

BETHEL COMPREHENSIVE PLAN

SECTION I

Inventory & Analysis

Prepared by
The Bethel Comprehensive Plan Committee
with assistance from
Androscoggin Valley Council of Governments

June 1998

The Comprehensive Plan, presented in two sections-the Inventory & Analysis and Goals, Policies, & Strategies-should serve as a guide for the community and for town officials as they make decisions about the future of Bethel. The plan suggests general directions; recognizing the specific details will require further efforts. The plan should be considered a living document meaning that it will require review and revisions as Bethel changes over time.

The plan is not a zoning ordinance, and the future land use map is not a zoning map. The plan is, however, intended to guide future changes in the Town's land use regulations so that they will reflect the goals and policies of this plan. Similarly, the discussions of capital needs and spending priorities are intended as general guides, not as specific proposals.

This plan is the result of the efforts of many current and former members of the Bethel Comprehensive Plan Committee and input from many other citizens of Bethel.

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INTRODUCTION

The comprehensive planning process needs to be based on an accurate and comprehensive understanding of the community. In planning terms, the "community" means its people, infrastructure, services, and natural features. To provide that factual informational base, the Comprehensive Plan Committee, with assistance from the Androscoggin Valley Council of Governments, collected, organized, and analyzed information about Bethel. Areas considered in the inventory and analysis elements related to population, economy, housing, transportation, natural resources, historic, cultural, and, archaeological resources, land use and development patterns, outdoor recreation, public facilities, and fiscal capacity.

The information to prepare the inventory and analysis came from several sources. Individual committee members collected information only available in Bethel. Such information included scenic locations, road and sidewalk conditions, sewer and water systems, and sale prices of homes and recent development trends. Other information came from state and federal sources. State agencies provided information on the location of wildlife habitat, traffic volumes, traffic accidents and lake and pond phosphorus loads. For much of the characteristics concerning Bethel's population information from the U.S. Department of Commerce 1990 Census was used. While this information was somewhat dated, it was the best readily available for the comprehensive plan.

The inventory and analysis also made several forecasts for the 10-year planning period. These included year-round and seasonal population growth and year-round housing demand. Such forecasts were based on past trends and acceptable forecasting techniques.

The inventory and analysis are intended to be a snapshot of Bethel based on the best information available in 1997. Communities are dynamic places and thus the inventory and analysis may not reflect all community characteristics at time of the adoption of the plan or five years from adoption. However, it presented a reliable picture of Bethel and provided the necessary direction for the Comprehensive Plan Committee to identify issues and implications and formulate town goals and policies.

HISTORIC, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Findings

- ❖ The Broad/Park/Church Streets Historic District is the only nationally recognized district in the county exhibiting all of the major nineteenth century architectural styles.
- ❖ Placement of a structure in the National Register of Historic Places offers no protection from private activities that would result in the loss of historic values.
- ❖ Bethel has several important cultural facilities and programs.

Historic Background

Since its settlement in 1774, the Town of Bethel has been influenced by a variety of factors including geography, economic and regional forces and individuals. A brief review of Bethel's historical background and patterns of development is useful in obtaining a perspective from which to plan for the future.

The origins of the town extend back to the 1690s when Massachusetts joined British forces attempting to wrest control of the continent from the French at Louisbourg in present day Nova Scotia. The expedition failed and Massachusetts rewarded soldiers from Sudbury, Massachusetts with land on the Androscoggin River in the District of Maine. The grant was not officially made until 1768 when it was given the name Sudbury, Canada, to designate the Massachusetts town from which the soldiers came and for the Canada campaign of 1690 in which they served.

When white settlement was established in 1774 on lands that had once been inhabited by the Anasagunticook Indians, the population growth of the fledgling plantation was severely curtailed by the American War for Independence. Adding to the uncertainty was the raid upon the plantation by six Indians in 1781, thereafter termed "New England's Last Indian Raid."

Following the war, settlement grew rapidly from the ten families of 1781 to more than 300 at the time of the first federal census in 1790. Most of those who came here were farmers, but there were a few artisans and professionals as well. Early settlement occurred near the Androscoggin River where the Indians had cleared the rich interval land. A devastating flood in 1785 moved settlers to higher ground. Clusters of settlement appeared in this period at Bethel Hill in the West Parish and at Middle Interval in the East which became the major village. The town was incorporated on June 10, 1796 and renamed Bethel at the suggestion of Rev. Eliphaz Chapman, from the book of Genesis, Hebrew for "House of God."

Bethel's first industrial area was on Mill Brook, below the present Bethel Inn. Here, Eleazer Twitchell built grist and saw mills. Later, this area became the center for a whole range of activities including starch and box factories, dowel and shingle mills and a tannery. The availability of waterpower dictated other locations for factories and mills. Such as the one at Walker's Mills in South Bethel where by the 1850s there were saw, grist, threshing and shingle mills, and a bedstead factory. The major waterway in the town, the Androscoggin River, was not suited for waterpower, but did become a major transporter of wood from the lakes region to the Brunswick mills. Some early industries were not dependent upon the force of water; a cheese factory and potash processing facility operated at Middle Interval for several years.

Middle Interval was the dominant village in town until the railroad arrived in Bethel in 1851 which dramatically changed the town geographically. Bethel Hill then became the business center; the tourist industry was born; rail service made it possible to ship wood products, agricultural produce, and livestock to markets throughout the nation. The development of other power sources, first steam, and then electricity, spurred the commercial development along the rail line. Highways were slower to develop with most roads not being paved in town until after the 1930s.

Initially, Bethel's industry was largely self-sufficient. Small businesses and shops made everything from shoes to bricks. With the arrival of the railroad, it became possible to ship goods easily. In the 1880s, the town subsidized the construction of a chair factory to provide employment. This lasted until 1912.

Farming has always been an essential part of Bethel's economy. Crops changed with market demands. Wheat and hops were important in the nineteenth century, but by 1900, they had been abandoned in favor of corn and potatoes. The railroad made it possible to ship dairy products and meat to markets to the south.

The growth of corporate agriculture in the American West and the rural depopulation that fueled the growth of industrial cities in the northeast brought significant changes in Bethel including the loss of several hundred in population. Hillside farms, always marginal, were gradually abandoned; the fields and pastures so laboriously cleared returned to forest. Today, the harvesting of wood from these areas helps to support the forest product industries essential to life in the town.

Religion was a vital aspect of life in the town from its earliest days. The Baptists organized in 1795, the Congregationalists the following year. They were soon followed by the Methodists. The Universalists built a church in Bethel in 1853. A Union Church was built at West Bethel in 1896. A significant Roman Catholic community existed for many years in Bethel holding services in a variety of locations until building a church just south of Bethel Hill in 1968. In recent years, several conservative Christian churches have also been established at West Bethel in the former Universalist Church and near the Roman Catholic church. Beginning in the nineteenth century, many civic organizations and lodges flourished providing impetus to community improvements and activities.

Along with the population who worked the farms, shops and mills of Bethel, the town was home to an important group of business and professional people who were also dedicated to community service and shaping the character of the town. They were instrumental in founding many of the town's institutions.

Predictably, education was a major concern of the townspeople from the earliest times. The first schools were on Church Street and near the meeting house at Middle Interval. At one time, there were more than 30 district schools, but they began to be consolidated in the 1890s in response to new state laws. Gould Academy, founded in 1836, served as the town's high school, as well as a boarding school, until the formation of School Administrative District 44 in the 1960s and the opening of Telstar Regional High School in 1968. The National Training Laboratories was established in Bethel in 1947 now known as the NTL Institute. The Institute specializes in Behavioral Science and its summer sessions have made Bethel one of the best known small towns in the world for those involved with these sciences. The Adult and Community Education program based at Telstar has also extended educational opportunities for many residents from enrichment courses to college credit.

Since the time of the Civil War, Bethel has attracted large numbers of summer visitors from the cities of the northeast seeking fresh air and memorable vistas. Following the arrival of the railroad, summer hotels and boarding houses began to flourish. Several visitors who came to town as tourists came to have important roles upon the town's development. The expansion of the Gould Academy campus in the twentieth century and the formal recognition of Bethel's Historic District beginning in the 1970s were significant cultural developments. The founding of the Bethel Historical Society in 1966 and the opening in 1974 of its headquarters, the Dr. Moses Mason House, the formation of the Mahoosuc Arts Council in the 1980s, and the growth of the Bethel Area Chamber of Commerce all helped to promote and encourage the development of cultural activities.

In its early history, the Bethel Inn also attracted winter visitors to Bethel for snowshoeing and toboggan sliding. Skiing was first introduced to Bethel residents in the 1920s by Norwegian immigrants. There were once modest ski areas on Robertson Hill and on Vernon Street. Gould Academy also developed facilities at Swan's Corner.

These areas preceded the development of Newry's Sunday River in 1959 and Greenwood's Mt. Abram in 1960 which were both begun by Bethel residents. In the 1980s, Sunday River began major expansions of lifts, trails, snowmaking and hotel and condominium development. In a more limited way, Mt. Abram followed suit beginning in the 1980s. This expansion of alpine skiing, making the area one of the best known in the east, was further enhanced by the growth of facilities and the popularity of cross country skiing.

Skiing has become one of the "engines" promoting change in Bethel. No more dramatic illustration of this fact can be seen than the Bethel Station project across the railroad tracks from Bethel Hill. It promises to make Bethel a more comprehensive shopping and recreational destination in the future.

Historic Resources

Bethel is rich in historic architecture. More fortunate than other Oxford County towns it has retained large portions of its architectural heritage and contains the only nationally recognized historic district in the county exhibiting all of the major nineteenth century architectural styles. Bethel contains the Broad Street Historic District that was first designated in 1977 and later expanded to include all of the Broad and Park Streets and a portion of Church Street. Besides the historic district, individual structures listed on the national register include the Samuel D. Philbrook House and John M. Philbrook House. Two other structures, the Cole Block and

Middle Intervale Meeting House, have been determined to be eligible for nomination to the National Register of Historic Places. Placement on the National Register is primarily ceremonial in that it offers no protection from activities that would reduce historic values unless the activity is funded, licensed or executed by the federal government. The town does not have any specific local standards relating to alterations or demolitions of structures located in the historic district.

The Historic District contains some 54 structures and sites including the Bethel Common, the Bethel Library, the Chapman House, the Moses Mason House, the Bethel Inn, Hammons House, Tuell House, Gehring Clinic, Wright Cottage, Herrick House, Merrill House, Broad Street School House and Stiles House.

Randall H. Bennett in his Oxford County, Maine, A Guide to Historic Architecture also identified the following structures for their noteworthy architecture.

Amos Powers House	Intervale Road
East Bethel Village	Intervale and Locke Mills Roads
East Bethel Church	Intervale Road
Asa Kimball House	Intervale Road
Hasting Farmstead	Intervale Road
Josiah Bean House	Intervale Road
Bean Homestead	Intervale Road
Carter House	Intervale Road
Sandom Farmstead	Off Intervale Road
Benjamin Russell House	Intervale Road
Ayer Mason House	Intervale Road
Methodist Church	Main Street
Mt. Abram Lodge Odd Fellows Hall	Main Street
Purington-Merrill House	Main Street
Sudbury Inn	Main Street
Harrington Grain and Feed Store	Summer Street
Mason Farmstead (Norseman Inn)	Route 2
Samuel Twitchell House	Route 2
Chapman-Fadner House	Route 2
Twitchell-Chamberlain House	Route 2
West Bethel Union Church	Route 2

Archaeological Resources

Archaeological resources are physical remains of the past, most commonly buried in the ground or very difficult to see on the surface. Archaeological sites are defined as prehistoric or historic. Prehistoric sites are those areas where remains that were deposited thousands of years before written records began in the United States are found. These sites are the only source of information about prehistory. More recent archaeological sites are those sites which occurred after written records began.

In Maine, archaeological sites are most commonly found within 25 yards of an existing or former shoreline. These areas provided good locations for boat access and camp locations. Although some 4,500 archaeological sites have been identified in Maine, there may be an additional 12,000 sites to be discovered.

The Maine Historic Preservation Commission has reported one prehistoric archaeological site has been documented on the banks of the Androscoggin River in Bethel. The Commission has suggested that the Androscoggin River floodplain and valley margins are sensitive and that several prehistoric sites exist both up and down stream of Bethel. To date, Bethel has not had a complete survey of prehistoric archaeological sites.

While no community-wide professional survey for historic archaeological sites has been conducted in Bethel, work associated with the natural gas pipeline, which will pass through a portion of town, will provide data on several historic sites. Future field work should focus on sites relating to the earliest European settlement of the town beginning in the 1770s.

Cultural Facilities and Programs

Bethel has several cultural facilities and programs that provide opportunities for both residents and non residents. The following presents an overview of these facilities and programs.

Bethel Historical Society: The Bethel Historical Society, founded in 1966, is a nonprofit, tax-exempt, educational organization, with headquarters on the Bethel Common in the Dr. Moses Mason House which contains a period house museum, exhibit and meeting space, and office and research facilities. The house, built in 1813, was restored in 1974. Under a professional director, with more than 1,000 members, the society supports a varied program of research, exhibitions, lectures, school programs, museum tours and special events relating to local and regional history. Its research room contains several thousand volumes, periodicals, pamphlets, and archival boxes relating to the history of Western Maine and the White Mountains. A number of local newspapers are preserved on microfilm, and the genealogical collection is especially rich. The society is perhaps best known for its very ambitious publications program which has resulted in several major books and other smaller volumes since 1981. For this record, the organization was honored by the American Association for State and Local History in 1992.

The Dr. Moses Mason House is open to the public throughout the year. Its period house museum depicts the life and times of a prominent 19th Century Bethel couple. Each year, several thousand tourists and researchers from many parts of the United States and Canada as well as from around the world visit the House to learn more about life in the past, to do genealogical or scholarly research, and/or to participate in the wide range of historical activities offered.

Mahoosuc Arts Council: This private non-profit organization sponsors a wide variety of cultural performances and events for area schools and the public.

Bethel Town Library: The Bethel Town Library, on the Common, is sponsored by the Bethel Library Association, a private volunteer group. The home of the library was designed by the prominent Portland architect, John Calvin Stevens in 1937. Approximately 17,000 volumes are found at the library with an annual circulation of 19,000. Staffing is provided by a librarian and part-time assistance. Operating monies come from municipal appropriations including Bethel, Newry and Greenwood, endowment funds, fundraising events and a recently established annual giving program.

Telstar Library: The Telstar Library has 9,000 volumes and Internet access "online catalogues." It is available to the public when not engaged in school work.

Gould Library: The library has 11,000 volumes and access to other private libraries. While the library is for students and faculty of the Academy, the public can search for publications.

POPULATION CHARACTERISTICS

Findings

- ❖ Bethel's year-round population is expected to reach 2,600 by 2008.
- ❖ Seasonal population in Bethel can exceed 3,000 people.
- ❖ Seasonal population in the region can exceed 12,000.
- ❖ Bethel's year-round population is older than that of Oxford County.

Introduction

Population trends and forecasts provide the foundation for understanding the anticipated growth that will occur over the next 10-year planning period. By examining population characteristics, trends and forecasts, Bethel will be able to anticipate future demands on community services as the result of population change.

The population of Bethel includes a "year-round population" that, according to the U.S. Census has remained steady in recent years, and a part time population that have been growing. An estimate of the growth of the overall population likely in the next ten years and the characteristics of that population can provide a basis for estimating future demands on community services, the growth of the housing stock and the likely pattern of settlement under different assumptions about regulations and incentives.

Population growth is affected by the balance of births and deaths of the year-round population and the movement of people in and out of the town. This movement is related to the ebb and flow of businesses and employment opportunities in the area, to the attractiveness of the town for families who may work within commuting distance (which includes Rumford) and the attraction of the town for retired people whose numbers have grown in recent years.

Another factor affecting the movement of population in or out of Bethel is the cost of housing. Generally, housing is more expensive in Bethel when compared with surrounding communities which have gained population in recent years while Bethel's year-round population has remained about the same.

When considering the impacts of population change on the town, considering three population types is useful, year round, part time and transient. Year-round population will pay local taxes, require town services and send children to local schools. Part time population own vacation or second homes, pay local taxes, require town services but do not send children to local schools. Over time, part time residents may become year-round residents. Transient population find accommodations in hotels, motels and bed and breakfasts. They are secondary users of town services and payers of local taxes.

The significance of these population types relates to demands on town services and housing. The increase of some 3,000 part time and transient people place additional demands on town services that normally provide services to 2,300 people. An increase in the part time population will create a demand for new dwellings above that expected due to year-round population growth.

Year-round Population Trends

Over the past 100 years, Bethel's year-round population peaked at 2,408 in 1960. Since 1960, year-round population has declined slightly to 2,329 in 1990. It is expected that this decline (3.25%) can be attributed to modernization of the traditional natural resource-based industries, lumber and wood products and pulp and paper which resulted in a demand for a smaller work force and movement to the smaller surrounding communities for their lower land and housing costs. According to the U.S. Census, Bethel's population increased by 5.4 percent from 1970 to 1980 and declined by 0.5 percent from 1980 to 1990. Except for Hanover and Rumford, surrounding communities experienced increases in their population from 1970 to 1990. Surrounding communities of Gilead (33%), Greenwood (13%), Newry (52%) and Woodstock (19%) experienced increases in population from 1970 to 1990.

During the 1980s, Bethel's population remained stable declining by 0.5 percent or 11 people. For the most part, surrounding communities' population continued to increase at a slower pace than during the 1970s except for Newry and Woodstock. Overall, Oxford County's population grew 21% from 1970 to 1990. While many factors contribute to population growth or loss within a community or region, out migration was the controlling factor in Bethel's slight decrease in population between 1980 and 1990. The town experienced a natural population increase of approximately 100 while year-round population decreased by 11. It is expected that a decline in the traditional opportunities in manufacturing industries and migration to the smaller rural communities was a significant factor in Bethel's population trends between 1970 and 1990.

TABLE I-1
Year-Round Population Change
1970-1990

	1970	1980	1990	1970-1980 Percent Change	1980-1990 Percent Change
Bethel	2,200	2,340	2,329	5.4%	-0.5%
Andover	791	850	953	7.5%	12.1%
Gilead	153	191	204	24.8%	6.8%
Greenwood	610	653	689	7.1%	5.5%
Hanover	275	256	272	-6.9%	6.3%
Newry	208	235	316	13.0%	34.5%
Rumford	9,363	8,240	7,078	-12.0%	-14.1%
Woodstock	1,005	1,087	1,194	8.2%	9.8%
Oxford County	43,457	49,043	52,602	12.9%	7.3%

Source: U.S. Census 1970, 1980, 1990

Population estimates prepared by the Maine Department of Human Services (MDHS) suggest a small increase (0.3%) in Bethel's year-round population from 1990 to 1995. The components of the estimated year-round population change were a natural increase of 53 and an out migration of 47. Surrounding communities' estimates show increases of 2.0 percent to 3.3 percent. Based on housing starts from 1990 to 1997 it is believed that year-round population growth has exceeded the estimates prepared by the Department of Human Services.

Table I-2
Bethel Estimated Population Change
1990-1995

	1990	1995 (Est.)	Numerical Change	Percent Change
Bethel	2,329	2,335	6	0.3%
Andover	953	933	-20	-1.0%
Gilead	204	208	4	2.0%
Greenwood	689	711	22	3.2%
Hanover	272	281	9	3.3%
Newry	316	324	8	2.5%
Rumford	7,078	6,795	-283	-4.0%
Oxford County	52,602	53,440	838	1.6%

Source: Maine Dept. of Human Services

Bethel's natural increase in population (the number of births minus deaths) totaled 80 from 1990 to 1996 based on information obtained from Maine Department of Human Services and Town of Bethel. From 1990 to 1993, Oxford County's natural increase was 520 persons. This information suggests that out migration based on 1995 population estimates is the controlling factor in population change in Bethel.

Table I-3
Births and Deaths
1990-1996

	Bethel			Oxford County		
Year	Births	Deaths	Natural Increase	Births	Deaths	Natural Increase
1990	44	21	+23	758	537	+221
1991	33	22	+11	660	540	+120
1992	27	18	+9	674	494	+180
1993	30	23	+7			
1994	25	19	+6			
1995	29	19	+10			
1996	32	18	+14			
Total	220	140	+80	2092	1571	+521

Source: Town of Bethel

Seasonal Population

Seasonal population is a measure of the number of people in a community who are not year-round residents. This includes individuals staying for extended periods in second homes, persons staying in transient accommodations such as hotels/motels and day trippers. Bethel's natural and cultural resources and the ski areas attract significant seasonal populations. While the summer and fall seasons attract seasonal population, it is the winter ski season when seasonal population growth peaks.

In 1972, the Public Affairs Research Center at Bowdoin College estimated that the peak seasonal population for Bethel was approximately 1,100 in 1970. Since 1970, there has been no municipal seasonal population estimates prepared on a state wide basis. To estimate seasonal population for the present time, two factors were considered: the number of seasonal residences and the number beds in transient lodging facilities. The methodology did not account for individuals in town eating at restaurants or obtaining other services. It is estimated that peak seasonal population in Bethel can exceed 3,000.

Peak seasonal population in the greater Bethel area is significant due to the influence of the Sunday River Ski Resort. The Bethel area, which includes Bethel, Greenwood, Hanover, Newry and Woodstock, has the capacity to accommodate more than 12,000 seasonal residents and transients. With accommodations for approximately 6,000 people on the mountain at Sunday River, the ski area has the greatest impact on seasonal population.

Age Distribution

The greatest percentage of Bethel's year-round population (39%) falls within the 18-44 age group and is equal to that of Oxford County. The second greatest age category (21%) was 45-64. This age category also captures part of the baby boom generation. Bethel's elderly population (15%) is equal to that of Oxford County but greater than the State of Maine (13%) for those 65 years or older. The median age of Bethel's 1990 population was 37.4 which was greater than 33.9 for Oxford County.

Table I-4 Population Distribution by Age 1990				
	Bethel		Oxford County	
	Number	Percent	Number	Percent
Less than 5	148	6.4%	3,792	7.3%
5-17	416	19.9%	9,318	18.0%
18-44	915	39.3%	20,282	39.1%
45-64	491	21.1%	10,518	20.3%
65+	359	15.4%	7,926	15.3%
Total	2,329		51,836	

Source: 1990 U.S. Census

Educational Attainment

According to the 1990 U.S. Census, Bethel had a larger percentage than Oxford County of its population 25 years of age and older with more than a high school education. Forty-one percent of the population had some college education or a degree. This compared with 31 percent for Oxford County.

Table I-5 Educational Attainment 1990 (persons 25 years and older)				
	Bethel		Oxford County	
	Number	Percent	Number	Percent
Less than 9th grade	163	10.1%	3,451	8.9%
9th to 12 grades no diploma	151	9.3%	5,731	14.8%
High School Graduate or Equivalency	633	39.1%	17,355	44.9%
Some college, no degree	231	14.3%	5,385	13.9%
Associate Degree	110	6.8%	2,290	5.9%
Bachelor's Degree	232	14.3%	3,014	7.8%
Graduate or Professional Degree	99	6.1%	1,462	3.8%
Total	1,619		38,688	

Source: 1990 U.S. Census

Occupation of Residents

The greatest number of workers in Bethel (203) was in precision production, craft and repair occupations in 1990 followed closely by professional specialty occupations (197). The number of workers with occupations in precision production, craft and repair increased by 60 between 1980 and 1990. The number of Bethel residents in professional specialty occupations increased by 50 over the same period.

Table I-6
Employment by Occupation
1990

Occupation	Bethel		Oxford County	
	# of Workers	% of Total	# of Workers	% of Total
<i>Managerial and speciality occupations:</i>				
Executive, administrative & managerial	125	10.9%	1,798	8.0%
Professional speciality occupations	197	17.2%	2,547	11.3%
<i>Technical sales & administrative support:</i>				
Technicians & related support occupations	14	1.2%	550	2.4%
Sales occupations	81	7.1%	2,288	10.1%
Administrative support occupations, including clerical	106	9.3%	2,768	12.3%
<i>Service occupations:</i>				
Protective service occupations	5	0.4%	220	1.0%
Other services except above	171	15.0%	2,871	12.7%
Farming, forestry, and fishing	39	3.4%	853	3.8%
Precision production, craft & repair occupations	203	17.8%	3,646	16.1%
<i>Operators, fabricators & laborers:</i>				
Machine operators, assemblers & inspectors	127	11.1%	2,756	12.2%
Transportation & material moving occupations	55	4.8%	1,139	5.0%
Handlers & equipment cleaners	20	1.8%	1,075	4.8%
Employed person 16 years and over	1,143		22,593	

Source: 1990 U.S. Census

Income

Bethels' 1989 median household income was higher than Oxford County at \$23,693. Among the surrounding communities, Bethel had the second highest median household income of \$27,188 with Hanover first at \$33,750.

Table I-7 Median Household Income 1989	
Bethel	\$27,188
Andover	\$23,693
Gilead	\$20,288
Greenwood	\$26,806
Hanover	\$33,750
Newry	\$26,250
Rumford	\$21,608
Woodstock	\$23,580
Oxford County	\$23,693

Source: 1990 U.S. Census

According to the U.S. Census, per capita income for Bethel was approximately \$1,000 more than that for Oxford County in 1989. In 1979, Bethel's per capita income was equal to that of Oxford County's and ranked fourth of the eight communities considered. If the declining value of the dollar due to inflation is considered, per capita income in real dollars increased by approximately \$4,600 between 1979 and 1989.

Table I-8 Per Capita Income 1979-1989		
	1979	1989
Bethel	\$5,545	\$12,472
Andover	\$5,571	\$11,140
Gilead	\$3,628	\$8,895
Greenwood	\$4,508	\$11,074
Hanover	\$5,980	\$14,988
Newry	\$7,340	\$13,454
Rumford	\$6,394	\$11,488
Woodstock	\$4,908	\$9,994
Oxford County	\$5,562	\$11,373

Source: U.S. Census 1990, 1980

The distribution of households by income is highlighted in Table I-9. The largest number of households (196 or 21%) is in the \$25,000 to \$35,000 income bracket. This is likely the reflection of the number of workers in precision crafts and professional occupations. The \$15,000 and less income brackets comprised 26 percent of the households.

Table I-9 Distribution of Households by Income Bethel 1989			
	Count of Households	Percent of Households	Oxford County Percent of Households
Less than \$5,000	24	2.5%	4.9%
\$5,000 to \$9,999	131	13.8%	12.7%
\$10,000 to \$14,999	87	9.2%	11.2%
\$15,000 to \$24,999	193	20.4%	22.1%
\$25,000 to \$34,999	196	20.7%	18.4%
\$35,000 to \$49,999	184	19.4%	17.2%
\$50,000 to \$74,999	94	9.9%	10.2%
\$75,000 or more	38	4.0%	3.3%
Total	947		

Source: 1990 U.S. Census

Population Forecasts

Year-Round Population

Anticipating population change is an integral part of the comprehensive planning process. Depending on future population characteristics, various community needs and facilities can be identified as well as providing an indication of housing demand. It should be understood, however, that predicting population with great accuracy at the single municipality level is difficult.

Year-round population change is the result of two primary factors, natural increase and migration. Natural increase is derived from the number of births minus the number of deaths over a specific period. Migration is the number of persons moving into or out of a community over a period of time.

The Long Range Economic Forecast published by the Maine State Planning Office in 1993 estimated that Maine's total population would increase by only 10,000 between 1992 and 2005. This would represent a sharp decrease in the State's annual average increase in population which was approximately 10,000 in the 1970s and 1980s. The report cites three factors for the significant decline in population growth: slow economic growth, the reduction in defense forces and expenditures, and the aging of post-World War II baby boomers. Population estimates prepared by the Maine Department of Human Services (MDHS) Office of Data, Research and Vital Statistics reported that Maine's population grew by approximately 13,000 between 1990

and 1995. This rate of growth would exceed the projected State of Maine population for 2005 should the trend continue. Natural increase was the controlling factor in statewide population growth at 22,800. It was estimated that some 9,500 people moved from the State over the 5-year period.

Based upon the 1995 population estimates prepared by the MDHS, Bethel experienced a population increase of six persons between 1990 and 1995. Natural increase was the controlling factor in the MDHS estimate. The known natural increase was 53 and out migration of 47.

Most population forecasting techniques use past trends as an important factor in the forecasting the formula. The forecast for Bethel's year 2008 year-round population using past trends, therefore, results in an estimated population of 2,400. This was influenced by the relatively stable population levels since 1950. Other factors must be considered in estimating year-round population including a declining birth rate, economic conditions and housing affordability. It is believed that over the 10-year planning period the rate of natural increase will remain or increase slightly over the 1990 to 1996-rate. It is also expected that the rate of out migration will decline over the period due in part to improved economic conditions. The projected build out employment of 700+ full time equivalent jobs at the Bethel Station Project will add to the town's year-round population as well. Therefore, the plan assumes a 2008 year-round population of 2,600.

The aging baby boom generation is reflected in both Bethel's and Oxford County's estimated 2008 population age distribution. The age distribution of Bethel's 2008 population reflects an increase in the 45-64 age category to 26 percent. The 5-17 age category will decrease slightly by the year 2008 to 17 percent reflecting fewer people in the child bearing ages. The 65-year-old and older category will also increase.

Table I-10 Population Distribution by Age 2008				
	Bethel		Oxford County	
	Number	Percent	Number	Percent
Less than 5	130	5%	3,361	6%
5-17	442	17%	9,400	16%
18-44	936	36%	20,610	35%
45-64	676	26%	16,225	27%
65+	416	16%	9,693	16%
Total	2,600		59,289	

Source: Maine Department of Human Services/Androscoggin Valley Council of Governments

Seasonal Population

Future seasonal population will consist of both part time and transient. Growth in seasonal population will depend on growth in second/vacation home demand and growth in transient rooms. Since the 1980s, the number of second homes and transient rooms have increased in Bethel primarily as the result of expansions at the Sunday River Ski Resort. It is expected that seasonal population will increase from 3,000 to 3,800 during the planning period.

HOUSING

Findings

- ❖ The number of dwelling units increased by 28 percent between 1980 and 1990.
- ❖ Between 1990 and 1997, 135 new dwelling units have been added to Bethel's housing stock.
- ❖ Housing units considered vacation or second increased by 162 between 1980 and 1990.
- ❖ Individuals and families with annual incomes of less than \$24,000 may have problems finding affordable housing in Bethel.

Introduction

Local housing characteristics are an essential part of a comprehensive plan. An understanding of housing trends, availability, conditions, and affordability is important in the overall planning process. Analyzing housing conditions and trends will provide information to decision makers concerning additional provisions for affordable housing and the need for a mixture of housing types.

Housing Trends

The 1990 U.S. Census reported that the total number of housing units, year round and seasonal, in Bethel increased by 273 or 28 percent from 1980 to 1990. This rate of growth exceeded that of Oxford County but was less than that of Greenwood, Newry and Woodstock. The greatest amount of growth occurred in multi-family units (132) followed by mobile homes (91) and single family units (50). While the overall growth in the housing stock was 28 percent, growth in year-round housing units was much less, 12 percent or 100. Housing units considered as seasonal or vacation increased by 245 percent or 162. Second homes comprised 18 percent of the housing stock in 1990 compared with 6 percent in 1980. This growth in second homes is primarily associated with skiers at Sunday River.

Table I-11 Number of Housing Units Year-Round & Seasonal 1980-1990				
	1980	1990	# Change	Percent Change
Bethel	993	1,266	273	28%
Andover	445	560	115	26%
Gilead	104	118	14	14%
Greenwood	458	628	170	37%
Hanover	160	192	32	20%
Newry	209	964	755	360%
Rumford	3,180	3,308	128	4%
Woodstock	529	756	227	43%
Oxford County	23,796	29,698	5,902	25%

Source: U.S. Census - 1990

Since the 1990 census, 135 new residential dwellings have been added to the town's housing supply.

Type of Dwelling Unit

In 1990, most of housing units in Bethel were single-family. Multi-family and manufactured homes comprised 23 percent and 14 percent of the total housing stock respectively. Bethel had a higher percentage of multi family homes compared with Oxford County. This reflects several subsidized multi family and condominium type ownership developments. The census reported 25 percent or 313 units in Bethel were vacant with 212 of those being for seasonal or recreational use. Oxford County had a much higher percentage of vacant housing units, 32.4%, however, 26.7% of all units were for seasonal or recreational use. This is understandable given the role of tourism in Oxford County and western Maine.

Table I-12
Distribution of Housing Units by Type
1990

	Bethel		Oxford County	
	Number	Percent	Number	Percent
Total	1,266	2.2%	29,689	2.9%
Single-family	793	62.2%	20,444	68.9%
Multi-family	294	23.2%	5,020	16.9%
Mobile home	179	14.1%	4,225	14.2%
Vacant Housing Units	313	24.7%	9,625	32.4%
# for seasonal or recreational use	228	18.0%	7,922	26.7%
Owner Occupied	713	74.4%	15,262	76.1%
Renter Occupied	245	25.6%	4,802	23.9%

Source: 1990 U.S. Census

Owner/Renter Patterns

The majority of housing units (73.8%) in Bethel are owner occupied. This percentage was somewhat lower than the 75 percent in 1980 that were owner occupied. The owners of homes in Bethel are generally less mobile than all homeowners in Oxford County. Approximately 53 percent of the owners of homes moved into the dwelling in 1980 or later; this compares with 58 percent for all of Oxford County.

Median Persons Per Dwelling Unit

As with most communities in Maine and the nation, the median number of persons per dwelling declined between 1980 and 1990. It is expected that this trend will continue through the middle of the next decade when household size will stabilize or increase slightly.

Table I-13 Median Persons Per Dwelling Unit		
	1980	1990
Bethel	2.3	2.
Gilead	n.a.	2.6
Greenwood	n.a.	2.4
Hanover	n.a.	2.3
Newry	n.a.	2.7
Rumford	2.3	2.1
Woodstock	2.7	2.4
Oxford County	2.4	2.3

Source: 1990 U.S. Census

Housing Conditions

The condition of a town's housing stock is an indicator of its economic vitality. Analyses of Census information, questionnaires, and physical inspections are all methods used to assess housing conditions. Each method has its advantages and disadvantages with physical inspection of each housing unit being the best.

The age of the town's housing stock is one indicator of housing conditions. General assumptions can be made that the older the structure, the more likely it is to have structural, electrical, or insulation deficiencies. Nearly 50% of Bethel's housing stock was constructed before 1960. If it can be assumed that the age of housing stock reflects physical condition, then a portion of Bethel's housing stock may be in need of updating and/or upgrading.

Visual, drive by inspection of the exterior condition of residential dwellings found isolated instances of deteriorated housing, however, housing conditions were generally good without significant problems of deterioration or dilapidation.

**Table I-14
Age of Housing Stock
Year Structure Built
1990**

	Bethel		Oxford County	
	Number	Percent	Number	Percent
1989- March 1990	43	3.4%	873	2.9%
1985-1988	171	13.5%	2,994	10.1%
1980-1984	74	5.8%	2,327	7.8%
1970-1979	181	14.3%	5,716	19.3%
1960-1969	193	15.2%	2,945	9.9%
1950-1959	104	8.2%	1,860	6.3%
1940-1949	38	3.0%	1,232	4.1%
1939 or earlier	462	36.5%	11,742	39.6%
Total	1,266		29,689	

Source: 1990 U.S. Census

Housing Assistance Programs

Information provided by the Maine State Housing Authority identifies three federally-assisted multi-family housing developments in Bethel. All of the housing units are multi-family, and 43 units are for the elderly. The federally-assisted housing developments are targeted for individuals/families on low, fix-incomes.

**Table I-15
Federally Assisted Multi-Family Housing Development
(As of March 1994)**

		Total Units		Low Income Units	
Sponsor	Program	Elderly	Family	Elderly	Family
FmHA	515	24	0	23	0
FmHA	515	0	24	0	24
HUD/MSHA	8/C	20	-	20	-

Source: Maine State Housing Authority

Vacancy Rates

While vacancy rates fluctuate, based upon housing demand, economic conditions and the season of the year, vacant housing is needed to provide housing opportunities in the community. Based on the 1990 Census on April 1, 1990, Bethel had a vacancy rate of 1.4 percent for year-round homes and a 9.3 percent rental vacancy rate. Currently, rental vacancy is low with unfurnished rentals almost non-existent. The demand for rental units remains high due in large part by the demand of Sunday River employees and skiers. There is a shortage of reasonably priced rents in Bethel.

Affordability of Housing

The market pressures of the 1980s caused housing prices to increase dramatically through most of Maine. In addition, the influence of the Sunday River Ski Resort in Newry has increased the market value of owner-occupied dwellings and elevated rental rates. It was estimated by one real estate professional that 75 percent of the real estate market in Bethel is ski-driven and 25 percent is local. The impact of the ski market is a significant factor in the availability of affordable housing for the average wage earner in Bethel or who may wish to locate to Bethel. These factors have resulted in lower to moderate income residents finding difficulty in finding affordable, safe and decent housing.

Essential to community growth and development is the availability of affordable housing either renter or owner-occupied. The lack of safe affordable housing may force young individuals or families to leave Bethel and hinder economic growth and development because of the lack of such housing for new employees.

While the 1990 Census reported that 80 percent of the renters in Bethel paid less than \$500 per month for rent, it is believed that rates have increased since then.

Table I-16 Gross Rent Specified Renter Occupied Housing Units 1990				
	Bethel # of Units	Bethel % of Total	Oxford County # of Units	Oxford County % of Total
Less than \$299	75	41%	1,579	38%
\$300 - \$499	71	39%	1,895	46%
\$500 - \$749	27	15%	558	14%
More than \$750	9	5%	70	2%
TOTAL	238		4,102	

The real estate transfer tax declaration forms provide sales prices of all homes sold including mobile homes. As the table below shows, Bethel's average sale price of residential housing increased from \$66,000 in 1990 to \$99,000 in 1994. As New England's economy has improved since 1994, the market value of homes in Bethel has also increased. The number of homes sold increased from 10 in 1991 to 23 in 1994.

Table I-17 Sales Price Residential Homes 1990-1994			
	Bethel		
	Number of Sales	Average Sale Price	Median Sale Price
1990	10	\$66,010	\$55,000
1991	8	\$76,312	\$75,000
1992	12	\$79,166	\$76,250
1993	20	\$100,218	\$84,450
1994	23	\$98,643	\$85,000

Source: Maine State Housing Authority

The United State Department of Housing and Urban Development (HUD) has established guidelines for computing general income guidelines for determining housing affordability. The income levels that are a primary concern with respect to affordability are moderate, low, and very low. These are 120%, 80%, and 50% of median household income respectively. In 1989, the median household income in Bethel was \$27,000. As shown in the table below, a household that earned no more than \$13,500 would be considered as a very low income household.

Table I-18 Moderate, Low-Income, and Very Low-Income Households As a Proportion of Total Households Bethel, 1989		
Household Income Level	Income Amount	Approximate Percentage of Total Households
Moderate	\$32,400	26%
Low	\$21,600	16%
Very Low	\$13,500	21%

Source: U.S. Census, 1990

Income figures for the years since the 1990 Census are not available for Bethel. However, the table below lists 1994 figures which have been generated for Oxford County by the Department of Housing and Urban Development (HUD). Also shown are the low-income (80% of median) and very low-income (50% of median) threshold figures for Oxford County, and amounts that constitute "affordability" for home purchase, monthly mortgage payment, and monthly rent for each of the three income categories.

Table I-19 Affordable Housing Rents and Prices Oxford County 1994					
Median Annual Family Income	Household Income Group	Annual Income Range	% of Total Households	Affordable Monthly Rent	Affordable Selling Price
\$29,600	Very Low Income	Up to \$14,800	31%	Up to \$280	Up to \$36,000
	Low Income	\$14,800 - \$23,680	18%	Up to \$510	Up to \$65,600
	Moderate Income	\$23,680 - \$44,400	33%	Up to \$1,000	Up to \$128,400

Source: U.S. Department of Housing and Urban Development

Based upon income information and generally accepted affordable housing rents and sale prices of houses, affordable housing opportunities in Bethel are an issue for very low and low income households. Given the low rental vacancy rate for rental units and rental costs, limited options are available for those individuals and families with incomes of less than \$24,000.

Future Housing Demand

Future population and the characteristics of the existing housing stock are major factors in identifying future housing demands. Adequate housing is important in supporting economic growth. This element of the comprehensive plan identifies the need for additional housing over the ten-year planning period. As with any forecast, unforeseen influences can greatly influence its validity.

Bethel's year-round population is expected to reach approximately 2,600 by the year 2008. Based upon an average household size of 2.2 persons in the year 2008, a demand for some 140 new year-round dwelling units will exist over the period. It is expected that a demand for seasonal and second homes will also affect housing demand. The demand for temporary housing for seasonal employees at the Sunday River Ski Resort will continue. Should the Bethel Station Project reach its projected 700+ full time equivalent jobs, rental demand will be increased.

Besides the number of units, an examination of the type of units (single family or multi-family) is necessary. Key factors in making this determination are income levels, household size and age of the population. Household size has been projected to remain at 2.2 persons. Persons above the age of 45 will increase. In addition, service sector employment will draw younger populations. These population groups will place new demands upon the nature of the housing stock. Dwellings requiring less maintenance and alternatives to the single family home will be needed.

Based upon available information and recent trends, the demand for housing will be primarily in the middle and lower income brackets. Affordable single family homes will be in demand along with rental units.

ECONOMY

Findings

- ❖ Almost one-half of Bethel's labor force is employed in service businesses.
- ❖ Between 1990 and 1996, retail sales increased by 36 percent or \$6 million.
- ❖ Retail sales associated with restaurants and lodging comprised 45 percent of consumer sales in 1996.

Regional Economic Perspective

Bethel is located along the major east/west corridor, Route 2, between the New Hampshire border and Rumford/Mexico in northwestern Oxford County. Bethel is part of a larger economically integrated geographic unit called the Rumford Labor Market Area (LMA). An LMA consists of a central community or communities and the surrounding territory within commuting distance. The Rumford LMA includes Bethel, Mexico, Dixfield, Hartford, Roxbury, Carthage, Woodstock, Peru, and others in the northern section of Oxford County.

During the 1980s, the Rumford LMA's economy shifted. The paper mill, in Rumford, which had dominated the region's economy for more than 50 years could no longer be counted on for its historic level of employment, even as mechanization raised output. Consequently, during the 1980s, the LMA lost population. This was in contrast to what was occurring in the communities of Bethel and Newry, also located within the LMA. Tourism in these two communities grew during the 1980s and continued into the 1990s to become the leading employer instead of traditional wood products industries.

The economic base of the Rumford LMA consists of a variety of manufacturing, service and retail employers. The largest employers with more than 200 employees include Mead Paper, Sunday River Ski Resort/Amercian Skiing Company, School Administrative District #43 and the Rumford Community Hospital.

Total non-farm wage and salary employment from 1992 to 1995 increased approximately 1 percent. Highlights of employment characteristics of the Rumford LMA include the following:

From 1992 to 1993, total non-farm wage and salary employment increased by 2.8 percent.

From 1994 to 1995, total employment increased by less than 1 percent.

From 1992 to 1993, the lumber and wood products, logging and wholesale trade - durable goods had the highest increase.

Non-manufacturing employment comprised 69 percent in 1994 and 70 percent in 1995 of total employment in the Rumford LMA.

In 1995, the majority of employment was in manufacturing (29.7%), services (29.3%), and government (17.25%).

Within the non-manufacturing sector from 1994-1995, retail trade decreased less than 1 percent, finance, insurance and real estate declined 14 percent while construction increased 14 percent.

From 1994 to 1995, total manufacturing employment increased by less than 1 percent. Non-manufacturing employment gains occurred in construction, services, wholesale trade and health services.

TABLE I-20
Rumford Labor Market Area
Non-Farm Wage and Salary Employment 1992-1995

	1992	1993	1994	1995	% Change 1992-1993	% Change 1994-1995
Total	7,640	7,860	7,670	7,710	2.88%	0.52%
Total Manufacturing	2,220	2,137	2,360	2,290	-3.74%	-2.97%
Durable	680	840	860	840	23.53%	-2.33%
Lumber & Wood	660	820	840	820	24.24%	-2.38%
Logging	140	160	150	150	14.29%	0.00%
Non-Durable	n/a	n/a	n/a	n/a	n/a	n/a
Printing/Publishing	n/a	n/a	n/a	n/a	n/a	n/a
Leather, Leather Prod.	n/a	n/a	n/a	n/a	n/a	n/a
Total Non-Manufacturing	5,420	5,490	5,310	5,420	1.29%	2.07%
Construction	190	180	140	160	-5.26%	14.29%
Trans/Utilities	250	240	240	240	-4.00%	0.00%
Wholesale Trade	70	80	80	90	14.29%	12.50%
Durable Goods	40	50	60	60	25.00%	0.00%
Retail Trade	1,160	1,220	1,170	1,160	5.17%	-0.85%
Finance, Insurance, Real Estate	180	200	210	180	11.11%	-14.29%
Services & Mining	2,060	2,110	2,120	2,260	2.43%	6.60%
Health Services	680	580	550	590	-14.71%	7.27%
Government	1,510	1,470	1,350	1,330	-2.65%	-1.48%

SOURCE: Maine Department of Labor Employment and Earnings Statistical Handbook 1991, 1992, 1993, 1994, 1995

The shift in employment patterns from manufacturing to other employment sectors can be seen in Table I-26. According to the U.S. Census, the highest percentage of employment for Oxford County residents in 1980 was in manufacturing (40.5%), services (24.3%) and retail trade (13.4%). By 1990, employment in the manufacturing sector had decrease to 25.9 percent. Service sector employment grew to the highest percentage of employment at 30.3 percent. By 1990, retail trade employment consisted of 17.1 percent of the employment for Oxford County residents.

Table I-23
Bethel
Percent of Consumer Sales by Quarter

Year	Quarter			
	1st	2nd	3rd	4th
1991	28.5	19.4	26.7	25.3
1992	31.2	17.8	27.8	23.2
1993	29.8	18.8	26.1	25.4
1994	28.2	17.7	28.1	25.9
1995	29.7	17.7	25.4	27.2
1996	29.9	18.2	27.2	24.7

Source: Maine State Planning Office

Labor Force

Since 1992, Bethel's labor force increased by approximately 30 or 2 percent based on information collected by the Maine Department of Labor. However, since 1993, there has been reported growth of some 130 in the labor force. The decline and growth in the town's labor force is reflected in the fluctuation of Oxford County's labor force during the same period. This is an indication of the improving local and regional economy after the recession of the early 1990's. Annual average unemployment rates in Bethel have exceeded those of Oxford County and the State. An important element of the somewhat high annual average unemployment rate in Bethel is seasonal employment. Over the past five years, unemployment rates in the months of April, May, and June have been from 11 to 15 percent.

TABLE I-24
Average Annual Labor Force
1992-1996

	Town of Bethel		Oxford County		Maine
	Labor Force	Unemployment Rate	Labor Force	Unemployment Rate	Unemployment Rate
1992	1,250	8.6	28,080	8.2	7.1
1993	1,151	10.9	25,600	9.9	7.9
1994	1,207	10.8	24,630	9.6	7.4
1995	1,164	8.9	25,700	7.1	5.7
1996	1,281	8.4	26,180	6.2	5.4
Change in Labor Force 1992-1996	31		(1,900)		

Source: Maine Department of Labor

In 1990, 42 percent of the labor force was employed in service occupations as compared with 30 percent for Oxford County. Employment in education services comprised 18 percent of the total labor force. This is significant when it is considered that the Oxford County total was 9 percent. Employment in the manufacture of durable goods decreased from 238 persons in 1980 to 199 in 1990. This is due in part to the loss two businesses and modernization.

Table I-25 Distribution of Labor Force by Industry 1990				
Industry	Bethel		Oxford County	
	# of Workers	% of Total Employed Labor Force	# of Workers	% of Total Employed Labor Force
Agriculture, Forestry	31	2.7%	701	3.1%
Construction	94	8.2%	2,200	9.7%
Mining	0	0.0%	33	0.2%
Manufacturing	273	23.9%	5,743	25.9%
Durable goods	199	17.4%	3,116	13.8%
Nondurable Goods	74	6.5%	2,727	12.1%
Transportation	31	2.7%	756	3.4%
Public Utilities	11	1.0%	358	1.6%
Wholesale Trade	33	2.9%	524	2.3%
Retail Trade	145	12.7%	3,855	17.1%
Finance Inc. Real Est.	35	3.1%	852	3.8%
Services	483	42.3%	6,835	30.3%
Business & Repair	36	3.1%	619	2.7%
Personal Services	83	7.2%	957	4.2%
Health	64	5.6%	2,025	8.9%
Educational	215	18.8%	2,021	8.9%
Entertainment/Recreation	40	3.5%	250	1.1%
Other Professional	45	3.9%	963	4.3%
Public Administration	7	0.6%	636	2.8%
Total	1,143		22,593	

Source: 1990 U.S. Census

As evidenced by the 1990 U.S. Census information on commuting patterns to work, business and industry in Bethel provided significant employment opportunities for Bethel residents. In 1990, 72% of Bethel residents worked in Bethel.

Table I-26 Distribution of Bethel's Labor Force by Place of Employment 1990		
Place of Employment	Number of Persons	Percent of Total
Bethel	746	72.2%
Rumford	208	7.2%
Greenwood	99	3.4%
Paris	82	2.9%
Norway	34	1.2%
Woodstock	25	0.8%
Andover	18	0.6%
Oxford	13	0.5%
Other & Not Reported	321	11.2%
Total	1,143	

Source: 1990 U.S. Census

Economic Expectation

Bethel will continue to grow as a service center for the area's recreation industry. Development of the Bethel Station project will create additional service related employment opportunities. Such jobs are normally lower paying and seasonal in nature. The traditional wood products industries appear stable and will continue to provide manufacturing employment opportunities.

PUBLIC FACILITIES AND SERVICES

Findings

- ❖ Improvements to the sewage treatment plant will provide the capacity for an estimated 20 years.
- ❖ Educational opportunities abound in Bethel.
- ❖ Public school enrollment has increased by 4 percent or 15 students between 1991 and 1997.
- ❖ Over the planning period, municipality facilities/services including solid waste, fire fighting equipment, police services and administrative offices will require upgrading.

Introduction

An examination of Bethel's public facilities and services and today capacity is an important element of the comprehensive plan. In addition, the future demands upon the town's public facilities and services must be addressed. This section presents an analysis of the current demands placed upon existing town facilities and services and determines if public facility or service system additions and improvements will be needed to meet demands of the forecasted population and housing growth.

Water System

Bethel Village and West Bethel are served by the Bethel Water District. The Bethel Village system was purchased from the Bethel Water Company in 1967 that had operated the system since 1889. The District acquired the West Bethel system from the town in 1970. While the District is a separate entity from the town, it is overseen by a three-member Board of Trustees appointed by the Selectmen. The Bethel Village system has approximately 400 customers, 530 services and 63 hydrants. The West Bethel system is much smaller with some 50 customers. The District employs a full-time superintendent that oversees the day-to-day operation of the systems.

A surface supply source provides the water for the village system. Chapman Brook drains an area of approximately 2,200 acres of mostly forest land, and the District owns some 2,000 acres of the watershed. The drainage area or watershed extends into Newry and Riley. Water is stored in the 500,000 reservoir on Paradise Hill. Treatment consists of chlorine and fluoride. The quantity of available water in Chapman Brook is approximately five times the current demand. The District believes that the supply will be sufficient for the estimated growth over the next five to ten years. Storm events affect the quality (color and turbidity) of water requiring use of the Paradise Hill Reservoir until water at Chapman Brook clears.

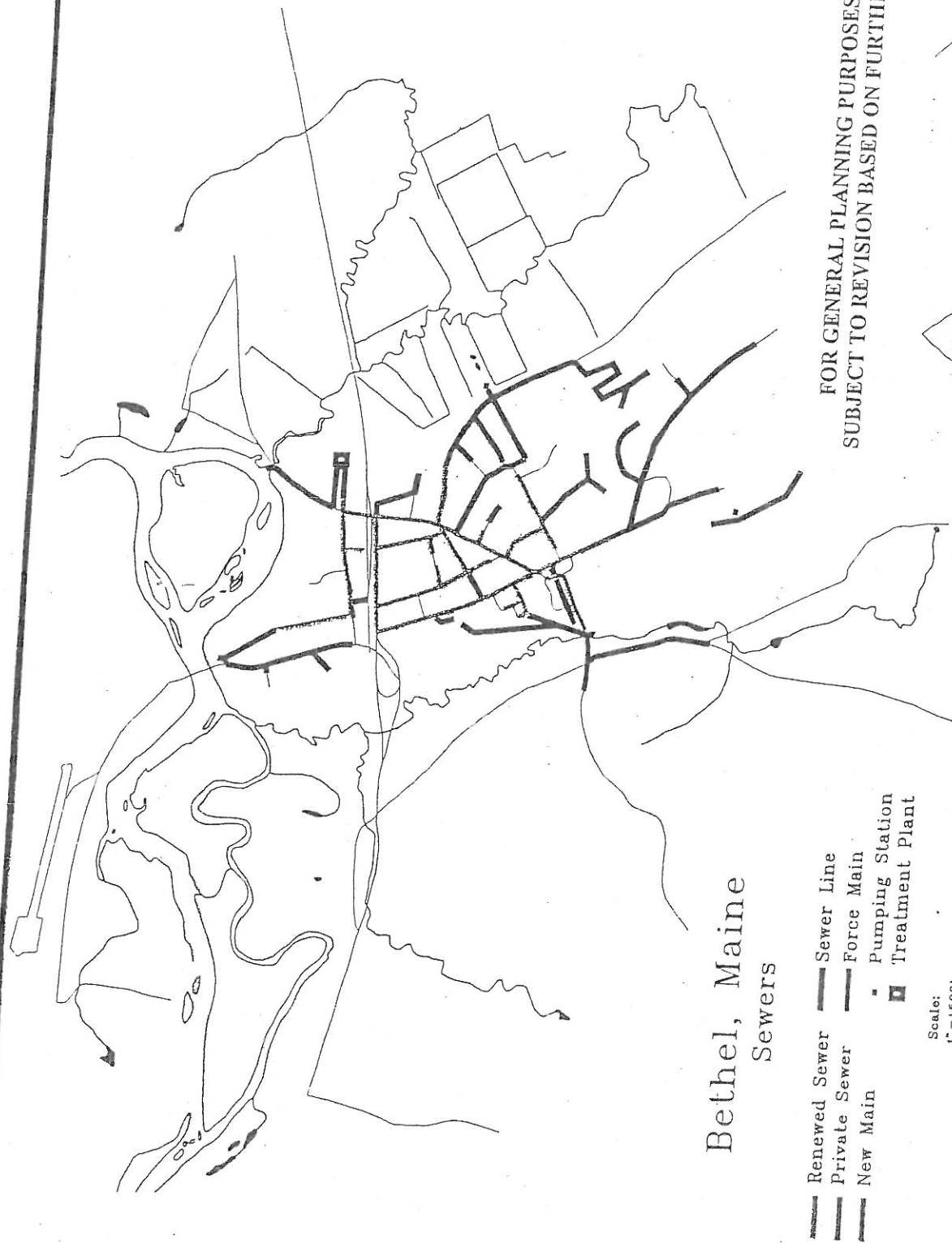
Two wells provide the water for the West Bethel system. One is in a sand and gravel aquifer and the other is in bedrock. The system has a 2,000 gallon storage tank. The District superintendent sees a need for restrictions on land use to keep the wells safe from possible contamination.

Public Sewer System

Bethel Village is served by a sewage collection and treatment system. The system is owned and operated by the town with the original treatment plant constructed in 1972. The original treatment facility was an extended aeration type plant. As the result of numerous discharge violations in the 1980s, the town entered into a consent agreement with the Maine Department of Environmental Protection and completed the first phase of an upgrade in 1989. That upgrade included new circular clarifiers and sludge pumping facilities, a new chlorine tank and related equipment and other minor improvements. The existing treatment plant is licensed for 300,000 gallons per day. At times, primarily due to infiltration and inflow, the plant has exceeded its licensed discharge. Through a program to replace older sewer mains, the rate of the infiltration and inflow has been reduced. Current average discharge rates are approximately 150,000 gallons per day.

As the result of the developing Bethel Station Project that is expected to generate a flow of 50,000 gallons per day and an estimated additional 50,000 gallons per day from new commercial and residential growth over the next twenty years; the treatment plant is being upgraded. The upgrade will include a new headworks building to house screening and grit removal equipment, a new septage receiving facility, a new influent pump station, a new concrete oxidation ditch and other improvements. These improvements are being designed for a twenty-year planning period.

Future needs include an examination of alternatives to dispose of solids from the treatment process. One option would be to composite the solids from the treatment process.

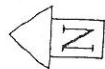


Bethel, Maine Sewers

- Renewed Sewer
- Private Sewer
- New Main
- Sewer Line
- Force Main
- Pumping Station
- Treatment Plant

Scale:
1" = 1500'

FOR GENERAL PLANNING PURPOSES ONLY
SUBJECT TO REVISION BASED ON FURTHER REVIEW



Education

Bethel is home to a number of educational programs unusual for a community of its size. Two of the public school facilities of SAD #44, Crescent Park and Telstar Middle/High School, are in Bethel. Gould Academy founded in 1836 is a private boarding and day school attracting students from the United States and abroad. The NTL Institute founded in 1947 holds summer sessions in programs of behavioral science and attracts students from around the world.

Bethel is a member of School Administrative District #44 which besides Bethel includes the communities of Andover, Greenwood, Newry and Woodstock. Tuition students from Albany, Gilead, Mason, Milton, Hanover and Upton also attend SAD #44 schools in Bethel.

Public school enrollment in SAD #44 decreased by 40 students or 4 percent between April 1 of 1991 and April 1 of 1997. At the same time, Bethel students enrolled in SAD # schools increased by 4 percent over the same period. The largest gain in Bethel enrollment was in the grades K-8 which experienced a 6 percent increase or 17 students. On April 1, 1997, students from Bethel comprised 38.5 percent of the total number of students enrolled in SAD #44 schools.

TABLE I-27
MSAD# 44
Bethel Student School Enrollment
1991 - 1997

Year	K-8	9-12	Total K-12	Total District Enrollment	% Bethel Students	% Other Students
1991	287	111	398	1,112	35.8	64.2
1992	286	94	380	1,096	34.7	65.3
1993	286	90	376	1,079	34.8	65.2
1994	282	92	374	1,048	35.7	64.3
1995	293	100	393	1,029	38.2	61.8
1996	311	101	412	1,042	39.5	60.5
1997	304	109	413	1,072	38.5	61.5

Source: M.S.A.D. #44

Gould Academy on a tree-lined campus on Church Street is a coeducational, college preparatory, boarding and day school. Students from many states and countries have attended the school. Over the past five years, the number of boarding students has averaged approximately 160 annually and day students 46. The number of boarding students is restricted by the availability of student beds. Under consideration is an increase of approximately 16 student beds. The Academy foresees that the day enrollment will not exceed 60 students.

The National Training Laboratory (NTL) conducts summer sessions in Bethel. It specializes in programs in human dynamics and attracts students from around the world interested in the social sciences. NTL owns its own facilities in Bethel and uses facilities at Gould Academy.

SAD 44 offers a comprehensive adult education program with 1,700 enrollments annually in more than 200 courses and programs including Basic Literacy, High School Diploma, GED, College Preparation and Support, Personal Enrichment, Computer Literacy, Career Guidance and Job Readiness. The Adult Learning Center offers daytime and evening classes and a computer lab accessible for public use. The University of Maine's ITV site at Telstar High School offers post-secondary opportunities ranging from Associate to Graduate degrees using both interactive television and Internet-based technologies. With over 80 enrollments per semester, the Telstar site is one of the most active in the University system. More than 400 individuals have taken part in ITV classes at Telstar since 1989.

Police Department

The Bethel Police Department is staffed by three full-time officers, and 10 reserve officers and provides 24 hours per day coverage. The department is headquartered in the Cole Block Building on Main Street. In fiscal year 1996, the department logged some 50,000 patrol miles in the department's two cruisers. In the same year, the department responded to more than 1,400 complaints and 190 motor vehicle accidents.

Short term needs for the department include a fourth full-time position, third cruiser, and suitable time for training. While the department has moved its operations within the Cole Block Building, a more permanent solution is needed to allow for suitable police department operations.

Fire Department

The Bethel Volunteer Fire Department is headquartered in the fire station on the northwest corner of the Bethel Common. The building was built in 1965 replacing a small inadequate building. The fire station building consists of three truck bays in the upper level and two smaller bays on the lower level. In addition, the lower level contains the Civil Emergency Preparedness office and equipment. The upper level also contains a meeting room, small kitchen, equipment repair area, storage room, office with town communications equipment, and two rest rooms. As a result of the 1995 comprehensive study of the town's fire protection services, conducted by Maine Fire Training and Education Technical Services, the town is having the building analyzed to decide whether it is worth the expenditures to correct existing deficiencies and improve the facility to accommodate modern day fire fighting apparatus or if replacing the entire structure would be more realistic.

By town ordinance, the fire department is a municipal department of the Town of Bethel. The department bylaws provide for a complement of up to forty-four fighters. The active membership over the past ten years has averaged about twenty-five. The number of volunteer fire fighters has decreased over the past 10-15 years. Reasons for the decrease in firefighters include the closing of traditional business resulting in firefighters working outside the area, state and federal training requirements for firefighters and a general trend of not volunteering or having the available free time to volunteer for community service. A continuation of the decline of available firefighters particularly during certain times of the day may lead to response issues.

Existing major fire-suppression apparatus consists of the following:

1991	Ford/Middlesex Pumper/Tanker, 1,000 g.p.m. pumper with 2,000 gallons of water, deluge gun, fold tank.
1974	International/American Lafrance Pumper, 1,000 g.p.m. pumper with 1,000 gallons of water. New tank installed 1989 - pump overhauled in 1996.
1977	International Tank Truck, 1,800 gallons of water with 120 g.p.m. pump.
1977	Dodge 4x4 Forestry Truck, 150 gallons of water with 120 g.p.m. pump.
1976	Ford Utility Van - Equipment Vehicle.
1952	Mack 750 g.p.m. pumper, 250 gallons of water
1944	500 g.p.m. Trailer Pump.
1976	300 g.p.m. GPM Portable Pump.
1991	400 g.p.m. Portable Pump.
	2,100 gallon Portable Water Tank.
	18 SCBA Units (Air Packs)

The last full Issuance Services Office (ISO) rating to set the Fire Suppression Rating in Bethel was in 1983. This is an insurance driven entity charged with evaluating the fire defenses of municipalities with the intent of establishing fire insurance rates for individual properties. As a result, the quality of a community's fire defense system has a significant impact on the premiums property owners are charged for fire insurance. The evaluation considers three categories; receiving and handling fire alarms (10%), fire department (50%) and water supply (40%). The 1983 rating assigned Bethel a 7/9. The area with municipal water received the 7 and the area beyond water service a 9. The rating is based on a scale of 1 to 10 with 10 representing less than the minimum recognized protection and 1 representing the best possible fire protection system. The rating was conducted before the delivery of the 1991 pumper/tanker. However, with the two pumpers rated capacity of 2,000 g.p.m., flow is still below the 2,500 g.p.m. required.

The study recommended among other things as a high priority that a new pumper be purchased and a fire station be established in West Bethel. Other needed capital expenditures include the following:

- * Remove Utility Van from service - replace with a Rescue Pumper.
- * Have aerial ladder capabilities - with either a "Quint" unit (ladder-pumper) or shared purchase of an aerial ladder truck.
- * Update the supply of hose.
At this time, 4,500 feet of hose from 1-inch Forestry; 1½ inch, 1¾ inch, 2½ inch, and 4-inch supply hose is 1936-1996 vintage and need to replace yearly.
- * Radio communications upgrading.

The radio communications system was put into service in 1976 and is due for an update with other town emergency services. The fire station houses the base radio for the emergency services and town garage, remotes are at the town office and town garage. The ambulance service is also in need of one at their site. The telephone number to report emergencies is 9-1-1. When 9-1-1 is called to report an emergency, the call goes into the Oxford County Sheriff's Office dispatch center that in turn relays the message to the fire department via tone and voice pagers that each member carries.

Hydrant coverage is limited to the immediate village area only. Outside the immediate area, a water supply has to be found or water brought to the scene via tanker shuttles.

The Bethel Fire Department also provides the townships of Albany and Mason with fire protection. Mutual-aid assistance is given and received from the following towns: Andover, Rumford, Newry, Gilead, Greenwood, and Woodstock.

Besides scheduling replacement of fire apparatus, the department must budget funds for education, not only for the grade schools, but for the firefighters to comply with state laws.

Emergency Medical Services

The town operates the Bethel Ambulance Service that has provided emergency medical services and transportation to the Bethel area since 1970. It is governed by a board of directors. Administrative supervision is provided by the town manager and day to day operations are overseen by the director. The service is staffed by a number of volunteers and responds to an average of 250 calls per year. As with the fire department, volunteers available to respond to calls at certain times may become an issue.

Health Services

Bethel is served by the Bethel Family Health Center on Railroad Street. Staff at the Center includes physicians, physician assistant and nurses. In addition, the Riverside Family Practice, Bethel Family Dentistry, Comeford Chiropractic, and Dr. Lennie Shaw, Optometrist provide health services to the Bethel area. Hospitals are in Rumford, Norway, Lewiston, and Berlin, New Hampshire.

Public Works Department

The Public Works Department maintains and constructs public roads and sidewalks, maintains the storm and sanitary systems and provides snow removal and sanding in the winter. The town manager serves as road commissioner with the road foreman overseeing daily operations. The department consists of the foreman and six full-time employees.

The town garage which is two years old is off the Northwest Bethel Road next to the airport. A salt/sand shed is also found here which has a storage capacity of 15,000 cubic

Solid Waste Disposal

The Town of Bethel operates a green box type transfer station and recycling center. The transfer station located next to Route 2 uses several 10 cubic yard boxes to store waste that is then transported by an independent contractor to the Mid-Maine Waste Action Corporation plant in Auburn. Bulky wastes which cannot be transferred to Auburn are transfer to commercial landfills. In 1996, approximately 1,600 tons of household and commercial waste was generated. Within the 10-year planning period, improvements to the transfer station will be necessary.

The town provides a separate recycling center located off Lower Main Street. This is a self service center with 24-hour access. Items collected for recycling include newsprint, corrugated cardboard, office paper, mixed paper, glass, #2 plastic, aluminum and tin cans. In 1996, 394 tons were recycled.

Municipal Administrative Offices

Administrative offices are in the Cole Block on Main Street. This four-story structure built in 1891 and acquired by the town in 1983 houses the town's administrative offices and police department. Meeting room space for small groups is provided on the first floor. Town meetings and other larger gatherings are held at Crescent Park School or Telstar High School. Office space is somewhat confined, and use of the upper floors is restricted due to accessibility.

Boards and Commissions

Bethel has a number of elected and appointed Boards and commissions. They include the following:

- | | |
|---|-------------------------------|
| * Selectmen | * Board of Appeals |
| * Recreation Board | * Budget Committee |
| * Airport Authority | * Planning Board |
| * Conservation Commission | * Assessors |
| * Comprehensive Plan Committee | * MSAD #44 Board of Directors |
| * Trustees of the Bethel Water District | |

Administration

Bethel town government is organized according to the general laws of the State of Maine as contained in Title 30-A of the Maine Revised Statutes Annotated. The town is governed by its citizens assembled at the annual town meeting and periodically at special town meetings. These meetings provide citizens the opportunity to elect members of the Board of Selectmen and other elected positions, to discuss local issues and vote on items of town business such as the budget, ordinances and bylaws.

There are five selectmen elected on a rotating basis who serve three-year terms. The Selectmen appoint members of the various appointed boards and committees.

The Town Manager, who administers the day-to-day operations of town government, is hired by the Board of Selectmen. The manager serves as the treasure, tax collector, road commissioner, airport manager and general assistance administrator.

Town Owned Property

The Town of Bethel owns a number of property parcels ranging in size from several 100 square feet (Civil War Monument site) to more than 100 acres (Chapman Brook reservoir site). The following are other properties owned by the town.

Property	Location
Old ferry site	Ferry Road
Airport/industrial park/town garage	Northwest Bethel Road
Town forest	Route 2
Former land fill site	Route 2
Town common	Broad Street
Two pumping station sites	Mill Hill Road/Vernon Street
Fire Station	Broad Street
Odeon Hall/town office	Main Street
Ambulance Garage site	Main Street
Wastewater treatment plant site	Main Street
Davis Park	Route 26

TRANSPORTATION

Findings

- ❖ There are several high motor vehicle accident locations in Bethel.
- ❖ Routes 2 and 26 carry high traffic volumes.
- ❖ With a few exceptions local highways are in good condition.
- ❖ Sidewalk improvements are needed.

Introduction

Bethel's transportation system consists of its roadway and sidewalk network, airport, rail and trail systems. This system is extremely important to existing and future development characteristics.

Bethel contains approximately 81 miles of public roads. Of this number, 62 are town-maintained roads. The State of Maine has maintenance responsibility of 19 miles of road.

The Maine Department of Transportation (MDOT) has classified highways based on functions within Bethel as arterial, collector or local. Brief definitions of the three classifications as used by MDOT are:

Arterial Highways: The most important travel routes in the state. They carry high speed, long distance traffic and attract a significant amount of federal funding. They usually carry interstate or U.S. Route number designations. The arterial highways in Bethel include Routes 2 and 26.

Collector Highways: These routes collect and distribute traffic from and to the arterial routes serving places of lower population densities, and they are somewhat removed from main travel routes. Collector highways in Bethel include Routes 5, 35 and 232 and the Sunday River Road, Intervale Road and East Bethel Road.

Local Highways: All public highways not in the arterial or collector classification. They serve primarily for service to adjacent land areas and usually carry low volumes of traffic.

Based upon the MDOT functional classification system, Bethel contains 15 miles of arterial highway (Route 2 and Route 26), 15 miles of collector highway (Route 5, Route 232, Sunday River Road, Intervale Road, and East Bethel Road) and 49 miles of local highways.

Besides public roads, there are privately owned gravel roads in Bethel that serve year-round and seasonal residential developments and logging operations.

Motor Vehicle Accident Data

The Maine Department of Transportation (MDOT) maintains accident reports of all reportable accidents (those involving \$500 damage or personal injury). A report entitled "Maine Accident Report Summary" provides information relating to the location and nature of accidents. One element of the summary report is the identification of a "Critical Rate Factor" (a statistical comparison to similar locations in the state). Locations with a "critical rate factor" of greater than 1.0 with more than eight accidents should be of concern because they can be potential high-accident locations. Based upon the information provided by MDOT, there are five locations with a critical rate factor greater than 1.00 and eight or more accidents in Bethel. In addition, there are five locations with either a high critical rate factor or a high number of accidents. Table I-28 presents these locations and their critical rate factors.

The Maine Department of Transportation also provides information on the nature of reported accidents. In examining the nature of accidents at high accident locations in Bethel, the most frequent accident types were rear end/sideswipe, head-on sideswipe, ran off road and collision with an animal (deer/moose).

TABLE I-28 High Level of Accident Locations 1994 - 1996		
Location	Total Accidents	Critical Rate Factor
Rt. 26 (Chase Hill Rd.-Chandler Hill Rd.)	12	1.07
Lockes Mills Rd. (Paris Rd. -Kimball Hill Rd.)	11	1.22
Sunday River Rd. (Martians Rd.-Townline)	17	3.42
Rt. 2 (Between intersections with Barker Rd.)	15	1.15
Rt. 2 (2 miles east of Walter Emery Rd. east to Townline)	10	1.24
North West Bethel Rd. & Bridge St. Intersection	5	2.46
Route 5(Skillings Rd.-Grover Hill Rd.)	6	0.00
Lovers Lane Road	4	1.29
Rt. 2 (Walter Emery Rd.-2 miles east)	8	0.00
Sunday River Rd. (Route 2 to Martians Rd.)	5	1.75

Source: Maine Department of Transportation

Highway Capacities

The major highways in and out of Bethel are Routes 2 and 26 with Routes 5 and 35 serving as secondary highways. These highways are important to Bethel and the region transporting goods, commuters, recreationist and tourists. Route 2 is the major east west travel corridor from New Hampshire and Canada through Maine. In 1996, the Maine Department of Transportation (MDOT) reported an Annual Average Daily Traffic volume (AADT) of approximately 5,330 vehicles on Route 2. This represents a 50 percent increase over the 1979 AADT. Traffic on Route 2 particularly from the Parkway, east, peaks during the ski season as it is the major route to the Sunday River Ski Resort. It has been estimated that the peak winter PM peak hour traffic on Route 2 near the Route 2/Parkway intersection approaches 1,800 vehicles. This level of peak hour traffic can greatly increase the time for some turning movements onto or off Route 2.

Highway capacity refers to the ability of a highway to move vehicles in a safe and efficient manner. The quality of traffic operation or level of service is measured on a scale of A to F. An A level of service refers to free flowing traffic whereas an F level of service results in congestion with long delays. The level of service can be reduced by increased traffic volumes, intersections and new curb cuts or driveways. While the major highways in and out of Bethel operate a high level of service currently, some intersections and driveways drop to a low level of service. Should additional curb cuts or driveways develop, lower levels of service can be expected. This is particularly true for the segment of Route 2 from Parkway to the Sunday River Road.

Route 26 is, along with Route 2, the major highway into Bethel. This route also carries goods, commuter traffic, recreationist and tourist to and through Bethel. The AADT on Route 26 was approximately 5,550 in 1996. This represented a 60 percent increase over the 1979 AADT. The physical condition of Route 26 from the Greenwood/Bethel line to Parkway is good. Of greater concern to moving vehicles efficiently are several segments of Route 26 in Greenwood and Woodstock.

Routes 5 and 35 carry much less traffic than do 2 and 26. The 1996 AADT was 1,150 and 1,300 vehicles respectfully.

Main Street and the Sunday River Road are the other roads with significant traffic volumes. Main Street has an AADT of approximately 3,500. Much of this is associated with local traffic accessing services and tourists visiting shops and restaurants. The AADT volumes for the Sunday River Road do not reflect the high volume of traffic during the ski season. It is estimated that the peak hour PM traffic approaches 1,000 vehicles.

ETHEL, MAINE

ROAD CONDITIONS

LEGEND

- Good
- Fair
- Bad
- 1996 Traffic Counts
- 1979/80 Traffic Counts
- High Accident Location
- # of Accidents 1/94-12/98
- Critical Rate Factor

Source: Town of Ethel
Maine Department of Transportation

Scale: 1" = 6000'

March 1998

Source: Town of Bethel
Maine Department of Transportation

FOR GENERAL PLANNING PURPOSES ONLY
SUBJECT TO REVISION BASED ON FURTHER REVIEW

AVCOG

Local Highway Conditions

The examination of local highway conditions is important for several reasons. Local road conditions can suggest the need for major capital expenditures for reconstruction or a need to direct new development to avoid costly road improvements.

The conditions of paved roads range from fair to good. Most of the major paved town roads are in good condition. The exceptions are Bird Hill Road, Chandler Hill Road and Intervale Road considered in fair condition. Public graveled surfaced roads are considered in fair to good condition.

Bethel Municipal Airport

The Bethel Airport known as the Colonel Dyke Field is sited approximately ½ mile east of the village center on the Northwest Bethel Road. Originally constructed in 1945 with only a gravel landing strip, it was donated to the town by Leslie Davis. In 1963, a small terminal building was constructed with several hangers. Today, it is managed by the Town Manager and there is an appointed Bethel Airport Authority.

As recommended in the 1982 Airport Master Plan, a new paved 60-foot by 3,150-foot runway was constructed in 1988 replacing the existing 2,400 foot gravel runway. Land was acquired from 1986 through 1990 to protect the new runway. There are three stub taxiways. A new paved apron and gravel parking lot was constructed in 1996. Navigation aids for general aviation include two non-frangible wind cones and runway edge reflectors. There are 15 paved and three turf tie downs and four hanger spaces at the airport. The airport has a fixed-base operator that provides flight instruction, scenic flights, charter flights, airframe and aircraft engine repair and fuel sales and service.

There are an estimated 5,500 annual aircraft operations (a landing or a take off). The number of operations is expected to double over the next twenty years. Passenger enplanements average 10 passengers per day. It is expected that aircraft used by the American Skiing Company will comprise approximately 75 percent of the anticipated airport activity. Improvements under consideration include visual navigation aids, obstruction lights, longer runway, additional taxiway and hanger space.

Currently, the town does not have specific land use standards to control obstructions to air navigation or airport associate noise.

Rail

The St. Lawrence & Atlantic Railroad passes through Bethel carrying products from points south to New Hampshire west. Bethel Station has the capacity to accept passenger rail. In 1995 and 1996, passenger service was provided to Bethel in conjunction with the Sunday River Ski Resort. Rail sidings are provided in neighboring Gilead and used by local businesses.

Parking

On-street parking is provided on Main Street in Bethel Village and Broad Street. At times of peak parking demand, on-street parking is not adequate. Public parking is also available behind the fire station on Broad Street.

Sidewalk System

The Town maintains approximately 1.5 miles of sidewalks in Bethel Village in addition to the sidewalks to be developed on the Bethel Station Project. Sidewalks are found on the north and south sides of Main Street to be connected to the Bethel Station Project, the westerly side of Broad Street, some Church Street, Mechanic Street and Chapman Street. Existing sidewalks are in good condition with the exception of the Chapman Street sidewalk that is narrow and rolling.

Pedestrian movement in Bethel Village allows residents and tourists to walk from residential areas and lodging to Main Street. As growth occurs in and adjacent to the Village, pedestrian facilities will become of greater importance. Short term sidewalk improvements are needed along Railroad Street and Chapman Street.

Public Transportation

The Western Maine Transportation Services provides "demand response" and fixed-route transportation service to residents of Franklin, Oxford and Androscoggin Counties. Fixed-route service is provided on a daily basis and is available to the public. Its primary use is by the elderly, disabled, and low-income residents. Door-to-door, on-demand service is subsidized for elderly, disabled, and low-income and Medicaid-eligible riders and is also available to the public. Bethel Express is a private company offering transportation services.

Because of the proximity of the Sunday River Ski Resort and Bethel's function as the service and retail center for thousands of skiers and vacationers at the resort, transit links between Sunday River and Bethel would have several advantages. These include reduced traffic congestion and parking demands in Bethel.

Bethel Pathway System

In development is the Bethel Pathway designed to provide pedestrian movement within Bethel Village, Bethel Station and along the banks of the Androscoggin River from Davis Park to Mayville. This pathway will enhance the area and should be expanded and connected to future development.

Snowmobile Trail System

The local, regional, and State snowmobile trail system is important to the economy, and this is considered part of the town's transportation system. This trail system in Bethel connects to the state wide trail system. Local snowmobile clubs maintain approximately 30 miles of local trails. A major need of the trail system is a crossing of the Androscoggin River in Bethel.

Maine Department of Transportation Official Business Directional Signs

Maine law provides for the erection of official business directional signs to show to the traveling public the route and distance to public accommodations, facilities, commercial services, and points of scenic, historical, cultural, recreational, educational and religious interests. The Department of Transportation designates the locations and erects these signs. Because of the services in Bethel and the directional changes motorists make in Bethel to reach other destinations in the region there has been a proliferation of this type of sign in Bethel. The location and numbers of these signs in gateway locations detract from community character.

OUTDOOR RECREATION RESOURCES

Findings

- ❖ Bethel's natural resources provide for outstanding outdoor recreation opportunities.
- ❖ All fields for organized recreational activities are provided by SAD #44 and Gould Academy.

Introduction

Recreation opportunities both organized and unstructured are important elements of Bethel's quality of life. Municipal organized recreational activities are directed by the Recreation Board appointed by the Board of Selectmen. The Recreation Board is responsible for managing recreation programs including swimming, tennis, skating, cross-country skiing and baseball.

Public Recreation Facilities

The town owns three parcels of land used for recreational purposes. Davis park is a 1.4 acre site found between Route 26 and the Androscoggin River as Bethel Village is entered. This park contains four covered picnic tables with fire boxes, a child's play ground and river frontage with canoe access. The Commons at the head of Main Street is flooded for winter skating. The Mount Will Trail, a hiking and nature trail developed by the Bethel Conservation Commission, is in the Bethel Town Forest which extends into Newry. Portions of the trail cross over private property.

Most of the recreational activities sponsored by the Recreation Board take place on facilities made available by SAD #44, Gould Academy and private property owners. SAD #44 maintains written policies concerning the use of its facilities for non-school organizations and Gould Academy requires liability assurance.

School Recreation Facilities

All athletic fields and facilities used by the public at the consent of the owners are on S.A.D. #44 and Gould Academy property facilities. At the Telstar Regional High School are one 90-foot base path baseball field, a soccer field, multi-purpose field and one half outdoor basketball court. A baseball field and playground are on the Crescent Park School property. Outdoor facilities at Gould Academy include a baseball field, multi-purpose/soccer field and two tennis courts.

Access to Surface Waters

The major surface water system in Bethel is the Androscoggin River. The Androscoggin River Canoeing Map identifies four river access locations in Bethel. These include Newt's landing in West Bethel, Riverside Campground at Mayville, Davis Park and the State Picnic area. The Androscoggin River Walking Trail is located on the easterly side of Route 2 between the State Picnic area to the River View Motel. This trail is on private property.

Snowmobile Trail System

The local snowmobile clubs, B&G Groomers and the Bethel Snow Twisters maintain a trail system for snowmobile use which connects to other snowmobile trail systems.

Private Recreational Facilities/Opportunities

Bethel has several privately-owned-and-operated recreation areas. These include the Bethel Inn 18-hole golf course, tennis courts and cross country skiing and Carters Ski Touring Center. The Sunday River Ski Resort is only a short distance away in Newry, Mt. Abram Ski Area in Locke Mills and Black Mountain Alpine and Nordic Center in Rumford. Private land owners have traditionally allowed public access for hunting, nature study and similar activities.

Regional Recreation Facilities/Opportunities

The White Mountain National Forest is only a short distance from Bethel offering hiking and camping.

Recreation Facility Needs Analysis

Current outdoor recreation facilities have been assessed based on recognized facility standards. These standards should be used as a guide to currently needed facilities and anticipated facility needs based upon the forecasted year 2008 year-round population. This analysis has not considered seasonal population which at peak periods may be more than twice the year-round population. This analysis is based on facilities owned by the town of Bethel and areas the public has been granted use. It should be noted all field use is on facilities not owned by the town.

Outdoor Recreation Facilities and Needs

Type of Facility	Recommended Stds. per 1000 pop.	Existing Facilities	1994 ^A Surplus/ (Deficiency)	2005 ^B Surplus/ (Deficiency)
Neighborhood Playground	C	2	0	0
Community Recreation Area (12-25 acres)	C	0	0	0
Community Park (100+ acres)	C	0	0	0
Baseball Diamond (90 ft. basepaths)	.16	2	1	1
Softball/Little League Diamond*	.75	1	(1)	(1)
Basketball Court*	.5	1	(1)	(1)
Tennis Court*	.67	2	0	0
Multi purpose Field (Football, Soccer, Field Hockey)*	.5	3	2	2
Swimming Area (square feet)	750	0	(1,755)	(1,950)
Ice Skating Area* (square feet)	5,000	1	0	0
Picnic Table	2	17	12	17
Nature Study Area	C	1	0	0

^A Based on a population of: 2,335

^B Based on a 2008 population of: 2,600

^C Standards are as follows:

Neighborhood playgrounds, for towns with a population greater than 1,000, should be located within ½ mile of housing concentrations of 50 or more homes and include playgrounds, basketball courts, play fields, etc.;

One **community recreation area**, 12-25 acres, for towns with a population greater than 5,000, developed with ballfields, tennis courts, swimming facilities, ice skating, etc.;

One **community park**, 100+ acres, for towns with a population greater than 5,000, largely undeveloped for walking, cross country skiing, nature study, etc.;

Minimum one **nature study area** for towns with population greater than 1,500.

* Minimum one per Town.

Based on this analysis there is currently a need for a softball/baseball field, basketball court and swimming area.

NATURAL RESOURCES

Findings

- ❖ Bethel's natural resources are critical to its character and economy.
- ❖ The natural landscape provides for outstanding scenic views.
- ❖ In 1994, 13,600 acres of land were classified under the tree growth tax law.

The natural resources of the Bethel area are an integral part of the town's economic, social and cultural heritage. These resources provide for Bethel's economic and recreational well being. They deserve to be husbanded and treated with diligence and respect. These resources include the soils, surface water, groundwater, wetlands, minerals, forests, wildlife habitat, and other critical natural resources.

The present topography, drainage and soils are a result of three major geologic processes. The first was the creation of the White Mountains approximately 250 million years ago. The second was the inundation of the area by a glacier between 15,000 and 23,000 years ago. The third event was the receding and melting of the glacier which created the basis of today's drainage pattern by cutting channels in the landscape.

Topography

Topography relates to the general land form of an area. Often, a locale may be referred to as mountainous, hilly or flat. Knowledge of the topographic characteristics of a community is important because of its influence on development location, scenic views and aesthetics.

Two factors are important when topography is considered -- relief and slope. Relief refers to the height of land forms above sea level and relative to surrounding land forms. The highest elevation in Bethel is approximately 1,920 feet above mean sea level atop Locke Mountain, and the lowest elevation is approximately 620 feet above mean sea level along the Androscoggin River as it leaves Bethel. Therefore, local relief is some 1,300 feet. Other significant points of high elevations include Farwell Mountain (1,896), Wilber Mountain (1,887) and Ellingwood Mountain (1,571).

Slope or the rise and fall of the earth surface in a given horizontal distance presents limitations to various land activities including development, agriculture, and forestry. Generally, as slopes become steep, greater than 20 percent, construction and other land use activities are more difficult and the potential for environmental degradation increases. Slopes of less than 20 percent generally do not present the engineering problems associated with development on slopes of greater than 20 percent. Approximately 35 percent of the land area has slopes greater than 20%. The majority of these steeper slopes are found in the eastern and northern portions of town.

Soils

Soils and their properties are extremely important to past, current, and future community characteristics. In Maine, where soils were highly suitable for agriculture, it became an important element in community character. Today, soils are still important factors in agriculture and forestry but are also critical in determining locations for new roads and residential development utilizing subsurface sewage disposal.

Soil development is strongly influenced by the underlying material. This "parent" material is unaltered by weathering. The four major materials in Bethel are: 1) recent alluvium - floodplain soils; 2) glaciofluvial deposits - sands and gravels; 3) glacial till - a mixture of sand, silt, clay, stones and boulders in either a compact or loose form; and 4) organic material - water bodies filled in naturally over time with sediment and organic material.

In 1980, soil scientists of the Soil Conservation Service mapped the soils in the Town of Bethel. The survey was done as part of the overall Oxford County Soil Survey program. This local survey was mapped at two levels of intensity. The higher level (order 2) was completed for all open land, land adjacent to major roads and other areas where land use conversion is likely. Areas as small as three acres were delineated. The less intensively mapped (order 3) areas were the remaining wooded areas. In these areas, soils that have similar interpretations were combined into soil units called soil associates. Areas were mapped as small as ten acres.

Each area is a unique natural landscape, and it generally consists of three major soils and several minor soils. The soils are not restricted to any one area, but the pattern of their occurrence is generally similar in each area. The soils in any one association differ from place to place in slope, depth, drainage, and other characteristics which affect management and uses.

Mapped soil associations of Bethel include the following.

Hermon - Skerry - Turnbridge Association

Areas of this association are throughout the town on broad, rolling ridges and hills and occupies about 36% of the town's land area. It comprises approximately 40% Hermon soils; 20% of minor soils.

This association is predominantly woodland, however, some areas are used for hay, pasture and cultivated crops. The areas in this association that do not have excessive slopes (greater than 20 percent) and are at least moderately well drained, have been used for limited development and are suitable for development. The major limitations for farm and non-farm

uses are the depth of bedrock in the Turnbridge soils, a seasonal perched watertable and slow permeability of the compact stratum in the Skerry soils and the presence of an abundance of surface stones.

Lyman - Turnbridge- Herman Association

The predominant areas of this association are confined to the tops of hills and mountains throughout Bethel. Bedrock is close to surface. The association occupies about 11% of the town. It consists of approximately 40% Lyman soils; 30% Turnbridge soils; 15% Hermon soils; and 15% of minor extent. The dominant minor soils in this association are the well-drained Beckett soils, the shallow Schoodic soils, the moderately well drained Skerry soils and rock outcrops.

The association is mainly woodland. These areas are difficult to log because of steep slopes and rock outcrops. Depth to bedrock, surface stones, and slope are the major factors limiting the use of this association.

Adams - Naumburg - Croghan Association

This association is found on the outwash plains and terraces at the lower elevations of the town, and it generally parallels major drainage ways. The association occupies approximately 20% of Bethel. It is comprised of 40% Adams soils; 30% Naumburg soils; 20% Croghan soils; and 10% soils of minor extent.

This association is used predominantly for woodland. There are some areas used for hay, pasture, and some cultivated crops. Home building and commercial development is common in these areas. This association has few limiting factors on its use.

Rumney - Cornish - Charles Association

The areas of this association are confined to floodplains of the Androscoggin and several smaller waterways. The association occupies about 8% of the town. It consists of approximately 50% Rumney soils; 15% Cornish soils; 15% Charles soils; and 20% soils of a minor extent. The dominant minor soils are moderately well drained Lovewell and Podunk soils along with the well drained Ondawa and Fryeburg soils.

Along the Androscoggin River, this association is mainly used for silage corn, hay and pasture. Other areas of this association are wooded. Flooding and wetness are the main limitations of the soils for any use.

Skerry - Science - Becket Association

Areas of this association are generally on north-facing slopes of glaciated uplands. The association occupies about 17% of the town. It is 40% Skerry soils; 30% Science soils; 10% Becket soils; and 20% soils of a minor extent.

This association is predominantly woodland, but some areas are used for pasture or hay. The wetness of the Skerry and Science soils, the stoniness, slope, and compact substratum are the major limitations of these soils for most farm and non-farm uses.

Chocorua - Naumburg - Croghan Association

Areas of this association are in the lower parts of landscapes throughout Bethel. Generally, this association is adjacent to small waterways in shallow organic deposits and on sand plains. The association occupies about 8% of the town. It is comprised of approximately 40% Chocorua soils; 30% Naumburg soils; 20% Croghan soils; and 10% soils of a minor extent. The dominant minor soils in this association are the excessively drained Adams and Hermon soils and wet alluvial soils.

This association is primarily wooded, though some areas are shrub and grassland swamps. The primary limitations to using these areas for most any use is the wetness.

Prime Farmland Soils

Prime farmland soils, as defined by the United States Department of Agriculture, Soil Conservation Service, are the best "farmlands" nationwide. Criteria for designation as "Prime Farmland" are tied directly to soil properties and not land use except urban land. If the land is urban or built-up, it cannot be prime farmland. Prime farmland, however, can be land in cultivation, forest, pasture, or idle, and it can be remote or inaccessible. Prime farmland soils are primarily on the Androscoggin River floodplain. The rich agricultural soils of the intervals along the Androscoggin River have attracted farmers ever since the original Indian settlers. Three of Bethel's major operating farms are still found along the river in floodplain and outwash sands. While in the past, the tilly soils of the hills and some wetlands were worked; most of the hillside farms have reverted to forest and raising Bethel's primary long-term crop - timber. The wetlands have reverted to natural vegetation.

Surveys of agricultural land undertaken by the Soil Conservation Service and the Androscoggin Valley Council of Governments in the late 1970s showed that there were approximately 3,300 acres of agricultural land in Bethel. Since then there has been some decline in the acres in active agricultural management. This has been primarily a loss of hayland reverting to woody vegetation.

Minerals

The sand and gravel deposits of Bethel's eskers, ice-contact mounds and terraces are excavated today for use in construction. Many other minerals lie within the bedrock. The substantial deposits of mica, feldspar, beryl, tourmaline and other stone minerals in the area have not been of great economic significance in the past. The expense of excavation and the great fluctuations in the marketplace have been the major deterrents. Some minerals are of strategic importance. If the current sources should become unavailable, then mining could become part of the local economy.

The mineral resources do have continuing value for the "rock hounds" who visit the area to scour old mines and diggings.

Surface Water

The Androscoggin River is the predominant surface water in Bethel. It flows approximately 18 miles from the Gilead border through the town into Rumford. Sunday River and Bear River join the Androscoggin from the north. The Alder River - Kendall Brook system is another important water system joining the Androscoggin from the south. Bethel has many other brooks and streams that comprise its surface waters. The town water supply is accumulated in a reservoir on Chapman Brook in northwest Bethel.

The Androscoggin has a highly regulated flow management system. A number of headwater lakes are manipulated to store water during periods of high runoff and to release water to the river stream during periods of low runoff. This flow management system was established to enhance the river's suitability for power production and manufacturing processes. Through flow regulation, spring flows are reduced and summer flows are increased significantly above what would naturally occur.

Before the damming and industrialization of the Androscoggin River, it was a rough and rugged water system. With an average drop of eight feet per mile, it was a raging torrent during periods of high runoff. At times of minimal runoff, the river resembled a brook at various points along its path to the Merrymeeting Bay, a tidal estuary. Prior to the changes in the river system created by man, it was naturally pure; however, even then, the river experienced siltation and the contamination from organic debris.

The pulp and paper industry anchored along the Androscoggin River during the 1800's. The continued expansion of this industry had long-term impacts upon the economy of the river basin and the quality of its waters. Mills were constructed at Berlin, New Hampshire, Rumford, Jay, and Livermore Falls; they discharged raw liquors from the sulfite pulping process to the river. As the pulp and paper industry and the economy grew, increased demands were placed upon the river to assimilate industrial and domestic wastes.

In the early 1940's, the public would not tolerate the condition of the river that gave off hydrogen sulfide gases and discolored exposed metal and paint. In a report presented to the Maine Sanitary Water Board in February 1942, it was stated that, "the pollution responsible for the objectionable conditions of the river is derived from industrial wastes and municipal sewage discharges without treatment." It was further noted that "few streams in the United States of comparable size showed evidence of such extreme pollution." It was estimated that the industrial discharge to the river was equivalent to that from a population of 2,411,500.

Since the 1940's, both industry and municipalities have constructed treatment plants which treat waste before they are discharged to the river. The river is classified as "B," the third highest classification, as it flows through Bethel. The State classification system for fresh surface waters describe the "B" classification as suitable for drinking water supply after treatment, fishing, recreation in and on the water, industrial process and cooling water and hydroelectric power generation.

The Bear River which joins the Androscoggin at the Bethel/Newry line has been assigned the State's highest classification of AA. All other drainages including Sunday River have been assigned an A classification, the second highest. Chapman Brook serves as the source of the public water supply for Bethel Village and is classified as A. The watershed of Chapman Brook is approximately 2,500 acres most of which is in the town of Newry.

The greatest threats to the continued good water quality of these surface waters is from non-point sources caused by improper land management practices that creates erosion of soil.

Bethel does not contain any inland water bodies that have a surface area greater than ten acres or great ponds. The town does, however, contribute runoff to several great ponds in other jurisdictions. These include Songo Pond, the head waters of the Crooked River in Albany, South Pond in Greenwood and North Pond in Woodstock. Development within these watersheds is scattered low density residential. The overwhelming percentage of the watersheds are forested. Activities in Bethel can effect the quality of water in these ponds.

Studies over the past decade indicate phosphorus, which acts as a fertilizer to algae and other plant life in the lake, is a major threat to lake water quality. While shoreland zoning has provided some protection, the studies indicate phosphorus can be contributed in significant quantities from the entire watershed.

The quality of water in a lake depends on the condition of the land in its watershed. Phosphorus is abundant in nature, but in an undisturbed environment, it is tightly bound by soil and organic matter for eventual use by plants. Natural systems conserve and recycle nutrients and water. Runoff from the forest is relatively low in quantity and high in quality. Water is stored in depressions and evaporates or seeps into the ground to become ground water, thereby preventing it from running over the land surface and exporting nutrients (i.e. phosphorus) from the system. Land development changes the natural landscape in ways that alter the normal cycling of phosphorus. The removal of vegetation, smoothing of the land surface, compaction of soils and creation of impervious surfaces combine to reduce the amount of precipitation stored and retained, dramatically increasing the amount of water running off the land as surface runoff. The increased runoff from disturbed land generally carries higher concentrations of phosphorus and may also exacerbate erosion and sedimentation problems.

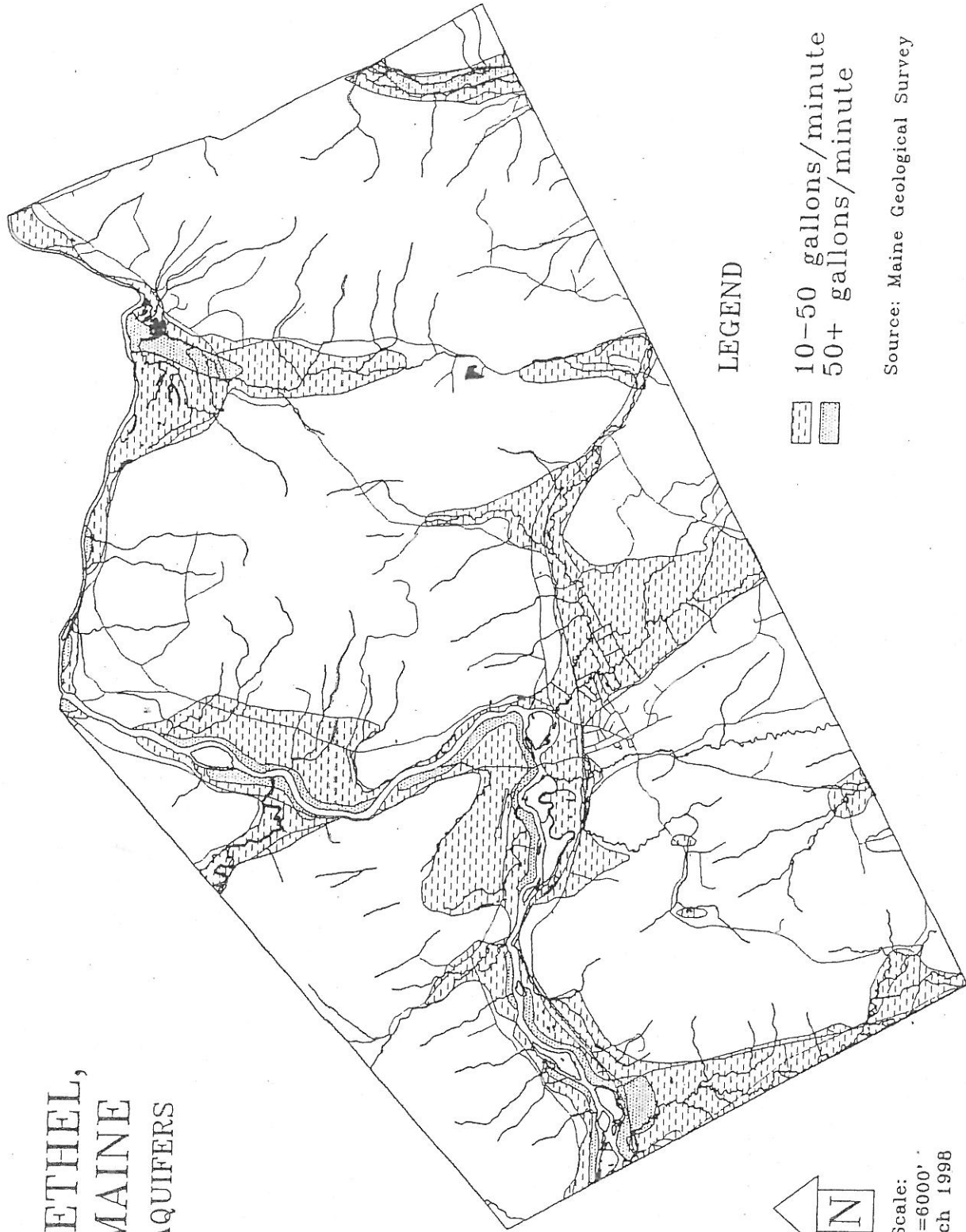
Ground Water

Ground water is water derived from precipitation that infiltrates the soil, percolates downward, and fills the tiny, numerous spaces in the soil and cracks or fractures in the bedrock below the water table. Wells draw water from permeable layers or zones in the saturated soil and fractured bedrock. In general, the saturated areas which will provide adequate quantities of water for use are called aquifers. Two major types of aquifers occur in Maine -- sand and gravel aquifers and bedrock aquifers. Wells in sand and gravel aquifers yield from 10 gallons per minute (g.p.m.) up to 2,000 g.p.m., while wells in fractured bedrock generally yield from 2 to 25 g.p.m..

Sand and Gravel Aquifers

A sand and gravel aquifer is a water-bearing geologic formation consisting of ice contact, outwash, and alluvial sediments left by the melting glaciers and subsequent meltwater rivers and streams that were once part of this area of Maine (roughly 12,000 years ago). The sand and gravel deposits range from 10 feet to more than 100 feet thick.

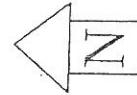
BETHEL, MAINE AQUIFERS



LEGEND

- 10-50 gallons/minute
- 50+ gallons/minute

Source: Maine Geological Survey



Scale:
1"=6000'
March 1998

Sand and gravel aquifers are generally large, continuous, sand and gravel deposits that extend along a river valley. The sand and gravel deposits fill the valley between the hills on either side to create a fairly flat valley floor. Usually, the flow path of ground water through the aquifer is from the valley walls toward a stream or river flowing along a valley floor. The stream, then, acts as a drain where ground water enters the surface water drainage system and flows downstream.

Water in the aquifer moves between the sand and gravel grains at a rate that is determined by the sizes of the pores (porosity) and the steepness of the flow path (the hydraulic gradient). The flow rates of ground water through the sand and gravel found in the area average from 10 to 500 feet per day depending on the coarseness of the material through which the water is traveling through.

Mapping of sand and gravel aquifers published by the Maine Geological Survey indicates sand and gravel aquifers can be contaminated from any substances that seep into the ground directly or are carried into the ground water after dissolving in water. As water infiltrates from the ground surface and goes down through the unsaturated zone above the water table, the soil, sands and gravel act as a filter and remove some contaminants. How much filtration depends on the thickness of the unsaturated zone above the water table, and the kind of contaminants. Once contaminants enter the water table, they may travel thousands of feet over time. In many Maine aquifers, the water table is generally close to the surface (within 20 feet) so that natural removal of contaminants by the soil is not nearly complete before the pollution reaches the ground water.

The slow rate of ground water movement causes this resource to be particularly sensitive to contamination. Once contaminants enter the ground water, they do not flush out of the system readily and residual contaminants are often left on the particles of sand or gravel to leach slowly into the surrounding ground water. Often hundreds of years are necessary for an aquifer to clean itself naturally.

Mapping of sand and gravel aquifers by the Maine Geological Survey indicates extensive sand and gravel aquifers associated with the Androscoggin, Alder, Pleasant and Sunday Rivers. One well of the West Bethel water system is in a high yield aquifer associated with the Androscoggin River.

Bedrock Aquifers

In Maine, much less information is available concerning bedrock aquifers. However, most private wells are drilled into bedrock and penetrate relatively small fractures that produce only small amounts of water. However, for most residential dwellings, wells drilled into bedrock need not produce large volumes of water. A well 200 feet deep with a yield of 2 gallons per minute will normally provide sufficient water for normal residential uses.

Contamination of both sand and gravel aquifers and bedrock wells is possible. Common ground water contaminants include petroleum products, hazardous substances, failing septic systems, and road salt.

Flood Plains

A flood plain is the flat expanse of land along a river or shoreline covered by water during a flood. Under the Federal Insurance Program, the 100-year flood plain is called the flood hazard area. During a flood, water depths in the flood plain may range from less than a foot in some areas to more than 10 feet in others. However, no matter the depth of flooding, all areas of the flood plain are subject to the requirements of the Flood Insurance Program. Flood plains along rivers and streams usually consist of floodway, where the water flows, and a flood fringe, where stationary water backs up. The floodway will usually include the channel of a river or stream as well as some of the land area adjacent to its banks.

The Androscoggin River has an extensive flood plain. The most extensive area is in the Mayville area and where the Alder River joins the Androscoggin. Flooding generally occurs in the winter and early spring as a result of heavy rainfall on snow-covered or frozen ground. Ice jams occasionally compound flood problems. The flood of record occurred in March 1936 and had a discharge 74,000 cubic feet per second (cfs). Other recent floods occurred in 1973, 1984 and 1986. Other significant flood plain areas are found along the Sunday River and Kendall and Twitchel Brooks. Damage to single and multi-family dwellings, businesses, farmland, railroads, roads, bridges, and utilities occur as the result of floods.

Bethel participates in the National Flood Insurance Program which allows property owners that are in the 100-year floodplain to purchase flood insurance. The town has also enacted floodplain management standards and zoned some undeveloped portions of the 100-year floodplain to restrict future structure development.

In 1996, there were 48 flood insurance policies issued in Bethel with a total coverage of \$2,186,000. Since 1978, there have been 15 claims with a total paid out of approximately \$100,000.

Wetlands

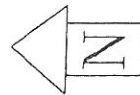
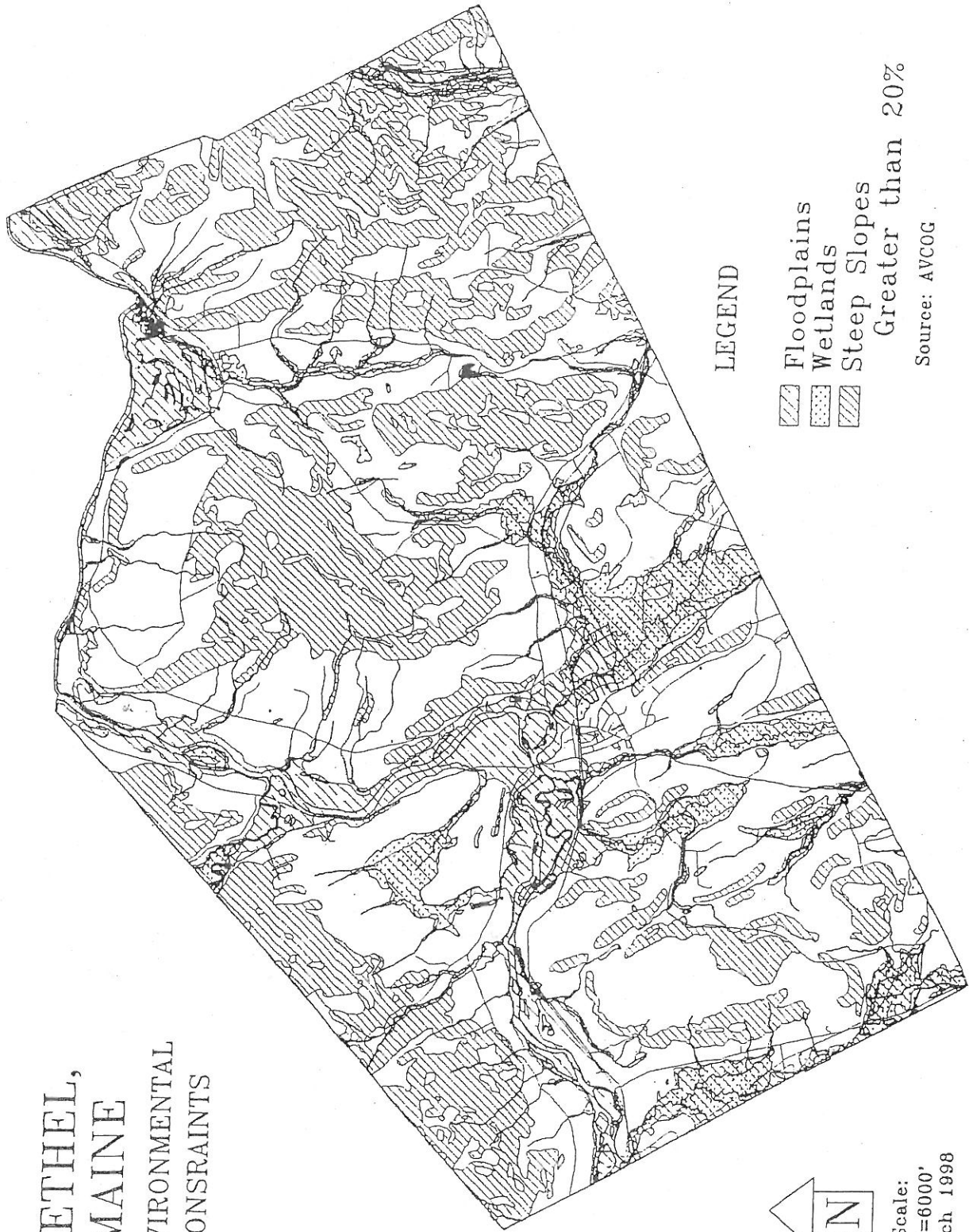
Wetlands perform a variety of functions. They serve as "natural sponges" that control water runoff by providing a buffer for excess water while allowing a steady, even, release of that excess to both the surface and ground water. Some wetlands serve as recharge areas for aquifers. Wetlands also perform a cleansing function by absorbing some physical and chemical pollutants from the runoff.

Wetlands are also important wildlife habitats. The pattern of water cover and vegetation accounts for the differing types of wetlands and the differing types of wildlife use.

The United States Department of Interior has published a series of National Freshwater Wetlands Maps that identify wetlands as small as two acres in size. Major wetland systems are adjacent to the Pleasant River, Kendall Brook, Alder River, Mill Brook and Twitchell Brook. These wetlands are classified palustrine scrub-shrub, emergent and forested.

Under the Mandatory Shoreland Zoning Law, the town regulates various land use activities adjacent to 17 wetlands that are 10 acres or greater in size.

BETHEL, MAINE ENVIRONMENTAL CONSTRAINTS



Scale:
1"=6000'
March 1998

LEGEND

-  Floodplains
-  Wetlands
-  Steep Slopes
Greater than 20%

Source: AVCOG

FOR GENERAL PLANNING PURPOSES ONLY
SUBJECT TO REVISION BASED ON FURTHER REVIEW

AVCOG

Wildlife and Fisheries

Wildlife should be considered a natural resource similar to surface waters or forest land. Our wildlife species are a product of the land and, thus, are directly dependent on the land base for habitat. Therefore, if a habitat does not exist or an existing habitat is lost, various types of species will not be present. Although there are many types of habitats important to our numerous species, four are considered critical which are wetlands, riparian areas (shorelands, ponds, rivers and streams), major watercourses and deer wintering areas. Other unique and/or critical habitats with special characteristics may also exist in some towns.

Besides providing nesting and feeding habitat for waterfowl and other birds, wetlands are used in varying degrees by fish, beaver, muskrats, mink, otter, raccoon, deer and moose. Each wetland type consists of plant, fish and wildlife associations specific to it. Whether an individual wetland is a highly productive waterfowl marsh or a low value area capable of producing just one brood of ducks, it is still valuable.

Besides providing habitat for fish and variety of aquatic furbearers, land adjacent to brooks, streams and rivers provide travel lanes for numerous wildlife species. Buffer strips along waterways provide adequate cover for wildlife movements as well as maintenance of water temperatures critical to fish survival.

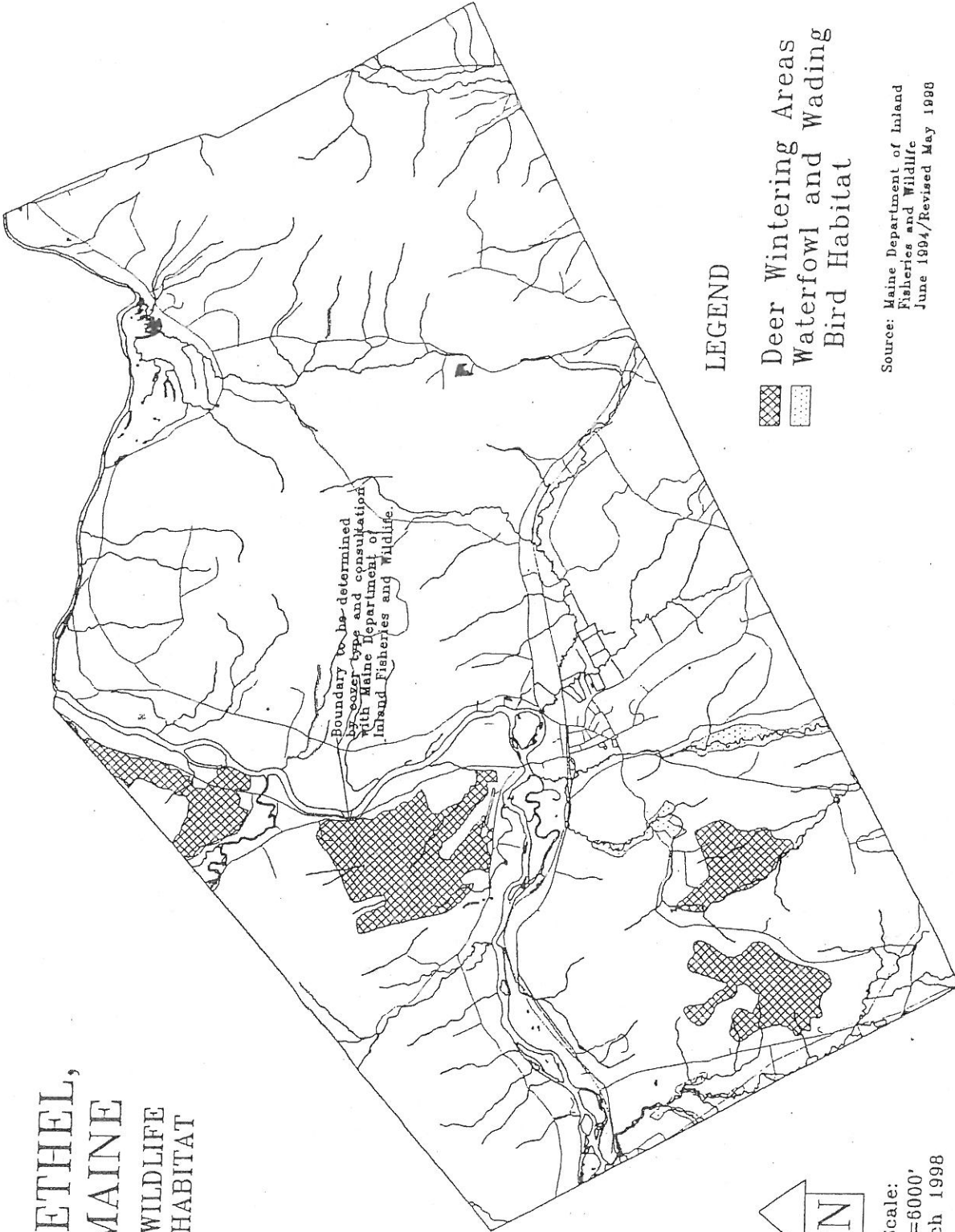
While deer range freely over most of their habitat during spring, summer and fall, deep snow (over 18 inches) forces them to seek out areas which provide protection from deep snow and wind. These areas, commonly known as deer yards or wintering areas, represent a small portion (10-20%) of their normal summer range. Wintering areas provide the food and cover necessary to sustain deer during the critical winter months. While size and shape of the areas can vary from year to year or within a given year, most are traditional in the sense that they are used year after year.

Unique or critical habitats include areas such as specific breeding sites or other areas shown to be of importance to a particular species due to traditional use or limited occurrence. They include, but are not restricted to, eagle, osprey and heron nesting sites. While some of these sites may be associated with critical areas discussed above, many are not.

While the critical areas meet the specific needs of certain wildlife species and are necessary for survival, they alone cannot support adequate populations of deer and other wildlife. A variety of habitat types ranging from open field to mature timber are necessary to meet the habitat requirements of most wildlife species throughout the year. Since different species have different requirements and home ranges, loss of habitat will affect each in different ways ranging from loss of individual nesting, feeding and resting sites to disruption of existing travel patterns.

Generally, loss of this habitat will not have an immediate negative impact on wildlife populations; however, the cumulative loss will reduce the capacity of an area to maintain and sustain viable wildlife population.

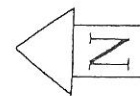
BETHEL, MAINE WILDLIFE HABITAT



LEGEND

-  Deer Wintering Areas
-  Waterfowl and Wading Bird Habitat

Source: Maine Department of Inland Fisheries and Wildlife
June 1994/Revised May 1998



Scale:
1" = 6000'
March 1998

FOR GENERAL PLANNING PURPOSES ONLY
SUBJECT TO REVISION BASED ON FURTHER REVIEW

AVCOG

The Department of Inland Fisheries and Wildlife (IF&W) has an ongoing program to map the locations of potential and known essential and significant wildlife habitats. These include deer wintering areas and water fowl and wading bird habitat. Based on the IF&W mapping there are four deer wintering areas. These are found on the southeast sides of Mt. Will, north of the Colonel Dyke Airport, west side of Sparrowhawk Mt. and east of Sparrowhawk Mt. Three water fowl and wading bird habitats have been mapped and are located between Robinson Hill and Pine Hill, upper section of Mill Brook and lower section of Pleasant River. These wildlife habitats have all been assigned indeterminate value which means that an assessment has not yet been conducted.

The Androscoggin River in Bethel and other reaches provide habitats from both cold and warm water sport fisheries. Cold water fisheries include brook, brown and rainbow trout and landlocked salmon. Warm water species include bass, perch and pickerel. The major tributaries including the Bear, Sunday, Pleasant Rivers and Chapman, Twitchell, Mill, Alder, and Otter Brooks contain rainbow and brook trout.

Forest Resources

As with the majority of communities in Maine, Bethel is primarily forested. Soils are important to wood production. In soils rated "good" for forest uses, growth rates are high and produce good yield of forest products. In soils rated "poor," growth rates are so slow and intensive management may not be justified as an economic practice.

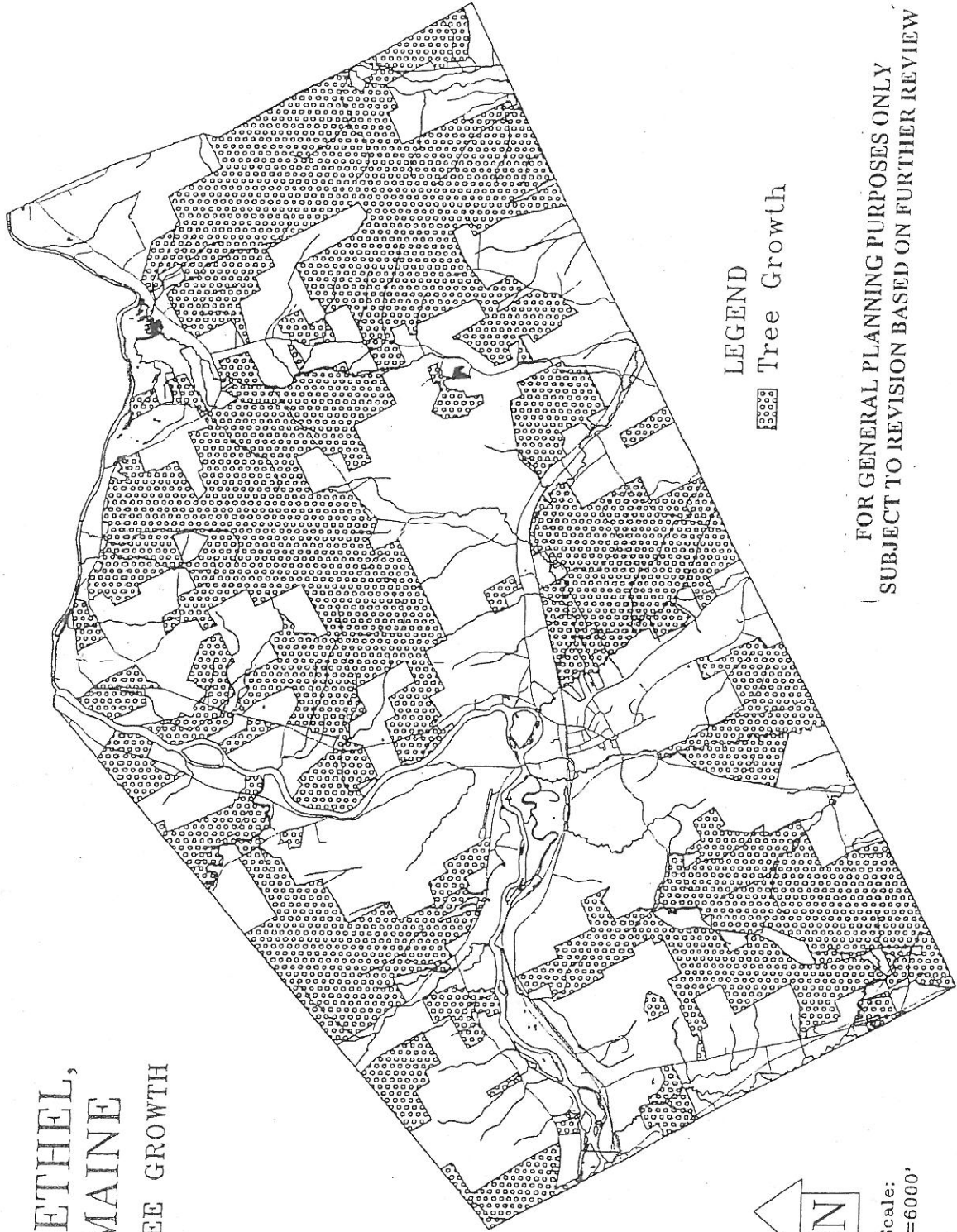
Recent work on forest quality site identification has found that rooting depth, water availability, and nutrients all contribute to how well trees grow and what species do better. The most important of these is rooting depth. From general observation it appears that Bethel has generally good forest sites. The same slopes which diminish site quality for housing development make excellent sites for growing trees. Those more limited sites with restricted rooting zones created either by higher seasonal water tables or shallow ledge are normally characterized by softwood forest of spruce, fir, and cedar. The mixed hardwood/softwood species forests normally occur in intermediate sites.

Much of Bethel's forest land is former agricultural land. Pioneer species such as poplar, birch, and white pine were the first to occupy abandoned sites. In some instances, these trees have been succeeded by hemlock, spruce, maple, beech and other more shade tolerant species. Other areas have retained their original post-agricultural timber types because of natural influences (disease and fire) and harvesting practices. Many acres of Bethel's forests are under the supervision of professional foresters and knowledgeable landowners.

Much of the present forest, on all but the steepest slopes, is grown up agricultural land. Forests are generally characterized by a mixture of hardwood species on the better drained sites and softwood on more poorly drained sites. The forests of Bethel are mostly hardwood types with the softwood areas restricted to dry ridge tops and wet seeps and low lands with high water tables. The normal harvesting method used is partial removal of the volume in the stand. This may range from 25 to 75 percent of the stand. This method allows forests to regrow and be harvested again on intervals of 10 to 40 years.

In 1994, there were 117 parcels totaling 13,600 acres classified under the tree growth tax law. Of the total 13,600 acres, 5,400 acres were hardwood, 5,000 acres mixed-wood and 3,515 soft wood.

BETHEL,
MAINE
TREE GROWTH



LEGEND
Tree Growth

FOR GENERAL PLANNING PURPOSES ONLY
SUBJECT TO REVISION BASED ON FURTHER REVIEW

Scale:
1"=6000'

AVCOG

Rare and Endangered Natural Features

The Natural Areas Program has compiled data on Maine's rare, endangered or otherwise significant plant and animal species, plant communities and geological features. While this information is available for preparation and review of environmental assessments, it is not a substitute for on-site surveys. The quantity and quality of data collected by the Natural Area Program are dependent on the research and observations of many individuals and organizations. In most cases, information on natural features is not the result of comprehensive field surveys. For this reason, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features in any part of Maine. The Natural Areas program has identified the following rare plant species. They were or may be found in Bethel.

<i>Aristida basiraea</i> :	Branching Needle-Grass
<i>Clematis occidentalis</i> :	Purple Clematis
<i>Impatiens pallida</i> :	Pale Jewel-Weed
<i>Lycopodium sabiniaefolium</i> :	Ground Fir
<i>Potamogeton confarvoides</i> :	Pondweed

Scenic Resources

Both residents and visitors enjoy the mountainous and pastoral scenery available in Bethel and the surrounding area. The scenic resources of an area are probably the most difficult to evaluate objectively. While there are many approaches to conducting a scenic assessment, the "professional approach" was employed for the Bethel Scenic Assessment. The assessment considered only those views and view sheds visible from public roadways and not from mountain tops or hiking trails. Some sites were not evaluated because the view was too fleeting or the view was directly in line with the road. The sites evaluated were all ones that would be seen at an angle from the road.

The scenic assessment used the following indicators. Seven scenic indicators are the basis of this rating process. When multiples of these indicators are found together, the sites are considered high scenic quality. These indicators are: landform, open land, special scenic features, views of water, land use, vegetation, and overall composition and effect. While the specific scenic indicators are partially based on topographical analysis, assigning specific numerical values was subjective. Once the indicators and values were developed, they were used evenly with all the sites. The sites' numerical ratings were added and ranked according to their scores. Sites were broken down into two categories based on the total number of points. These were the sites with the highest scores, and all others and were identified on the Scenic Sites map.

TABLE I-30
Scenic View Locations

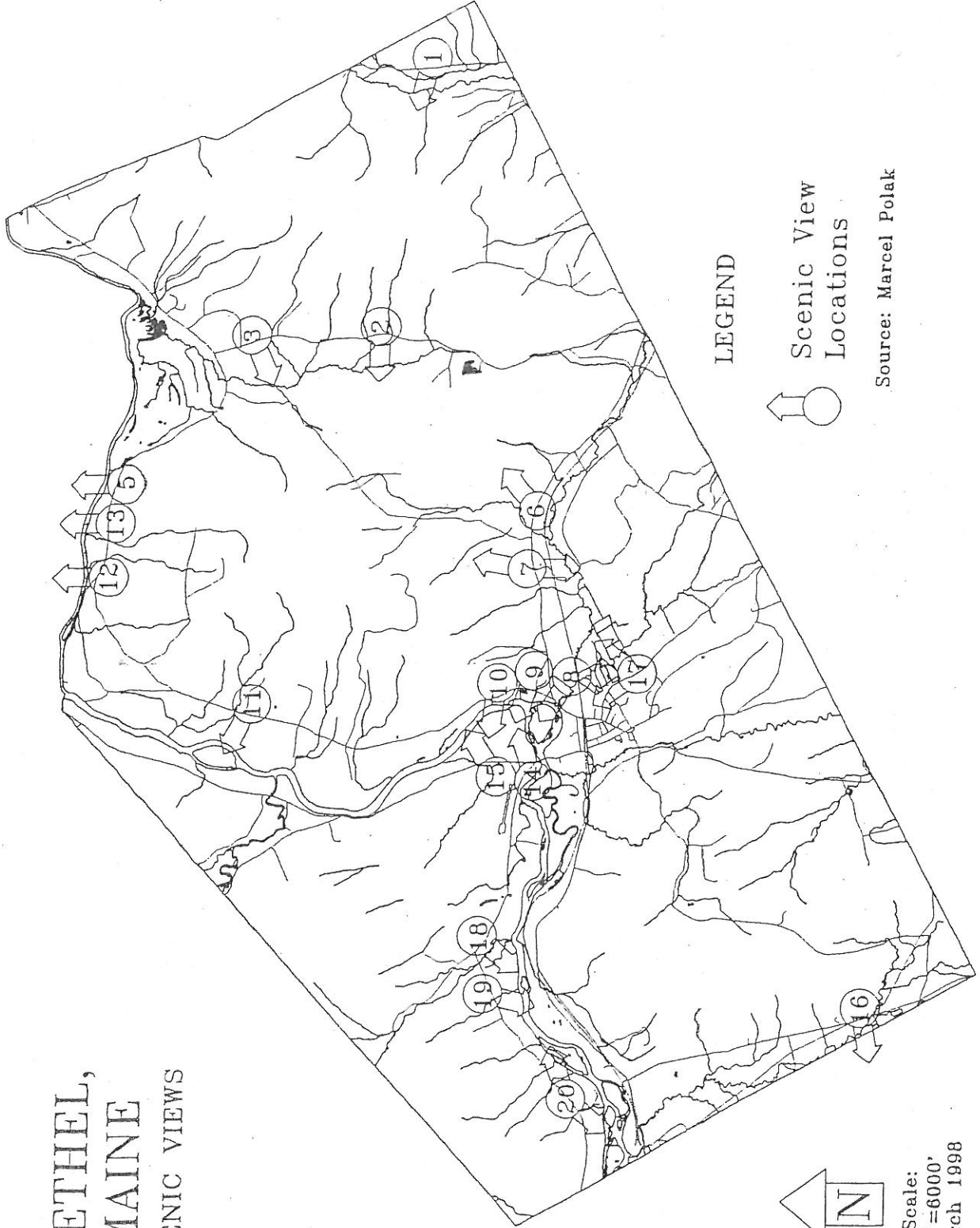
# ¹	Location	Score ²
1.	Route 232 to Wilber Mtn.	50
2.	E. Bethel Road, Ledges - Walkers Mtn.	50
3.	E. Bethel Road, Chandler Hill	45
4.	Middle Intervale Road, Hasting Farm area	48
5.	Middle Intervale Road, Olson Farm	46
6.	Rte. 26 S. To Walkers Mtn.	49
7.	Rte. 26 Blake Farm Fields N-S	42
8.	Rte. 26 entering Bethel Village	84
9.	Middle Intervale Road - Penley Farm	82
10.	Middle Intervale Road - W to Mtns.	67
11.	Middle Intervale Road - Carter Farm to Mtn.	78
12.	Middle Intervale Road S.	49
13.	Middle Intervale Road	46
14.	Rte. 2 Mayville	40
15.	Rte.2 Schools Farm W.	47
16.	Flat Rd. W to Pickett Henry Mtn.	82
17.	Vernon Street Fields N to Mtn.	66
18.	NW Bethel Road	37
19.	NW Bethel Road	49
20.	NW Bethel Road	40

¹ # of scenic site corresponds to the scenic site map.

² Based on a total possible score of 100.

Scenic View Locations based on work by Marcel Polak

BETHEL, MAINE SCENIC VIEWS



LEGEND

Scenic View
Locations

Source: Marcel Polak

Scale:
1" = 6000'
March 1998

LAND USE AND DEVELOPMENT PATTERNS

Findings

- ❖ Most new residential development has occurred away from public services.
- ❖ The traditional Bethel village is an outstanding example of a New England Village.
- ❖ The demand from commercial development adjacent to Route 2 will continue.
- ❖ Completion of the Bethel Station Project as originally planned will add some 200,000 square feet of retail and office space to Bethel Village.

Introduction

A major element of the comprehensive plan is an analysis of the use of land and development patterns. By analyzing past and present development patterns, we can gain insights into community functions, understand spatial relationships, examine past and current priorities, and set future direction. Current land use patterns and future development trends are cornerstones in the development of policies and strategies which will manage future development characteristics of the community.

Bethel occupies approximately 43,000 acres of land and water with only 2 percent being surface water. The town's traditional land use patterns developed around sources of water power. The construction of the railroad in the mid 1800's lead to Bethel Hill becoming the primary center of town. While the town has maintained much of its traditional development patterns, new commercial development associated with services has begun to alter those patterns. Bethel's shift from traditional resource-based economy to a recreation and tourist-based economy is reflected in its emerging development patterns.

Woodland/Forest

Most of Bethel's land area is forested. Of the approximately 43,000 acres of land in Bethel, it is estimated that 36,000 acres are forested. Some 14,000 acres of forested land are registered in the Tree Growth Program. Forest land in Bethel is comprised primarily of mixed and soft wood types with smaller amounts of hard wood types. Based upon interviews with owners of commercial forest land, it is their intent to continue current management objectives for commercial forest use and harvesting at appropriate times.

The forest lands of Bethel are an important resource providing raw materials for the region's pulp and paper and lumber industries. In addition, the forest land is an important factor in Bethel's character, provides habitats for various species of game and non-game wildlife and is important to maintaining clean cold surface water. For the planning period, commercial forest land will remain as such. Small amounts of the lower value forest land accessible from existing public roads will be converted to rural subdivision development.

Agricultural Land Use

Bethel's early development was based on agriculture. The rich soils along the flood plains of the Androscoggin and lesser streams attracted farmers to these locations and are still the primary agricultural locations today. Twenty years ago, there were approximately 3,400 acres of land in agricultural use with the majority hayland. Today, the flood plains of the Androscoggin are still the primary agricultural locations used for row crops, corn silage and hay. Three operating dairy farms and a row crop farm comprise the town's commercial agriculture. Since the 1970's, there has been a decline in the total amount of land used for agriculture. This has been the result of the abandonment of the less productive lands which are reverting to woody vegetation. Because much of the agricultural land is also flood plain there has not been significant loss due to residential development.

Many factors will contribute to the continued presence or loss of agriculture over the planning period. These include agricultural economics, interest in continued farming, local tax rates and development pressure. Because of the location of the best farm land in or adjacent to flood plains, much of this land has low development potential. The exception is the farm land located adjacent to Route 2 in Mayville.

Industrial/ Manufacturing

Land use devoted to manufacturing is found adjacent the major transportation corridors, Routes 2 and 26. These sites are also close to the rail line. These industries' raw materials are logs and wood and require highway access that can be used on a year-round basis. The P.H. Chadbourne Co. site is adjacent to Route 26 between Bethel Village and Greenwood. Other wood related mills including Bethel Furniture Stock and Kendall Dowel Mill and J.A. Thurston are located in West Bethel and accessible by Route 2. More recent manufacturing related land use has developed on land adjacent to the airport.

Institutional/Public Land Use

Institutional and public land uses include schools, municipal, state and federal owned property, churches, and other public or semi-public uses. The largest number of such uses is found in Bethel Village including Gould Academy, Crescent Park School, post office, municipal offices, treatment plant, fire station, the commons, library, the Bethel Historic Society, Bethel Area Health Center and several churches. These uses are important to Bethel Village attracting year-round and seasonal residents.

Public land uses in East Bethel include a grange hall and church. In West Bethel, there is a post office, a church and the West Bethel Children's Center.

The Telstar Regional High School on a 54-acre site is located off Route 26 approximately 1 ½ miles south of Bethel Village.

Commercial/Service Land Use

Bethel has both historic commercial development patterns as well as movement away from traditional locations. The traditional Bethel Village commercial area, defined as Main Street from Railroad Street to Broad Street, contains a wide range of commercial and service land uses. Uses range from grocery to banks to speciality shops and is currently the center of retail and service activity. Individual lots adjacent to Main Street are small, generally in the 12,000 to 15,000 square foot ranges with less than 100 feet of street frontage. The traditional Bethel Village commercial area has limited vacant land available for development thus conversion of some residential properties to commercial uses has occurred. This trend is expected to continue. A secondary smaller village center is found in West Bethel.

In 1994-1995, the Bethel Station Project adjacent to the traditional Bethel Village was approved. If completed as originally planned, this 70-acre mixed use project will contain 160,000 square feet of retail space, 27,000 square feet of office space, 120,000 square feet of hotel, 23,000 square feet of restaurant, a 7,300-square foot theater and a 2,400-square foot train station. Infrastructure improvements are under way to serve this mixed use development. As of the summer of 1997, the theater with a restaurant, the train station/information center and 14,000 square foot office building have been completed.

Route 2 in Mayville and the Sunday River Road have become attractive locations for highway commercial development over the past 10 years. Commercial land uses in these locations are lodging, services and convenient stores primarily associated with the skiers on route or returning from Sunday River and other recreation. Route 2 is a primary east-west corridor. Highway commercial development adjacent to Route 2 west of Bethel Village has also occurred, however, not to the degree east of the Village. Route 26 currently contains scattered commercial development.

Over the planning period, additional demand will develop for commercial development adjacent to the Routes 2 and 26.

Residential Land Use

Residential development patterns in Bethel can be placed into one of three categories: traditional compact residential, low density or scattered residential and subdivision residential.

Traditional compact, year-round residential land uses are found primarily in and next to Bethel Village. Served by public water and sewer, lots in the Bethel Village range from 10,000 to 30,000 square feet. Traditional compact residential development is found adjacent to Broad Street, Mason Street, Chapman Street, Vernon Street, Kilborn Street, Tyler Street, High Street, Elm Street, Summer Street, and Mechanic Street. West Bethel, although much smaller than Bethel Village, also exhibits traditional compact development.

Scattered residential development means single family development adjacent to long time public roads. The town requires a minimum lot area of 20,000 square feet for those locations not served by public sewer and not in an area regulated under the Shoreland Zoning Ordinance. Therefore, in some locations, scattered residential development can appear compact, and in other locations, this type of development is spread out by larger lots. Scattered residential development can be found on the majority of public roads. Since 1990, this type of residential development has been the most prevalent.

Subdivision residential includes those areas which are approved for subdivision development whether or not lots have been built on. Subdivision development since the late 1980's has been located in the rural areas of town not served by public water and/or sewer. In the majority of subdivisions, the lot sizes have far exceeded the 20,000 square foot minimum requirements. Recent subdivisions include Bird Hill Estates, Chestnut Knoll, Dole Woods, Chandler Hill, Haily Estates, Androscoggin Acres, Newton Highlands, Johnson Park, Woods Edge and Taylor Woods. Approximately 50 percent of the lots in these subdivisions have been developed.

In addition to the traditional single lot subdivisions, several multi-unit type developments in condominium-type ownerships have been approved. These include Eden Ridge (52 units), River Bend (18 units) and Dunton (8 units).

Bethel Village Land Use

Bethel Village is a gem of Oxford County. It serves as the business and service center for the Bethel region. Land uses include retail, service, public, education and residential. These land uses have been combined to create a village development pattern only wished for in most communities. Village residents, students and visitors can walk to most services creating a pedestrian oriented environment. Land use lining Main Street from Railroad to Broad is characterized by retail, service and public uses. Forming the westerly side of Bethel Village is the Broad Street Historic District, Church Street with its historic architecture and the campus of Gould Academy. To the north of the traditional village is the developing Bethel Station Project which is being developed to encourage pedestrian movement from the traditional village to the Project. The southern portion of the Village is comprised of residential neighborhoods including the Crescent Park School.

West Bethel Village

West Bethel Village located adjacent to Route 2 as it nears Gilead is much smaller than Bethel Village and has not experienced the recent growth of Bethel Village. Served by the West Bethel water system the village contains the West Bethel Union Church, the West Bethel Children's Center, West Bethel Post Office and several retail and service businesses. In addition, several wood related mills are located here.

East Bethel Village

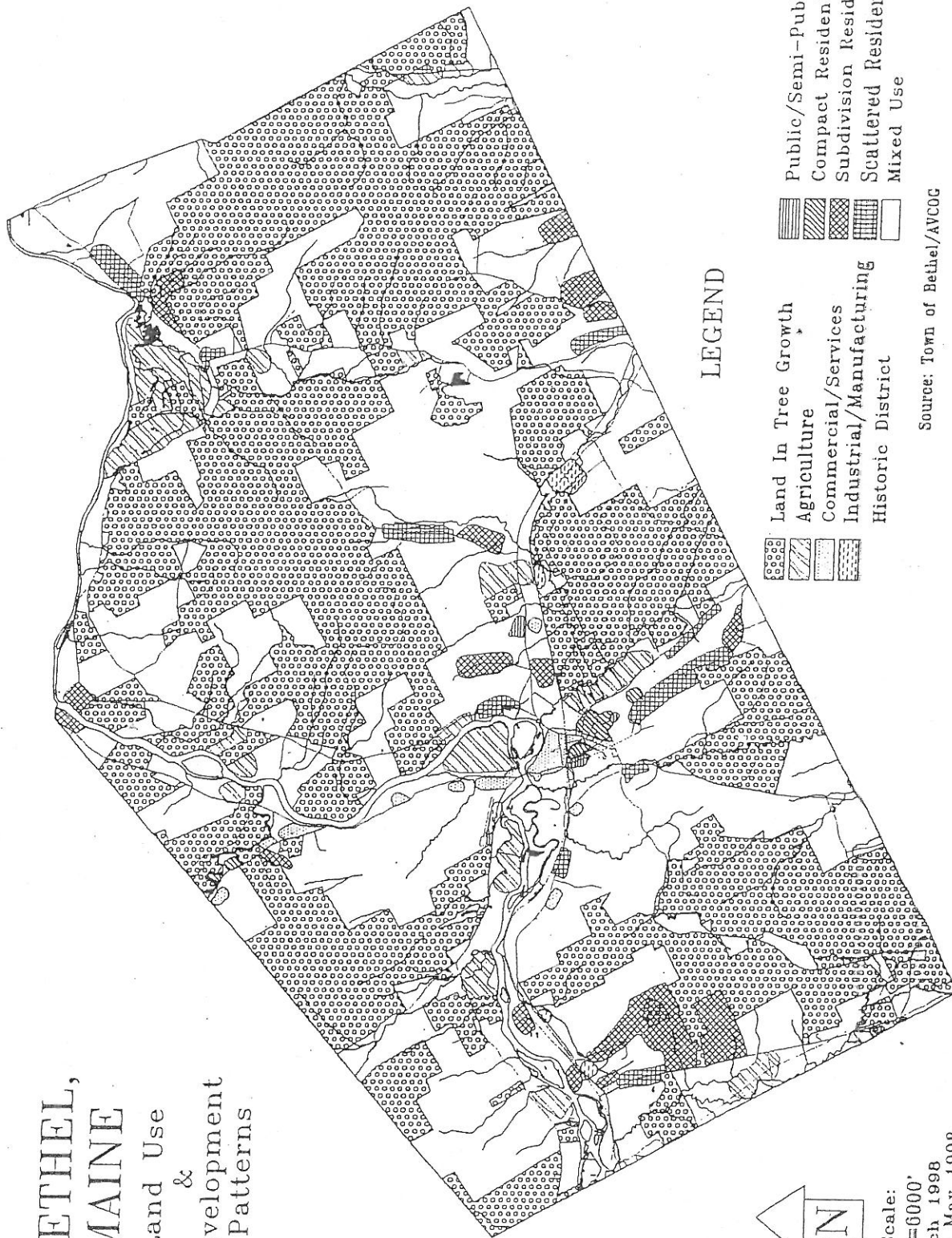
East Bethel Village located at the junction the East Bethel Road and Middle Intervale Roads developed during the early farming period of the town. Today, the village contains a church and grange hall and a number of residences.

Land Use Trends

Since the early 1980's Bethel has seen significant growth in service and retail land use. This growth has been primarily associated with the recreation industry and the Sunday River Ski Resort in Newry. Because access to Sunday River is via Route 2 business development, conversion and expansion have been centered adjacent to Route 2 and the Sunday River Road. While the Bethel Station Project could add some 340,000 square feet of retail and service space to the town's inventory, a demand will continue for highway retail and service space along Route 2.

From 1990 through July of 1997, there has been 90 new stick built single family homes, 37 manufactured homes and seven seasonal homes added to the town's housing supply. In addition, 8 multi-unit condominium type ownership dwellings and the Bethel Park Apartments were constructed. The vast majority of these dwellings have been located in the rural portion of town.

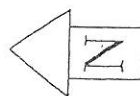
BETHEL, MAINE Land Use & Development Patterns



LEGEND

- Land In Tree Growth
- Agriculture
- Commercial/Services
- Industrial/Manufacturing
- Historic District
- Public/Semi-Public
- Compact Residential
- Subdivision Residential
- Scattered Residential
- Mixed Use

Source: Town of Bethel/AVCOG



Scale:
1"=6000'
March 1998
Revised May 1998

FOR GENERAL PLANNING PURPOSES ONLY
SUBJECT TO REVISION BASED ON FURTHER REVIEW

AVCOG

Land Use Ordinances

Bethel's current Comprehensive Plan was adopted in 1986. The 86 Plan contained a recommendation that the town should adopt a land use plan. This recommendation was not carried out. The Town of Bethel has adopted the following land use related ordinances: shoreland zoning, subdivision, site plan review, sign ordinance, street design and construction standards, private road and construction standards and flood plain management. The town has an appointed planning board, planning assistant, board of appeals, and part-time certified code enforcement officer.

Shoreland Zoning Ordinance

Bethel adopted an amended Shoreland Zoning Ordinance in 1992. The ordinance was found by the Maine Department of Environmental Protection to be in compliance with the Mandatory Shoreland Zoning Act.

Subdivision Ordinance

The current Subdivision Ordinance was adopted in 1989 with the most recent amendment in 1997. The town has defined a subdivision consistent with that of the State Subdivision Law. The Ordinance contains a three-step review process and requirements for subdivision approval. While the ordinance has provided the planning board with the basic tools to review proposed subdivisions the ordinance could be improved by the addition of several submission requirements and performance standards.

Flood Plain Ordinance

The Town participates in the National Flood Insurance Program and has enacted a Floodplain Management Ordinance. The Ordinance is administered by the Planning Board.

Site Plan Review Ordinance

The Site Plan Review Ordinance most recently amended in 1997 applies to commercial, retail industrial, recreational buildings, multi-family, campgrounds, mobile home parks and lodging facilities. The ordinance contains a number of performance standards with some access management standards. The ordinance could be improved by the additions of more specific performance standards.

Sign Ordinance

The Sign Ordinance regulates the number and sizes of signs. As of June 1997, no new sign may be internally lit.

Street Construction Standards

Standards for both public and private streets have been adopted. These standards contain design and geometric standards.

Ordinance Effectiveness

Bethel's land use ordinances have been amended as needed to address continued development. The town through its planning board and planning staff has managed development to the extent provided by existing ordinances. As development reviews become more complex, existing ordinances will be tested.

FISCAL CAPACITY

Findings

- ❖ Property taxes are the largest source of town revenues.
- ❖ The town's mil rate remained the same between 1992 and 1996.
- ❖ In terms of adjusted dollars for inflation, total municipal expenditures have remained stable between 1991 and 1996.
- ❖ The rate of growth in property valuation has been approximately the rate of inflation.

Introduction

A community's fiscal capacity refers to its ability to meet current and future financial needs through public expenditures. As Bethel develops over the next ten years, there will be a need to maintain and/or improve various municipal services, facilities and equipment. Demands could include new or improved roads, public facilities, public water and sewer facility improvements and/or recreation areas. The comprehensive plan will make various recommendations requiring public investment. These recommendations must be considered in light of Bethel's fiscal capacity or its ability to finance such improvements.

Revenue

The largest source of revenue for the town is from property taxes. Table I-31 lists the local valuation, property tax revenue and the town's mil rate for fiscal years 1991 to 1996.

TABLE I-31 Valuation and Mil Rate Bethel Fiscal Years 1990-1996						
Fiscal Year	Assessed Valuation (Local)	Annual % Change	State Valuation	Annual % Change	Mil Rate	Property Taxes
1991	129,666,900		129,450,000		0.01350	1,720,856
1992	127,547,200	1.6	136,050,000	5.1	0.01475	1,881,311
1993	129,468,900	1.5	132,650,000	(2.5)	0.01475	1,909,666
1994	133,650,000	3.2	129,850,000	(2.1)	0.01475	1,971,346
1995	136,615,200	2.2	139,000,000	7.1	0.01475	2,015,074
1996	143,593,700	5.1			0.01475	2,118,007

Source: Town of Bethel Annual Reports

Between fiscal years 1991 and 1996, the local assessed valuation increased by approximately \$14 million or 11 percent. The largest increase in valuation occurred between 1995 and 1996 with approximately \$7 million. The increase in valuation can be attributed to commercial development. The 11 percent increase in valuation over the six-year period approximated the decrease in the value of the dollar based on the consumer price index (CPI). This has allowed the mil rate to remain steady over the period. The total assessed value of Bethel consists of 95 percent land and buildings and 5 percent personal property. There is approximately \$3.7 million real property exempt from taxation. The state valuation of Bethel increased from \$129 million in 1991 to \$139 million in 1995 representing an 8 percent increase.

The mil rate remained unchanged between the years 1992 and 1996. The amount of property taxes assessed from 1991 to 1996 increased by approximately \$400,000. This represents an increase of approximately 23 percent over the six-year period. Considering the consumer price index, the amount of property taxes assessed in adjusted dollars was approximately the same in 1996 as in 1992.

Other major consistent sources of revenues are excise and charges for services. Excise taxes collected increased from \$175,000 in 1991 to \$235,000 in 1996. Excise tax collection increased each year between 1991 while a general municipal trend was a decline in excise tax collections between 1991 and 1993 due to a weak economy. Revenues from charges for services increased by 22 percent or \$20,000 over the six-year period.

Another significant source of revenue is intergovernmental. These are primarily comprised of state revenue sharing dollars, local road assistance and general assistance reimbursement. The largest is from state revenue sharing.

TABLE I-32
Municipal Revenue
Bethel

Fiscal Year	1991	1992	1993	1994	1995	1996
Property Taxes	1,668,956	1,885,383	1,898,433	1,937,879	2,136,232	2,235,902
Excise Taxes	174,718	179,894	194,734	204,115	235,259	235,161
Intergovernmental Revenues	205,265	232,332	303,569	294,476	241,841	203,336
Charges for Services	89,113	59,405	58,622	61,205	94,181	108,717
Other	59,741	54,768	64,672	91,351	54,410	149,812
TOTAL	2,242,793	2,411,782	2,520,030	2,589,017	2,786,755	2,938,143

SOURCE: Town of Bethel Annual Reports

Expenditures

Total municipal expenditures increased by approximately \$360,000 or 15 percent in the six-year period between 1991 and 1996. Considering the CPI for adjusting dollars for inflation, municipal expenditures were approximately the same in 1996 as they were in 1991. The largest expenditure item was for education which in 1996 accounted for 50 percent of the town's total expenditures. Between 1991 and 1996, this budget item increased by some \$300,000 or 27 percent. Other major expenditure items are for public works, health and sanitation and public safety.

TABLE I-33
Significant Expenditures
Bethel
Fiscal Years 1991 - 1996

Category	1991	1992	1993	1994	1995	1996
General Government	141,296	138,669	146,637	155,546	174,297	188,576
Protection	166,187	185,982	177,541	187,600	193,230	203,875
Health & Sanitation	202,201	105,026	162,146	198,573	227,860	242,838
Public Works	263,279	273,642	269,881	217,206	229,037	254,975
Municipal Building	23,928	22,854	23,670	29,164	24,316	30,226
Leisure Services	29,711	30,241	16,392	17,399	19,742	32,415
Education	1,070,748	1,100,903	1,128,797	1,129,216	1,257,139	1,369,721
County Tax	83,119	99,676	90,473	89,539	87,000	92,157
Overlay					39,319	13,388
Debt Service		18,235	18,235	182,350	18,235	18,262
Improvement Projects	261,569	13,950	78,020	309,687	111,326	168,259
Unclassified	190,947	169,057	169,238	171,950	161,221	180,273
TOTAL	2,431,012	2,158,235	2,281,512	2,524,115	2,542,236	2,794,902

Source: Town of Bethel Annual Reports

Capital Projects Fund

The town maintains part of the general fund equity for capital projects. As of June 30, 1996, this fund contained approximately \$40,000. Capital project funds have been established for equipment, road construction, sidewalks, fire hydrants, town line, conservation, Davis Park, fire station, records restoration and ambulance.

Municipal Debt

As of the end of fiscal year 1996, the Town of Bethel had an outstanding long-term debt of approximately \$1,396,000. This debt consists of primarily FmHA loans for the waste water disposal system. The amount of debt allowed a municipality is governed by state law; the law limits a town's outstanding debt to 15 percent of the town's last full state valuation. This limit is reduced to 7.5 percent if the debt for schools, sewer, airport, water and special-district purposes are excluded. Based upon Bethel's state valuation, the maximum debt under state law, including debt associated with special districts, Bethel could carry what would be approximately \$20 million. Currently, Bethel has an outstanding municipal debt of approximately \$1,369,000. Bethel has significant borrowing power, based on its state valuation, to fund major capital projects.

Fiscal Capacity

A community's fiscal capacity is based upon the ability to pay normal municipal operating costs, including education, public works, public safety and finance major capital expenditures compared with the ability of the tax base and other revenue sources to support such expenditures. In considering Bethel's capacity to fund normal municipal services and capital projects, two areas are important. First, in recent years annual increases in valuation have been slightly above the rate of inflation. A rate of increase in valuation greater than the rate of inflation would allow new expenditures to be implemented without a mil rate increase. Bethel does, however, have significant borrowing power based on the maximums established in state law. Future borrowing for capital expenditures should be based upon projected valuation increases and their impacts upon individual taxpayers.

