainable use now and in the future. These areas, while not all specifically designated on the land use map, are primarily in the Rural Residential and Reserve areas.

Town Policies:

1. Specific protection requirements or recommendations will be developed on a case-by-case basis depending upon the character of the area or resource.

Rural Residential

This district includes lands which are already committed to rural development, or which appear capable of accommodating a significant proportion of Dummerston's expected growth. These lands have slight or moderate physical limitations to development and are readily accessible by improved public roads.

Town Policies:

1. Rural residential areas should be used to accommodate a major proportion of the growth of permanent and seasonal homes and their associated uses. Residential use should not, however, damage resource values and should not ignore physical limitations to development.
2. Agriculture, forestry, open space and recreational uses should be maintained and encouraged.
3. Cluster housing may provide an appropriate means for conserving open space and natural resources in this area.
4. Random location of commercial or industrial uses should be discouraged. These uses should only be allowed where they can be carefully controlled to avoid any unreasonable burden or impacts to neighbors or the Town of Dummerston.

Rural/Commercial

This district includes lands along Route 5 and the west side of Route 30. These lands fit the criteria for Rural Residential, and appear generally suitable for light commercial uses that require good access to a main traveled road.

Town Policies:

1. Both residential and commercial uses including recreation are suited for this area. Commercial uses should be compatible with surrounding predominantly residential uses.
2. Strip development should be discouraged and its negative impacts minimized if possible, by techniques such as shared access points,

increased landscaping, sign control, and emphasis on pedestrian movement.

Village

This district includes the traditional village area of West Dummerston. Villages provide a focus for Town cultural and social activities and provide for mixed residential, agriculture, commercial, and government uses. Of critical importance is the preservation of the historic character of the villages.

Town Policies:

1. Traditional village-related uses should be permitted, subject to appropriate development review.
2. New uses should ensure the retention of the village character and its historic and scenic resource qualities.
3. Villages shall be maintained for uses that are compatible with the quiet residential nature of the villages and which do not noticeably increase traffic or noise.

Hamlet

The Hamlet District provides for the orderly development of a hamlet center within a rural district, and provides a complementary mixture of land uses related to traditional hamlet centers or clusters which will increase the employment, shopping, cultural or recreational opportunities conveniently available to nearby residents, seasonal residents and transients, and which will not unnecessarily duplicate services offered in the village or urban areas. The principal land use for Hamlet Districts should be residential.

Town Policies:

1. Traditional hamlet-related uses should be permitted, subject to appropriate development review.
2. New uses should ensure the retention of the hamlet character and its historic and scenic resource qualities.
3. Hamlets shall be maintained for uses that are compatible with the quiet residential nature of the villages and which do not noticeably increase traffic or noise.

Commercial/Light Industrial

This district includes lands east of Interstate 91 near or at the borders in both Brattleboro and Putney.

Town Policies:

1. Commercial and industrial uses should be encouraged to share access and parking facilities.

2. Adequate landscaped buffers should be provided between commercial and non-commercial lots. Landscaping, plantings, and signs should be in keeping with the character of the surrounding area.
3. Development standards and site plan review are necessary to ensure that different uses will remain compatible.

Action Steps – Relevant to All Districts (The responsible party is listed following each action step):

1. Review the boundaries of all land use districts with the goal of making boundaries more reflective of physical characteristics and desired direction of development. This review is to take place in preparation for the next revision of the Dummerston Town Plan [Planning Commission].
2. Review all requirements and standards of each land use district (including definitions and boundaries), taking into account all existing land uses, physical limitations, natural and cultural resources, and important farmland and forest land. This analysis would be the basis for future zoning amendments [Planning Commission].
3. Identify and review all unique flora and fauna habitats and migration routes, all cultural resources, and all unique forested areas for inclusion into the new Conservation Resource districts [Conservation Commission and Planning Commission].
4. Identify and review areas of concentrated development, other than the existing village, for inclusion into the new Hamlet districts [Planning Commission].

RELATIONSHIP TO ADJACENT TOWNS, WINDHAM REGION AND THE STATE OF VERMONT

Vermont's Growth Management Law, Title 24VSA Chapter 117, passed in 1988, set up a system for communities to work in concert with their neighbors, and with agencies of State government, to shape the future. As envisioned, decisions on local growth issues are to be made by the local communities, and decisions of regional significance are to be made by the region's communities acting in concert. Each State agency action and program that affects land use is to be based on agency plans developed in consultation with communities and regions.

To achieve a unified vision for the future, plans at all levels are to be consistent with the 17 Vermont planning goals and compatible with one another. Town Plans are to be compatible with the regional plan and with approved plans of other municipalities in the region. Currently, there are 15 towns in the Windham Region with "approved" Town Plans.

As defined in the law, for one plan to be "compatible with" another, the plan in question, as implemented, will not significantly reduce the desired effect of the implementation of the other plan. If a plan, as implemented, will significantly reduce the desired effect of the other plan, the plan may be considered compatible if it includes the following [24 VSA §4302 (f)]:

a. A statement that identifies the ways that it will significantly reduce the desired effect of the other plan;

b. An explanation of why any incompatible portion of the plan in question is essential to the desired effect of the plan as a whole;

c. An explanation of why, with respect to any incompatible portion of the plan in question, there is no reasonable alternative way to achieve the desired effect of the plan; and

d. An explanation of how any incompatible portion of the plan in question has been structured to mitigate its detrimental effects on the implementation of the other plan.

Compatibility with Town Plans

Dummerston shares boundaries with Brattleboro, Marlboro, Newfane, Brookline, and Putney. The Connecticut River separates Dummerston from Chesterfield and Westmoreland, New Hampshire. The status of Town Plans for Vermont towns is as follows:

Brattleboro – Town Plan adopted 11/18/2003, expires 11/17/2008
Marlboro – Town Plan adopted 6/20/2003, expires 6/20/2008
Newfane – Town Plan adopted 6/5/2003, expires 6/5/2008
Brookline – Town Plan adopted 8/16/2000, expires 8/16/2005

Putney – Town Plan adopted 10/10/2000, expires 10/10/2005

Compatibility of Town Plans refers to more than adjacent land uses at town borders; it can include use of shared resources, for example, rivers, roads, and community facilities such as solid waste, recreation, and fire and police protection. The Dummerston Planning Commission believes the most pressing compatibility issues with its neighbors involve 1) the use and management of the Connecticut and West Rivers; 2) the use of Dummerston's roads and bridges to meet regional transportation needs; 3) future planning for Interstate 91, Connecticut River bridges (Route 9), and Routes 5 and 30; 4) commercial development at the Dummerston/Brattleboro town line and in general along State highway routes; and 5) coordinated growth center planning with Brattleboro and area towns including New Hampshire. As Town Plans come up for renewal and adoption, the Dummerston Planning Commission will take an active role in their review.

Compatibility with the Regional Plan

The Regional Plan is intended to provide guidelines for the planning and coordination of economic development which will, in accordance with present and future needs and resources, best promote the health, safety, and welfare of the citizens of the Region. As proposed, the Dummerston Town Plan is compatible with the Windham Regional Plan, which was adopted in December of 2001. The Dummerston Town Plan, if implemented, will not significantly reduce the desired effect of the Windham Regional Plan.

IMPLEMENTATION

Putting the Town Plan into Action

Effective implementation of the Town Plan requires careful consideration and action by the townspeople, Selectboard, Planning Commission, Conservation Commission and other organizations. Managing growth is a conscious process of directing development to appropriate locations and in appropriate ways. The process requires a commitment on the part of a community to set a course for its future and to employ all of the tools available to stay on that course. This Town Plan shall provide the framework for managing Dummerston's future growth. Tools and techniques for implementing the Town Plan follow.

1. Action Steps: In each of the Elements of the Town Plan a set of steps with responsible parties is included to give various town officials direction in implementing immediate needs in the Town. Setting a schedule for those items in the next five years will guarantee implementation of the Town Plan.

2. Land Use Regulation: Land use regulation at the local level is most effective when it is specifically directed to public health, safety and welfare, the prohibition of unsuitable uses, and the protection of water quality and highly valuable natural resources. Dummerston has had zoning since 1969. The subdivision of land is enforced through zoning. Flood hazard area regulations are contained in Dummerston's Zoning Regulations. There have been no major changes to zoning since its initial adoption.

3. Local Ordinances: Towns can regulate certain activities which take place in the Town through the adoption of ordinances.

4. Capital Budgeting: Budgeting provides for control of development pressure by providing public services and facilities according to projected need and the Town's ability to fund improvements. Capital budgeting also increases the efficiency and economy of town government by foreseeing and planning needed capital expenditures well in advance. This fiscal management tool allows communities to schedule the timing and method of payment for major, one-time expenditures. A capital budget and program as outlined in Chapter l17 of Title 24 V.S.A. lists and describes capital projects to be undertaken during the coming fiscal year and the next 5 years, their estimated cost and the proposed method of financing.

5. Land Acquisition: The most certain methods for protecting and assuring controlled public use of valuable recreational and scenic lands are by gift, purchase in fee simple, lease, or by acquisition of easements or development rights.

6. Taxation: Vermont's Use Value Appraisal Program enables landowners who choose agriculture or forestry as long term uses of their property to have that land taxed accordingly. The Program encourages the maintenance of undeveloped land for farming, forestry, and public recreation. Towns may also

provide property tax relief for qualifying farm, forest, and open space landowners by adopting local tax stabilization programs to reduce local property tax burden.

7. Voluntary Action: The following methods would ensure Plan implementation: (l) privately-agreed restrictive covenants binding on purchasers of land; (2) special attention and consideration given by private landowners to the objectives of the Plan and its policies when they decide to build or subdivide; (3) participation in the Act 250 review process by abutting landowners; (4) participation in the town planning process by organizations concerned with the future of Dummerston; and (5) setting aside a percentage of new development for affordable housing.

8. Community Surveys and Public Meetings: Regular contact with residents and citizens of Dummerston can provide important insights into the Town's direction on important issues facing Dummerston. All possible techniques should be explored to maximize public participation.

9. Coordination with Neighboring Towns: Dummerston must take the initiative to work with its neighbors on issues that cross town borders. This is particularly important in dealing with such issues as transportation, housing, education, utilities, solid waste, and land use.

TOWN PLAN MAPS AND EXPLANATIONS

Maps have been produced in large scale for the purposes of the Town Plan public hearings and office use. Smaller scale maps are enclosed as part of the Town Plan.

1. Transportation, Utilities and Community Facilities
Includes network of roads (paved and gravel), railroad lines, airport, surface waters, private and public buildings and facilities, villages, cemeteries, and schools.

2. Natural and Cultural Resources
Locations of Natural Heritage data (including threatened and endangered plant and animal sites, and natural communities), deer wintering areas, geologic sites, historic sites and structures, and recreation sites.

3. Water Resources
Includes all surface waters including wetlands, flood hazard areas, shorelands, public watersheds, and wellhead protection areas.

4. Important Farmland and Forest Land
Includes all parcels in the Use Value Appraisal Program, official tree farms, and important farmlands as evaluated by the Dummerston Agricultural LESA.

5. Physical Soils Limitations
Includes soils with the following limiting factors for land development: shallow soils and soils with steep slopes.

6. Septic System Suitability
Depicts lands that are suitable in various ranges for conventional septic systems and mound systems.

7. Current Land Use
Outlines the following land use districts: Forest Reserve, Reserve, Conservation, Rural Residential, Rural/Commercial, Village, and Commercial/Light Industrial.

8. Map Showing 9-1-1 Road Names
Map showing current road names as of the changes made for the 9-1-1 emergency system. A few changes made in 2000 are included.

9. Future Land Use
Outlines the following land use districts: Forest Reserve, Reserve, Conservation Resource, Rural/Residential, Rural/Commercial, Village, Hamlet and Commercial/Light Industrial. See text in the Land Use element for a description of these areas.

APPENDIX A

Septic System Design Classes *(See Septic System Suitability Map)*

SoVT Class 1 is composed of sandy and gravelly glacial outwash soils with rapid to very rapid permeability in the substratum. These soils require backfilling, or replacement, with finer textured material to slow the perc rate enough to allow for thorough filtering of effluent.

SoVT Class 2 is composed of glacial till soils with a loamy, friable substratum. Experience has shown that the permeability of the substratum can vary from moderate to slow. Therefore, soils in this group may require mound systems in some places and will be suitable for conventional systems elsewhere.

SoVT Class 3 is composed of well drained glacial till soils with a slowly permeable "dense" substratum or that are underlain by bedrock at moderate depths. Mound systems designed for a high water table or bedrock soils are usually required. (There will be some areas falling into SoVT Classes 2 and 4. For example, Berkshire soils in a complex of Tunbridge-Berkshire soils might be suitable for a conventional system. Likewise, some areas of well drained Marlow and Shelburne souls may have mottles at depths that require monitoring.)

SoVT Class 4 is composed of soils with a seasonal high water table that usually require on-site monitoring before establishing suitability. Once a site is determined to be acceptable, mound systems are normally specified. Curtain drains may be used to lower the water table. A significant percentage of these soils may be found unsuitable for septic tank absorption fields.

SoVT Class 5 is composed of soils that are generally not suitable for septic tank absorption fields, but may have areas that are suitable. Footnotes are used to describe the conditions more specifically.

SoVT Class 6 is composed of soils that are generally too rocky, wet, steep or otherwise unsuitable for use as septic tank absorption fields.

Footnotes

a. Portions of this map unit are less than 24 inches to bedrock. However, there are some areas which are deeper and may be acceptable for a septic system.

b. This map unit has a slope limitation. However, there may be areas within this unit that are flat enough to place a septic system, or cut and fill site modifications may produce a suitable area within the unit.

c. Part of this map unit (generally 8-15% slopes) is less than 20% slope and is suitable for mound systems. However, some of it exceeds 20% slope and is not suitable for mound systems.