

CANAAN, VERMONT

MUNICIPAL PLAN

Adopted March 7, 2000

CANAAN MUNICIPAL PLAN

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1. INTRODUCTION

This plan is intended to provide the basis for the enactment of local land use controls that will guide and direct the future development of Canaan. It is hoped that this will ensure, that growth in Canaan will benefit rather than burden the community.

The original Plan was written in 1979 in conjunction with the Northeastern Vermont Development Association (NVDA). At that time, the Planning Commission looked at several factors:

1. Existing land use patterns
2. Availability of community facilities and services
3. Natural resources found in Canaan
4. Population trends
5. Survey of Canaan taxpayers with regard to current and future development in Canaan.

In 1992 the process was similar. The Planning Commission mailed out 478 questionnaires, of which more than 50 percent were completed and returned.

The Vermont Municipal and Regional Planning and Development Act (Vermont Statutes, Title 24, Chapter 117), which contains the statutes that regulate planning in Vermont, has been amended by the Legislature extensively in recent years. Specifically, the creation of Act 200, "The Growth Bill", had been very controversial and at the 1990 Canaan Town Meeting the citizens voted "NOT to participate in Act 200". The latest changes to Chapter 117 went into effect July 1, 1997 and include all changes affecting land use planning. The Canaan Planning Commission will continue to plan within the guidelines of Chapter 117 and will retain as its goal the best interests of Canaan.

We have maps available for public use in the Town Office that feature roads, water and sewer lines, electrical power lines, town buildings and properties, public buildings and other information about the villages of Canaan and Beecher Falls.

With all the information gathered, the Planning Commission has developed several policies. These policies are not intended to remain static. Conditions and trends will inevitably change and growth policies will need to be revised accordingly. The Regional Planning Commission will assist us as development trends and plans for adjacent towns change. Planning is a continuing process and this Plan simply represents the current state of that process in Canaan.

II. TOWN PROFILE

Canaan is located in the extreme northeastern corner of Vermont, in the County of Essex. It is bounded on the north by the Province of Quebec, Canada; on the east by the Connecticut River and the Towns of Clarksville, Stewartstown and Colebrook, New Hampshire; and on the west and south by the Towns of Norton, Averill, and Lemington, Vermont. Total land area of Canaan is 21,992 acres.

Canaan had a population of 1,121 as of the 1990 census. There are two unincorporated villages in the Town of Canaan. The larger of the two is Canaan. Approximately one mile Northeast from the village of Canaan and on the Canadian border is the village of Beecher Falls. The majority of land in Canaan is hilly woodland. Open farmland runs along the Connecticut River from the village of Canaan to the southernmost border of the township, from the village of Beecher Falls to the northeast corner of the township, and along Leach Stream from the village of Canaan northwest to the Canadian border. Vermont Route 253 runs north from Canaan village through the village of Beecher Falls to the Canadian border. Vermont Route 102 begins at Canaan village and continues south along the Connecticut River to Lemington on the southernmost border. Vermont Route 114 runs west from the village of Canaan to Averill. Wallace Pond, Canaan's only recreational lake, is situated on the Canadian border, with more than half the lake in Canada.

Canaan was chartered by the State of Vermont in 1782. Actual settlement occurred in 1795. Most of the early settlers were farmers who initially established farms in the hilly areas away from the Connecticut River. Gradually, settlement dispersed throughout the Town. Lumbering was a major economic activity, with log runs on the Connecticut River taking place annually. In 1888, a railroad line began operating through Beecher Falls with connections to southern New England and extending north to Lime Ridge, Quebec. Six years later the Beecher Falls Manufacturing Company began its furniture manufacturing operations taking advantage of the rail service with initial employment of about 150 people. The combination of the railroad, the furniture factory and lumbering resulted in further settlement being concentrated in the river valleys, particularly the villages of Beecher Falls and Canaan. The furniture factory now operates under the name Beecher Falls Division of Ethan Allen, Inc. and as the major employer currently (as of March 1999) provides jobs for 680 men and women. Other sources of employment include agricultural and forestry occupations, small businesses and the U.S. Customs, Immigration and Border Patrol Services. Though Canaan has attracted people from around the U.S. and Canada for local employment, the town's population is by and large descended from local families. There is a prominent French-Canadian lineage, with many bilingual families.

Most retail stores are located across the border in New Hampshire which has no sales tax. This has resulted in particularly strong economic ties with the neighboring Towns of Colebrook and Stewartstown. Currently, the following retail services are located in Canaan and Beecher Falls: two gas/service stations, three dining establishments/taverns, and one barber shop. (See VI. Land Use (A) Commercial of this plan for a more detailed list of commercial enterprises).

III. POPULATION

HISTORIC TRENDS

The population of Canaan has fluctuated near 1000 for the past 90 years. The peak population occurred in 1980 at about 1200. The table below indicates past population trends.

Year	Population
1890	829
1900	934
1910	869
1920	982
1930	906
1940	872
1950	969
1960	1094
1970	949
1980	1194
1990	1121

POPULATION PROJECTION

Future trends in the population of Canaan will be largely dependent upon economic factors, namely the level of activity at Ethan Allen Inc. and job opportunities in Colebrook, New Hampshire. The Vermont Center for Rural Studies projects the population of Canaan, in the year 2000, to be approximately 1082 people.

IV. NATURAL RESOURCE FACTORS

An important consideration in the town development plan is the natural resources of the community and limitations they place on future land development. In Canaan, shallow soils steep slopes, stream banks, and flood plain areas, limit prime agricultural land and favor forestry.

SOILS

Soil conditions which can limit future development of land include: shallow depth to bedrock, instability, inability to absorb water and excessive wetness.

Information from the Soil Conservation Service indicates that the existence of these conditions vary widely throughout the town. In general, the best soils are found in the valley regions with the soil becoming increasingly shallow and unstable as the land slopes up and away from the valleys.

Soil conditions are extremely important away from the village centers where on-site water supply and sewage remaining disposal are required. However, except for the river valley bottom land, most of the land area is moderately to steeply sloped which limits the density of development which can be supported in these areas.

STEEP SLOPES

Land with slopes in excess of 15 percent, tend to erode once disturbed and present limitations in terms of road construction and other types of excavations. Therefore, it is unsuitable for intense development.

The largest area of steeply sloped land is in the central portion of the town. Within this area there are four hills, all over fifteen hundred feet high. In addition, most of the land west of Route 253 between Canaan village and Beecher Falls is steeply sloped. Steeply sloped land also occurs around numerous other hills scattered throughout the town.

PRIME AGRICULTURAL LAND

The Connecticut River valley land is particularly good agricultural land and accounts for most of the land currently in agricultural production in Canaan. Other areas of agricultural land include the land lying on either side of Routes 114 and 141 to the Canaan - Hereford border crossing. Other than these areas, agriculture is severely limited. In 1998 the development rights to approximately 371 acres of land were sold to the VT Department of Agriculture, Food and Market, etal. Some of the acreage is located on VT Route 102 and the balance is located on VT Route 114.

FOREST LANDS

Areas with good forestry potential are extensive in Canaan (over 80% of the land area). The two largest areas are found in the Morrill and Hudson Brook watersheds. Much of this land is presently in various stages of timber growth and harvest. In most cases, the prime forestry lands are relatively inaccessible and therefore unsuitable for other types of uses with the exception of outdoor recreational activities.

IV. NATURAL RESOURCE FACTORS (CONT'D)

STREAMBANKS

The Connecticut River and its major tributaries represent an important natural resource in the Town of Canaan. They are important in terms of outdoor recreation as well as contributing significantly to the natural beauty of the Town. The major tributaries of the Connecticut include Willard, Leach and Hall streams. Minor tributaries include Keyer and Capon brooks and their tributaries. In addition, the upper portion of Leach Stream, with its tributary Morrill Brook, drains into Wallace Pond.

Intense development too close to the banks of these streams would limit their accessibility for recreational purposes and decrease their attractiveness.

FLOOD PLAIN AREAS

In the event of a major flood, most of the land lying between Route 102 and the Connecticut River would be flooded. Fortunately, practically all of this land is now in agricultural use. In order to insure against the damage and inconvenience a major flood would cause, other types of development should be somewhat limited in this general area. Substantial flooding also occurs along the banks of Leach and Hall Streams.

WALLACE POND AREA

Wallace Pond represents an important natural and recreational resource for the Town. While it possesses the potential to serve as a site for expanded recreational and seasonal development, this development must be guided in such a way as to protect the water quality and visual appearance of the Pond.

V. POLICIES

A. ANALYSIS OF COMPATIBILITY

An analysis of information has indicated that the consensus is to maintain Canaan's rural character as is. Keeping Canaan as a rural New England town with two village centers and the economic efficiencies that go along with that remain a top priority for Canaan citizens.

However, since Canaan is in an interdependent relationship with its neighboring Towns, we are forced to evaluate potential obligations and opportunities that are created by certain economic and social trends. The Town of Canaan plans to keep the current communication lines open concerning any developing trends or plans with all adjacent municipalities. The neighboring towns of Norton, Averill and Lemington, currently have town plans that are compatible with Canaan's.

The areas we would be most affected in are housing and schools. In the event of economic development in a neighboring town, Canaan could benefit by providing affordable housing as addressed in Policy #3 below, and the proposal in Section VI., B. Zoning Districts. Since R-1 and R-2 lands were taken out of potential development use by conservation easements, agricultural land near the town center should be considered for conversion to residential use.

Canaan's school could be affected by a decrease in any neighboring school's ability to accommodate their current level of enrollment. Our school could benefit from a limited number of additional students while still maintaining present quality standards and programming. This issue is addressed under Section VII, Schools.

B. SCENIC, NATURAL AND HISTORIC FEATURES

Canaan has natural area, where scenic vistas and rare wildlife may be viewed. Some of these include Lake Wallace, sections of Routes 102 and 114 where moose are regularly seen. Historical sites include cemeteries, our village parks, the Alice Ward Library building, our two Custom Houses, along with more properties as listed by the VT Division for Historic Preservation.

C. STATEMENT OF POLICIES

The following policies are put forth:

1. To maintain services and facilities at current levels.
2. To remain abreast of current State policy in regards to Act 78, the Solid Waste Management Act. The Town accepts the responsibility for its waste and maintains a Recycling Plan and other related programs necessary to meet this responsibility.
3. To review certain land uses provided by the current Zoning Bylaw. In particular:
 - a) consider special provisions regarding lots and structures on Wallace Pond;
 - b) review building set-back dimension requirements;
 - c) review light industrial and home occupation uses;
 - d) review Zoning, Bylaw definitions;
 - e) provide for additional residential housing adjacent to the existing villages;
 - f) review the range of lots sizes to encourage more efficient land use;
 - g) consider and review the possibility of designating a historic district
4. The implementation of the above policies will be consistent with the preservation of scenic, natural and historic features and resources.

VI. LAND USE

This section is structured in two parts:

- A. An overview of present land uses.
- B. A description of the desired Zoning Districts.

A. PRESENT LAND USES

(Note: Detailed maps may be seen at the Town Office.)

Agriculture

Canaan owes its natural good looks to farming. While open land once covered much of the countryside, today's farms are concentrated on those fertile areas better suited to intensive use of machinery; mainly the flat terraced soils of the Connecticut River Valley. There are, at present, three working dairy farms in the town. Total approximate area under intensive management, including tillage and hay fields, is approximately 1400 acres, or 6.4 percent of the land area in the town.

Recent sale of individual farms has seen the better farm land absorbed by neighboring farmers and kept in good agricultural use.

There are a few small scale gardening operations which meet family needs. Many residents have always grown their own food and the incidence of home agriculture is on the upswing including raising of poultry and livestock.

Forestry

Roughly 18,000 acres or 82 percent of the land area is wooded, supplying renewable forest resources to the North Country and Canadian mills. The larger tracts of woodland are owned by woods contractors and other private parties. Under reasonable management, the total forest (assuming an average growth rate of 1/3 cord/acre/year) could sustain an annual harvest of 6000 cords or 3,000,000 board feet. This points to the considerable economic value of our forests.

There are eight to ten Christmas tree farms in the area, from small part-time businesses to larger full-time businesses. This shows tree farming as a major forest crop in Canaan.

Equally important to the Town are forest fringe benefits; notably clean water, fish and wildlife, firewood, and outdoor recreation of all types. Not the least contribution to the Town's welfare is the exceptionally attractive setting provided for the village areas by the surrounding forested hills.

Commercial

The Residential Commercial district provides for a mixture of residential and commercial uses.

Commercial uses in the villages include the following:

- | | |
|---------------------------------------|--------------------|
| 1 surveyor | 3 restaurants |
| 1 dance hall | 1 barber shop |
| 1 bowling alley | 1 membership club |
| 1 small engine repair shop | 1 motel |
| 1 insurance agency/real estate agency | 2 service stations |

Commercial enterprises outside the villages include:

- | | |
|-------------------------|--|
| 1 auto body repair shop | 1 motel |
| 1 sporting camp complex | 1 home appliance repair shop |
| 1 printer | 1 recreational vehicle sales and service |

VT. LAND USE (CONT'D)

Industrial

Ethan Allen, Inc., maker of Ethan Allen furniture, is the main industrial employer in Canaan. Woodland Carvers, another wood products manufacturer, is also an employer in Canaan. Of the areas many industrial wood harvesting contractors, one has headquarters and shop facilities in Canaan village.

Public Service of New Hampshire operates a hydroelectric plant (1100 KW) on Power House road.

Year-Round Residential

Population is concentrated in the two village areas of Canaan and Beecher Falls. Individually owned structures are single family units; rental properties are usually larger homes renovated into multiplex rentals. One mobile home park with 18 units is situated in the village of Canaan. In reviewing population statistics relative to housing units in Canaan, additional moderate income housing may satisfy a small demand for growing families.

In 1982, a Housing For the Elderly project was built in Canaan village off Route 253. This consists of ten single units and two double units.

Outlying residences are scattered along the public highways, with minor concentrations along Route 102 and in the Wallace Pond area. Due to the lack of available building lots in either of the villages, construction in outlying areas is taking place, particularly in the Canaan Hill area.

New homes are evenly divided between frame dwellings and mobile homes in character and are situated mostly in outlying locations.

Seasonal Residential and Camps

These are located primarily around Wallace Pond and along the Canaan Hill and Kemp Hill roads, with a few others scattered throughout the town. While most are owned locally and used primarily as summer cottages, hunting camps or winter retreats, some are owned by vacationing non-residents who may be tempted to convert to year-round use at some later date.

Second home development has been active in Canaan and surrounding towns.

Federal and State Agency Properties

The United States Customs, Immigration and Border Patrol Services maintain two border stations in Canaan; one on Route 141 and another on Route 253. Both of these buildings are listed on the National Registry of Historic Places and were constructed in the early 1930's. There is a United States Post Office in Beecher Falls and a Post Office building in Canaan, constructed in 1975, next to the Town Office Building on Route 253.

The Vermont Highway Department maintains equipment and three salt storage facilities on Route 141, the two newest buildings were erected in 1998. The Vermont Fish and Wildlife Agency maintains a boating and fishing access on Wallace Pond.

Proposal

Our policy is to encourage the wise use of natural resources including rare and irreplaceable natural areas.

VI. LAND USE (CONT'D)

B. ZONING DISTRICTS

The desired zoning, districts are:

1. Industrial
2. Residential-Commercial
3. Residential One-Half
4. Residential One
5. Residential Two
6. Agricultural
7. Rural Lands
8. Wallace Pond District

Industrial

The Industrial (IND) District encompasses the lands occupied by and in the immediate vicinity of Ethan Allen Inc., and an area adjacent to Route 114 west of Canaan village, as well as an area on the north side of Route 114 between Harriman Hill and Wallace Pond. These areas serve as locations for the establishment of a variety of types of manufacturing and commercial activities to provide employment opportunities and broaden the tax base in Canaan. All uses within this district are subject to site plan approval which requires that certain standards with respect to traffic areas, circulation and parking, landscaping and screening are met.

Residential-Commercial

The Residential-Commercial (R-C) District provides for a mixture of residential and commercial uses at a high density of development in four locations:

- (1) an area within the village of Beecher Falls;
- (2) an area within the village of Canaan;
- (3) an area adjacent to Route 14 1
- (4) an area adjacent to the Canaan Post Office on Route 253.

Uses are subject to site plan and/or conditional use approval which require conformance to certain standards with respect to impact on the community and the character of the area.

Residential One-Half

This district (R 1/2) is intended to be primarily for single and two family dwellings at a higher density of development. Various other uses that complement the district may be allowed. The R 1/2 district includes areas within both village centers and along the west side of Route 253 between Canaan and Beecher Falls.

Residential - One

The Residential-One (R-1) District is primarily for residential use at the same density of development as the Residential-Commercial District. All other uses within the district are conditional and require site plan approval. The R-1 District includes areas within the villages of Beecher Falls and Canaan.

Residential - Two

The Residential - Two (R-2) District is primarily for residential use. This district includes areas which are not remote from more densely developed areas and which are served by an adequate year-round road system. The R-2 District includes areas west along Route 114 from Canaan village, along Route 102 south of Canaan village, and along Canaan, Kemp and Todd Hill Roads.

VI. LAND USE (CONT'D)

Agricultural

The Agricultural (AGR) District is intended to preserve major areas of prime agricultural land while allowing other uses that are secondary to agricultural use. Areas designated AGR include the Connecticut River valley land south of Canaan village and certain areas along, Route 114.

Rural Lands

The Rural Lands (RL) district includes areas of the town that have a low density of development as they are generally mountainous, remote from densely developed areas, and generally are not served by an adequate year-round road system.

Wallace Pond District

The Wallace Pond District (WPD) includes that area of town where the lake is situated on the north side of VT Route 114 and a section on the south side of the road. Special attention will be given to this area.

The Zoning By-Law also includes requirements with respect to development in flood hazard areas. While these requirements do not prohibit development in such areas, they do insure that damage due to flooding is minimized.

Proposal

It is recommended that the existing zoning by-law be reviewed and amended as necessary to control and direct future growth and development in and around Canaan.

Since some of the R-1 and R-2 lands were taken out of potential development use by conservation easements, agricultural land near the town center should be considered for conversion to residential use.

VII. FACILITIES AND SERVICES

TOWN BUILDINGS

1. Town Hall

The present Town Hall is a brick building located on Route 253 next to the Post Office. It was initially constructed and used by the Community National Bank who sold it to the Town in 1980 for \$60,000 including 1.12 acres of land. The single story building has a finished basement with rest rooms, storage room, conference room and a vault. The ground floor of the building houses the town Clerk and Treasurer's office, another vault, a large conference room and three rooms used by the Superintendent of Schools. A new rest room was added on the ground floor in 1997 in compliance with ADA. Numerous local clubs and organizations make good use of the building throughout the year.

2. Town Barn

The Town Barn including 1.33 acres of land was purchased in 1966 from Alfred Gendreau as storage space for the Town road maintenance equipment. It is located off Route 253 near the Town Hall. In 1997 the original barn was torn down and a new pole barn, 24' x 72', was built by the Canaan Building Trades Class, and was completed in 1998.

3. Town Library

In 1933 Alice M. Ward presented her home to the Town of Canaan, for use as a public library. The library is located adjacent to Fletcher Park in the center of Canaan village and in 1980, was recognized as a building in the National Register of Historic Places. This building is owned and maintained by the Town.

4. Old Town Hall/ VIT Building

On September 28, 1994, the Town of Canaan voted to re-purchase the former "Town Hall" located at the southerly end of Fletcher Park and adjacent to the Alice Ward Library. The purchase was fully funded by State and Federal grants and took place in 1995.

The reason for the purchase was to restore the appearance and utility of the historic building; furnish a site for the High School Building Trades students to learn and Practice restoration and renovation of old structures; and, upon completion, to serve as space for Interactive TV coursework, and for rest room facilities for the adjacent Town Recreation Park and Fletcher Park, where frequent public functions are held.

The two story building was built in 1872 with School District No. 3 on the first floor and the Town Hall on the second floor, where Town Meetings as were held until March 4, 1947, when the Canaan Memorial High School gymnasium was first available. From 1947 until 1984, the building was used for and by several different businesses, including 'The Clinic', a law office, the Superintendent's office and an apartment. In 1984 the Town sold the building to a Land Surveying business, with the same business selling it back to the town in 1995.

Proposal

Current town buildings should be maintained to provide the current level of services.

TOWN PROPERTIES

The Town owns several properties including: Fletcher Park (donated to the Town in 1896) at the junction of Routes 102 and 114 in Canaan Village; the Beecher Falls Park located at the junctions of Route 253 and River Road; and the playing fields that adjoin the school buildings.

In 1988, the Town bought from Pearl Spaulding, James Nichols and Marlene Morneau a total of 10.6 acres of open land across Route 102 from the school playing fields to use as a recreational park. The park consists of:

- | | |
|--------------------|-----------------------|
| 1 Baseball field | 1 Little League field |
| 2 Soccer fields | 2 Tennis courts |
| 1 Basketball court | 54 parking spaces |

The Town currently has three open cemeteries: the Alice Hunt Cemetery west of the village on Route 114, the Canaan Village Cemetery on Route 253, and the South Canaan Cemetery on Route 102. The Alice Hunt Cemetery has the best potential to be expanded. The Town also has several older cemeteries whose locations can be found on the maps located at the Town Office.

Proposal

These properties represent certain areas of the community which may have scenic as well as historical features that the Town has long recognized and maintained and should continue to do so. Enhancement of the rec park should proceed to allow for a wider range of activities. Additional cemetery space should be acquired to enlarge the Alice Hunt Cemetery.

VII. FACILITIES AND SERVICES (CONT'D)

SCHOOLS

The Canaan Schools serve 1774 people and approximately 275 K-12 12 students. Some Canaan Elementary students also attend St. Albert's School, a private parochial school in Riverside, Stewartstown, NH. Canaan High School is a receiving high school, which accepts tuition students from Norton, Lemington, Brunswick and Bloomfield, VT and also from neighboring New Hampshire towns.

The elementary and high schools are located in two adjacent buildings on a five acre lot overlooking the Connecticut River in Canaan Village.

The high school building, built in 1946, is a wood and steel framed masonry building. A gymnasium and library were added in 1977 replacing the original gym. Basic facilities in the high school include: 8 general classrooms; a stage and gym with locker and shower facilities; a library/media center; a science laboratory; an art classroom; a home economics classroom; and offices for the principal, athletic director, and teachers.

The elementary school building, constructed in 1960, is a steel framed masonry building with a three room addition that was completed in 1986. It has 7 general classrooms, a multi-purpose room/cafeteria (shared with the high school), and office space for special services.

Current projections for the use of our classroom facilities indicate that we can absorb an increase of approximately 10% by average. We do not have the capacity to accept a greater number of students, on average, without altering our pro-ram offerings. As a receiving school district for the Essex North Supervisory Union and neighboring New Hampshire communities, we are susceptible to population shifts due to economic and social conditions beyond our control. History has indicated that we have been able to accept these fluctuations with minimal changes to our educational program. We do not expect changes in either our program or pupil/teacher ratio in the next five years.

Per pupil school costs in Canaan for 1999/2000 are projected to be the lowest in the region. Elementary students will cost approximately \$4800, and secondary/vocational students will cost approximately \$6200.

Vermont Act 60, the Equal Education Opportunity Act, was enacted in the Spring of 1997 to improve the quality of education for all Vermont students. It is essentially divided in two main parts: improving the equity of how schools are financed and improving the academic achievement levels of students through the use of a standards-based curriculum and testing system.

Under Act 60, schools are required to evaluate student achievement scores. Act 60 suggests that schools evaluate achievement not only by test results and grades, but also community surveys, demographic data, drug and alcohol use surveys, student surveys and teacher evaluations. Canaan has formed a Steering Committee to perform these duties. The Action Plan, one of the requirements of Act 60, is a plan to improve student performance. It is being developed with the involvement of community members, teachers, parents and administrators. This document will be presented to school board and is expected to be adopted in the Spring of 1999.

The website for the Canaan Schools is maintained and updated on a regular basis and is intended to provide the latest information about our schools. That address is <http://www.canaanschools.org>. You are encouraged to visit this site and offer your comments, suggestions or review the information found there.

Proposal

Canaan School facilities should be maintained and strive for cost effective solutions to quality education for the citizens of the community.

VII. FACILITIES AND SERVICES (CONT'D)

WATER SUPPLY

The Canaan and Beecher Falls villages are served by separate water systems.

Beecher Falls village is supplied by a water system owned and operated by the Beecher Falls Division of Ethan Allen, Inc. The system consists of a gravel packed well, a small reservoir and distribution pipes ranging from eight to two inches in size. Well capacity is two hundred gallons per minute with a maximum yield estimated to be over 250 gallons per minute. The reservoir, located across the Connecticut River in Stewartstown, New Hampshire has a capacity of about 10,000 gallons. The system serves approximately 120 households including a few in New Hampshire. Several improvements to the distribution lines along Rt 253 have been completed in 1997 and 1998. Improvements to the Beecher Falls pump and injection house on the corner of River Road and Hall Stream, were completed in 1998 and includes improvement to the water quality of the system.

The Canaan system is a Municipal Fire District formed in 1986. The Fire District's primary responsibility is the control of the Canaan village water collection and distribution system. The primary source of supply is a group of springs located northwest of the village in Canada augmented during dry periods by a 180 gallon per minute driven well located in Ethan Allen Park near Leach Stream.

In 1987 a 100,000 gallon covered concrete reservoir was constructed adjacent to the previous open pond 300,000 gallon reservoir near the springs on the U.S. side of the border. Safe water storage is now provided, free from spring and summer runoffs which had caused some coliform problems in the past. The distribution system from the reservoir is six inch (transit) main installed in 1964.

In anticipation of and in conjunction with the new reservoir, certain other water line improvements were done including approximately 1000 feet of six inch main line on Route 253, a new fire hydrant, and a two inch branch line on Kingsley Road. An additional 1600 feet of new eight inch line through Ethan Allen Park was added in 1987. This replaced a six inch line from the junction of the well and reservoir lines to Ethan Allen Drive and also replaced a one and one half inch line that ran from the same junction across Ethan Allen Park to Reservoir Road.

In 1988, a new eight inch line was installed from the fire hydrant on Reservoir Road to the fire hydrant near the Jerry Tirrill residence on Route 253. This connection increased system reliability by providing a complete loop of a large section of the Fire District, with resulting increased water pressure. It should be noted that the Green Hill apartment complex on Route 253 is not a water system user. An additional fire hydrant was also installed at the west end of Gale Street in 1988.

During the summer of 1990, 1900 feet of new six inch main was installed on Route 102 along with two new hydrants. In 1991, the new Recreation Park west of Route 102 was connected to the system.

The water meter system is properly maintained and, with the completion of the new covered reservoir, master meters were installed both at the new reservoir and the well, allowing better control of usage and alerting personnel to possible leaks in the system. In 1994 a new water meter for West Stewartstown was installed, as well as a new shut off valve in the pump house that supplies New Hampshire with water.

In 1994 the Clean Water Bill was made law, and certain requirements had to be met by our system and personnel. We are pleased to have a Class 2 Public Water Certified Operator on the Municipal Fire District Committee. Vermont state personnel inspected our springs with the Clean Water Bill in mind, and they made certain suggestions. In 1996 some new replacement water lines were installed from the spring sites, along with extensive cleaning and placing clay around the springs to keep surface waters from running in to the spring water. A new chlorine system was installed in 1997.

VII. FACILITIES AND SERVICES (CONT'D)

In 1998 the Town had the springs put on a GPS tracking system to make it simpler to locate them. The Canaan Fire District Committee also adopted a Source Protection Plan around the springs and well house. Adoption of the plan required meeting certain State mandated tests. These test results were successful and will now be removed from the list of annual tests that have to be done.

Hydrants are located along the six inch line providing fire protection in the major portion of the village. Pressures range from fifty to seventy pounds per square inch. This system supplies water to about 140 dwellings, school buildings, a motel and numerous small businesses in Canaan village as well as the village of West Stewartstown, New Hampshire.

Proposal

The current level of water supply should be maintained. As funding becomes available, the line from just south of the Town Office building north on Route 253 and into Holmes Street (one of the oldest and least reliable sections) should be replaced.

SEWAGE TREATMENT

In 1973 the Town of Canaan undertook the construction of a sewage collection system and treatment facility, which was expanded in 1981 to serve West Stewartstown, New Hampshire. At this time, West Stewartstown purchased 48% (88,000 gallons/day) of the system's total capacity of 185,000 gallons/day with a commitment to also pay 48% of future capital expenditures. Current usage is 35-40,000 gallons/day by Stewartstown and 120-135,000 gallons/day by Canaan. The VT Agency of Natural Resources, Wastewater Management Division estimates that as of March 12, 1998, there is an uncommitted reserve capacity of approximately 51,000 gallons/day.

The treatment facility, located between Route 102 and the Connecticut River, consists of three aerated lagoons. Blowers force air through polyethylene tubing at the bottom of the lagoons. The air interacts with bacteria to remove the impurities in the sewage. The plant effluent discharges into the Connecticut River through a submerged outfall pipe with diffusers to provide diffusion within the River.

Collection of raw sewage is accomplished through a system of gravity and force mains. The force mains are operated by one injector station and three pump stations. The majority of the mains are eight inches in diameter with some sections of ten inch pipe. Collection of sewage is separated from storm drain collection. West Stewartstown has two pumping stations with a combination of eight and ten inch lines installed in 1983.

In 1987 a build-up of sludge in the lagoons required State approval for removal. This was done in cooperation with a local landowner and was completed in 1989. The number one lagoon reef system, which is used for the aeration process, was replaced in 1990.

In 1994 an engineering firm was hired to film the sewer lines, and review all the pump stations, lagoons and the plant. This 20 year evaluation is mandated by the State. A new chlorination system, as well as a dechlorination system were installed, to make sure that the discharge water entering the Connecticut River met all requirements of both New Hampshire and Vermont.

1998 was a hard year for the Canaan Wastewater facilities and pump station. The flood in April required much time and money for repairs. A study was done of the aeration system at the plant and the state deemed it necessary for the lagoons to be cleaned of approximately 880,000 gallons of sludge before replacement parts to the aeration system can be installed.

VII. FACILITIES AND SERVICES (CONT'D)

The treatment facility serves a population of approximately 1200 of which the employees of Ethan Allen, Inc. are included.

Under the current sewer bylaw, any new structures located within one hundred feet of the collection system are required to connect to the system. Maintenance costs and debt service for the sewage treatment facility are paid by user fees.

Proposal

It is proposed that the mandated sludge clean-up be completed and that the aeration system be improved.

TRANSPORTATION

1. Highways

There are 40.12 miles of highway in Canaan of which State Routes 253, 102 and 114 account for nearly half or 17.84 miles. Town Highways consist of:

Class II: 2.35 miles

Class III: 13.82 miles

Class IV: 6.11 miles

The State highways are of modern asphalt construction and quite adequate for present levels of traffic. They handle a substantial amount of local traffic as well as through traffic. It is recommended that the highway from the intersection of VT 141 and VT 114, west to Dubeau Road, remain unchanged.

In general those portions of town highways within the villages of Canaan and Beecher Falls are paved and those outside the villages unpaved. The bridge on Clay Brook Road was upgraded in 1990 with State Aid funds. The Hall Stream bridge is in relatively poor condition and is scheduled to be repaired in the near future. The Keyer Brook bridge at the junction of the Canaan Hill and Clay Brook roads was washed out in the heavy rains of 1998 and was replaced. Further, most town highways are in good condition for present levels of traffic.

Proposal

Current town highways should be maintained as necessary to provide safe and sufficient passage. Repair of the Hall Stream bridge should be completed as planned.

2. Bus, Rail and Air Service

The nearest bus stops are in Littleton and Berlin, New Hampshire with service to points south in New Hampshire and in Newport, Vermont with service to western and southern Vermont, southern New England and Quebec.

Limited unscheduled commercial air service is available in Newport, Vermont and Whitefield, New Hampshire. There is a private landing field in Colebrook, New Hampshire without commercial service. There is no longer any rail service available north of North Stratford, New Hampshire.

Proposal

Canaan residents travel frequently outside town to obtain commercial and professional services and at various times the need for some sort of public transportation has been expressed, but current demand is not sufficient to make it possible.

VII. FACILITIES AND SERVICES (CONT'D)

FIRE PROTECTION

In January 1976, the Beecher Falls Volunteer Fire Department building and all equipment was destroyed by fire. A new building was constructed at the same location in Beecher Falls consisting of a six bay garage with a meeting room and toilet facilities. Presently there are five trucks maintained for active duty.

The Beecher Falls Vol. Fire Department Rescue Squad started to respond to medical emergencies and other types of rescues in 1993. This Rescue Squad is an integral part of the Fire Department. All aspects of the Rescue Squad are run through the Fire Department members.

As of March 1999, the team consists of 9 EMT's, plus several members trained in other aspects of rescue operations. The Rescue Squad responds to medical emergencies only as first responders, the Squad does not have an ambulance or a license to transport. The Squad is licensed as a fire rescue team in the State of Vermont and New Hampshire. The Squad is also a member of the District A1 Ambulance Corps, with two members serving on the governing body. The Squad is dispatched through the U.S. Customs in Beecher Falls, VT.

The Squad operates from a 1996 Grummin van and Engine 2. The van is equipped with all the materials that are needed for the team to operate at emergencies. Engine 2 is equipped with the Jaws of Life, a complete set of air bags, and many other tools necessary for rescue operations.

The Fire Department, with the help of many generous donations, purchased a snowmobile and enclosed trailer, and snowmobile rescue sled for winter rescues.

The Squads number of calls is increasing each year. In addition to the regular fire calls, the Fire Department Rescue Squad responded to 49 different types of rescue operations in 1998.

Proposal

The current level of service should be maintained.

POLICE PROTECTION

The Town contracts with the Essex County Sheriff for routine police protection. The Essex County Sheriff is located in Lunenburg, some forty miles from Canaan. However, the deputy who presently serves Canaan is a town resident.

There are two State Police Troopers in Essex County with the nearest State Police Barracks about 45 miles away in Derby. One outpost trooper lives in Beecher Falls and one in Island Pond. U.S. Border Patrol Agents provide back-up assistance when state and local officers request it. There is also a State Fish & Wildlife officer posted in Canaan with police powers and who works with State and local officers in certain situations.

Proposal

The current level of service should be maintained.

VII. FACILITIES AND SERVICES (CONT'D)

SOLID WASTE DISPOSAL

Solid waste from Canaan is picked up curb side, once a week, by a private hauler, and then is transported to the Crown Vantage Sanitary Landfill in Berlin, NH. The Town pays the tipping fees.

In 1987 the Legislature mandated that all towns come up with a solid waste plan by 1990. In 1991 the Town developed its own waste management plan which includes solid waste being hauled to the Crown Vantage site and recycling. Establishing and maintaining our successful recycling program is an important step as the Town works towards state approval of a waste management plan. Canaan was fortunate in being able to join the "Piggery Recycling Center" project in neighboring West Stewartstown, NH. This is a cooperative effort involving several neighboring New Hampshire towns. Recyclables are picked up at the curb, weekly, by Canaan employees and transported to the Piggery site, where it is sorted and sold.

The Town established 3-4 'Stump Dump Days' per year, for disposal of large household items.

Proposal

Continued vigilance has to be maintained in order to continue our successful recycling system.

ROAD MAINTENANCE

One full time person and one part time person (as needed during the winter), as well as additional summer help are responsible for road maintenance. Equipment owned by the Town includes:

1995 one ton truck	1985 Grader
1986 Backhoe/loader	Steam cleaner
1997 one ton truck	Miscellaneous tools/machinery
Plows, sander, etc.	

Equipment is housed in the Town Garage on Route 253.

Proposal

The current level of service should be maintained.

VII. FACILITIES AND SERVICES (CONT'D)

LIBRARY

In 1933 Alice M. Ward presented her home to the Town of Canaan, for use as a public library. The library is located adjacent to Fletcher Park in the center of Canaan village and in 1980, was recognized as a building in the National Register of Historic Places. This building is owned and maintained by the Town.

The Town appropriated \$15,000 for a new roof in 1989. In 1991 the Selectmen obtained a grant for repair of eight of the building's original 1846 windows. The Library Trustees and the Executive Committee of the Canaan Historical Society have, over the past years, designated four rooms on the second floor for the development of a museum to preserve our local heritage. During 1997-98 it was agreed that the use of the first floor apartment space would be converted into additional library space. The renovations are an on going project that has been successfully funded by tax appropriations and by generous grants and donations that were given by, including but not limited to, the Tillotson Foundation and Ethan Allen, Inc. The Building Construction and Restoration Carpentry program at Canaan Memorial High School has undertaken most of the construction and restoration.

The Library runs three story hours a week, year round, for the youngest members of our community. There are now more than 9000 books and 8 computers available to the public, with 2 of the computers being on-line. There is a Summer Reading Program that is staffed by employees and volunteers alike. The Library hours are: Monday 2-6, Tuesday 2-6, Wednesday 2-4, Thursday 10-6, Friday 2-6, Saturday 10-12. There are additional hours added to this schedule during the summer months.

Proposal

The economic realities of maintaining two libraries needs to be addressed by the Trustees of the Library and the School Board.

HEALTH FACILITIES AND SERVICES

Canaan residents go to Colebrook, Berlin and Lancaster in New Hampshire; Newport and St. Johnsbury in Vermont; and Coaticook, Quebec for dental care, outpatient treatment and minor hospitalization. Intensive care cases normally go to Hanover, New Hampshire, Burlington, Vermont or Sherbrooke, Quebec.

The nearest pharmacy is in Colebrook, NH. Twenty-four hour ambulance services are available in Colebrook and Pittsburg, NH supported by an annual contribution from town taxes and a user service charge. The Beecher Falls Volunteer Fire Department now staffs trained EMT personnel and has the necessary equipment to provide first response assistance to accident victims and any other health emergencies.

Home Health Care is provided by the Orleans-Northern Essex Home Health Agency working out of Newport, VT. Nursing homes for the elderly are located in West Stewartstown, NH; Barton, St. Johnsbury and Newport, VT.

Transportation for health care is provided by the Area Agency on Aging. There are no transportation charges, but they do accept donations if the recipient is able.

Mental health organizations in Colebrook, NH and Newport, VT provide services to Canaan residents supported by an annual contribution from town taxes and user service charges.

School health programs include speech therapy, occupational therapy, physical therapy which is provided through the VNA (Visiting Nurses Association), dental referrals/screening and special education. There are other programs offered when obtained through grants, and these may vary from year to year.

VII. FACILITIES AND SERVICES (CONT'D)
ENERGY

A. ANALYSIS:

Canaan has energy savings information available for the public at the Town Office Building. Several of the local businesses and homes have had energy audits completed. The local utility company sponsors energy savings programs for remodeling and building energy efficient housing. The School had an energy audit completed and made all the recommended changes, yielding a substantial savings in energy costs. Maintaining our two village centers and the economic efficiencies that go along with that are a priority for Canaan citizens, as we try to concentrate housing, roads and utilities within core landscapes.

B. SOURCES:

Electric power service throughout Canaan is supplied by Citizens Utilities of Newport, VT. Three phase service is available along Routes 114 and 253 and south on 102 to the Leach Stream Bridge. Single phase power runs southward along Route 102 and along the town roads that connect with Route 102. Citizens obtains backup service from the Public Service Company of NH.

Most buildings in Canaan use oil for heating during our long winters. Delivery service is available from several oil distributors located in the Colebrook area. Wood is also a commonly used heating fuel and is readily available from many sources in the area. Propane gas is available from a distributor with a storage tank located west of Canaan Village on Route 114 and also from sources in Colebrook, NH.

C. EXPENDITURES 1993-1998

	1993	1998	%Change
Town Garage:			
Utilities	N/A	\$556	N/A
Fuel & lubricants	5278	1975	-267
Sewer Plant			
Heat & Utilities	17,404	15,971	-9
Sewer Collection System			
Utilities	3142	2761	-13
Town Buildings			
Water, sewer & electric	2106	1684	-25
Cemeteries			
Fuel & lubricants	89	90	1
	<u>\$28,019</u>	<u>\$23,037</u>	<u>-22%</u>

Proposal

Canaan will promote energy conservation throughout the Town and School buildings.

VII. FACILITIES AND SERVICES (CONT'D)

COMMUNICATIONS AND MEDIA

As is common in most parts of the County, Canaan has two modes or vehicles of communication services, direct link methods such as telephone and cable television connections using poles and wires and broadcast methods relying on satellite or tower transmission and antennae for reception.

Nearly all sections of the Town's Class 3 or better roads, are served by telephone lines. The villages have cable television service. Personal computer links to the Internet are a widespread and growing communication tool. The Town library provides public Internet access. A Vermont Interactive Television site at the Old Town Office building uses T-1 telephone lines to provide video teleconferencing for business, government and educational purposes.

The orographic features of our region make wireless reception difficult. Numerous radio and several television stations can be received with housetop antennae but the quality of the broadcast and the number of stations received varies widely within the town. Most households not connected to the cable TV system use some type of satellite dish system. Wireless personal communication is limited for the same reasons. Emergency personnel use two-way radios connected to local transmitters. Loggers and other contractors use CB radios. A tower on Ben Young Hill in Clarksville, NH provides limited pager coverage and there is virtually no cellular phone coverage in our area at this time.

The school uses a satellite down link to bring Long Distance Learning services and other educational offerings to its students.

The Town is receptive to innovations and new technologies in communications that will better serve our personal and professional goals and that will enhance the quality of our lives.

Proposal

It is urged that any action by any party on the placement of any communication facilities within the town be initiated only after extensive discussion with town officials and interested parties.