

TABLE OF CONTENTS

INTRODUCTION.....	1
I. Purpose.....	1
II. The Planning Process.....	1
III. Implementation.....	2
IV. Basic Goals.....	2
V. Compatibility Statement.....	3
VI. The Town of Woodbury – A Brief History.....	4
CHAPTER 1. A STATISTICAL PROFILE OF WOODBURY.....	5
I. General Population	
Data.....	5
II. General Household	
Data.....	5
III. General Family	
Data.....	6
IV. General Work & Commuting	
Data.....	7
V. General Education	
Data.....	7
VI. General Employment	
Data.....	8
VII. General Income	
Data.....	9
VIII. General Housing	
Data.....	10
IX. General Housing Cost	
Data.....	10
X. General Housing Characteristic	
Data.....	11
CHAPTER 2.	
THE LAND AND ITS RESOURCES.....	12
I. Overview.....	13
II. Physical Geography.....	13
A. Topography/Slope.....	14
B. Soils.....	14
III. Resource Protection Lands.....	15
A. Significant Natural Communities and Rare, Threatened and Endangered Species.....	15
B. Aquatic and Wildlife Habitat.....	15
C. Surface Waters.....	16
D. Wetlands.....	18
E. Floodplains.....	19
F. Groundwater.....	20
G. Air.....	20
IV. Resource Production Lands.....	20
A. Agricultural Land.....	21

B. Forest Land	21
C. Earth Resources	22
V. Land-Based Cultural Resources	22
A. Historic, Architectural and Archeological Resources	22
B. Scenic Resources	23
VI. Land Resources – Goals, Policies and Strategies	23
A. Resource Protection Lands	23
B. Resource Production Lands	28
C. Land-Based Cultural Resources.....	30
CHAPTER 3. MUNICIPAL RESOURCES.....	32
I. Utilities.....	32
A. Telephone / Telecommunications.....	32
B. Electricity.....	33
C. Heating Sources	33
D. Water	33
E. Sewage Disposal	33
F. Solid Waste	34
II. Facilities.....	34
A. Town Office.....	34
B. Town Library	35
C. Town Hall	35
D. Schools and the Community.....	35
E. Churches	36
F. Post Office.....	36
G. Town Garage / Road Equipment	36
H. Fire Department Facilities	36
I. Emergency Services	36
J. Cemeteries	37
III. Recreation.....	37
A. Public Land.....	37
B. Trails.....	38
C. Other Facilities.....	38
IV. Services	38
A. Health and Social Services	38
V. Municipal Resources, Goals, Policies & Strategies	38
A. Utilities	38
B. Facilities.....	39
C. Recreation.....	40
D. Health & Social Services.....	41
CHAPTER 4. – TRANSPORTATION.....	42
I. Public Highways	42
A. Vehicular Traffic	42
B. Bicycle & Pedestrian	
Use.....	38
II. Public Transportation.....	43
III. Transportation Goals, Policies & Strategies.....	44

CHAPTER 5. EDUCATION	48
I. General Information	48
II. Facilities.....	48
III. Educations Goals, Policies and Strategies.....	49
CHAPTER 6. HOUSING.....	50
I. Existing Conditions.....	50
II. Housing Goals, Policies & Strategies	51
CHAPTER 7. ENERGY	52
I. Energy Use in Buildings	52
A. Siting of New Buildings	52
B. Energy Efficiency	52
C. Alternative Energy.....	52
II. Primary Sources of Supply	52
III. Energy Goals, Policies & Strategies	53
CHAPTER 8. ECONOMY	55
I. Woodbury’s Economic “Landscape”	55
II. Economic Goals, Policies and Strategies.....	55
CHAPTER 9. LAND USE	56
I. Overview	56
II. Land Use Districts.....	57
A. Village District	57
B. Shoreline District.....	58
C. Agricultural/Rural Residential District.....	58
III. Land Use Techniques & Zoning Tools.....	59
A. Planned Residential Development / Clustering.....	59
B. Minimum Lot Sizes	60
C. Setbacks.....	60
D. Conditional Use Review.....	60
E. Pre-Existing, Non-Conforming Uses	60
F. Pre-Existing, Non-Complying Structures	61
G. Review and Regulation of Sewage Disposal Systems.....	61
IV. Land Use Goals, Policies & Strategies.....	62
A. Village District	62
B. Shoreline District.....	63
C. Agricultural/Rural Residential District.....	64
D. Land Use Techniques & Zoning	
Tools.....	60
CHAPTER 10. REGIONAL ISSUES	65
I. Transportation	65
II. Schools.....	65
III. Lake Use	66
APPENDIX A	1
WOODBURY LAKES & PONDS STUDY 1991.....	2
APPENDIX B.....	8

MAPS

INTRODUCTION

I. Purpose

This Town Plan is intended to provide guidelines and recommendations to help Woodbury accommodate future growth and other opportunities for improvement while maintaining its rural character and protecting its natural resources.

The Plan is designed to protect the health, safety and welfare of Woodbury residents now and in the future. To accomplish this end, the plan will encourage wise land uses based on the capacity of the land to support development, and the availability of necessary community facilities and services. All town residents should have access to clean drinking water, proper sewage disposal, a safe transportation network, and high quality schools and government services. They should be able to enjoy a clean natural environment, recreational opportunities, and peace and quiet if they so choose, while maintaining the full use and enjoyment of their own property.

This Plan will also serve as the framework for regulatory processes at the state and local levels.

II. The Planning Process

In 1994, as a first phase in the development of this plan, the Planning Commission prepared a survey to elicit public opinion regarding the land-use goals of Woodbury property owners. A total of 763 surveys were mailed to all property owners, both residents and non-residents, and 249 responses were received, for a statistically valid return of 33%.

Generally, the responses indicated that protection of natural resources is a high priority. 81% of respondents agreed or strongly agreed, “the town should protect areas where natural, scenic, or historic resources are located.” Fifty-nine percent felt that tax incentives should be used to encourage protection of natural resources on privately owned land, and 69% agreed that the town should seek to acquire conservation easements from willing landowners to conserve significant natural areas. In a question designed to prioritize natural resources for protection, undeveloped lakeshore ranked first, followed by wildlife habitat, scenic areas, wetlands, agricultural lands, woodlands, rare plants, high elevations and open lands, in that order.

Adoption of a sewage disposal ordinance was favored by 74% of those responding to the survey, with 96% agreeing that a large buffer zone between sewage fields and surface waters should be required. 74% agreed that some activities should be restricted within 200 feet of shorelines, including the use of pesticides and fertilizers and intensive logging. 58% were comfortable with the rate of population and housing growth in the town. 46% felt that commercial development should be allowed in all districts of the town. 45% felt that the town should extend road maintenance onto Class 4 roads where permanent residences have been located. Only 36% felt that a regional middle school should be considered as a solution to potential space problems at Woodbury Elementary, and 54% were in favor of an addition to the existing school.

General comments were also solicited in the survey. A number of respondents indicated opposition to land use regulation in general, and concern with property values and tax rates.

III. Implementation

The Town of Woodbury will attempt to implement the goals, policies and recommendations of this Plan in the following ways:

- A. By using this document as the foundation for any land use regulations (i.e., zoning and/or subdivision) that the voters of the Town might amend or authorize over the life of the Plan;
- B. By using this Plan as a guide in all relevant local decision making processes;
- C. Through the Town's participation in the Act 250 process as a "statutory party", particularly under criterion 10 (conformance with the local plan);
- D. By promoting the philosophy of this Plan, and thereby the best interests of Woodbury, at the regional level through continued membership and participation in the Central Vermont Regional Planning Commission; and
- E. By reviewing the plans and activities of State agencies to ensure that they are consistent with this document (and taking appropriate action if they are not).

IV. Basic Goals

- A. To maintain the rural character of the community as defined by the traditional village centers, lakeshore recreation areas, open spaces, and forestlands.
- B. To protect and preserve the integrity and function of significant natural communities, environmentally sensitive areas and special scenic features.
- C. To ensure that current and future land uses do not adversely affect air and water quality.
- D. To uphold Woodbury residents' right to enjoy the full use of their land while according the same property rights to their neighbors.
- E. To encourage housing development or re-development which fits the land's physical qualities and capacities, and to provide safe and affordable housing opportunities for current and future Woodbury residents.
- F. To allow for appropriate economic development including home-based ventures.
- G. To maintain and enhance recreational opportunities.
- H. To encourage the provision and maintenance of a safe road network and to provide guidance in planning and construction of future roads and improvements.
- I. To provide high quality educational and governmental services.

- J. To serve as a framework for future amendments to the town zoning ordinance and other state and local regulatory tools.

V. Compatibility Statement

According to Vermont Statute, a municipal plan is considered to be “compatible” with the plans of its neighboring towns and the region if it "will not significantly reduce the desired effect" of the same.

By virtue of its geography and planning goals, Woodbury's potential for inter-municipal land use conflicts is limited. This Plan's basic focus (i.e. to preserve the Town's rural character while accommodating reasonable growth and development), and current development patterns, do not appear to threaten or obstruct the planning goals of any neighboring community or the Central Vermont Regional Planning Commission.

Draft copies of this Plan have been mailed to all neighboring towns, The Central Vermont Regional Planning Commission and The Department of Housing and Community Affairs for review and comment. No objections were raised. Woodbury therefore concludes that this Plan is compatible with those of adjoining communities and with the relevant regional plans.

VI. The Town of Woodbury – A Brief History

Woodbury lies in the northeastern corner of Washington County. It is bounded to the east by Cabot, to the south by Calais, to the west by Elmore (in Lamoille County), and to the north by Hardwick (in Caledonia County). It was chartered on August 16, 1781 by the Vermont legislature to Colonel Ebenezer Wood, William Lyman, Esq., and sixty associates. The first twelve settlers were Gideon Sabin, Joseph Carr, William West, Benjamin Ainsworth, John Bettis, Ephraim Ainsworth, Thomas Ainsworth, Ezekiel Ball, Daniel Rugg, Ferdinand Perry, Daniel Smith and Samuel Mackres. The first Town Meeting was held March 4, 1806.

Woodbury is a mountain town, with a mountain range, known as Woodbury Mountain, extending southwest to northeast through the township. The best farmland has always been in the western and southern parts of town. Water flows in every direction from Woodbury. It has numerous streams and 23 natural ponds – greatest number of any town in the state of Vermont. These features must have held an attraction for Woodbury’s earliest settlers, much as they do for current residents of the town.

The town currently maintains five cemeteries, each with some gravestones dating from ca. 1840. As with all cemeteries, there is much local history to be assimilated at these sites. Woodbury had the distinction of sending more of its sons to fight in the Civil War than any other town of its size in the state. This was done without public meetings or excessive bounties.

In 1880, Woodbury had a population of 856. In 1888 it had ten school districts and as many common schools, attended by 195 scholars. Fifteen children attended private schools. The school budget was \$1,246.11, and the amount spent was \$1,539.43.

During the 1880’s, several small granite quarries were operating in the hills of Woodbury, but production was limited by the lack of efficient transportation. In late 1894, a company was chartered to build a 9.5 mile railroad between the quarries in Woodbury and the finishing mills in Hardwick. Construction began in April, 1896. This rail line featured extremely steep grades (averaging 5%, with a maximum of 7%), and reached 1,130 feet in elevation, the highest point served by a Vermont railway. “Woodbury Gray” granite was used in the construction of the City Hall & Cook County Courthouse in Chicago. The peak years for the quarries and the railroad were 1904-1916. Passenger service was offered from 1911-1919. Demand for granite fell off in the 1920’s, and operations ceased in October 1934. Since the 1970’s, the Swenson Granite Company has been mining granite from the quarry off the Woodbury-Cabot Road.

The Reverend R.B. Wright, assisted by the Home Missionary Society, organized the congregational Church in South Woodbury in 1875 with 32 members. In 1876, the society erected its beautiful church at the expense of \$3,000. The Reverend W.D. Malcolm organized the Methodist Church in Woodbury in 1879. The church had no building but held services in the town hall. The present building was built after 1879, and has recently been completely restored.

(Adapted primarily from the Gazetteer of Washington County, Vermont.

Information on other historic architecture in Woodbury may be found in this Town Plan under **Chapter 3. Municipal Resources, Section II. Facilities**).

CHAPTER 1. A STATISTICAL PROFILE OF WOODBURY

Data provided by Central Vermont Regional Planning Commission /Central Vermont Chamber of Commerce.

I. General Population Data

Table A.

Census Category	2000 Census Data	% Change from 1990 Census Data
Total Population	816	+ 6.5 %
Male Population	432	+ 8 %
Female Population	384	+ 4.9 %
18 and under	181	- 25.8 %
19 to 29	99	
30 to 49	293	
50 to 64	177	
65 and over	66	+ 40.4 %

As of 2000, Woodbury had a population of 816, comprised completely of rural residents. The population has increased by 6.5% since 1990. Woodbury contains more males than females. Approximately 53% of the total population is male, while 47% is female. Table A. shows the breakdown of age groups amongst the total population in Woodbury. Approximately 22% of the population is children, age 18 and under, while 8% of the population is senior citizens, age 65 and over. The number of residents age 18 and under has decreased, while the number of residents age 65 and over has increased throughout the last decade. There are currently 25.8% less children and 40.4% more senior citizens in Woodbury than there were in 1990.

II. General Household Data

Table B.

Census Category	2000 Census Data	% Change from 1990 Census Data
Population in Households	816	
Population in Family Households	622	
Male Householder	171	
Female Householder	45	
Population in Nonfamily Households	194	
Male Householder	73	
Female Householder	75	
Nonrelatives	46	
Total Households	364	+ 32.4 %
Family Households	216	
2-person household	104	
3-person household	50	
4-person household	37	
5-person household	17	
6-person household	6	
7-or-more-person household	2	
Nonfamily Households	148	
1-person household	101	
2-person household	43	
3-person household	3	
4-person household	1	

Of the total population in Woodbury, 100% live in households. Of these people, 76% live in family households, while 24% live in nonfamily households. Of the 364 total households in Woodbury, 59% are family households, while 41% are nonfamily households. Most of the family households contain 2 to 4 persons. Approximately 48% are 2-person households, while 23% are 3-person households, and 17% are 4-person households. Most of the nonfamily households contain 1 or 2 persons. Approximately 68% are 1-person households and 29% are 2-person households. Compared to 1990, there are currently 32.4% more households in Woodbury. See Table B. for details related to household data.

III. General Family Data

Table C.

Census Category	2000 Census Data	% Change from 1990 Census Data
Total Families	216	+ 11.3 %
Married-couple Family	162	
With own children under 18 years	63	
No own children under 18 years	99	
Husband in Labor Force	141	
Unemployed	0	
Husband not in Labor Force	21	
Wife in Labor Force	109	
Unemployed	2	
Wife not in Labor Force	53	
Other Family	54	
Male Householder, no wife present	23	
With own children under 18 years	9	
No own children under 18 years	14	
Male in Labor Force	20	
Unemployed	0	
Male not in Labor Force	3	
Female Householder, no husband present	31	
With own children under 18 years	27	
No own children under 18 years	4	
Female in Labor Force	22	
Unemployed	0	
Female not in Labor Force	9	

Of the 216 total families that reside in Woodbury, approximately 75% are married-couple families. Of these married-couple families, 39% have children under the age of 18, while 61% do not have children under the age of 18. The remaining 25% of families in Woodbury fall under the category of other family. See Table C. for details. Approximately 57% of these families have a female householder with no husband present, while 43% have a male householder with no wife present. In total, there are 11.3% more families residing in Woodbury than there were in 1990.

IV. General Work and Commuting Data

Table D.

Census Category	2000 Census Data	% Change from 1990 Census Data
Workers 16 Years and Over	485	+ 27.3 %
Work in Place of Residence	76	
Work at Home	22	- 33.3 %
Work outside Place of Residence	409	
Commute by Car, Truck, Van, or Motorcycle	432	
Drive Alone	347	
Carpool	85	
Commute by Public Transportation	2	
Commute by Bicycle, Foot, or Other Means	29	
Less than 5 Minutes	33	
5 to 19 Minutes	60	
20 to 39 Minutes	245	
40 to 59 Minutes	86	
60 to 89 Minutes	23	
More than 90 Minutes	16	

In Woodbury, there are 485 workers age 16 and over, which is a 27.3% increase from 1990. Approximately 16% of these workers work in Woodbury, while 84% work outside of the community. The majority of workers, 89%, travel to work by car, truck, van, or motorcycle. Approximately 80% of those who travel to work by car, truck, van, or motorcycle drive alone, while 20% use carpools. See Table D. for other means of transportation used by workers in Woodbury. Although there are a range of travel times for Woodbury workers, 12% commute between 5 and 19 minutes. Approximately 51% commute between 20 and 39 minutes. Only 7% travel less than 5 minutes to work, while 3% travel more than 90 minutes to work from Woodbury.

V. General Education Data

Table E.

Census Category	2000 Census Data	% Change from 1990 Census Data
Population Attending School	175	- 19.7 %
Nursery School, Preschool	7	
Kindergarten	4	
Grades 1 to 4	33	
Grades 5 to 8	46	
Grades 9 to 12	51	
College, Undergraduate	31	
Graduate or Professional School	3	
Population 25 Years and Over	584	
Nursery School to Grade 4	0	
Grades 5 to 8	17	
Grades 9 to 12, no diploma	44	
High School Graduate	221	
Some College, no degree	83	
Associate Degree	43	
Bachelor's Degree	128	
Master's Degree	31	

Professional Degree	11
Doctorate Degree	6

In Woodbury, there were 175 people attending school at some level in 2000, which is a 19.7% decrease from 1990. A range of educational attainment is represented by the population in Woodbury. Approximately 8% of all residents 25 years and older attended high school without graduating, while 38% have only a high school diploma. Approximately 38% of Woodbury residents 25 years and older hold some type of degree, ranging from an Associates degree to a Doctorate degree.

VI. General Employment Data

Table F.

Census Category	2000 Census Data	% Change from 1990 Census Data
Population 16 Years and Over	671	+ 22.2 %
In Labor Force	507	+ 19.6 %
In Armed Forces	0	
Civilian	507	
Employed	490	+ 23.7 %
Unemployed	17	- 39.3 %
Not In Labor Force	164	
Employed Population 16 Years and Over	490	
Male Employed Population 16 Years and Over	275	
Female Employed Population 16 Years and Over	215	
Agriculture, Forestry, Fishing, Hunting, and Mining Industry	35	
Construction Industry	60	
Manufacturing Industry	65	
Wholesale Trade Industry	16	
Retail Trade Industry	47	
Transportation, Warehousing, and Utilities Industry	10	
Information Industry	14	
Finance, Insurance, Real Estate, Rental, and Leasing Industry	17	
Professional, Scientific, Management, Administrative, and Waste Management Services Industry	38	
Education, Health, and Social Services Industry	113	
Arts, Entertainment, Recreation, Accommodation, and Food Services Industry	15	
Public Administration Industry	44	
Other Service Industries	16	

In Woodbury, there are 507 residents in the labor force, which is 76% of the population age 16 and over – a 19.6% increase from 1990. Approximately 97% of the people in the civilian labor force are employed, while 3% are unemployed. The 17 residents that are unemployed represent 39.3% less than the unemployment level in 1990. All of the industries covered in the Census are represented by residents of Woodbury. The industries with the largest percentage of workers are: education, health, and social services, representing 23% of employed residents; manufacturing, representing 13.3% of

employed residents; and construction, representing 12.2% of employed residents.

VII. General Income Data

Table G.

Census Category	2000 Census Data	% Changes from 1990 Census Data
Total Households	364	+ 32.4 %
Household Income less than \$10,000	27	
Household Income \$10,000 to \$14,999	19	
Household Income \$15,000 to \$19,999	26	
Household Income \$20,000 to \$24,999	47	
Household Income \$25,000 to \$29,999	39	
Household Income \$30,000 to \$34,999	23	
Household Income \$35,000 to \$39,999	17	
Household Income \$40,000 to \$44,999	25	
Household Income \$45,000 to \$49,999	15	
Household Income \$50,000 to \$59,999	53	
Household Income \$60,000 to \$74,999	29	
Household Income \$75,000 to \$99,999	18	
Household Income \$100,000 to \$124,999	12	
Household Income \$125,000 to \$149,999	6	
Household Income \$150,000 to 199,999	6	
Household Income More than \$200,000	2	
Median Household Income in 1999	\$35,357	+ 19.2 %
Total Families	216	
Family Income less than \$10,000	6	
Family Income \$10,000 to \$14,999	10	
Family Income \$15,000 to \$19,999	12	
Family Income \$20,000 to \$24,999	22	
Family Income \$25,000 to \$29,999	18	
Family Income \$30,000 to \$34,999	16	
Family Income \$35,000 to \$39,999	15	
Family Income \$40,000 to \$44,999	19	
Family Income \$45,000 to \$49,999	8	
Family Income \$50,000 to \$59,999	39	
Family Income \$60,000 to \$74,999	21	
Family Income \$75,000 to \$99,999	14	
Family Income \$100,000 to \$124,999	12	
Family Income \$125,000 to \$149,999	2	
Family Income \$150,000 to 199,999	0	
Family Income More than \$200,000	2	
Median Family Income in 1999	\$42,727	+ 35.6 %
Per Capita Income in 1999	\$19,772	+ 83.6 %
Population for Whom Poverty Status is Determined	810	
Income Below Poverty Level in 1999	67	- 9.5 %
Income at or Above Poverty Level in 1999	743	+ 6 %

Table G. shows household income and family income data for Woodbury. All income classes are represented here. Approximately 7% of the total households have an income of less than \$10,000; 25% have an income between \$10,000 and \$25,000; 33% have an income between \$25,000 and \$50,000; 23% have an income between \$50,000 and \$75,000; 5% have an income between \$75,000

and \$100,000; and 7% have an income above \$100,000. In 1999, the median household income in Woodbury was \$35,357, which is a 19.2% increase from 1990.

Approximately 3% of the total families have an income of less than \$10,000; 20% have an income between \$10,000 and \$25,000; 35% have an income between \$25,000 and \$50,000; 28% have an income between \$50,000 and \$75,000; 6% have an income between \$75,000 and \$100,000; and 7% have an income above \$100,000. In 1999, the median family income in Woodbury was \$42,727, which is a 35.6% increase from 1990. In 1999, the per capita income for Woodbury was \$19,772, an 83.6% increase from 1990.

Approximately 8% of people in Woodbury for whom poverty status is determined have incomes below poverty level. Fortunately, the 67 residents who have incomes below poverty level are 9.5% less than those who suffered from poverty in 1990.

VIII. General Housing Data

Table H.

Census Category	2000 Census Data	% Changes from 1990 Census Data
Total Housing Units	663	+ 17.6 %
Urban Housing Units	0	
Rural Housing Units	663	
Occupied Housing Units	329	+ 19.6 %
Vacant Housing Units	334	+ 15.6 %
For Rent	0	
For Sale Only	0	
Rented or Sold, not occupied	2	
For Seasonal, Recreational, or Occasional Use	311	
For Migrant Workers	0	
Other Vacant Housing Units	21	

There are 663 total housing units in Woodbury, all of which are located in a rural area. This is a 17.6% increase from the total housing units in 1990. Approximately 50% of these housing units are currently occupied, leaving 50% vacant. Of these vacant housing units, none are for rent or sale. Approximately 93% of the vacant housing units are for seasonal, recreational, or occasional use. There are currently 15.6% more housing vacancies in Woodbury than there were in 1990 and the occupancy level has increased by 19.6% over the last decade. See Table H. for details.

IX. General Housing Cost Data

Table I.

Census Category	2000 Census Data
Owner-Occupied Housing Units (where data was available)	115
Real Estate Taxes less than \$1,000	20
Real Estate Taxes \$1,000 to \$1,999	70
Real Estate Taxes \$2,000 to \$2,999	23
Real Estate Taxes \$3,000 to \$3,999	2
Real Estate Taxes \$4,000 to \$4,999	0
Real Estate Taxes \$5,000 to \$7,499	0
Real Estate Taxes \$7,500 to \$9,999	0
Real Estate Taxes \$10,000 and Over	0
Median Real Estate Taxes	\$1,631

The median real estate tax for owner-occupied housing units in Woodbury is \$1,631. See Table I.

X. General Housing Characteristic Data

Table J.

Census Category	2000 Census Data	% Change from 1990 Census Data
Total Occupied Housing Units	329	+ 19.6 %
1-Person Household	97	
2-Person Household	131	
3-Person Household	50	
4-Person Household	31	
5-Person Household	13	
6-Person Household	5	
7-or-more-Person Household	2	
Total Housing Units	663	
1 Room	6	
2 Rooms	36	
3 Rooms	73	
4 Rooms	109	
5 Rooms	148	
6 Rooms	113	
7 Rooms	76	
8 Rooms	54	
9-or-more Rooms	48	
Detached Housing Units	575	
Attached Housing Units	28	
1 Unit	8	
2 Units	11	
3 or 4 Units	7	
5 to 9 Units	0	
10 to 19 Units	0	
20 to 49 Units	2	
50 or More Units	0	
Mobile Home	60	
Boat, RV, Van, etc.	0	
Built 1999 to March 2000	15	
Built 1995 to 1998	42	
Built 1990 to 1994	58	
Built 1980 to 1989	103	
Built 1970 to 1979	117	
Built 1960 to 1969	67	
Built 1950 to 1959	24	
Built 1940 to 1949	34	
Built 1939 or Earlier	203	
Contain Complete Plumbing Facilities	599	
Lack Complete Plumbing Facilities	64	

Of the 329 total occupied housing units in Woodbury, 69% are 1 to 2 person households, while 25% are 3 to 4 person households. Of the 663 total housing units in the Town, most have between 3 and 7 rooms. Approximately 6% have 1 to 2 rooms; 27% have 3 to 4 rooms; 39% have 5 to 6 rooms; 20% have 7 to 8 rooms; and 7% have 9 or more rooms. Many of the housing units in Woodbury were built prior to 1980. Approximately 31% of the houses were built before 1939; 36% were built

between 1940 and 1979; and 33% were built after 1980. Approximately 90% of the total housing units in Woodbury contain complete plumbing facilities, leaving 10% without adequate plumbing.

CHAPTER 2. THE LAND AND ITS RESOURCES

I. Overview

The landscape is the stage and source for all human activity. In Woodbury, natural features have determined settlement patterns, and hence helped to define the character of the community. Natural resources have also served as a source of livelihood and beauty to town residents over the last two centuries. These resources continue to provide benefits for residents, as well as opportunities for, and constraints to, growth and development.

However, as recent decades have demonstrated, the resources and frontiers that the land can provide are finite and vulnerable to abuse. This is particularly true during periods of rapid growth and development. It will be in Woodbury's long-term best interest therefore, to use land resources efficiently and wisely so that they may continue to provide opportunities for human endeavor and growth in the future.

Woodbury's natural resources are its greatest asset. The diversity of landscapes - wetlands, ponds and lakes, forests, hills and ridgelines – define the Town. Woodbury is extensively forested and undeveloped with a high acreage of surface waters (the greatest of any town in the state), including wetlands, which provide habitat for a variety of wildlife. The effects of unrestrained development are real and can be found taking place in Vermont right now. Even incremental development, as seen in Woodbury, may impact fish and wildlife and natural areas through habitat fragmentation, loss of habitat, introduction of exotic and/or nuisance species and loss of natural species diversity. Rapid growth may threaten our rural culture, which is based on a strong connection to the land, and depends on the presence of fish, wildlife and natural areas. For these reasons, growth must be informed by thorough and accurate natural resource inventories, and carefully regulated in order to preserve existing natural communities.

This chapter first examines Woodbury's physical landscape and then considers the resources contained therein, exploring their relationship to various human activities. Finally, it offers some policies designed to help maintain a harmonious and mutually beneficial balance between people and the land.

II. Physical Geography

The Town of Woodbury is located in the Northeast corner of Washington County in Northeastern Vermont. It is bounded by the Towns of Calais, Worcester, Hardwick and Cabot, and contains approximately 25,122 acres of land. It is about 86% forested, with only about 1.5% of its land area developed. Approximately 5% of Woodbury's land area is cropland, pasture, or open land, and another 2% is formerly open land in the process of reverting to forest. Woodbury contains more lakes and ponds than any other town in Vermont. Surface waters and wetlands comprise over 5% percent of the Town's total area (See Table 1, below). (Also see Appendix B, Map 1 - Land Use/Land Cover).

Table 8: Current Land Use in Woodbury

Category	Acreage	Percent Total
1) Forest Land	21,469	85.5%
2) Ag/Open Land	1,326	5.3%
3) Surface Water	990	3.9%
4) Scrub/Shrub	576	2.3%
5) Wetlands	392	1.6%
6) Developed Land	369	1.5%

A. Topography/Slope

Topography, the lay of the land, is defined by elevation and slope. Both of these natural features influence past and future settlement patterns and uses of the land. With about 1560 feet of topographic relief inside its boundaries, Woodbury is rugged and picturesque. From a minimum elevation of just about 920 feet along the shores of Woodbury Lake, the terrain climbs to over 2483 feet on Woodbury Mountain in the northwest corner of Town. The Town lies within a physiographic region known as the Vermont Piedmont - a plateau that has been dissected by streams and subdued by glaciation. The Town is roughly bisected by Route 14 which traverses a valley formed by Cooper Brook to the north, and Kingsbury Brook from Greenwood Lake south to South Woodbury. Low hills lie to the east while the ridgeline of the Woodbury Range is the dominant topographical feature west of Route 14. Generally, slopes are steep. In fact, 4,395 acres (17.5%) of Woodbury's terrain exhibits slopes greater than 25%, with greatest concentrations being found in the Woodbury Range.

The steepness of the land as determined by slope can restrict the viability of septic tank systems, building locations, utility and safety service, and road building. Elevation is also important in evaluating the fragility of landforms; as soils are thinner, erosion more extensive, vegetative cover more sparse, and climatic conditions more severe as elevation increases, especially above 2,000 feet.

The percent of slope is determined from the number of feet of vertical rise over 100 feet of horizontal distance. Generally, land with slopes greater than 15% demands more detailed design, construction criteria and consideration of soil parameters, thereby increasing the costs of development and the potential of environmental damage due to erosion and runoff. With slopes of greater than 25% the likelihood of any of these damaging factors occurring is almost assured. Since steepness may preclude the use of large farm equipment, suitable land uses on steep slopes (greater than 25%) are farming with small equipment and soil conservation practices to prevent soil erosion, forestry, recreation, wildlife habitat and pasture.

B. Soils

Soil is the layer of earth that lies directly over the bedrock. It is the layer through which rain and nutrients filter, upon which crops and trees grow, and where wildlife and humans create their lives and homes. The type of soil that develops in an area is dependent on its parent material (bedrock and glacial deposits), vegetation, topography, climate and time. Understanding the characteristics and capabilities

of these soils is important for planning the types, locations, and intensities of future land uses. Soils information can be an important guide for reviewing individual development proposals.

Scientists of the USDA Natural Resources Conservation Service (NRCS) have mapped the soils in Woodbury and have transferred them to recent ortho-quads for GIS mapping. A soil interpretation sheet for each soil type is available which describes the soil and evaluates its capability for certain uses. Information on slope, texture, density, permeability, depth to bedrock, flood hazard, frost action, depth to seasonal high water table, and other characteristics is available. Soils are evaluated for their suitability for construction, septic systems, water supply, recreation, farming, woodland management, wildlife and resource material uses. In general, unfavorable soil types for development typically contain excessive slopes, shallow depth to bedrock or hardpan, wet soils, excessively drained soils, unstable soils, and erodible soils.

As Woodbury has no public sewage treatment facilities, its residents are dependent upon the Town's soils for on-site sewage disposal. The majority of soils identified in the survey of Woodbury by the NRCS, however, have severe or moderate limitations for septic field absorption due to depth, wetness, rock, slope, slow percolation, flooding, and/or poor filtering. In many of the soils that have moderate or severe limitations for septic absorption, it may be possible to install special systems that lower the seasonal water table or to increase the size of the absorption field so that satisfactory performance is achieved.

III. Resource Protection Lands

A. Significant Natural Communities and Rare, Threatened and Endangered Species

The Vermont Agency of Natural Resources defines a natural community as “an assemblage of plants and animals that is found recurring across the landscape under similar environmental conditions where natural processes, rather than human disturbances, prevail.” The Department of Fish and Wildlife may consider protection of significant natural communities as Rare & Irreplaceable Natural Areas under criterion 8 of Act 250. The Fish & Wildlife Nongame & Natural Heritage Program has identified four Natural Heritage sites in Town, where rare native plants and/or animals have particular habitat requirements, are at the edges of their ranges, are vulnerable to disturbance or collection, or have difficulty reproducing. The exact locations of these sites designated for protection are generally kept from public knowledge, since they occur on private property, are fragile and best left undisturbed.

The Natural Heritage Program has inventoried significant natural communities and rare, threatened and endangered species for every town in the state. A list of these for the Town of Woodbury includes two species of birds classified by the state as endangered – in immediate danger of becoming extirpated statewide – the common loon and the peregrine falcon. (The State may reclassify loons from “endangered” to “threatened” within the time frame of this five year Plan. However, this will not alter the State’s loon protection program). Additionally there are 13 plant species listed. These are ranked on a scale of 1-5 (#1 being “very rare”, #5 “demonstrably secure in the state”) according to degree of rarity. All 13 of the plant species listed as present in the Town of Woodbury are ranked as “uncommon”, “rare” or “very rare”.

B. Aquatic and Wildlife Habitat

A distinction is made between “rare, threatened and endangered species” and important habitat for creatures that are more common to Woodbury’s woods and waterways. Woodbury boasts considerable wildlife habitat for a variety of wildlife species, including many associated with wilderness settings (e.g. deer, moose, bear, loon, fisher cat, bobcat, etc). Residents value native wildlife for a variety of reasons, including hunting, fishing, trapping, wildlife viewing, and indirect income.

Our most important wildlife species are generally thought of as those that yield significant economic returns, provide for sport and subsistence hunting, are symbolic of wilderness values, or face the threat of extirpation or extinction. We know that viable habitat is the single most important survival need for most of these species, yet for many, habitat loss or fragmentation is a real and present threat.

Significant habitats are defined as “those habitats that provide a critical source of food, water, shelter, space, or travel that is decisive to the survival of a species including, but not limited to, deer wintering areas, wetlands, bear feeding areas and travel corridors, habitats of threatened and endangered animal and plant species, and significant natural communities”. Significant wildlife habitat is protected under criterion 8(a) of Act 250.

Winter deer ranges are generally located in south-facing coniferous stands, which offer food and relief from icy winds and deep snows. Such areas are often desirable sites for human activities as well. Woodbury possesses 1,545 (6.1%) acres of winter deer range. The most significant of these areas lie along the east side of Route 14 in the southern part of town and along County Road.

About three-quarters of Woodbury (excluding an area in the south-central portion of Town) have been mapped as a "Black Bear Production Zone" by the State. These areas are considered to be important to the survival and propagation of the species. Beech stands and wetlands within these zones may be important fall and spring feeding areas.

Water bodies are of particular importance for wildlife in Woodbury. Nichols and East Long Ponds are especially significant because they are relatively undeveloped and somewhat remote. Loons have nested at several of Woodbury’s larger water bodies in recent years, aided by floating nesting sites and signs prohibiting human disturbance while loons are on the nest, placed by the Fish & Wildlife Department. Non-breeding peregrine falcons have been sighted at one location in Town for the past several years.

C. Surface Waters

Woodbury has more lakes and ponds than any other town in Vermont, and is a headwater area for both the Lamoille and Winooski River Basins, so it is especially important that Woodbury’s water resources be protected. With half of the Town’s housing units qualified as seasonal, it is clear that the Town’s abundant water bodies and forests draw visitors from within and outside of the State, most of whom contribute to the local economy through the purchase of goods and services.

The Town's water resources are a large, interconnected hydrologic system of lakes, ponds, streams, aquifers and wetlands. The quantity and quality of water is affected by natural factors such as precipitation, run-off, soils, geology, and vegetation. Because of the manner in which precipitation flows from the land into drainage networks, there is a direct relationship between land use and surface

water quality. Development in watersheds may disturb the natural balance between ground and surface water resources and result in flooding, erosion and sedimentation. Loss of aquatic habitat, decreased aquifer recharge, irregular stream flows and water pollution are all possible impacts of watershed development. The quality of water resources in Woodbury is important for public health and safety, recreation, diversity of wildlife, environmental quality, and scenic beauty; and thus requires special consideration in land use planning.

Water bodies over 25 acres are considered "public waters" by the State; it is the responsibility of the Fish & Wildlife Department to maintain a public boating access on these lakes if property is available.

The following is a table of Woodbury's 25+ acre water bodies (data from Vermont Boating Safety: www.boatsafe.com/vt/):

NAME	LOCATION (TOWN)	SURFACE AREA IN ACRES	≥ 30 CONTIGUOUS ACRES(2) (Y/N)	INTERNAL COMBUSTION MOTORS ALLOWED(3) (Y/N)	MAXIMUM SPEED LIMIT(4) M.P.H.	PERSONAL WATERCRAFT ALLOWED (Y/N)	USE BY AIRCRAFT PROHIBITED (5) (Y/N)	OTHER RESTRICTIONS APPLY
BUCK LAKE	WOODBURY	39	N	N	5 mph	N	Y	N
CRANBERRY MEADOW POND	WOODBURY	28	N	N	5 mph	N	Y	N
EAST LONG POND	WOODBURY	188	Y	Y	N/A	N	N	N
FOREST LAKE (NELSON POND)	CALAIS & WOODBURY	133	Y	Y	N/A	N	N	N
GREENWOOD LAKE	WOODBURY	96	N	Y	N/A	N	N	Y
NICHOLS POND	WOODBURY	171	Y	Y	5 mph	N	N	N
SABIN POND (WOODBURY LAKE)	CALAIS & WOODBURY	142	Y	Y	N/A	N	N	N
VALLEY LAKE (DOG POND)	WOODBURY	88	N	Y	N/A	N	Y	Y

In addition to these larger ponds and lakes, there are approximately 20 smaller ponds.

The 1991 report entitled "Woodbury Lakes and Ponds Study" (LPS), which was undertaken by consultants Jeffrey Parsons, Don Meals and Deb Lester as a result of public concern about water quality, found that the Town's water bodies appear to be in reasonably good condition. Some potential threats were noted, however, particularly in and around the larger lakes. The report offers several recommendations (listed in Appendix A), which are endorsed by this Plan. See the Goals, Policies & Strategies section of this chapter, where Lakes & Ponds Study recommendations are expressly implemented.

The Vermont Water Resources Board has established a water quality classification system which specifies (1) water quality goals to be attained where actual water quality is lower than the standard, or

(2) the minimum standard to be maintained where actual water quality is higher. Most of the surface waters in Woodbury have been classified as Class B. By definition, streams so classified should "consistently exhibit good aesthetic value and provide high quality habitat for aquatic biota, fish and wildlife." They should also be suitable for drinking with filtration and disinfection; irrigation and other agricultural uses; swimming and recreation. It is State policy to maintain the quality of its surface waters at their designated standards. The Agency of Natural Resources (ANR), Department of Water Resources and Environmental Engineering has received the charge of river management with respect to the above classification system.

Nuisance aquatic plants such as Eurasian Milfoil can impair water quality and the health and diversity of aquatic habitat. Once established, such weeds have the capacity to proliferate so dramatically that other aquatic plants will be choked out, destroying the biodiversity essential for a healthy ecosystem. While significant populations of Eurasian Milfoil have not yet plagued Woodbury's Lakes, this threat could be averted through public education and careful monitoring of all surface waters.

Storm water run-off can also have a negative impact on water quality, transporting excess silt or pollutants, and eroding shorelines. Preserving public health, protecting wildlife, and preventing the loss of shoreline property due to erosion, should be guiding principles in considering regulation of storm water run off.

D. Wetlands

Wetlands are swampy or marshy areas that are inundated by surface or groundwater with a frequency sufficient to support significant vegetation or aquatic life that depend on saturated or seasonally saturated soil conditions for growth and reproduction. They are inhabited by a unique variety of plants and animals and help make our environment more livable by purifying surface and underground water supplies, storing floodwaters during excessive rains and replenishing water supplies in dry weather, and providing for productive and diverse biological communities. Over 50% of Vermont's original wetlands have been lost. Wetlands may be threatened or destroyed by human activity, and should be protected from harm.

Woodbury contains numerous wetlands, totaling over 1000 acres, which are listed on the National Wetlands Inventory. Many of these occur next or adjacent to surface waters. There are several types of wetlands within the Town of Woodbury, including swamps, marshes, fens and vernal pools. The National Wetlands Inventory (NWI) includes all wetlands one acre or more in size. These wetlands plus those not mapped but physically contiguous to wetlands listed in the NWI are protected by the Vermont Wetland Rules, adopted by the ANR/Water Resources Board. Upon request, the ANR may formally determine wetland boundaries through field investigation. (See Appendix B, Map1).

The Vermont Wetland Rules (VWR), updated in 2001, establish three classes of wetlands, which are used to determine the level of protection under these rules. Class One and Two wetlands are "significant wetlands" and therefore are protected under the rules. Class Three wetlands are defined as "those wetlands that are not designated as Class One or Class Two wetlands". Most wetlands shown on the NWI maps and those wetlands that are contiguous to mapped wetlands are Class Two wetlands. A 50-foot buffer zone is designated contiguous to all Class Two wetlands and a 100-foot buffer zone is designated contiguous to all Class One wetlands. The Wetland Rules specify, "allowed" and "conditional" uses in each class. As wetland areas may change in function over time, it would be

appropriate to periodically re-evaluate their classification under VWR criteria (See VWR 2001 Edition, Section 5).

The Wetland Rules point out that local planning commissions can undertake studies, make recommendations on wetland protection, and indicate those areas proposed for protection in their Town Plans. No municipality may grant a zoning permit for the development of a wetland prior to the expiration of a period of thirty days following the submission of a report to the Agency of Natural Resources, describing the proposed use, the location requested and an evaluation of the effect of such proposed use on the town plan and regional plan.

In 2000, through the efforts of the Conservation Commission, the Town of Woodbury purchased a significant portion of the wetland area in Woodbury Village, contiguous with the wetlands owned by Woodbury School. The School, as well as the Agency of Natural Resources and the Vermont Institute of Natural Sciences, have used the wetlands for field trips in environmental education. The Conservation Commission intends to support the School in the further development of wetlands studies curricula.

E. Floodplains

The 100 year flood (i.e. a flood of a magnitude that has a statistical recurrence interval of once every 100 years) has been adopted by the National Flood Insurance Program (NFIP) as the base flood for floodplain management. In total, approximately 177 (0.7%) acres of land in Woodbury lie within a 100-year flood zone. These areas have been identified on the Flood Insurance Rate Maps prepared by the NFIP. These federally recognized areas are primarily low-lying shorelines (such as around parts of Woodbury Lake). (See Appendix B, Map 2).

Because of the great retentive capacity of its numerous lakes and wetlands, Woodbury does not contain extensive flood prone areas. However, some of the smaller tributary streams are subject to flash flooding and are capable of causing property damage as well. The most frequent flooding occurs in early spring as a result of snow melt and heavy rains, but flooding has historically occurred in every season. Flooding has also occurred as a result of ice jams and debris collection. The NFIP does not identify small streams such as Woodbury has in abundance, that are prone to flood and cause damage to roads and private property.

According to the Vermont Agency of Natural Resources (ANR), NFIP maps tend to be inaccurate, deficient and incomplete. However, any property owner can buy flood insurance from the NFIP, whether it lies in the federally designated flood plain or not. Insurance rates on properties not in the NFIP are lower than in federally designated areas, so it is actually in the best interest of the Town not to advocate for other known flood-prone areas to be added to the NFIP.

Development on floodplains reduces their water storage potential, increasing flood heights and thus damage to downstream areas. In addition, development of these areas and the resulting effect on floodplain mechanics is disruptive of river ecology. Finally, the economic benefit of locating a structure in a flood hazard zone rarely outweighs the economic risks of damage to or destruction of that building. Therefore, standards for new development in NFIP-designated or locally recognized flood prone areas should be stringently reviewed.

F. Groundwater

The importance of groundwater to the residents of Woodbury cannot be overstated. So dependent is the community on underground sources for domestic water supply, that pollution or significant depletion of its aquifers would spell hardship for many years to come. Woodbury therefore, must consider the protection of groundwater resources in planning for its future.

Vital to the protection of groundwater sources is an awareness of their "recharge" areas. Aquifer recharge areas are zones that contribute to subsurface supplies. A recharge area consists not only of the land area directly above the aquifer through which precipitation percolates, but also of upland areas from which run off drains towards the aquifer. Uses of these lands, which may have the potential for spills of toxic or dangerous substances, also have the potential to pollute the aquifer. Uses which render the land impermeable (e.g. parking lots, buildings, etc) will deplete the groundwater supply. Also, as there is exchange between surface and ground waters, land uses which pollute upstream waters may in time damage downstream aquifers. (See reference to storm water run-off, section C of this Chapter). Obviously, the regulation of potentially hazardous land uses is a vital part of aquifer protection.

Aquifer yields may be available in sand and gravel deposits. These resources should be considered in future planning efforts.

G. Air

Less tangible yet undeniably essential, air is another natural resource that merits protection. Natural resources cannot be enjoyed if air quality is poor. While there is little that can be done on the municipal level to regulate automobile emissions (which contribute significantly to air pollution), a municipal government can have an impact on air quality by enforcing the State law banning households from burning their trash. The New Hampshire Department of Environmental Services estimates that back yard trash burning accounts for 17% of the air-born dioxin in that state. Woodbury's air is still relatively clean. Steps should be taken to ensure that air quality is maintained at the highest practical standard.

IV. Resource Production Lands

Resource production lands benefit society on many levels - economic, aesthetic, recreational, and environmental. They provide habitat for wildlife, undeveloped sites for flood storage and watershed protection, scenic vistas, open spaces for a variety of outdoor pursuits, and self-sufficiency as local sources of food and wood products. In addition, as detailed in the previous chapter, these lands play an important part in Woodbury's economy, providing a relatively high percentage of jobs compared with other towns in the region.

Few would argue against the need to protect and maintain these important and traditional uses of our land. Still, they are being threatened by development pressures, poor practices and a variety of economic forces. Agricultural lands are particularly vulnerable to encroachment and conversion as they

are often level, cleared and on good building soils.

On the other hand, while land use regulations speak of agricultural and forest lands as a resource, it must be remembered that the lands upon which the resources exist do not belong to the public, but are owned by private individuals whose rights and interests must be considered in any land use regulations which affect their land. Most of us see agricultural and forest lands and their uses as a backdrop to our lives and our quality of life. However, few of us have to bear the burden of owning, maintaining and supporting such resource production lands. As we consider public goals and policies for preserving resource production lands, we must be careful not to disadvantage and disenfranchise those who own and have owned and paid for those resources.

A. Agricultural Land

Although Woodbury, with its wet and rugged landscape, may not fit the image of an agricultural community, it does contain some good farmland soils. In fact, some 2,096 (8.3%) acres of prime agricultural soils exist in Woodbury. They are located primarily along the Calais border, between Nelson Pond and East Hill in South Woodbury, and in the extreme northwest corner of Town. These soils are significant due to the correlation between their location and the over 1,300 acres of land that remains open. Some of this agricultural land is enrolled in Vermont's Use Value program. Through this program landowner's property taxes are assessed on the basis of the land's current use (as opposed to its development potential). In return, the landowner pledges to abide by a management plan for the parcel. Although few of Woodbury's agricultural landowners are full time farmers, the open spaces they provide still play an important role in defining the character of this rural community.

The NRCS has classified Vermont's soils into four categories with respect to their potential for agriculture: highest, good, low and limited. (See Appendix B, Map 3 – Agricultural and Forest Soils). The NRCS recommends that the highest and good categories qualify as primary agricultural soils as defined in Act 250. These only consider physical and chemical soil properties, without assessing size, location, accessibility and current land use. Some communities have used LESA (Land Evaluation and Site Assessment) to identify prime agricultural lands using a broader set of criteria designed to be more reflective of community values.

B. Forest Land

Critical to Woodbury's identity are the vast forest lands within its borders (see Table 1). In addition to providing intangible benefits, many of Woodbury's large, managed parcels are important sources of lumber and cord wood. The fact that almost half of Woodbury's households burn wood as their primary heat source (compared to 18% for the Region), attests to its availability and local importance.

About 148 acres of the Town's forest lands are protected and managed within the Buck Lake Wildlife Management Area. This forest is comprised predominantly of red and sugar maple, yellow birch and beech, and is managed for multiple uses. The vast majority of Woodbury's forest lands, however, are privately owned. Vermont's Use Value Appraisal Program, which offers a property value adjustment for forest lands being managed and harvested with the oversight of a State tree warden, is the most widely used and most effective forest conservation tool, serving the economic interests of land owners as well as the public good. With the recent initiation of the U.S. Forestry Service's "Forest Legacy"

program, forest landowners may have another option and incentive for the voluntary conservation of their land (provided funding is continued). Under this program, federal funding is available for the purchase of conservation easement on eligible, privately owned forest lands.

The NRCS has recently rated the forestry potential for soils in Vermont. Rated on a scale of 1 to 7, those with the best potential (1-3) were used to define good potential forest land in Woodbury. (See Appendix B, Map 3). Given the desire of the Town to conserve forest land, soils with good forestry potential should be considered in development proposals. However, USDA ratings only reflect physical and chemical compositions of the soils and do not consider location, current land use, parcel size, or other relevant factors. A Forest Land Evaluation and Site Assessment (FLESA) study could include other criteria for determining the conservation potential of important forest land in town. When prime forest lands are thus identified, the town could find ways to encourage landowners to maintain these lands in productive use. If large parcels of forest are fragmented through subdivision, the natural and economic value of the forest decreases.

C. Earth Resources

Earth resources abound in Town. The discovery of granite in Woodbury led to the Town's rapid growth in the late 1800's. Granite extraction was the major industry in town until the 1940's. The Swenson Granite Company quarry (off the Woodbury-Cabot Road), which was re-opened in the 1970's, continues to operate and expand. Other earth resources in Woodbury include: pyrite, smoky quartz, apatite, zircon, calcite, feldspar, epidote, rutile, magnetite, and most importantly, sand and gravel. Woodbury's sand and gravel deposits are glacial in origin, and, like human habitation, agriculture, and groundwater resources, these deposits generally follow the courses of streams. While sand and gravel deposits may yield needed materials for road and building construction, these coincidental development patterns render their extraction a matter of some sensitivity. It is vital that care be taken in the permitting process for future extraction operations to avoid land use conflicts and environmental damage. The Town should also consider leaving access to current or potential extraction sites in decisions regarding future development. (See Appendix B, Map 1).

V. Land-Based Cultural Resources

The special way in which people have interacted with the natural environment over time has resulted in a complex and rich heritage in Woodbury. The resulting cultural environment - the historic buildings, sites, landscapes and scenic vistas - work together to evoke a "sense of place" that gives Woodbury its identity. The identification of these vulnerable cultural elements that comprise community character is necessary before taking measures to plan for change, to influence the scale of change and mitigate the nature of the impact of change on the character of Woodbury.

A. Historic, Architectural and Archeological Resources

Woodbury hosts many buildings of historic and architectural importance. The Woodbury Elementary School and Town Hall are both listed on the National Register of Historic Places, and many homes and other municipal buildings are listed on the State Register for Historic Places. The Woodbury Town Hall is among the oldest in continuous use without having had any major structural changes. An inventory of historic properties undertaken by the Vermont Department of Historic Preservation is

available in the Town Clerk's Office. A listing in the inventory affords no specific protection for a structure or benefits for its owner. It is merely intended to catalogue historic resources, which may serve to facilitate individual or local protection efforts.

Woodbury has a storied history, which is reflected in its built environment. While Woodbury does not have an official historic district, the character of the Town is greatly affected by these old buildings, as they transmit lessons about the events of earlier times. The integrity and impact of these lessons will benefit from the continued care of these historic buildings and the incorporation of historic styles into new structures.

The map of Woodbury from Beers Atlas of 1873, when compared with existing development, is valuable in identifying potential archaeological remains. Industrial archaeological sites have not been surveyed, but may exist along the rivers and streams in the eastern part of town where the milling activity was concentrated. Archaeologically sensitive lands should be protected during project planning because they are likely to contain either Native American and/or historic archaeological sites.

B. Scenic Resources

The visual character of Woodbury is of great value to residents. It helps give a sense of identity to the Town. This identity depends on the Town's natural landscape (lakes, hills, wetlands, forests, etc.) as well as its cultural landscape (farmhouses, barns, roads, and villages). Development which is insensitive to aesthetic resources will diminish the quality of life for Town residents.

Among Woodbury's most outstanding scenic features is the marsh wetland complex in Woodbury village, which is now owned entirely by the Town. Other locally recognized sites of scenic beauty include Woodbury Gulf, Nichols Ledge, and the ridgeline of Woodbury Mountain. While they deserve protection, these sites are located on private property. Any strategy for protection must be consistent with the rights of land owners.

VI. Land Resources – Goals, Policies and Strategies

The overall goal with regard to land resources is to conserve the integrity and function of Woodbury's vital resource protection lands, resource production lands, and land-based cultural resources.

A. Resource Protection Lands

GOAL #1: To protect Woodbury's rare, threatened and endangered plant and animal species, and significant natural communities.

Policy #1-A: In order to adequately protect rare, threatened and endangered species and significant natural communities, an ongoing effort should be made to identify such species and natural areas, share data with agencies that provide protection on the state and federal level, and educate Woodbury residents about the Town's precious species as well as existing state and federal laws for their protection. State and federal regulations should be reviewed, and the Town's current zoning ordinance should be examined to assure compliance with these laws.

- **Strategy #1-A (1):** The Conservation Commission, together with other interested Townspeople, will broaden its existing program to identify and inventory rare, threatened and endangered species and significant natural communities, and provide the State Agency of Natural Resources and the Fish & Wildlife Nongame & Natural Heritage Program with up-to-date information on field findings. It should be noted that permission must be sought from land owners before trespassing on private property to conduct such wildlife inventories. (Ongoing throughout the life of the Plan).
- **Strategy #1-A (2):** The Planning Commission, together with the Conservation Commission, will study state and federal wildlife protection programs and discuss the effectiveness of current zoning ordinance to uphold and clarify state and federal regulations.
- **Strategy #1-A (3):** The Conservation Commission will provide information on the Fish & Wildlife Nongame & Natural Heritage Program at annual Town Meetings and at the Town Clerk's Office.

GOAL #2: To protect critical aquatic and wildlife habitat.

Policy #2-A: In order to protect critical aquatic and wildlife habitat, an ongoing effort should be made to identify such habitat, supply updated information to state and federal protection agencies, and educate Woodbury residents about critical aquatic and wildlife habitat as well as state and federal laws protecting such habitat. State and federal regulations should be reviewed, and the Town's current zoning ordinance should be examined to assure compliance with these laws.

- **Strategy #2-A (1):** Strategies connected with Policy #1-A, above, (in reference to rare, threatened and endangered species), will likewise be applied to critical wildlife habitat.

GOAL # 3. To preserve the quality and character of water bodies and shorelines.

Policy #3-A: On-site sewage disposal in lakeshore areas should meet reasonable standards.

- **Strategy #3-A (1):** The Planning Commission will consider proposing a sewage disposal ordinance or a shoreline regulation (using setback recommendations in Woodbury Lakes and Ponds Study - see Appendix A) in addition to existing zoning regulations.
- **Strategy # 3-A (2):** In keeping with the recommendations of the Lakes & Ponds Study (LPS), the Select Board should designate a Town Sewage Officer, or charge the Town Health Officer, to take primary responsibility for reviewing design and construction of new sewage systems (or ensuring that a certified engineer approves such systems). (A third alternative would be to share a Sewage Officer with a neighboring town).
- **Strategy # 3-A (3):** The Conservation Commission and/or the Town Health Officer or Town Sewage Officer, will approach lake associations to coordinate a voluntary assessment of existing camps to determine if and where septic systems are directly polluting lakes and ponds.
- **Strategy # 3-A (4):** Pamphlets (available through the ANR) will be distributed by the Conservation Commission to lakeshore property owners regarding the potential use of alternative waste disposal systems and flow reduction devices where standard options are not sufficient.

- **Strategy #3-A (5):** Complaints concerning septic systems that may be faulty and causing pollution, will be investigated by the Town Health Officer (or designated Sewage Officer), who will report to the Select Board. As recommended in the LPS, “In cases where phosphorus and/or nitrogen is likely to reach (or is already reaching) surface waters (through overland flow and ground water), a holding tank should be installed.”
- **Strategy #3-A (6):** The Planning Commission will explore the possibility of state funding for septic system upgrades.

Policy #3-B: The Town should consider adopting a growth management strategy that considers the interaction between land use, lake sensitivity and water quality.

- **Strategy #3-B (1):** The Planning Commission will invite a representative from the Vermont Department of Environmental Conservation to speak at a public forum on this issue.

Policy #3-C: The maintenance of undisturbed areas of vegetation along shorelines of lakes, streams and wetlands should be encouraged for these reasons: (1) the presence of native grasses and shrubbery along shorelines reduces the impact of sedimentation and other overland pollutants; (2) trees along stream banks can protect property from flood flow and ice jams; (3) maintenance of trees and shrubbery along stream banks also provides shade that is important to fish habitat; and (4) undisturbed vegetation along shorelines reduces the potential of erosion.

- **Strategy #3-C (1):** The Conservation Commission will use information available from the ANR on the function and value of vegetated buffer strips for distribution to town property owners, especially owners of waterfront property.
- **Strategy #3-C (2):** The Conservation Commission will prepare information regarding the water quality impacts of the use of pesticides, herbicides and fertilizers near water bodies for distribution to town property owners, especially owners of waterfront property.

Policy #3-D: Standard erosion controls should be used during construction in the vicinity of any shorelines. Erosion and sediment control standards within shoreline districts (also tributary streams and wetlands) have been drafted by the Vermont Department of Environmental Conservation, and should be used as a guideline.

Policy #3-E: Land alterations that interfere with the natural flow of streams to surface waters should be discouraged. Consideration should be given to regulations requiring that any stream crossings for public or private roads be constructed with appropriate consideration for control of soil erosion, maintenance of water quality and fisheries concerns during and after construction. Such regulations should take into consideration Vermont’s Acceptable Management Practices for timber harvesting (AMP’s) as the standard for road crossings of streams. Permitting for more permanent bridges should be site specific.

Policy #3-F: Construction of ponds by diverting streams, or by dredging or damming wetlands, is not allowed under state law. The zoning ordinance should contain this information.

Policy #3-G: Infestations of Eurasian milfoil in Woodbury's lakes and ponds should be averted. While the ANR has posted signs concerning milfoil and the precautions all boaters should take to avoid spreading this weed, additional efforts should be made to educate the general public and engage townspeople in a monitoring program.

- **Strategy #3-G (1):** The Conservation Commission will obtain educational materials concerning milfoil from the ANR to place in Town offices or disseminate through lake associations.
- **Strategy #3-G (2):** The Conservation Commission will organize a public forum on Eurasian milfoil by summer 2002, and invite a trainer from the ANR Milfoil Watchers Program to explain how a milfoil monitoring program could be established.
- **Strategy #3-G (3):** The Conservation Commission will appoint one member to serve as a local contact person concerning milfoil. This person would be contacted if anyone wants to report suspected evidence of milfoil. The contact person would then be responsible for following up on such tips, checking for the presence of milfoil, and contacting the ANR with pertinent information. Informational materials prepared for the Town concerning milfoil should include this person's name.

GOAL # 4: To preserve and protect significant wetlands.

Policy #4-A: In order to ensure adequate protection for Woodbury's significant wetlands, the status of all wetlands in the Town should be periodically reviewed.

- **Strategy #4-A (1):** The Conservation Commission will review National Wetlands Inventory maps and the classifications used in Vermont Wetland Rules, and conduct an informal field survey, where property owners grant access, to determine whether wetland areas in Woodbury are properly identified and classified.
- **Strategy #4-A (2):** The Conservation Commission will contact the Agency of Natural Resources concerning any recommended reclassification of a wetland area in Town.
- **Strategy #4-A (3):** The Conservation Commission will work with the ANR to ensure adequate protection of all wetlands in Town, including the identification of Class 3 Wetlands that may be providing significant functions and therefore merit upgrading to Class 2.
- **Strategy #4-A (4):** The Planning Commission will consider proposing changes in the zoning ordinance relating to wetlands protection, based on recommendations submitted by the Conservation Commission.

Policy #4-B: Care should be given to the protection of wetlands in the course of road maintenance.

- **Strategy # 4-B (1):** The Conservation Commission will continue to work with the Town road crew, the ANR and the State Agency of Transportation to protect public roads while maintaining the

integrity of wetlands (for example, installing culverts through beaver dams to regulate water level without draining wetlands, which would destroy important habitat for many species). (Ongoing).

Policy #4-C: Construction of new roads and/or buildings should provide adequate protection of wetlands via the permitting process. Such regulation should also be in compliance with Vermont's AMP's regarding access roads for timber harvesting.

- **Strategy #4-C (1):** The Town should retain current zoning regulations pertaining to building setbacks in wetland areas.

Policy #4-D: Woodbury residents should be well-informed about the wetlands as an important natural resource, and fully acquainted with state and local laws protecting wetlands from destruction.

- **Strategy #4-D (1):** The Planning Commission, in conjunction with the Conservation Commission, will organize a public forum on wetland issues, as needed.

GOAL # 5: To minimize damage to property and buildings due to flooding.

Policy #5-A: New construction on the 177 acres of land in Woodbury that lie within a 100 year flood zone, as identified on the Flood Insurance Rate Maps prepared by the National Flood Insurance Program (NFIP), should be strictly regulated, i.e., a building must be designed so that it is above the established flood level. The Federal Emergency Management Agency (FEMA) requires such standards as a prerequisite to providing residents with federal flood insurance.

- **Strategy #5-A (1):** The Planning Commission will draft new a zoning regulation addressing this issue.

Policy #5-B: The regulation of water levels to prevent flooding of roads and properties should be accomplished without disrupting wildlife habitat.

- **Strategy #5-B (1):** As in Strategy #4-B (1), the Conservation Commission will continue to work closely with the Town road crew, the ANR and the State Agency of Transportation, to monitor and regulate water levels at pond and wetland outlets where beaver dams may be causing water to encroach upon roads or shoreline properties.

GOAL #6: To preserve the quality of groundwater resources in all areas of the town.

Policy #6-A: Ensuring that every building in town has an adequate sewage disposal system is essential to preserve groundwater from pollution. Implementation of the sewage disposal section of the current Zoning Ordinance which requires the professional design of all new sewage disposal systems in accordance with state standards, should be a high priority. Replacement of any pre-existing, substandard sewage systems, should be supported and encouraged.

Policy # 6-B: Ensuring that soil erosion is adequately controlled is essential to preserving groundwater quality. Current zoning ordinance should be reviewed and consideration should be given to regulations, such as a requirement that permit applications for new development show adequate erosion controls during construction, and appropriate landscaping to prevent storm water run-off. An effort should be

made to provide educational material on soil erosion controls, so that landowners can voluntarily make informed choices.

- **Strategy #6-B (1):** The Planning Commission will consider a zoning regulation stipulating that construction of private ponds must conform with guidelines issued by the State of Vermont or with appropriate engineering design.
- **Strategy #6-B (2):** The Planning Commission will continue to study the experience of neighboring towns, such as Marshfield, with implementing regulation of new construction on slopes in order to prevent soil erosion.

Policy #6-C: Proper disposal of hazardous waste is essential to groundwater quality. Hazardous materials should be handled properly so as to prevent groundwater pollution.

- **Strategy #6-C (1):** The Conservation Commission, in conjunction with the Central Vermont Solid Waste Management District, will distribute educational materials regarding household hazardous materials and proper disposal methods, via the Town Clerk's Office, and at annual Town Meetings. (Ongoing).

Policy #6-D: Critical recharge zones for groundwater supplies, known as Wellhead Protection Areas (WPAs) should be identified and protected.

- **Strategy #6-D (1):** The Conservation Commission will solicit assistance from the Agency of Natural Resources to map or gain access to maps for WPAs relative to the Town's two small public water systems, one serving the church and the Town Office in South Woodbury Village, the other serving the Post Office and the Fire Station in Woodbury Village.
- **Strategy #6-D (2):** The Planning Commission will consider the recommendations of the ANR/Conservation Commission as to whether changes in zoning regulations might be needed to adequately protect Wellhead Protection Areas..

GOAL #7: To maintain optimum air quality in the Town of Woodbury.

Policy #7-A: State laws prohibiting the burning of household trash should be enforced. However, Central Vermont Regional Solid Waste District recommends that municipalities adopt ordinance banning the burning of household trash and setting penalties for violation.

- **Strategy: #7-A:** The Select Board should consider adopting an ordinance to ban trash burning and set fines for violators.

B. Resource Production Lands

GOAL #1: To encourage productive use or conservation of agricultural lands.

Policy #1-A: The rights and economic interests of private property owners should be respected and

protected. However, property owners should be informed about incentives for maintaining agricultural lands in productive use.

- **Strategy #1-A (1):** The Planning Commission will obtain current information on the State's Use Value Appraisal Program, and provide such information at annual Town Meetings and at the Town Clerk's Office.
- **Strategy #1-A (2):** The Planning Commission will obtain current information on Vermont Land Trust and its projects encouraging property owners to maintain agricultural lands through conservation easements, and provide such information at annual Town Meetings and at the Town Clerk's Office.

Policy #1-B: Agricultural soils should be identified and evaluated, where possible, based on site-specific soil evaluations and actual or potential agricultural function. Prime agricultural soils should be identified and conserved consistent with the rights of property owners and the interests of the citizens of Woodbury. Any new development should be designed to preserve prime agricultural lands for their resource production potential, to the greatest extent possible.

- **Strategy #1-B (1):** The Planning Commission will consider encouraging or requiring clustered development on prime agricultural soils through district zoning amendments.

GOAL #2: To encourage wise and sustainable use of forest resources.

Policy #2-A: The rights and economic interests of private property owners should be respected and protected. However, property owners should be well-informed about incentives for maintaining forest lands in productive use.

- **Strategy #2-A (1):** The Planning Commission will obtain current information on the U.S. Forestry Service's Forest Legacy Program, and provide such information at annual Town Meetings and at the Town Clerk's Office. (Also see Strategies #1-A (1) & (2)).

Policy #2-B: Forestry soils should be identified and evaluated, where possible, based on site-specific soil evaluations and actual or potential forestry function. Prime forestry lands should be identified and conserved consistent with the rights of property owners and the interests of the citizens of Woodbury. Any new development should be designed to preserve prime forestry lands for their resource production potential, to the greatest extent possible.

GOAL #3: To promote ecologically sound use of earth resources.

Policy #3-A: Extraction of sand, gravel, granite, etc. should be managed in such a way as to minimize negative impacts on quality of life and on the environment. The permitting process should take these concerns into consideration: impact on surface and groundwater resources; impact on road maintenance; noise and traffic factors; and site reclamation. Mineral extraction operations must include an adequate plan for site reclamation in new or expansion permit applications.

- **Strategy #3-A (1):** The Planning Commission will review current ordinance and propose an amendment addressing this issue if needed.

C. Land-Based Cultural Resources

GOAL #1: To preserve Woodbury's historic buildings and potential archeological sites.

Policy #1-A: Woodbury's historic buildings, such as the School, the Town Hall and the Methodist Church in Woodbury, and the Town Clerk's Office and the Church in South Woodbury, should be preserved for their value as a cultural resource.

- **Strategy #1-A (1):** The Planning Commission will contact the Vermont Division of Historic Preservation and the Historic Preservation Trust to research available resources for historic and archeological preservation.

Policy #1-B (2): Woodbury's potential archeological sites should be identified and preserved for their value as a cultural resource.

- **Strategy #1-B (1):** The Planning Commission will contact the State Archeologist, for help in locating potential archeological sites in Town, and information on researching and preserving these sites.

GOAL #2: To preserve Woodbury's overall scenic beauty and special scenic areas for current and future generations.

Policy #2-A: Dumping of household or commercial trash not only mars the scenic beauty of any Town, but may pollute soil and groundwater. For this reason it is prohibited by Vermont statute. However, Central Vermont Regional Solid Waste District recommends that municipalities adopt ordinance banning illegal disposal and setting penalties for violation.

- **Strategy #2-A (1):** The Select Board should consider adopting an ordinance banning illegal disposal of household and commercial trash, which sets penalties for violation.

Policy #2-B: The old water trough on Route 14 along Woodbury Gulf is a unique scenic resource, attracting many visitors, both resident and non-resident. The State's roadside trash collection program is not adequate to keep up with the trash that tends to accumulate at this site; it deserves local attention.

- **Strategy #2-B (1):** The Conservation Commission will coordinate with other concerned citizens to develop a regular schedule of clean-up activities at this site.

Policy #2-C: Developers should be encouraged to design and site new structures so as to preserve access to and enjoyment of scenic views by the general public.

- **Strategy #2-C (1):** The Planning Commission will scrutinize any communication tower or other commercial development permit applications during the Act 250 review process, with an eye to protecting scenic views. (Ongoing). (See also Chapter 3, Section V. concerning the development of a Wireless Telecommunication Facilities Ordinance).

CHAPTER 3. MUNICIPAL RESOURCES

(See Appendix B, Map 4 – Utilities & Facilities)

I. Utilities

A. Telephone / Telecommunications

Telecommunications technology is changing rapidly, which will undoubtedly also affect Woodbury. One change is the introduction of fiber optic lines, which have already been installed in central areas such as Barre, Montpelier, Northfield and Williamstown, and will be installed in local lines in the next few years. Fiber optic lines have larger capabilities than copper lines, and are necessary for the full utilization of telecommunication technology, such as FAX machines and computer modems. The installation of fiber optics in local lines will increase opportunities for individuals and businesses which depend on telecommunications to operate away from urbanized areas. This could have the positive effect of increasing employment in Woodbury, but may also have the effect of increasing growth pressure.

Another result will be a reduced need to travel for many errands and activities, such as banking, paying bills, filing taxes, shopping and renting home videos. In the near future, all such activities will be available through the internet. One positive effect may be a reduction of energy, pollution, expense and commuting time that automobile travel entails. Local communities may also be rejuvenated as residents have less need to travel out of Town.

The use of cellular technology may provide personal and business opportunities, and can also assist public safety services. In the future, this technology may utilize satellites for transmitting signals but in the interim, telecommunication towers are being erected around the area. Now that wireless service providers are changing from analog to digital/cellular systems, there is less interest in placing towers on remote mountaintop sites, and more of a trend toward accessing a denser network of sites closer to roadways and population centers.

To quote from CVRPC's model narrative on wireless telecommunication facilities: "While Central Vermonters want and expect good cellular service, they also expect the placement and design of new facilities to be informed by a respect for the integrity of the region's landscape and compliance with microwave emissions standards. As such, it is important to balance aesthetics, signal quality, health, business and personal needs when deciding whether and where to build new towers and other facilities."

Towns may create ordinance setting reasonable requirements and restrictions for the placement of such towers, relating to visibility/aesthetics, erosion control, protection of environmentally sensitive natural areas, etc. Woodbury would be wise to develop a communication tower ordinance. Many towns in the region now have such ordinances; these may be used as models in writing an ordinance appropriate for our town. CVRPC also provides a model ordinance.

Woodbury residents will need to consider some questions in designing a wireless telecommunication facilities ordinance, such as: do we prefer several small scale, less visible facilities closer to residential areas or a few larger, highly visible sites in less populated locations? Are there certain areas that should be protected from this type of development to prevent any potential environmental or aesthetic degradation? Through careful planning and regulation, our Town should be able to ensure good service

without compromising our rural character or the welfare of human and non-human inhabitants.

B. Electricity

The Hardwick Electric Department supplies electricity to most of the Town. The Washington Electric Cooperative supplies some customers in the southeastern portion and the western corner of Town. Several houses in town use solar power as their primary source of electricity. Both Hardwick Electric and Washington Electric monitor growth trends in the municipalities they serve, and do not anticipate any constraints in their capacity to accommodate increased demand for electric power supply in the foreseeable future. (For further discussion, see **Chapter 7. Energy**).

C. Heating Sources

Wood is the fuel of choice for Woodbury residents, followed by oil and LP gas. The use of passive solar energy may contribute as a secondary source to many houses, although its use as a primary source is relatively small, as with coal and electricity.

D. Water

The majority (301) of Woodbury homes use springs to obtain water for household use. Many (259) have drilled or dug wells. There are two public water systems: one serves the church and the Town Office in South Woodbury village and the other serves the Post Office and the Fire Station in Woodbury Village. Since there is no public water system approved for residential use, the purity of individual household water sources depends on the careful disposal of septic waste, especially in the lake and village areas.

E. Sewage Disposal

Most (408) Woodbury houses have septic tanks and in-ground disposal systems. Some dwellings, most notably seasonal camps, use other means, such as outhouses and composting toilets.

Despite their relative densities, the villages of Woodbury and South Woodbury do not have public or community sewage disposal systems, and since there are no rivers running through either village to take the discharge, the construction of a public disposal system would be problematic.

On-site sewage disposal and local regulation thereof has become a subject of growing concern in recent years. The increasing density of houses, especially around the lakes, and the conversion of buildings that were designed for seasonal use to year-round use, makes sewage disposal a crucial issue, deserving thorough address through the zoning regulations.

In 1991, a committee was appointed by the Select Board for the purpose of studying the sewage issue and recommending an ordinance statement. The committee recommended adoption of a sewage/health ordinance which would require approval by an engineer or site technician for new construction, building enlargements, system changes and changes of use. Results from the Planning Commission's survey in June 1994 indicate there is strong support among townspeople for such an ordinance.

F. Solid Waste

Regulation and technology in the field of solid waste has become more complex during the past 10 years, as the hazards of conventional disposal methods have become better known. This situation has contributed to a heightened level of controversy surrounding the field in the past few years, and will probably continue to do so for several years to come.

The maxim for solid waste today is “Reduce, Re-use and Recycle”. That is: **reduce** your use of products that will become garbage; **re-use** whatever still has some use; and **recycle** the increasing array of items that can be recycled. These practices will go far in helping to reduce the quantity of garbage requiring disposal, and will therefore alleviate some of the problems associated with this process. The Central Vermont Solid Waste Management District (CVSWMD), of which Woodbury is a member, adopted a mandatory recycling policy in 1995. It has, until recently, supported 11 recycling depots, including one at the Woodbury Elementary School, which was maintained by a designated town resident and a pool of volunteers. The Woodbury Depot is scheduled for closure in 2002. Woodbury residents will need to travel to the sites in Hardwick, East Calais or East Montpelier to continue recycling efforts.

CVSWMD has developed excellent resources for public outreach and education, such as their pamphlet "Garbage Guidelines: The Where, When, Why, and How of Proper Waste Handling." It answers often-asked question about recycling, provides specific guidelines for recycling various materials, lists the location of all District operated and underwritten recycling depots, and which items each location will accept. There is also a calendar of special programs, such the annual Green Up Day, Household Hazardous Waste Collections, etc.

Despite the value of the three R's, there is still a need for an ecologically sound method for disposing of what is left. In order to prevent this residual waste from contaminating our surface and groundwater, the State has implemented regulations that require the use of advanced technology, such as plastic-lined landfills, leachate collection systems and pollution-monitoring devices. The problem is that this advanced technology requires such a high level of investment that 1) the price of disposal has increased significantly; and 2) towns and private firms are limited in their ability to develop facilities.

Currently, trash disposal is offered by private corporations for both collection and landfill operations, in accordance with State regulations. The CVSWMD oversees contracts. Woodbury residents have the option of having their trash picked up “curbside” or dropping it off with a trash collection service outside the Town Hall on Saturday mornings. There are also solid waste transfer stations where one can bring household trash in Hardwick and Montpelier.

II. Facilities

A. Town Office

The Town Clerk's Office and municipal meeting rooms are located at the Town Office (formerly a neighborhood schoolhouse) in South Woodbury. In keeping with the Americans with Disabilities Act, a federal law established in 1990, which sets standards for handicapped accessibility in public buildings, this structure has been audited by a representative of the Vermont Department of Aging & Disabilities (DAD). Options should be considered, based on this audit, to bring the Town Clerk's Office into compliance, so that the Town Office is truly accessible to all citizens. Funding sources, both private and public, will need to be explored to facilitate the necessary renovations.

B. Town Library

The Town Library has been moved from the basement of the Town Office to the new annex next to the Woodbury School. It functions as a Community Library, combining the functions of both School and Town Libraries. The new location provides for greater access, more space and the possibility of providing more services, such as computers. The library also serves as a handicapped accessible space for small public meetings. (See D. Schools and the Community, below).

C. Town Hall

In addition to Town Meeting, the Town Hall is available to community and private groups for a variety of activities. The Woodbury Town Hall, which was built around 1840, is among the oldest in the State, and may be the oldest Town Hall in continuous use without major structural changes. The building has been added to the national register of historic places. It has no sanitary facilities or running water; bathrooms at the Fire House are accessible during functions at the Town Hall.

A covenant in the deed requires that the building be used for Town purposes at least once a year, or ownership reverts to its original owner or his assigns. The Hall is used at least once a year for Town Meeting and continues to be used as a polling place, despite accessibility issues.

As with the Town Clerk's Office, the Town Hall has been audited, as a first step in determining what renovations would be necessary to bring this building into compliance with the Americans with Disabilities Act.

D. Schools and the Community

The Woodbury Elementary School is listed on both the State and National Register of Historic Buildings. Built in 1914, the School has four large classrooms on the main floor, smaller classrooms and offices on the ground floor and a gymnasium/cafeteria/multi-purpose room on the top floor. The building has been well maintained. An elevator was installed in 1998, making the building fully accessible.

The Elementary School currently has adequate classroom capacity, although as recently as 1990, overcrowding at the School necessitated building the one-room addition. It appears that the present space will be adequate for the next several years (enrollment has dropped from 74 in 1997-98 to 48 students in 2001-02). However, if the Town's population continues to grow as it has over the previous decade (see Chapter 1, Tables A & E), there may eventually be a need for more classroom space.

The one-room annex next to the school was originally built for the fifth grade, but presently houses the

Community Library. Students in grades 7-12 attend the Hazen Union Middle School and High School in Hardwick as well as the Lamoille Area Vocational School. (See Chapter 5. Education for more information and discussion).

E. Churches

Woodbury hosts two churches, which are located in the two villages. The Methodist Church is located in Woodbury Village on Church Street. It was completely renovated in 1999. The South Woodbury Church is on Route 14 in South Woodbury Village. It received a new roof in 2000. The South Woodbury Church is open for services only during summer months.

F. Post Office

The Post Office, housed in what was originally the Charlie Dana Store in Woodbury Village, was built in 1873. The three-story building has been extensively refurbished and is in very good condition. The water system that serves the Post Office and the Fire Station is Town-owned.

G. Town Garage / Road Equipment

Woodbury owns a four-bay highway garage on a one-acre site on Dog Pond Road. The Town owns three dump trucks with snow plow and sanding attachments, a road grader, and a back-hoe/loader. A Road Foreman is appointed by the Select Board and additional truck driver/equipment operator(s) make up the rest of the road crew. The Town Garage site is currently inadequate for the current array of equipment and for storage of the winter sand supply. The Town owns no gravel resources but has commercial sources available in Calais, Hardwick and Wolcott.

H. Fire Department Facilities

The Woodbury Volunteer Fire Department is the first responder to calls in Woodbury and Calais, and assists with mutual aid calls in Hardwick and for the Capital Fire Mutual Aid System. The fire station and garage are located in Woodbury Village. The garage was built in 1992 and provides storage space for the Department as well as for the First Response Team.

The Fire Department currently has four dry hydrants: (1) on the mill pond in South Woodbury Village; (2) near the Fire Department Annex building on Valley Lake Road in Woodbury Village; (3) on Scribner Road; and (4) on the County Road side of Greenwood Lake. In addition, a 10,000 gallon water storage tank has recently been installed on the grounds of the Woodbury Elementary school to serve as an alternative emergency water source. The department's ultimate goal is to place a sufficient number of dry hydrants at strategic locations, to provide adequate fire control for the entire Town. When this is achieved, the Insurance Services Office (ISO) can then re-evaluate properties in Town, with the likelihood that insurance costs would be reduced due to reduced risk of damage from fire.

The implementation of Enhanced-911 has been completed. E-911 will help the Fire Department and rescue providers locate and respond to emergencies.

I. Emergency Services

Ambulance and rescue services are provided by the Hardwick Emergency Rescue Squad and the Woodbury First Response Team. Woodbury-based members of the Squad maintain on-call response status for medical emergencies in Woodbury. They maintain their own equipment and emergency response vehicle. The majority of their funds are raised from donations and volunteer activities.

Woodbury does not have a police force but First and Second Constables and the State Police provide public safety services to the Town. Voters have supported funding for constable training and equipment because the State Police are not always able to respond in a timely manner.

An emergency generator was installed at the Elementary School in 1999. It is capable of powering the school and the fire station in case of a major power outage.

J. Cemeteries

The Town maintains five cemeteries: (1) The West Woodbury Cemetery on West Woodbury Road; (2) The North Cemetery on Buck Lake Road; (3) The Center Cemetery on Cabot Road (near the village); (4) The Harvey Cemetery on Cabot Road (near the Cabot town line); and (5) The South Woodbury Cemetery on Route 14 in the south village. Additional land was recently purchased to expand the South Woodbury Cemetery; this should be adequate for the foreseeable future. A sixth unmarked cemetery near Woodbury Lake was recently discovered, although the Town does not own or maintain it.

III. Recreation

A. Public Land

Woodbury has a 65-acre Town Forest, which is located on Town Farm Road, near the village. The Forest is not currently managed for timber, but is used for recreation and hunting. The Town Forest was donated to the Town of Woodbury by the Hugo Meyer family in 1958 to be known as the “Harvey M. Drennan Town Forest.” The intent of the gift was that the forest be held by the town as a timber forest with the income from the harvest of timber to be used for the benefit of the town. According to the deed, harvesting is to be undertaken only under the supervision by the Vermont State Forestry Department. (See Appendix B, Map 4 – Utilities & Facilities for location of Town Forest).

The State of Vermont owns the 275-acre Buck Lake Wildlife Management Area. The State Department of Fish and Wildlife owns and operates the Green Mountain Conservation Camp at Buck Lake each summer, providing week-long youth camping experiences with an emphasis on learning about the environment and outdoor sporting skills. (See Appendix D, Map 4 for location of State Conservation Camp on north end of Buck Lake). The State owns boat launches on Greenwood Lake, Nelson Pond and Woodbury Lake, providing public access for fishing and boating to the larger lakes. The state also owns a primitive fishing access on Valley Lake that is suitable for non-motorized craft only.

Despite the wealth of lakes and ponds in the town, there is no public swimming area for town residents. There has been ongoing discussion over several years about establishing a beach for public use. The Conservation Commission conducted a survey in 2000, which showed overwhelming support for a Town owned and managed beach. Such a facility would be an outstanding resource for residents of all

ages.

B. Trails

Woodbury has an array of roadways such as abandoned railroad beds and Class 4 roads, as well as trails and logging roads on private land, that provide recreation for hiking, bicycling, cross-country skiing, snowmobiles, dirt bikes and 4 wheelers. It should be noted that logging roads and trails on private property are not automatically available for public access. Verbal permission should be sought for pedestrian use. Written permission must be obtained for any vehicular trespass on private property.

C. Other Facilities

The elementary school maintains a small gymnasium and a playground with varied apparatus. There is also a baseball field next to the elementary school. Woodbury has Little League teams, as well as after-school programs in basketball, soccer and cross-country skiing. The School also maintains natural trails for educational and recreational use.

IV. Services

A. Health and Social Services

Services for Woodbury's youth, seniors, disabled, sick and less fortunate are provided by the Washington County Youth Services Bureau, the Central Vermont Council on Aging, Retired Seniors Volunteers Program, Vermont Center for Independent Living, Central Vermont Home Health Agency, Battered Women's Services, Sexual Assault Crisis Team of Washington County, Inc., Aid to Women in Abuse and Rape Emergencies (Hardwick), The Shelter Committee, Inc., the Central Vermont Community Action Council, and Patch. The Town Meeting has approved financial support for these organizations for many years.

Woodbury residents are also served by the Copley Hospital and the Lamoille Home Health and Hospice in Morrisville, the Central Vermont Hospital and Central Vermont Home Health Agency in Berlin, the Health Center in Hardwick and the Health Center in Plainfield.

V. Municipal Resources, Goals, Policies & Strategies

A. Utilities

Goal #1: To improve cell phone service in Woodbury while addressing environmental and aesthetic concerns.

Policy # 1-A: Siting of commercial satellite dishes, radio towers, antennae and other transmission and receiving equipment in Woodbury should include the latest technology and meet any ordinance requirements. They should be sited, designed, maintained and operated so as to minimize potential negative impacts on natural and scenic resources.

More specifically:

- Telecommunications facilities should not be sited in close proximity to schools, daycare facilities or other areas where they may create a nuisance.
 - Use of stealth design (e.g., concealing antennae by mounting on silos or disguising them to look like a tree) or use of existing structures should be encouraged where appropriate. The policies of the Plan addressing ridgeline and hilltop development are intended to apply to telecommunication facilities.
 - The use of existing towers and communication facilities, as an alternative to the development of new towers, should be required wherever possible. Permits issued for new tower facilities should require that owners be willing to accommodate additional users, appropriate to the structure, at a fair market rate.
 - Permits for towers should require a financial mechanism to ensure their removal by service providers should they be abandoned or rendered obsolete by advances in technology. Processes for establishing bonds should take inflation into account, as many years may elapse between construction and removal of such facilities.
 - Applicants must demonstrate that proposed telecommunication facilities comply with FCC emission standards in order to protect public health and safety.
 - New towers should be constructed in areas served by existing roads. Access roads should be designed to minimize their impact on scenic, agricultural, forestry and natural resources.
- **Strategy:** The Planning Commission will develop a Wireless Telecommunication Facilities Ordinance. Model ordinances from neighboring towns, as well as CVRPC, will be reviewed.

Goal #2: To plan for, finance and provide an efficient system of public utilities as deemed necessary to meet future needs.

Policy #2-A: The rate of growth and development should not exceed the Town's ability to provide adequate utilities. While municipally owned and managed utilities in Woodbury are currently minimal, the need for expanding the public water supply in the Village Districts, or creating alternative sewage disposal systems, for example, should be periodically reviewed.

- **Strategy:** The Planning Commission will assess the Town's utilities supply and demand, via a public survey or forum, with each update of the Town Plan, i.e. every five years.

B. Facilities

Goal #1: To provide adequate access to all Town facilities to persons with disabilities.

Policy #1-A: The Town Office in South Woodbury and the Town Hall in Woodbury should be the focus of efforts to improve accessibility, since the School and the Post Office have already made provisions for handicapped access.

- **Strategy #1-A (1):** The Planning Commission will review the DAD's accessibility audits (completed October 2001) of the Town Clerk's Office and the Town Hall, and make inquiries in order to estimate renovation costs.

- **Strategy #1-A (2):** The Planning Commission will investigate grant sources for accessibility renovation. (Vermont Community Development Program, State Library Association, Vermont Division of Historic Preservation and Historic Preservation Trust are possibilities). With the approval of the Select Board, the Planning Commission will apply for any appropriate grants.

- **Strategy #1-A (3):** If additional sources of funding are necessary to cover renovation costs, the Planning Commission will petition an article for Town Meeting, to see if the citizens of Woodbury support including accessibility renovation costs in the Town budget.

Goal #2: To plan for, finance and provide an efficient system of public facilities to meet anticipated future needs.

Policy #2-A: The rate of growth and development should not exceed the Town's ability to provide adequate facilities.

- **Strategy:** The Planning Commission will assess the capacity of the Town's facilities via a public survey or forum, with each update of the Town Plan, i.e. every five years.

C. Recreation

Goal #1: To maintain and enhance recreational opportunities for residents and visitors.

Policy #1-A : The Town Forest should be managed for timber as intended by the Meyer family. Using the State's model for land management, multiple uses such as hunting, hiking, wildlife viewing, trapping, trail riding, and education, as well as timber harvesting, can all be accommodated, while still conserving areas of the Town Forest that merit protection, such as vernal pools, rare plants, bear habitat, etc.

- **Strategy #1-A(1):** The Conservation Commission will contact the Select Board to discuss the development of a management plan for the Town Forest.

- **Strategy #1-A(2):** The Conservation Commission will continue to work together with Woodbury Elementary School to develop a nature trail in the Town Forest for educational purposes.

Policy #1-B: The lease or purchase of lakefront property to serve as a Town swimming area should be actively pursued.

- **Strategy #1-B(1):** The Planning Commission will continue to research lakefront properties that might be appropriate for a Town beach.
- **Strategy #1-B(2):** The Planning Commission will examine current Zoning Ordinance to ensure that the development of a public swimming area is an allowable use. The PC will propose an amendment to the Zoning Ordinance, if necessary, to accommodate and set appropriate conditions for such use.
- **Strategy #1-B(3):** The Planning Commission will seek a coordinator to develop a fund, which could be supplemented by tax dollars, state grants or private donations, so that if an appropriate lakefront property came on the market the town would be in a position to act to acquire the property.

Goal #2: To utilize the existing road system to provide recreational opportunities throughout the Town.

Policy #2-A: Existing rights-of-way for Class 4 roads and public trails (owned by the Town or the School) should be retained by the Town for recreational purposes, as well as for agricultural, forest-related and quarrying activities.

Policy #2-B: The Town is not obligated to provide any maintenance or upkeep on public trails. The Select Board should not unreasonably withhold permission for repair, maintenance, improvement or restoration of trails.

- **Strategy:** The Planning Commission will coordinate with the Conservation Commission to periodically update mapping and marking of trails and class 4 roads in Woodbury. The difference between private and public trails should be noted and owner permission should be secured before any private trail is shown on a map.

D. Health & Social Services

Goal #1: Agencies providing essential services to Woodbury residents should be supported financially.

Policy #1-A: Voters at annual town meeting should be informed of the services provided by each agency, and encouraged to appropriate funds requested in articles put forward in the Town Report.

Strategy: Continue to publish reports from each agency in Town Report, and request that a representative from each agency be present at Town Meeting to make a brief statement if necessary or answer any questions pertaining to the services they provide.

CHAPTER 4. – TRANSPORTATION

Woodbury's transportation system has evolved considerably over the past 100 years. Its original purpose was to support an agricultural community with a few mills. Later it expanded to include railroad lines serving the granite quarries (see History, p. 4). It now provides mobility and access for residential, commercial, forest, agricultural and recreational use.

I. Public Highways

A. Vehicular Traffic

The town's principal paved road, Route 14, is classified as a "minor arterial" by the state Agency of Transportation (AOT). Minor arterials connect towns and allow movement throughout and between counties. Route 14 connects Woodbury to the Barre/Montpelier area further south, and to Hardwick and the Northeast Kingdom further north, and serves as a conduit for traffic between these areas. The state is responsible for the maintenance of this highway.

Traffic volumes on Route 14 in Woodbury have grown approximately 20-25% since the mid-1980's. The road currently handles an average of about 2,500 vehicles a day. The growing volume of traffic raises concerns about speeding and vehicle/pedestrian accidents in village locations. In addition, the proliferation of curb cuts along the highway is becoming an issue. The AOT has inventoried and classified all roads according to "access management categories". In each category the State recommends a range of posted speed limits and access standards. The stretch of Route 14 running through the Town of Woodbury is in Access Management Category 4, except in the South Woodbury and Woodbury Village Districts, where it is in Access Management Category 6 (A copy of VT AOT Access Management Program Guidelines is available at Woodbury Town Office). It may be in the best interest of the Town to create and implement access management regulations based on the AOT recommendations.

As a minor arterial, Route 14 is eligible for funding from the state for improvements, under the 1991 Inter-modal Surface Transportation Act (ISTEA), the new system for designating transportation improvements. Improvements to the road need to be recommended by the Central Vermont Regional Planning Commission (CVRPC), of which Woodbury is a member, in order to be considered by the Agency of Transportation. To facilitate the maintenance and repair of Town highways, the CVRPC staff is available to assist the Town road crew in developing a road and culvert inventory. Using this data, the Select Board could then adopt a road and culvert standard. The CVRPC is also trained to facilitate collaborative planning by town road crews, fire departments, schools, Select Boards, etc. to develop a five year Capital Improvement Program.

The only other road in Woodbury which is eligible for ISTEA funding at this time is Foster Hill Road (Town Highway #1), which is officially classified as a "major collector". The Cabot Road (TH #2) is a "minor collector", as this is the only direct route between Woodbury and Cabot. East Hill Road (TH #6) may warrant being upgraded from a class 3 to a class 2 highway, as this road serves as a local collector. The remaining highways serve primarily for local trips.

Class 4 roads are roads that are not maintained above a minimal level and are used for recreational,

agricultural, logging and quarrying purposes, or to provide access to a limited number of homes. Some of these roads are in ecologically sensitive areas.

B. Bicycle and Pedestrian Use

The public road system is not used solely by automobiles. Bicyclists and pedestrians utilize roads in this town for both recreation and transit, especially near the village areas. This combination of uses can cause difficulties. For instance, the narrow shoulder on Route 14 and the high speed of some automobiles can be intimidating, and indeed dangerous. These conditions may discourage some pedestrians from even attempting to use the road system for bicycling or walking.

State statute calls for maximizing shoulder width on all state highways (except the Interstate highway system) wherever logistically possible without being cost prohibitive. It is also a policy of the AOT to slightly reduce travel lane widths, allowing a wider bicycle/pedestrian lane. The most recent repaving of Route 14 from just above the village of South Woodbury north through Woodbury Gulf to the Hardwick Town line (summer 2000) is evidence of these policies' implementation – in other words, bicycle/pedestrian lanes appear wider and more clearly demarcated. The section of Route 14 south of South Woodbury village and along Woodbury Lake has not yet been upgraded, and is still dangerous for pedestrian use.

Another way of improving pedestrian and bicycle safety might be to extend the northern boundary of the Woodbury Village District along Route 14 to Ainsworth Road, and appeal to the AOT extend the Access Management Category 6 designation and post a 35 mph speed limit at this extended boundary, with the intent of having an impact on traffic speeds through the village.

Woodbury also has an extensive network of trails that benefits hikers, snowmobilers, cross-country skiers, mountain bikers and four-wheelers. Some of these trails have been mapped. Most of these trails are privately owned; a property owner's permission should be obtained for such recreational uses.

II. Public Transportation

Woodbury is served by Wheels Transportation, a nonprofit company which operates only an "on-demand" service in the Woodbury area. There is not currently a fixed-route system in town, other than the school bus route. Wheels coordinates a network of volunteer drivers who can provide rides as needed for Woodbury residents, for medical appointments, shopping or visiting, in return for a mileage fee. Travel cost reimbursement for such passengers who are Medicare or Medicaid recipients can be arranged and handled through Wheels. This service primarily benefits the elderly and disabled. Adults commuting to work form another population group which could benefit from access to public transportation.

There are currently some Woodbury residents, and there could be more, who have taken matters into their own hands, sharing their commute to work with one or more neighbors. A group-owned van pool, which travels weekdays from Hardwick to Montpelier, has been in operation since the early 1980's, and has been used by many Woodbury commuters.

The 2000 U.S. Census reveals that nearly 50% of Woodbury's working residents work in Montpelier, Barre or nearby towns to the south, such as East Montpelier, Berlin and Williamstown. Another 17%

commute to Morrisville or Hardwick. A good number of these commuters car-pool to work, at least occasionally. As indicated by the common destinations of many commuters, there may at some point be a need for a park-and-ride lot in town. The Town has the authority to designate a park-and-ride site, such as the Town Clerk's Office in South Woodbury, which already sees some unofficial use as such.

III. Transportation Goals, Policies & Strategies

Goal # 1: To maintain and improve Town roads to provide safe and reliable passage for automobiles, commercial vehicles, bicycles and pedestrians.

Policy # 1-A: The Planning Commission is open to public input to determine projects that would further enhance safe and reliable passage on Town roads for all manner of conveyance.

- **Strategy:** The Planning Commission will warn a public forum on transportation issues every 5 years or as needed, to hear residents' concerns. Suggestions deemed worthy and practical will be brought before the Select Board for consideration. Projects relating to Route 14, such as road repair, bicycle lanes, rideshare lots, etc. will be proposed to the Agency of Transportation via the CVRPC.

Policy # 1-B: The Town should explore alternatives that would aid in enforcing current speed limits outside of village districts, and reduce the speed limit within the village districts and other populated areas. 40 miles per hour is the current speed limit in populated areas, such as on Route 14 along Woodbury Lake and running through the villages of South Woodbury and Woodbury. An appeal should be made to the AOT to reduce posted speeds on these sections of Route 14 to 35 mph. State law establishes a 50 mph speed limit on all un-posted roads.

- **Strategy #1-B(1):** The Planning Commission will use the CVRPC as a resource to study traffic calming techniques, such as parking configurations, sidewalks and tree plantings along the roadsides in the villages (i.e. Route14), that could be recommended to the AOT.
- **Strategy #1-B(2):** Planning Commission recommends to the Town Constable periodic placement of the "Smart Cart" (digital mph read-out, available through the AOT) at various sites along Route 14 and other Town Highways, to raise driver awareness and change driving habits, i.e. reduce speeding. This device was used in many areas during the summer of 2000, with positive effect.
- **Strategy #1-B(3):** The Planning Commission will consider proposing an amendment to the zoning ordinance extending the northerly boundary for Woodbury Village District. The P.C. could then appeal to the AOT to extend the Access Management Category 6 designation and post a 35 mph speed limit at this extended boundary, with the intent of having an impact on traffic speeds through the village. The P.C. will solicit input from camp owners on Woodbury Lake as to whether the speed limit on Route 14 should be reduced from 40 mph to 35 mph.
- **Strategy #1-B(4):** On the recommendation of the Town Constable, the Select Board has directed the road crew to post 35 mph speed limit signage on all the Town's back roads.

Policy #1-C: The Town should play an active role in regulating specific highway uses to provide for maximum vehicle and pedestrian safety. For example, the Select Board may request compensation for

wear and tear on highways, anticipated or caused by vehicles in excess of the legal weight and size limitations. Vehicles used for agriculture, forestry or mineral extraction operations, should be held to the same standard as other vehicles.

Policy #1-D: A set of guidelines should be written to govern the issuance of town highway access permits, including curb cut permits, using the AOT Access Management Guidelines as a reference.

- **Strategy:** The Select Board should consider formalizing the highway access permitting process.

GOAL # 2: To maximize the efficiency of the transportation system, at the least overall cost to the Town.

Policy #2-A: Reclassification of public trails and Town highways should require a finding by the Select Board that the public interest will be substantially advanced. The Select Board may require that the cost of upgrading a trail to a class 4 highway (or a class 4 to class 3) be borne by the petitioner(s). The improvement of a trail or a class 4 road shall not guarantee the reclassification and subsequent town liability for maintenance of such a road. Acceptance of private roads into the Town highway system will occur only with the Select Board's approval.

- **Strategy:** The Select Board will consider developing a written policy regarding reclassification of trails and roads, with consideration given to the number of year-round residents affected by reclassification, the distance from an existing class 3 road, the cost to improve and/or maintain the road, and whether the reclassified road will be compatible with the character of the area and the land use goals of the area, as stated in the Land Use section of this Plan. This plan should also spell out the procedure by which a private road will be accepted into the Town highway system.

Policy #2-B: The maintenance and repair of private roads shall not be the responsibility of the Town. However, the Planning Commission may require, through a duly adopted regulatory process, standards for construction and maintenance of private roads, which will not exceed specifications for comparable public roads. Builders of private roads shall provide landscaping and erosion controls when requested by the Planning Commission.

Policy #2-C: The Town is not obligated to provide any summer maintenance of class 4 highways except as required by law, and the public good and convenience of the inhabitants, such as bridges, culverts and ditches to control erosion of highways or run-off to adjacent property. The Town is not obligated to provide any winter maintenance on class 4 highways and trails. Plowing by private parties of such roads requires permission from the Select Board. Any winter plowing of a class 4 road allowed by the Select Board shall not nullify the privileges under 23 VSA 3206 (b) (2).

Policy #2-D: The Select Board may exercise control of Class 4 highways and trails by means which may include, but are not limited to, the following: a) establishment of vehicle weight limits; b) prohibition or restriction of wheeled vehicle use during mud and snow season; c) requirements for temporary permits for heavy equipment access may be imposed and the stipulation included that any highway damaged will be repaired by or at the expense of the user; posting of bond or other security to guarantee that repairs are made may be required as condition of any permits; d) speed limits may be established; e) curb cuts must be approved for new roads or driveways located off any Town highway.

Policy # 2-E: The issue of setback and curb cut standards for structures on lots fronting class 4 highways, private roads and class 3 highways, should be revisited. It should be decided whether the same standards should apply.

- **Strategy:** The Planning Commission should examine existing Zoning Ordinance and propose new bylaws, if necessary, to accord with Policy # 2-E.

Policy #2-F: Public transportation alternatives should be explored. The needs of those with least mobility, such as elders, should be given priority. Ridesharing or carpooling should be facilitated for those who commute to work with shared destinations such as Hardwick, Barre and Montpelier.

- **Strategy:** The Planning Commission will use CVRPC and Wheels Transportation as a resource to study what transportation alternatives other comparable towns in the region have implemented.
- **Strategy:** The Planning Commission will solicit public opinion about designating a park-and-ride lot in Town.

CHAPTER 5. EDUCATION

I. General Information

The only public school in Town, Woodbury Elementary School, offers education in grades K-6. Since graduates of Woodbury School transfer to Hazen Union or Lamoille Area Vocational School in Hardwick to complete grades 7-12, Woodbury School is within the Orleans Southwest Supervisory Union. The following data was obtained from the Vermont Department of Education, from Woodbury School records, and from the year 2000 Town Report.

Enrollment at the school has been dropping for the past six years, from a high of 79 in 1996-97 to 48 at the start of the 2001-02 school year. Available figures for students receiving their education through home schooling do not account for the dramatic drop (by 31 students) in school enrollment over during this period.

Woodbury School's average class size in the 1999-2000 school year was 15.3, somewhat below the average class size for all Vermont schools. The student/teacher ratio in 1999-2000 was 10.5 (one teacher to 10+ students), well below the Vermont average teacher/student ratio of 12.3. This implies that Woodbury School students have better than average access to individual instruction.

The Accountability System Based on Student Performance has been implemented as required by the State Board, in compliance with Vermont Act 60. The goal is that by the fall of 2008 every Vermont school will have all students on average achieving the standards. Yearly assessments, reported to the State Department of Education, will measure progress toward this goal.

As noted in **Chapter 3**, the library located at the school serves both the school and the community. Other activities and events throughout the school year help to connect students to the Town they live in as well as the broader community. The Environmental Learning for the Future (ELF) Program, a Project of Vermont Institute of Natural Science, which trains volunteers to lead nature activities with students, is just one of many examples of community involvement with the school.

II. Facilities

As indicated in **Chapter 3, Section II. Facilities**, faced with steady decreases in student enrollment in the past six years, the School Board does not currently have plans for expanding Woodbury School facilities on the current site, nor does the Board foresee an urgent need to explore regional facilities for K-6 education. (See Appendix B, Map 4, showing school location).

The school staff prepares regularly for school emergencies. Fire drills are conducted monthly; evacuation drills (moving everyone from the school to the Town Hall) are conducted once each term. All plans are on file with the Vermont State Police and the Woodbury Emergency Management Team (EMT). A strategy for emergency school bus evacuation was presented by Wildcat Busing, and practiced by the entire school.

III. Educations Goals, Policies and Strategies

Goal #1: To ensure high quality education for every Woodbury public school student.

Policy #1-A: A quality education for all students within the school system should be promoted, through innovative educational opportunities, technology, mentorships, partnerships for learning with local businesses, artists or craftspeople, and collaboration with community organizations.

- **Strategy:** The School Board, Woodbury School administrative staff and faculty, and members of the community at large, will continue to use the above means to pursue the highest educational standard for Woodbury students.

Goal #2: To ensure adequate facilities for the comfort, well being and safety of school students, now and in the future.

Policy #2-A: School enrollment and other census indicators should be carefully monitored to anticipate the potential need for expansion, relocation or replacement of current facilities. The feasibility of “tuitioning out” Woodbury elementary school students in the case of sharply falling enrollment, should also be considered.

- **Strategy:** The School Board assesses the situation annually, and presents any significant developments in the Town Report.

Policy #2-B: The School should maintain a high standard of emergency preparedness.

- **Strategy:** School Administrators will continue to carry out regularly scheduled fire and evacuation drills; and will consult with Woodbury EMT, Fire Department and State Police as needed.

CHAPTER 6. HOUSING

I. Existing Conditions

The 2000 U.S. Census confirms that housing units in Woodbury are nearly evenly divided between year-round and seasonal (“vacation”) units (see **Chapter 1, Table H**). The Town’s percentage of seasonal housing is much higher than that of either Central Vermont or the State as a whole.

Housing in Town consists primarily of single-family dwellings with a few multi-unit properties located in the villages. Responses to the Planning Commission’s 1994 survey (see Introduction, Part II) indicated that there is probably an adequate amount of single-family housing, but that there might be a need for more multi-family housing, suitable for low income and/or senior residents. There also appears to be some demand for more rental housing. (see **Chapter 1, Table J**).

Housing unit growth has been dramatic in the last three decades. From 1970-1998 Woodbury’s housing unit growth rate averaged 48%, about the same growth rate for Central Vermont as a whole. But from 1990-2000 the increase in housing units in Woodbury (17.6%) is almost double the rate for Central Vermont during the same period. Some seasonal units are being converted for year-round use, indicating what may be the beginning of trend as Woodbury becomes more of a bedroom community for Montpelier, Barre, Hardwick and Morrisville.

While “adaptive re-use” of vacation homes is not in itself undesirable, this trend may exacerbate such issues as septic capacity and the condition of camp roads. For instance, converted camps may lack the septic capacity needed for year-round use. The 2000 Census records 64 housing units in Woodbury as having inadequate plumbing facilities (**See Chapter 1, Table J**). Also, there may be increasing pressure on the Town to accept private roads or upgrade Class 4 roads where former camps have become year-round residences.

Most respondents of the Planning Commission’s survey felt that their housing is of good quality, and only one resident and eight non-residents indicated their housing is of poor quality (the response rate for the survey was about 33%). A higher percentage of non-residents than residents feel that their housing is adequate, or of medium quality.

Despite the existence of many historical buildings, Woodbury’s housing appears to be newer than either the County’s or the State’s, as indicated by the more recent median year of construction. Rental housing seems to be the exception, however, as most rental units were built before 1940 (**Chapter 1, Table J**).

The State defines affordability as total housing costs of less than 30% of household income. Year 2000 census figures from the University of Vermont Center for Rural Studies show Woodbury’s median gross rent at \$553/month, or 23.8% of median gross income, while median family (\$42,727) and household (\$35,357) incomes (1999) are well above 30% of either the (1999) average residential (R1) equalized housing value (\$79,379) or the (2000) median housing value (\$87,700).

In terms of median value and monthly costs, and as a percentage of median income, Woodbury has less

expensive housing than either the County or the State. But median income doesn't tell the whole story. 7% of Woodbury households have an income below \$10,000, and 25% of household incomes fall between \$10,000-25,000 (**Chapter 1, Table G**). Housing costs may be 30% or more for some of these residents of our Town; in other words, there may well be a need for more low-income housing

II. Housing Goals, Policies & Strategies

Goal #1: To monitor the availability of decent housing for all citizens in Woodbury, regardless of income, age or choice of housing type.

Policy #1-A: Opportunities should be provided for the building of lower priced, owner occupied and rental housing, while preserving historic settlement patterns.

- **Strategy #1-A (1):** The Planning Commission will explore the possibility of enlarging the Woodbury Village District to allow for more one-acre parcels. (See Village District section of Chapter 9. Land Use).

- **Strategy #1-A (2):** The Planning Commission will examine the Town's Zoning Ordinance for any regulatory barriers to the provision of affordable housing, and recommend amendments as necessary to address this issue.

Policy #1-B: Opportunities for co-housing, shared housing, planned residential development (PRD) and other innovative approaches should be explored and disseminated.

- **Strategy:** The Planning Commission will contact housing advocacy organizations such as the Central Vermont Community Land Trust and the Vermont Department of Housing and Community Affairs for information about these and other approaches. The PC will make available relevant information at Town Meeting and the Town Clerk's Office.

Policy #1-D: The proposed Sewage Ordinance should deal with the conversion of seasonal homes to year round residences in order to protect water quality and ensure the safety of occupants.

- **Strategy:** The Planning Commission will explore the possibility and authorization for such regulatory standards.

CHAPTER 7. ENERGY

I. Energy Use in Buildings

This section of the Plan addresses energy issues associated with residential and commercial buildings. Discussion of energy issues related to transportation can be found in Chapter 5. Transportation. Energy use can be affected by a number of factors, including the siting and construction of buildings, and the selection, maintenance and use of appliances. Attention to each of these issues can be economically rewarding to homeowners as well as to society, as our vulnerability to the vagaries of the energy market becomes lessened.

A. Siting of New Buildings

Vermont statute enables the Zoning Board and the Planning Commission to consider solar access (as utilization of a renewable resource) during the conditional use and site plan review process. One and two family dwellings are excluded from site plan reviews, unless they are part of a major subdivision and the Town adopts subdivision regulations. Town-wide development patterns may affect energy consumption as well. Sprawling growth patterns tend to result in more and longer vehicle trips, while compact growth can have the opposite effect.

B. Energy Efficiency

The Town can, as it has in the past, apply for grant money to assist with the weatherization of buildings. The Department of Public Service, the Central Vermont Community Action Council or the Central Vermont Regional Planning Commission may be of assistance with this.

C. Alternative Energy

Several families in Town are partially or wholly “off the grid,” using solar panels and wood as their primary energy sources. These pioneers are to be commended for their ingenuity, idealism and independence. It is possible that cooperative purchasing by a sufficient number of participating households might allow for reduced prices when buying alternative energy equipment.

II. Primary Sources of Supply

As stated in Chapter 3. Municipal Resources, (under **Section I. Utilities**), the Town’s electric power supply is provided primarily by Hardwick Electric Department (HED), with Washington Electric Cooperative (WEC) accounting for a total of 62 meters (51 residential, 10 seasonal and one light commercial), mainly in West Woodbury and South Woodbury.

Aside from power generated by dams on the Lamoille River (approximately 10% of HED’s total supply), Hardwick Electric relies on contract power, i.e. contracting with other suppliers for a negotiated amount of electric power. These suppliers, such as Vermont Public Power Supply Authority (VPPSA) and New York Public Power, generally combine several sources of power. HED currently receives some power from Vermont Yankee Nuclear Power Plant (approximately 5-10% of total supply) via contract

power. No HED contracts involve power from Hydro Quebec at this time. HED does not foresee any major transmission or distribution constraints for anticipated growth in demand; the company is addressing minor reconducting and substation issues on an ongoing basis.

Washington Electric also contracts for power supply. Major sources at this time are Hydro Quebec (25%) and Vermont Yankee (30%). WEC's contract with Vermont Yankee ends in 2002. Plans are in place to replace power received from Vermont Yankee with long term renewable sources, such as the McNeil Woodchip Plant in South Burlington, and other independent suppliers. WEC prepares and implements four-year construction work plans as well as long term plans, tracking growth through its entire catchment area. WEC currently anticipates a 1-2% increase in supply overall, with most of the increased demand in the Mad River Valley. Thus, the Town of Woodbury, with its relatively stable population, should be assured of adequate electric power supply for the foreseeable future.

III. Energy Goals, Policies & Strategies

Goal #1: To decrease total energy use and associated costs.

Policy #1-A: Zoning regulations should include references to the recently adopted statewide Residential Building Energy Standards. These standards apply to all new residential development, but awareness of this law is still limited.

- **Strategy:** The Planning Commission will research available tax incentive programs for energy-efficiency improvements, and provide information concerning tax liability/relief for the increased property values resulting from such improvements.

Policy #1-B: Funding sources to increase the efficiency of existing housing (weatherization) should be explored.

- **Strategy #1-B (1):** The Planning Commission will contact the Department of Public Service Energy Efficiency Program, HED and WEC to determine available resources.

Goal #2: To decrease the Town's dependence on non-renewable sources of energy, allowing both homeowners and renters to reduce the cost and vulnerability associated with the use of electricity and petroleum energy resources.

Policy #2-A: A management plan for the Town Forest should be developed, to include harvesting of timber for fuel, as articulated in **Chapter 3, Municipal Resources** (Goals Policies & Strategies, Section C, Policy # 1-A).

- **Strategy:** The Planning Commission will invite open discussion with the Conservation Commission and Select Board regarding a management plan for the Town Forest.

Policy #2-B: The development of other renewable energy resources should be encouraged.

- **Strategy:** The Conservation Commission will organize an educational forum on renewable energy and its benefits, featuring local innovators.

CHAPTER 8. ECONOMY

I. Woodbury's Economic "Landscape"

A significant number of Woodbury residents are self-employed, and many of those work from their homes. Many who now travel to jobs in other towns would hope to someday be self-employed and work from their homes. "Tele-commuting" has been made possible by advances in telecommunications systems and equipment, and is making it possible for more people to work from their homes.

The 2000 census counts 76 Woodbury residents working in their own homes or at another home business in the town, while 409 commute out of town to work. Several businesses currently employ staff other than family members, such as the quarry, Shatney's Garage, the School, the Post Office, the Town Clerk's Office, an excavation business, and others. Woodbury is home to quite a few successful artisans, artists and craftspeople with thriving businesses based in their homes. These and other home-based, self-employed residents help to create a rich and diverse community.

An informal survey of townspeople conducted in 2001 shows strong support for maintaining a successful general store in Woodbury Village as part of a vital economy and a thriving community.

II. Economic Goals, Policies and Strategies

Goal #1: To provide for a diverse and thriving economy that provides satisfying job opportunities while maintaining high environmental standards.

Policy #1-A: In order to maintain and promote the trend toward small, home-based businesses, the Zoning Ordinance should continue to allow home businesses to locate in all districts of the Town as long as the businesses are operated and maintained in a way which does not change the character of the surrounding area.

- **Strategy:** The Planning Commission will review current zoning regulations and propose any amendments deemed expeditious to encourage home business without sacrificing environmental quality.

Policy #1-B: Businesses producing primary and value-added agricultural, forest or mineral products should be supported and encouraged.

- **Strategy:** The Planning Commission will examine current zoning ordinance for any barriers to the development of such enterprises, and propose appropriate amendments, if necessary. For example, trucking weight limits on roads may be a barrier to the transport of primary forest products, or granite.

Policy #1-C: Avenues for economic development in the Village Districts should be explored.

- **Strategy:** The Planning Commission will consider applying for a grant from the Division for Planning (VACCD) to study current economic conditions and incentives for appropriate future growth. The public forums and survey on commerce in Woodbury Village initiated during fall 2001 by town residents could provide the basis for such a study.

CHAPTER 9. LAND USE

I. Overview

This section presents an overview of land use values for the Town. Section II describes three land use districts, each of which has particular characteristics and values, both for people and for the ecosystem. Section III describes techniques and tools intended to influence the pattern of future development, so that the natural assets of Woodbury can be preserved, while areas that are developed utilize the land to its greatest potential. These values are then articulated as goals, policies and strategies (Section IV). These goals form the basis for the Town's Zoning Ordinance, and should be considered for permit decisions, such as conditional use and Act 250, and for governmental decisions such as road reclassification. The goals are rooted in the need and the right that members of this rural community have to pursue the lifestyle or livelihood they desire, without causing undue discomfort to their neighbors or creating a negative impact on the environment.

As articulated in the Vermont Municipal and Regional Planning and Development Act, all towns in the state should attempt to preserve the historic settlement pattern of compact village and urban centers separated by rural countryside. Historic village settlement patterns make modern-day sense in many ways. Concentration of commerce in the villages creates shorter travel to reach public services and retail outlets for townspeople in and around the villages, where residential development is most dense; this leads to energy savings and cost efficiency. The sense of community is enhanced by having nearby neighbors. Safety is more assured by living near others, an important factor for the elderly and for single mothers with young children. Cultural activities, which occur in the village centers, also serve to build community.

On the other hand, many Woodbury residents enjoy the peace and rare scenic beauty of more rural settings. These values are often satisfied by the ownership of large, relatively secluded lots. Maintaining this relative peace and seclusion is important to many Woodbury residents. This Plan recognizes that opportunities for residential development will thus continue to be diverse, including village and rural sites. It is recommended, however, that development of housing options near the existing villages should be encouraged where appropriate land is available. If housing growth is inevitable, and the trend over the past decade suggests that it is, it makes the most sense that growth occur in a more concentrated manner. Also, most Town facilities and services are already located in the villages.

In addition to zoning ordinance amendments suggested in the Land Use Goals, Policies & Strategies Section of this chapter, there are other land use issues presented in previous chapters which may merit a set of written regulations, such as a Sewage Ordinance (see **Chapter 2**) and a Wireless Telecommunication Facilities Ordinance (see **Chapter 3**).

It should be noted that State Statute passed at the end of the 2002 legislative season makes significant changes in policy regarding land use and sewage disposal. The Agency of Natural Resources is currently writing regulations specific to this new law. This may dictate amendments to zoning ordinance for the Shoreline District.

II. Land Use Districts

Three districts (the Village District, the Shoreline District and the Agricultural/Rural Residential District) were established in previous Plans dating to 1973, primarily to implement the goals of resource protection and continuation of historical settlement and land use patterns. (A copy of the current Zoning Ordinance, last amended in 1989, is available at the Woodbury Town Office). (Also see Appendix B, Map 5 – Zoning Districts).

A. Village District

The two village areas, Woodbury and South Woodbury, are designated as Village Districts. Historically, these two centers have provided the focus for commercial and community activity within the Town. Although there is little undeveloped land left in the villages, a goal of this Plan is to enable the villages to continue providing these functions. Expansion of the village districts may be warranted if areas contiguous to these districts are found to be suitable for residential development on smaller lots, or development for commercial uses.

The Woodbury Village District runs along Route 14 from the northern end of Blake Hill Road northerly to the intersection of Town Farm Road. South Woodbury Village District runs along Route 14 between the cemetery and the north end of Maple Road, and along Maple Road and Foster Hill Road to their intersection. The boundaries for each village district extend 300 feet to either side of the highways indicated.

Both villages are located on the region's principal arterial road, Route 14. This location presents somewhat of a land use conflict, especially in Woodbury Village, as the road is used as a minor arterial between the Northeast Kingdom and Central Vermont, and carries a high percentage of through-traffic. This can cause problems, in that Woodbury Village also has a relatively high amount of pedestrian and bicycle use. The **Transportation Chapter** of this Plan (Chapter 4) discusses possible solutions for this problem. As mentioned in Chapter 4, one way of improving pedestrian and bicycle safety might be to extend the northern boundary of the Woodbury Village District along Route 14 to Ainsworth Road, and appeal to the State Transportation Agency to post a 35 mph speed limit at this extended boundary, with the intent of having an impact on traffic speeds through the village.

Consideration might also be given to extending Woodbury Village boundaries easterly past the School to Wheeler Road, and westerly up the Cabot Road to Flat Street. This might encourage additional development in the Village District, which would be consistent with the goal of preserving historic settlement patterns.

While it is desirable to preserve and improve village settings, it is recognized that expanded development of the villages will be severely constrained by the lack of developable land, and the absence of public water and sewer utilities. The options for expanding the village districts should be studied more thoroughly during the preparation of Zoning amendments, with special attention given to potential land capacity as well as the goal of clustered village development.

Both South Woodbury Village and Woodbury Village host buildings of historic significance, and both retain a character that is, in large part, defined by these historic buildings. It is hoped that these buildings will be maintained in good condition, and any future construction will not detract from the historic and unique character of the villages.

B. Shoreline District

This district was established in order to protect the Town's larger water bodies from pollution and degradation through adequate land use safeguards. These lakes and ponds are an irreplaceable economic and aesthetic resource to the Town. Woodbury should encourage better management of shoreline areas in a manner compatible with their special nature, as well as the rights of property owners.

The shorelines are becoming increasingly valuable, as evidenced by the rising re-sale values of shoreline camps. Undeveloped shoreline areas are valuable for the protection of water quality as well as aquatic and wildlife habitat. The remaining undeveloped shorelines may lose these functions through unchecked development if action is not taken to preserve them.

The Shoreline District encompasses an 800 foot distance from the shoreline (normal mean watermark) of all lakes and ponds 20 acres or larger. If it is found that particular lakes warrant special protective measures, the zoning ordinance may be amended to address these issues. Also, specific guidelines for lake and shoreline use may be implemented through zoning or a separate ordinance to address concerns about particular water bodies.

The Shoreline District includes the land surrounding the following bodies of water in the Town of Woodbury: Buck Lake; Cranberry Meadow Pond; East Long Pond; Greenwood Lake; Mud Pond (SE Woodbury); Nelson Pond; Nichols Pond; Valley Lake; Woodbury Lake.

C. Agricultural/Rural Residential District

This district comprises a major portion of the Town. It is characterized by a combination of wooded and open land, has generally rolling terrain (except for Woodbury Mountain and other steep elevations), and is, for the most part, accessed by the Town's highway system. It includes residential development and open lands, either currently or historically in agricultural use as well as undeveloped forestlands.

Historically, agricultural properties have included both croplands for feed production and forestlands for necessary fuel and lumber. Some parcels of undeveloped forestland in the Town of Woodbury are quite extensive. It is hoped that these lands may be preserved from unrestrained development in the future in order to protect wildlife habitat from fragmentation. Woodbury's forestlands should be managed in an environmentally sustainable way. The Current Use program, which encourages sound forest management in return for reduced property taxes, should be encouraged at the state level. Currently there are 58 parcels, encompassing 12,291 acres, or 57.3% of the town's forested land, enrolled in the Current Use program.

The historic settlement pattern in this district is one of older farmhouses, widely dispersed, with residences that have been constructed more recently between them. Most of the older homes are located close to town highways, and the newer homes are more likely to be farther from the road, on long

driveways or private roads. Many residents of the Ag/RR district have chosen their locations for the peace and quiet of rural life. Some may dream of eventually working from their homes, and others already do so. The potential of telecommuting may make it possible for more people, both current residents and newcomers, to work from home, either full or part-time.

The overall objective of this district is to allow residential and limited home-based commercial uses in keeping with the rural nature of the district. The rural residential character has been maintained by not allowing any commercial uses in the district unless they qualify as home occupations. The Zoning Ordinance specifies that home occupations that fit within certain parameters are allowable in this district, even if they involve construction of additional buildings. This provision furthers the goals of this Plan and should continue.

In addition to residences and home businesses, the Ag/RR district is home to two pre-existing, non-conforming uses: the Fletcher Granite Quarry owned by Swenson Granite Company, and Camp Kahagon, a small resort on Nichols Pond (holding property in both Ag/RR and Shoreline Districts).

III. Land Use Techniques & Zoning Tools

As mentioned in this chapter and elsewhere in the Plan, conservation easements, land trusts, cluster development, and tax incentive programs can be effective land use techniques. Zoning regulations will continue to be the primary tool for implementation of this Plan in the years to come. One of the purposes of this Plan is to lay out a framework of land use goals and values on which future zoning regulations will be based. Over and over in this Plan, concepts such as environmental quality and a quiet, rural way of life have been promoted in various ways. Clean air and water, wetland and wildlife preservation, peace and quiet, and natural beauty, are all generally valued by Woodbury residents.

Respect for others, if it could be practiced without being written into law, would solve many of the problems which zoning regulations attempt to manage. Unfortunately, personal freedom is also a popularly held value - which doesn't always go hand in hand with respect for others. Thus, zoning is a tool by which voters agree to regulate each other, so that each person can be protected, to some extent, from possible excesses by his or her neighbors.

A. Planned Residential Development / Clustering

Planned Residential Developments (PRD) are encouraged where appropriate, especially in the Agricultural/Rural Residential District. The purpose of a PRD is to allow a higher density on part of a development, while enabling a portion of the parcel to remain undeveloped (usually the portion with the most sensitive resources). This technique has proven to be effective in preserving productive or ecologically important land and maintaining rural character because housing units are not spread as widely as they would be normally, yet they still have sufficient space.

This style of development also saves costs for both the developer and the Town in that services, such as road construction and maintenance, are concentrated in a smaller area. Because this technique can produce benefits for the Town, State law allows a density bonus of up to 25% to be granted. The current zoning regulations contain provisions for this type of development. According to Woodbury's Zoning Ordinance, an applicant for a PRD must submit a statement setting forth the nature of all

proposed modifications of the existing zoning regulations, in addition to the site map and zoning permit application required for all manner of construction.

B. Minimum Lot Sizes

Minimum lot sizes attempt to ensure that people will have enough space so as not to intrude on others while they enjoy their way of life. They also are assumed to be affective in dispersing adverse environmental impacts (sewage disposal and storm water run-off, for example) created by residential developments. They may also consume more land than is actually necessary to support residential uses.

C. Setbacks

Setbacks are another regulatory tool intended to have the effect of separating neighbors, and their impacts, from each other. Setbacks also keep fire from jumping from building to building. Highway setbacks serve the purpose of aesthetics (to foster a more rural setting instead of a crowded one), traffic safety (to prevent cars running into houses if they leave the road), maintenance (to allow room for plowed snow and drainage ditches) and to allow for future public infrastructure such as wider roads, power lines, and sewer and water lines.

Water setbacks are important to preserve water quality, primarily from erosion caused by storm water run-off from roofs, roads and driveways, as well as sewage disposal. Vegetated buffer areas between surface waters and man-made structures help to minimize the effects of runoff. The wider the buffer, and the more natural and dense the vegetation, the more the water quality will be protected. Appropriate setbacks from water, based on scientific studies of actual impacts, will be examined in the near future to determine if any changes should be made in the current zoning ordinance.

Newer residences on lots created to meet the minimum lot size requirements are usually able to meet the setback restrictions without hardship. However, many of the older residences, and most of the camps, in Woodbury are on lots that are smaller than the current recommended minimums. Continued expansion of buildings that do not meet current regulations is an issue that must be addressed through zoning.

D. Conditional Use Review

Conditional Use Review by the Zoning Board of Adjustment is required for commercial uses and for home occupations in accessory buildings. In this review, the Board of Adjustment can review specific aspects of a building proposal, including the capacity of the land to support the use, impact on neighboring areas, character of the area affected, traffic and parking, landscaping, signs, water and sewage disposal, noise and other air pollution, and more. The Board is empowered to impose “other reasonable conditions and safeguards as it deems necessary to implement the purpose of the ordinance, the Town Plan and enabling state statute, and to protect the health and welfare of the residents of the neighborhood and the Town.”

E. Pre-Existing, Non-Conforming Uses

Pre-existing, non-conforming uses are those uses, and their accompanying buildings, which would not be allowed under current zoning restrictions, but which are allowed to continue because they were

established prior to the initial implementation of zoning in Woodbury. State law guarantees that these businesses are allowed to continue and expand, but the town is empowered to regulate such expansion through zoning. Current zoning allows the expansion of non-conforming uses with the issuance of a Conditional Use Permit by the Board of Adjustment. The Conditional Use review includes several standards including the character of the area, traffic, land capability, parking, landscaping, design and location of buildings and signs, water and sewage disposal, performance standards such as noise, air pollution, electromagnetic or other disturbances, solid waste disposal, and creation of dangerous or noxious hazards.

Two businesses that could be defined as “pre-existing, non-conforming uses” currently exist in the Ag/RR district – the Fletcher Granite Quarry owned by Swenson Granite Company, and Camp Kahagon, a small resort on Nichols Pond (holding property in both the Ag/RR and the Shoreline Districts).

F. Pre-Existing, Non-Complying Structures

Non-complying structures are those that were in existence prior to the adoption of zoning, but would not meet the zoning requirements of today – insufficient lot sizes and setbacks are the usual reasons for non-compliance. These structures are allowed to expand as long as the expansion will be in compliance with zoning requirements, or the Board of Adjustment issues a variance. Non-complying dwelling structures may be expanded in ways which would not otherwise conform with zoning set-backs, without necessity for a variance, as long as the “degree” of non-compliance is not increased. This zoning rule was adopted to improve the ease with which pre-existing dwellings could be extended. This means that the “amount” of non-compliance can increase (the size of the aspect of the building which is non-complying) as long as the “degree” of non-compliance does not increase (the distance from a setback line, for example). To explain, an older home which is 50 feet from the road (where 65’ is required) could be expanded, without a variance, even if the addition will also be 50 feet from the road, as long as the addition will not be closer than 50 feet from the road. This change has greatly increased the ease and fairness of implementation of the Zoning Ordinance.

G. Review and Regulation of Sewage Disposal Systems

An integral tool in land use planning is the regulation of sewage disposal. As mentioned elsewhere in this plan, sewage disposal is both an environmental and a public health issue. Experience shows that this is the primary limiting factor in determining the capability of land to support development. Because Woodbury is characterized by rocky slopes and wetlands, there are many areas which will never be suitable for development. Still, due to the variability of terrain, most tracts of land include some areas that can be suited for a house site.

Until now, regulation of sewage disposal has been tied directly to the State of Vermont Environmental Protection Rules, as authorized in state law. However, it has been necessary to allow pre-existing homes and camps to improve and replace sewage disposal systems that have failed, despite the fact that such systems could never meet state regulations for new system design. The Environmental Protection Rules do not apply to dwellings that were in existence prior to the adoption of the rules in 1970.

Currently, the zoning ordinance requires that any zoning application for enlargement of a dwelling or commercial building shall provide information to show that the existing wastewater disposal system is sufficient to support additional use. This section is subject to some interpretation and should be studied and clarified in the next zoning amendment. Alternatively, the section could be deleted and replaced by a separate health ordinance. Applicants for new buildings must show that a system has been designed and will be installed in accordance with the state regulations.

IV. Land Use Goals, Policies & Strategies

A. Village District

Goal #A-1: To encourage greater efficiency in land use, and protect natural resources, historic development patterns and aesthetic resources, while balancing these concerns with property owners' right to full and reasonable use of their land.

Policies:

#A-1 (1): The Zoning Ordinance should be examined for inconsistencies or barriers to the above goal.

#A-1 (2): Concerns with substandard sewage disposal in Woodbury Village should be explored. (See Chapter 2, Policy #6-A).

#A-1 (3): The expansion of the Village Districts (as described in Section IIA. narrative) to encourage concentration of new development near village centers, should be considered.

#A-1 (4): The minimum lot size requirement for non-residential uses in the Village Districts should be reconsidered. A reduction in lot size from two acres to one acre, might serve to promote the development of new small-scale businesses.

#A-1 (5): Any future construction in the villages should be of a compatible scale and design with existing structures so as not to detract from the historic and unique character of the villages.

#A-1 (6): The Planning Commission should solicit public input as to the definition of commercial uses compatible with the Village District.

#A-1 (7): Planned Residential Development (PRD) requirements should continue to allow for lower minimum lot size, and provide incentives such as density bonuses, in order to encourage the use of this technique on land that will support greater density.

#A-1 (8): Home occupations that are compatible with their neighborhoods and do not have an adverse

impact on the environment or aesthetics should continue to be allowed.

- **Strategy:** The Planning Commission will review current zoning regulations and propose any amendments deemed appropriate to implement the policies under Goal #A-1.

Goal #A-2: To accommodate future growth in the Village Districts where appropriate.

Policy #A-1 (1): A study should be conducted to determine any infrastructure improvements needed to accommodate more intensive growth in the Village Districts. An analysis of ground water availability and the potential for community sewage disposal should be part of such a study. Resources for economic growth in the Village Districts should also be explored.

- **Strategy:** The Planning Commission will consider applying for a grant from the Vermont Department of Housing & Community Affairs (DHCA) to study these issues.

B. Shoreline District

Goal #B-1: To encourage greater efficiency in land use, thus preserving natural and aesthetic resources, while protecting the rights of property owners to reasonable use and enjoyment of their land. (See also Chapter 2, Goal #3 under Resource Protections Lands – Goals, Policies & Strategies).

Policy #B-1 (1): Consideration should be given to adoption of regulations which would address issues specific to the shoreline district, such as sewage disposal options for seasonal homes on tiny lots, regulations concerning the conversion of seasonal camps to year-round homes, regulations and/or guidance concerning removal of trees and vegetation along the shoreline, use of pesticides and herbicides, and construction of retaining walls. (See **Chapter 2, Goal #3**).

Goal #B-2: To protect and enhance the enjoyment of the lakeshore by camp owners, vacation renters and year-round lakeshore residents.

Policy #B-2 (1): Large parcels of undeveloped lakefront land exist on most lakes. These parcels contribute to water quality and wildlife protection, and enhance the lake experience for landowners and visitors. Opportunities to protect these parcels from development should be researched and acted on. It should be noted, however, that Vermont statute prohibits municipalities from enacting ordinance that restricts activities mandated under state law, such as a Use Value Appraisal forest management plan.

- **Strategy:** The Conservation Commission will investigate available non-regulatory land preservation tools, such as enrollment in Vermont's Land Use Value Program, conservation easements, fee simple or less than fee simple acquisition, to determine how these might be applied in Woodbury's Shoreline District.

- **Strategy:** The Planning Commission, Conservation Commission or a specially selected group of stakeholders should inventory those parcels and offer assistance to landowners who might want to

permanently protect the lands on a voluntary basis (ongoing).

C. Agricultural/Rural Residential District

Goal #C-1: To preserve historic settlement patterns and protect natural and production resources in the Ag/RR District.

Policy #C-1 (1): Minimum lot sizes should be re-examined in future zoning amendments. Larger lot sizes may be appropriate in some areas. The current 3-acre minimum may contribute to wasteful land development; on the other hand, it maintains the dispersed development pattern enjoyed by many residents of the district.

- **Strategy:** When developing zoning amendments, the Planning Commission should use available mapped natural resource data to help determine appropriate development density.

Policy #C-1 (2): Residential growth can be guided in several ways:

a) By identifying tracts of land which have suitable soils and terrain to support development, and encouraging owners of those tracts to maximize their development potential if they decide to develop;

b) By creating zoning incentives such as density bonuses and Planned Residential Developments, to encourage creative land use planning;

c) By building some flexibility into lot size requirements, to avoid wasting land by large lot subdivision. Expected state rule changes will hopefully eliminate the so-called “ten acre loophole” which is, in fact, not a loophole in Woodbury since all new residences are required to meet state standards for sewage disposal, regardless of lot size.

- **Strategy:** The Planning Commission will bear these considerations in mind when writing amendments to the zoning ordinance.

Policy #C-1 (3): Restrictions on commercial development in the Ag/RR District should continue.

- **Strategy:** While analyzing potential zoning amendments, the Planning Commission should ask the public whether this restriction has created difficulties for any local residents, and weigh any objections to these restrictions against the interests of environmental and aesthetic preservation.

Policy #C-1 (4): The conditional use permitting process for home-based businesses should be reassessed as zoning amendments are rewritten. Future zoning amendments should include provisions regarding transfer of business property or operations from the original owner. A new owner should not be discouraged from expanding or changing the nature of a business unless such use would be incompatible with existing Ag/RR District uses.

- **Strategy:** The Planning Commission will take these considerations into account when rewriting future zoning amendments.

D. Land Use Techniques & Zoning Tools

Goal #A-1: Design and implement revisions to the current Zoning Ordinance to make it clear, fair, understandable, meaningful and enforceable.

Policy: The zoning ordinance, as well as any associated ordinances such as a sewage ordinance, shoreline zoning, or tower ordinance, should be designed realistically by taking into consideration Woodbury's specific issues of concern, values, and record of past zoning problems and successes.

- **Strategy:** The Planning Commission should first meet with the Zoning Board of Adjustment to review the current ordinance and discuss items which have resulted in problems in past cases.
- **Strategy:** The Planning Commission should next hold public hearings to determine what, if any, zoning issues are of concern to Woodbury *landowners*.
- **Strategy:** The Planning Commission should hold at least one hearing during July or August and specifically notify lakefront property owners so that they may attend and have a voice in the process.

CHAPTER 10. REGIONAL ISSUES

It is not believed or intended that this Plan will have impacts beyond the Town borders. All of the recommendations, as articulated in the Goals, Policies and Strategies, are directed at problems or issues in Woodbury, and these recommendations are not thought to be of a magnitude or nature that neighboring municipalities will likely be affected. That said, there are some issues that are regional in nature, or that may benefit from multi-town effort. The issues that fall in this category relate to transportation, education and lake use.

I. Transportation

The **Transportation** and **Land Use** chapters of this Plan note that Route 14 is used for a variety of purposes, including commercial trucking, inter-regional travel (between central Vermont and the Northeast Kingdom), and bicycle and pedestrian travel. These uses, almost by their very nature, are conflicting. The resolution to these conflicts may lie beyond the recommendations of this Plan; however, a partial solution may be found in the creation of bike paths on both sides of the road. This would not require an inordinate increase in the width of Route 14, but would allow for some separation between different modes of use. (See **Chapter 5, Transportation**, for further discussion of this issue). In addition to the State highway, Woodbury and its neighboring towns share the use of many Town highways. Upholding Woodbury's high standard for road maintenance makes us a good neighbor.

II. Schools

It was noted in the **Education** chapter that Woodbury School has occasionally been crowded, although the student body is currently within the capacity of the facility. However, Woodbury will likely experience renewed population growth at some point in the future, and the school may the again find

itself with shortages of space. A possible solution to this problem may lie in the creation of a regional middle school, allowing two, three or four towns (i.e., Woodbury, Cabot, Calais and/or Hardwick) to combine resources for such a facility.

III. Lake Use

Woodbury shares some of its larger water bodies with other towns, notably Nelson Pond and Woodbury Lake (with Calais). It was mentioned in the Natural Resources section that intensive use of the lakes and their shorelines can create impacts on resources such as water quality, wildlife habitat and the general enjoyment of the lakes and ponds. The fact that these lakes lie in two towns means that any effort directed at moderating the impacts of lake or shoreline use will have to be regional in nature. Similarly, although the ponds themselves are wholly in Woodbury, the areas surrounding Nichols Pond and East Long Pond are enjoyed by residents of both Hardwick and Cabot. The regional nature of these resources might warrant that if any protection program is undertaken in these special areas, these towns might be asked to participate.

For example, neighboring towns might consider jointly contracting the services of a Town Sewage Officer, whose area of expertise would be septic system inspection, design, upgrading, etc; and whose primary responsibility (after a thorough study of existing septic systems in Shoreline Districts) would be to review proposed septic systems in any new building permit applications for compliance with the highest allowable standards to ensure water quality. **(See Chapter 2. The Land And Its Resources.)**

APPENDIX A

WOODBURY LAKES & PONDS STUDY RECOMMENDATIONS 1991

**Jeffrey Parsons, Consulting Ecologist
Don Meals, Limnologist
Deb Lester, Aquatic Botanist**

Woodbury Lakes & Ponds Study

3.0 Recommendations

The recommendations which follow assume that the goal of lake management is to manage for a variety of uses, and that, in *most* cases, by maintaining the current water quality, these uses will not be impaired.

Lakes and Ponds: Water Quality

1. Consider most vulnerable lakes and ponds a high priority for protection, adopting appropriate measures to ensure maintenance of water quality.

Buck Lake, East Long Lake, Nichols Pond and Nelson Pond currently have the highest water quality *and* are the most sensitive of the larger lakes. The Town of Woodbury should consider these lakes a high priority for protection, and at a minimum, should adopt recommendations to improve septic system siting and set-backs, buffer strip standards and other measures appropriate to the protection of these lakes and ponds (see recommendations 6 and 8). Other measures may include adoption of Erosion and Sediment Control Standards within the Shoreline Districts of these lakes and ponds (sample Provisions have been drafted by the Vermont Department of Environmental Conservation); and, along tributary streams.

2. Assess the status of lakeshore septic systems to protect Valley Lake.

Valley Lake, because of its relative sensitivity and current trophic status is in danger of eutrophication. Our study suggests that the status of lakeshore septic systems should be assessed. This could be accomplished with either dye, the use of a septic sniffer, or the use of a Sepstik. The Town should consult the State Lakes and Ponds Division to discuss which method is appropriate. Septic systems which are found to be faulty should be repaired. Those systems that are faulty and are located in an area of inappropriate soils or steep slopes (generally greater than 15% slopes), should be re-located or septic holding tanks should be installed. At a minimum, the recommendations adopted for the Valley Lake watershed should address septic system siting and set-backs, and buffer strip standards for the maintenance of natural vegetation (see recommendations 6 and 8).

3. Assess the status of lakeshore septic systems to protect Greenwood Lake and adopt measures to protect its watershed.

Greenwood Lake's current water quality status with a high phosphorus loading rate and oxygen depletion suggests that it is in danger of eutrophication. The lakeshore septic systems should be assessed, with either a septic sniffer or with the aid of a dye at Greenwood Lake. Septic systems, which are found to be faulty, should be repaired. Those systems that are faulty and are located in an area of inappropriate soils or steep slopes (generally greater than 15% slopes), should

be re-located or septic holding tanks should be installed. At a minimum, the recommendations adopted for the Greenwood Lake watershed should address septic system siting and set-backs, and buffer strip standards for the maintenance of natural vegetation (see recommendations 6 and 8).

4. Assess facilities at Green Mountain Conservation Camp on Buck Lake to determine if any problems exist regarding septic disposal.

Buck Lake is showing danger signs, as well. While Buck Lake is currently of high quality, the activities of the conservation camp should be reviewed to identify if there are significant phosphorus contributions. The Town of Woodbury should investigate the facilities at the Green Mountain Conservation Camp to determine if there are problems present such as: overland flow of septic field contaminants to Buck Lake, inadequate below-ground septic field treatment of effluent at the camp (i.e. is there sufficient depth to seasonal high water tables and/or bedrock), and shoreline alteration for erosion problems. The Town of Woodbury should work with camp personnel to correct deficiencies/problems if they are found. If no problems are found in the camp area or broader shoreline - the Buck Lake watershed should be examined for possible problems. Significant contributing sources of sediment and/or nutrients should be identified and remedial actions implemented.

If no significant sources of sediment and/or nutrients are identified in the Buck Lake watershed the current water quality problem may be related to some past activity(ies) which contributed large phosphorus loads to the lake. That is to say, the phosphorus in Buck Lake may be internally recycled from a pool of phosphorus, which reached the lake at some time in the past. If water quality declines in Buck Lake - remedial measures to address and inactivate this pool of phosphorus might be considered. To assess possible changes in water quality at Buck Lake, monitoring should continue under the State's Lay Monitoring Program.

5. Monitor activities in watersheds of smaller lakes and ponds to maintain their insensitive status.

The majority of the smaller lakes and ponds in Woodbury are relatively insensitive. In general, the smaller lakes and ponds have high flushing rates and polluted waters can be moved out of the lake system relatively quickly. If the watersheds of these lakes and ponds become developed in such a way as to contribute large loads of phosphorus to the surface waters - these high flushing rates may not be enough protection to stop water quality problems from appearing and persisting. If water quality problems develop on a small lake or pond, we recommend that the Town of Woodbury adopt a Shoreline District zoning class for these areas. The Town of Woodbury should consider adopting buffer strip standards and a septic system ordinance and setback regulations for these Districts (see recommendation 6).

6. Adopt one or more measures to ensure that septic systems are properly sited, designed and constructed throughout the Town.

Because of such a high percentage of Woodbury's soils have Severe Limitations (Soil Conservation Service [SCS] Advance Copy Soil Maps) for septic operation, the Town should adopt one or more measures to ensure that systems are properly sited, designed and constructed. The SCS soil mapping units for the Town of Woodbury are, in general, no finer in scale than 10 acres. While a high

percentage of the soils mapped have Severe Limitations, there are many smaller soil inclusions within these mapping units which are more suitable for septic system construction and operation. The Town would benefit from knowing the location of these sites, and siting septic systems in these areas. Once these sites are located, the Town needs to ensure that the septic systems will provide adequate treatment of septic effluent. We recommend the following:

(A) In order to ensure town review of septic system soils, the Town should appoint a *Town Sewage Officer*. The Town Sewage Officer should review the design and construction of systems or at least ensure that the responsible engineer or certified technician certifies that the design and construction meet the standards adopted by the Town.

(B) We strongly encourage the Town of Woodbury to adopt a Municipal Sewage Disposal Ordinance. By adopting a Municipal Sewage Disposal Ordinance, the Town can set standards for placement of septic systems, which would ensure that these systems would not convey contaminants to its lakes and ponds. Assistance in drafting an ordinance can be obtained from the Vermont Association of Conservation Districts, Montpelier, VT., and the Agency of Natural Resources, Waterbury, VT.

(C) If a town-wide sewage ordinance is not adopted, a system of septic field setbacks in the Shoreline District (Town of Woodbury Zoning Ordinance) of Woodbury's larger lakes and ponds may be used. Set-backs in the Shoreline District should provide a minimum of 100 feet in soils well-suited for septic systems (those soils with percolation rates between 10-40 minutes per inch) and a minimum of 200 foot set-back for those soils which are less well suited for septic system operation (soils with percolation rates between 0-10 minutes per inch and 40-60 minutes per inch).

(D) The Town of Woodbury should adopt a system of septic replacement (and repair) which calls for the installation of the best possible system for each site condition. In cases where phosphorus and/or nitrogen is likely to reach (or is already) reaching surface waters (through overland flow or ground water), a holding tank should be installed.

(E) The Town of Woodbury should adopt a program, which mandates a High Intensity Soil Sampling process. The SCS soil maps (as mentioned above) are gross mapping units and smaller inclusions of soils which in some cases are more appropriate for septic system operation are included in these mapping units. In Woodbury, much of the limitation for septic field operation is due to the presence of steep slopes and/or shallow bedrock. The soil types, which have less severe limitations for septic system operation, are those areas with less slope and also those soils which are deeper to bedrock. High Intensity Soil Sampling could locate these inclusions within a parcel of land. The Town of Woodbury could implement a process which mandates that within Shoreline Districts (or near/within 800 feet of all lakes and ponds, regardless of size, or on a town-wide basis) applicants proposing new developments either (1) finance High Intensity Soil Sampling on the land in question, or (2) install septic holding tanks.

7. Consider adopting a growth management strategy, which considers the interaction between land use, lake sensitivity and water quality.

The Town of Woodbury should consider adopting a growth management strategy that considers

the interaction between land use, lake sensitivity and water quality. We would strongly encourage the Town of Woodbury to adopt such a program if it were determined that one or more lakes and ponds were experiencing negative impacts from declining water quality.

One such growth management program has been implemented by the Maine Department of Environmental Protection. This program adopts limits to watershed development based on the capacity of individual lakes to maintain a desired level of water quality. We have provided a copy of the Maine procedure to the Town of Woodbury (it is titled *Phosphorus Control in Lake watersheds: A Technical Guide to Evaluating New Development*). Representatives from the Maine program may be willing to speak in Woodbury.

8. Encourage better continuing and long-term management of shoreline and near-shore areas.

The Town of Woodbury should encourage better continuing and long-term management of shoreline and near-shore areas. This might include: limiting the use of fertilizers and pesticides near lakes and ponds; maintaining the integrity of shoreline vegetation; and controlling erosion.

The Town's current Shoreline District zoning is inadequate in preventing shoreline and near-shoreline erosion from contributing sediment and nutrients to lakes and ponds. Current provisions only address removal of trees within the shoreline area. There are many options available for the town to provide greater protection of lakes and ponds by maintaining shoreline vegetation. The publication "Planning for Lake Water Quality Protection: A Manual for Vermont Conservation" (August 1990) provides three different possible Sample Provisions for Buffer Strip Standards (pages 86-87). We recommend that that Town of Woodbury adopt standards, which consider and adjust buffer strip standards based on site-specific conditions such as slope and soil erodibility. Standards should be adopted near all lakes and ponds regardless of size.

Other Recommendations

9. Maintain active participation in State's Lay Monitoring Program.

The townspeople should maintain active participation in the state's Lay Monitoring Program. All of Woodbury's larger lakes and ponds should be monitored in order to provide some continuity to the findings of this study. The information gained by participating in the Program is invaluable to efforts at gauging and on-going lake water quality and the success of any measures implemented as a result of this study.

10. Promote the formation of lake associations on all lakes and ponds.

The Town of Woodbury should promote the formation of lake associations on all lakes and ponds. Lake associations should be involved in the implementation of this study's recommendations.

11. Protect the three Mud Ponds as a significant wetlands and Town Natural Areas.

The Town of Woodbury should protect the three Mud Ponds as significant wetlands and Town Natural Areas. While this study did not involve a thorough inventory of wetlands in Woodbury, the three Mud Ponds are significant natural resources. The Town of Woodbury should petition the Water Resources Board to reclassify these areas as Class I wetlands under the Vermont Wetland Rules. Such reclassification would provide greater protection to these areas by granting them a larger buffer (100 feet instead of a 50-foot buffer) and by signifying their importance in regulatory hearings. We believe wildlife and aesthetic values of the ponds would be better protected with a larger buffer. An alternative is to petition the Water Resources Board to increase the size of the buffer strip along these wetlands. The Town should consider a broader program for the identification and protection of all significant wetlands.

12. Inventory and protect significant undeveloped shoreline and develop criteria for defining such shorelines.

The Town of Woodbury should inventory and protect significant undeveloped shoreline. Criteria for defining significant shorelines should be developed by the Town of Woodbury Conservation Commission in consultation with townspeople. Criteria that may be considered include: aesthetics, wildlife and fisheries value, shoreline stabilization benefits, water quality benefits, wildness or uniqueness values and naturalness.

13. Conduct educational programs for year-round and summer residents on lakes and water quality.

The Town should conduct educational programs for year-round and summer residents on lakes and water quality. The Woodbury Conservation Commission should organize a series of presentations on lake ecology, pollution and measures to protect lakes and ponds.

14. Provide some protection for loons known to nest on East Long Pond.

As the Common Loon is a State Endangered Species, the Town of Woodbury Conservation Commission may want to provide some protection for loons known to nest on East Long Pond. The Vermont Institute of Natural Science recommends that water level manipulations not occur during the period after a loon lays an egg and a chick has hatched (usually late May - July 4). The Town of Woodbury should negotiate terms for loon protection with an appropriate representative from the power company.

15. Protect ponds and lake tributaries, which serve as spawning areas for trout.

In order to maintain the existing cold water fisheries in East Long Pond, Nichols Pond, Nelson Pond and other water bodies, lake tributaries that serve as spawning areas for trout should be protected. The fisheries or wildlife biologist with the State Department of Fish and Wildlife, as well as local anglers, may be of help in identifying these areas in the field.

16. Important spawning areas such as lakeshore and tributary wetlands should be identified and protected.

Where warm water fisheries are important, as in Valley Lake, Greenwood Lake, Buck Lake and Woodbury Lake, important spawning areas such as lakeshore and tributary wetlands should be identified and protected. Personnel from the State Department of Fish and Wildlife, as well as local anglers, may be of help in locating these areas.

Aquatic Plants

17. Prevention of infestation of Eurasian water milfoil in the Woodbury lakes and ponds should become a high priority for the Town.

While Eurasian water milfoil was not found in the lakes that were surveyed, prevention of infestation of Eurasian water milfoil in the Woodbury lakes and ponds should become a high priority for the Town.

18. A program should be developed to educate residents and visitors of the Town about Eurasian water milfoil.

An educational program should be developed to educate residents and visitors of the Town about Eurasian water milfoil. While the Vermont A.N.R. has posted signs at public fishing accesses, additional effort should be made to educate the public.

19. With assistance from Vermont A.N.R., “Milfoil Watchers Program,” create an educational pamphlet on Eurasian water milfoil that could be distributed at local businesses and the Town Clerk’s Office.

The Woodbury Conservation Commission, with assistance from the Vermont A.N.R. “Milfoil Watchers Program” could create an educational pamphlet on Eurasian water milfoil that could be distributed at local businesses and the Town Clerk’s Office. It could also be distributed with the purchase of a fishing license. The pamphlet could also be mailed to all lakeshore residents.

20. Create a program in which local residents are trained to identify Eurasian water milfoil and are responsible for the monitoring of specific lakes and ponds.

The Woodbury Conservation Commission, with assistance from the Vermont A.N.R. “Milfoil Watchers Program” could create a program similar to that of the “lay-monitoring” program were local residents are trained in the identification of Eurasian water milfoil. A volunteer would be responsible for monitoring a specific zone of shoreline. While this concept would require a larger number of volunteers per lake, it would not require the weekly commitment that the lay monitoring program does and would provide an inexpensive method for monitoring the lake.

21. Designate an individual to serve as a local contact regarding Eurasian water milfoil.

The Woodbury Conservation Commission should designate a person to serve as a local contact person regarding milfoil. This person would be contacted if it was thought that the plant was found. This person would be responsible for following up on any possible sighting of the plant and contacting the Vermont Agency of Natural Resources. If the town begins implementing all of the

recommendations regarding milfoil (18, 19, 20, 21), the chances of milfoil becoming established in the lakes and ponds will be greatly minimized. If milfoil is found, because of this effort, it will likely be found before a large population of the plant can establish itself and eradication should be relatively simple.

22. Work closely with planning commission and lake associations to limit impact of land use to the lakes and ponds with a concentration on protecting the aquatic plant ecology.

In regard to species diversity and density of aquatic plant growth, the following is recommended. The Woodbury Conservation Commission work closely with the local planning commission and lake associations to limit the impact of land use to the lakes and ponds in order to limit the impact of these activities on aquatic plant ecology. By preventing erosion and sedimentation in near-shore areas, a more diverse and healthy aquatic plant community will persist. All lake users will benefit from a diverse and healthy aquatic plant community.

APPENDIX B

MAPS

Map 1 – Land Use/Land Cover

Map 2 – Natural Features

Map 3 – Agricultural & Forest Soils

Map 4 – Utilities & Facilities

Map 5 – Zoning Districts