RUMFORD COMPREHENSIVE PLAN

Section I

Inventory & Analysis

Prepared by

The Rumford Comprehensive Plan Committee

and

Androscoggin Valley Council of Governments

November 1998

The Comprehensive Plan, presented in two sections--the Inventory & Analysis and Goals, Policies, & Strategies--should serve as a guide for the community and town officials as they make decisions about the future of Rumford. 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 Rumford 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 specific proposals.

This Plan is the result of the efforts of the Comprehensive Plan Committee and the citizens of Rumford that provided ideas during the planning process.

TABLE OF CONTENTS

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 Androscoggin Valley Council of Governments, collected, organized, and analyzed information about Rumford. 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 Rumford. 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. Much of the characteristics concerning Rumford'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 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 Rumford based on the best information available in 1997 and 1998. 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 Rumford and provided the necessary direction for the Comprehensive Plan Committee to identify issues and implications and formulate town goals and policies.

HISTORIC AND ARCHAEOLOGICAL RESOURCES

Findings and Implications

- **Rumford contains seven structures and a district listed on the National Register of Historic Places.**
- **Registered properties are provided no protection by such registration from activities undertaken by their owners with private financing.**
- **In addition to the structures listed in the National Register of Historic Places, Randall H. Bennett in his book, Oxford County, Maine, A Guide to its Historical Architecture, identified a number of other structures representing important local historic architecture.**

Historic Background

To understand the founding of Rumford, it is necessary to recognize that the present day Concord, New Hampshire, was originally called Pennacook (for the Indians who lived there). It was incorporated as the township of Rumford in 1733 (for the town in England that was home of the original Pennacook settlers) and in 1765 it became Concord.

The beginnings of Rumford, Maine can be traced back to 1652 to a boundary dispute between the Massachusetts Bay and New Hampshire colonies. This complicated issue was not settled for more than 100 years and left a number of citizens of the present day Concord, New Hampshire, deprived of their land holdings. These people, who become known as the "sufferers" because of the loss of their lands, eventually petitioned the Massachusetts General Court for a tract of uninhabited land in the District of Maine. The request was finally granted in 1774, and the area was settled as New Pennacook Plantation, the name it held until its incorporation as Rumford in 1800.

The town was settled as an agricultural and lumbering community and remained as such for more than 100 years. In 1901, the first paper machine was started at the Oxford Paper Company. Hugh J. Chisholm saw the Rumford Falls as an opportunity to produce power, and it was that power that lead to paper making in Rumford. The paper industry transformed the agricultural community of 898 people in 1890 to an industrial center of almost 7,000 people twenty years later in 1910. Rumford's population peaked in 1940 with approximately 10,500 residents.

Historic Structures

There is a growing recognition between citizens and governments across the country of the value of a community's historic resources. Historic buildings provide insight into a community's past and help answer broader questions about history. Serving as functional elements of a community, maintained historic buildings can conserve resources, time, energy and money while they sustain a sense of community character.

The National Register of Historic Places is an official list of those historic resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register includes those districts, sites, buildings, structures and objects that are significant to American history, architecture, archaeology, engineering and culture. In addition to the recognition that listing provides, registered properties are afforded a measure of protection from development projects funded, licensed or executed by the federal government. Registered properties are provided no protection by such registration from activities undertaken by their owners with private financing.

Rumford contains seven structures and a historic district listed in the National Register of Historic Places. The structures listed in the national register include the following.

Deacon Hutchins House:	Located on Route 5, this Federal period two-and-one-half story residence was built in 1818 by Hezekiah Hutchins.
Mechanics Institute:	This four-stories building on Congress Street was designed by a Boston architectural firm under guidelines established by Hugh Chisholm. The Institute was organized by the Rumford Falls Power Company as a benevolent and educational association for mill workers.
Municipal Building:	The Rumford Municipal Building on Congress Street constructed in 1915-17 is the most sophisticated example of its type in Oxford County. This two-and one-half storied brick structure with granite trim displays modillioned entrance portico in a modified Doric order and large Palladian windows with decorative swags above. A wall of an interior courtroom is painted with a large scale mural "Birth of Law" by the noted Monmouth artist Harry Cochrane.
Rumford Falls Power Company Building:	The Rumford Falls Power Company Building, also on Congress Street, was constructed in 1906 and designed by the well known New York architect Henry J. Hardenbergh. It was the headquarters of the firm largely responsible for growth in Rumford during the period. The building is characterized by a highly exuberant exterior and a rich classical interior.

Rumford Public Library: Constructed in 1903 and expanded in 1969, the library is a brick structure whose recessed arched entrance conveys a Romanesque Revival quality.

Rumford Point Congregational Church: Constructed in 1864-65, this church displays tall multi-paned windows, a double-doored entry capped with a distinctive triangular pediment, and a belfry pierced with round-arch louvered openings. The interior walls are painted with trompe d'oiel frescoes.

Strathglass Building: Constructed in 1906, this four-story (fourth story added in 1931) has colossal engaged Ionic columns of limestone which support massive entablature with a highly elaborate cornice. This building on Congress Street is a county landmark of architectural significance.

Strathglass Park Historic District: Designed to provide affordable housing in the 1900s Strathglass Park was built by Rumford Reality Company organized by Hugh Chisholm. Many of the structures were designed by the noted New York architect Case H. Gilbert. This turn of the century residential development contained 186 dwelling units consisting of brick duplex and wooded houses. Today, the structures are privately owned and remain architecturally significant.

In addition to the structures listed in the National Register of Historic Places, Randall H. Bennett in his book Oxford County, Maine, A Guide to its Historical Architecture, identified a number of other structures representing important local historic architecture. These included the following.

Calvin Howe Farmstead (Orchard Hill):	Route 5
Samuel Lufkin Farmstead (Silver farm):	East Andover Road
Phineas Wood House:	East Andover Road
Center Meeting House (Congregational Church):	Rumford Center Village
Oliver Pettengill Farmstead:	Route 2
Alexander Kimball House:	Rumford Point Village
Lyman Rawson House:	Rumford Point Village
Kimball Store:	Rumford Point Village
1824 House:	Rumford Point Village
Moses F. Kimball House:	Rumford Point Village
Porter Kimball House:	Rumford Point Village
Monroe House:	Rumford Point Village
Kimball School House:	Rumford Point Village
Ebenezer Virgin House:	Rumford Corner Village
Peter C. Virgin House:	Rumford Corner Village
Jeremiah Wardwell House:	Rumford Corner Village
Edward Small House:	Route 232

Moody House:	Route 232
Jonathan A. Bartlett House:	South Rumford Road
Cotton Elliot Farmstead:	South Rumford Road
Odd Fellows Block:	Congress Street
Continental Paper Bag Co. Mill:	Lowell Street
Prospect Avenue and Franklin Street Houses:	Prospect Avenue/Franklin Street
Universalist Church:	Franklin Street at Plymouth Avenue
St. Uthanasius-St John Church:	Maine Avenue at Knox Street
Baptist Church:	Plymouth Avenue at Washington Street
St. Barnabus Episcopal Church:	Rumford Avenue at Penobscot Street
Nathan Knapp House:	Washington Street
Chisholm School:	Rumford Avenue
Hancock Apartments:	Hancock Street

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 are found that were deposited thousands of years before written records began in the United States. 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 reports Rumford's industrial features as historic archaeological sites. Besides the inventory of early industrial sites, the Commission has identified a need for a field survey and inventory of the first wave of Anglo-American settlers and the sites of their homesteads, first churches and schools. Surveys to date have identified a total of 36 prehistoric historic archaeological sites in Rumford. Thirty-three sites have been documented along the banks of the Androscoggin River between the Rumford Falls dam to Rumford Point. Three sites are known in the Ellis River Valley. Other potential sites may exist along the remainder of the banks of the Androscoggin River, Ellis River and Swift River.

POPULATION CHARACTERISTICS

Findings and Implications

- ❖ It is forecasted that Rumford's population loss will be reversed over the ten-year planning period.
- ❖ Rumford's population is older than that of Oxford County and the State.
- ❖ Migration versus natural increase is the major component of Rumford's population change.

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, Rumford can plan for future demands on community services as the result of population change.

Population Trends

Rumford, like most industrial centers in Maine, has experienced population decline since the 1960s. Several factors have contributed to this trend including industrial modernization resulting in a smaller workforce and movement to the more rural communities. According to the U.S. Census, Rumford's population decreased by 12% from 1970 to 1980 and continued to decline by 14% from 1980 to 1990. Rumford's resident population decreased by 2,300 people (or by 24%) from 1970 to 1990. Except for the town of Mexico, surrounding communities experienced increases in their populations from 1970 to 1990. Surrounding communities of Andover (20%), Dixfield (18%), and Roxbury (61%) experienced the largest percentage increases in population from 1970 to 1990.

During the 1980s, Rumford's population declined by 14% (or 1,162 people). Again, surrounding communities, except for the towns of Bethel, Mexico and Peru, experienced population increases. Bethel's population declined by less than 1%, and Mexico's population declined approximately 14% from 1980 to 1990. Peru's resident population fell 1.5%. For the most part, surrounding communities' population continued to increase at a slower pace than during the 1970s. Andover (7.5%), Dixfield (7.7%), and Roxbury (17.2%). 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, it is expected that a decline in the employment opportunities in manufacturing industries, especially at Boise Cascade (Mead), was a significant factor in Rumford's population decline between 1970 and 1990.

Table 1-1 Population Change 1970-1990					
	1970	1980	1990	1970-1980 Percent Change	1980-1990 Percent Change
Rumford	**9363**	**8240**	**7078**	**-12.0%**	**-14.1%**
Andover	791	850	953	7.5%	12.1%
Bethel	2220	2340	2329	5.4%	0.5%
Dixfield	2188	2389	2574	9.2%	7.7%
Mexico	4309	3698	3344	-14.2%	-9.6%
Peru	1345	1564	1541	16.3%	-1.5%
Roxbury	271	373	437	37.6%	17.2%
Oxford County	43457	49043	52602	12.9%	7.3%
Source: U.S. Census 1970, 1980, 1990					

Population estimates prepared by the Maine Department of Human Services (MDHS) show a small decline (4%) in Rumford's population from 1990 to 1995. Surrounding communities' estimates show no dramatic increases or decreases except for Mexico (-6%) and Peru (7.5. %).

Table 1-2 Rumford Estimated Population Change 1990-1995				
	1990	1995 (Est.)	Numerical Change	Percent Change
Rumford	**7,078**	**6,795**	**-283**	**-4.0%**
Andover	953	933	-20	-2.1%
Bethel	2,329	2,335	6	0.3%
Dixfield	2,574	2,550	-24	-0.9%
Mexico	3,344	3,133	-211	-6.3%
Peru	1,541	1,657	116	7.5%
Roxbury	437	430	-7	-1.6%
Oxford County	52,602	53,440	838	1.6%

Source: Maine Dept. of Human Services

Rumford's natural increase in population (the number of births minus deaths) totaled 60 from 1990 to 1996 according to Maine Department of Human Services and Rumford Annual Reports. 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 Rumford.

Table 1-3
Births and Deaths
1990-1996

	Rumford			Oxford County		
Year	Births	Deaths	Natural Increase	Births	Deaths	Natural Increase
1990	113	98	+15	758	537	+221
1991	108	100	+8	660	540	+120
1992	100	76	+24	674	494	+180
1993	104	73	+31			
1994	75	81	-6			
1995	75	77	-2			
1996	67	77	-10			
Total	642	582	+60	2,092	1,571	+521

Source: Town of Rumford

Seasonal Population

Seasonal residential population associated with second home development is not a factor in Rumford's overall population characteristics. The 1990 census reported 33 seasonal homes in Rumford. There are, however, approximately 180 lodging rooms in Rumford which if filled to capacity would increase the population by 360. Resident seasonal population will not become a factor during the planning period.

Seasonal population is, however, a significant factor in the greater Rumford region. To the north, Roxbury's seasonal population exceeds 600, Andover exceeds 400, and to the west, seasonal population increases in Bethel and Newry is in the thousands.

Age Distribution

The greatest percentage of Rumford's population (32%) falls within the 18-44 age group. This age group comprises most of the baby boom generation. The second greatest age category (22%) was the 45-64. This age category also captures part of the baby boom generation. Rumford's

elderly population (19%) is above that of Oxford County (15%) and the State of Maine (13%) for those 65 years or older. The median age of Rumford 1990 population was 37.2 years compared with 33.9 years for Oxford County.

Table 1-4
Population Distribution by Age
1990

	Rumford		Oxford County	
	Number	**Percent**	**Number**	**Percent**
Less than 5	497	6.80%	3792	7.30%
5-17	1497	20.90%	9318	18.00%
18-44	2233	31.50%	20282	39.10%
45-64	1537	21.70%	10518	20.30%
65+	1350	19.10%	7926	15.30%
Total	7078		51836	

Source: 1990 U.S. Census

Educational Attainment

According to the 1990 U.S. Census, Rumford had a larger percentage than Oxford County of population 18 years and older with a high school education. However, Rumford had a lower percentage of its 18 years and older population that had some college, an associate degree, bachelor's degree, graduate degree, or professional degree.

Table 1-5 Educational Attainment 1990 (persons 18 years and older)				
	Rumford		Oxford County	
	Number	Percent	Number	Percent
Less than 9th grade	586	12.4%	3451	8.9%
9th to 12 grades no diploma	516	10.9%	5731	14.8%
High School Graduate or Equivalency	2414	51.0%	17355	44.9%
Some college, no degree	530	11.2%	5385	13.9%
Associate Degree	268	5.7%	2290	5.9%
Bachelor's Degree	295	6.2%	3014	7.8%
Graduate or Professional Degree	122	2.6%	1462	3.8%
Total	4731		38688	

Source: 1990 U.S. Census

Occupation of Residents

The greatest percentage of workers in Rumford (16.2%) was in precision production occupations in 1990 followed by service occupations (13.2%). Occupations in sales increased from 5.9 percent of the labor force in 1980 to 12.8 percent in 1990. Over the same period, machine operators, assemblers and inspector occupation employment dropped from 18.1 percent of the labor force to 10.4 percent.

Table 1-6 Employment by Occupation 1990				
Occupation	**Rumford**		**Oxford County**	
	# of workers	**% of Total Employed Labor Force**	**# of Workers**	**% of Total Employed Labor Force**
Managerial and speciality occupations:				
Executive, administrative & managerial	151	4.7%	1798	8.0%
Professional speciality occupations	316	12.9%	2547	11.3%
Technical sales & administrative support:				
Technicians & related support occupations	130	4.5%	550	2.4%
Sales occupations	369	12.8%	2288	10.1%
Administrative support occupations, including clerical	365	12.6%	2768	12.3%
Service occupations:				
Private household occupations	20	0.4%	82	0.4%
Protective service occupations	45	1.6%	220	1.0%
Other services except above	380	13.2%	2871	12.7%
Farming, forestry, and fishing	66	2.3%	853	3.8%
Precision production, craft & repair occupations	466	16.2%	3646	16.1%
Operators, fabricators & laborers				
Machine operators, assemblers & inspectors	300	10.4%	2756	12.2%
Transportation & material moving occupations	134	4.7%	1139	5.0%
Handlers & equipment cleaners	155	5.4%	1075	4.8%
Employed person 16 years and over	2877		22593	

Source: 1990 U.S. Census

Income

Rumford's 1989 median household income was lower than Oxford County at $21,608. Among the surrounding communities, Bethel had the highest median household income of $27,188 with Peru second at $26,354.

Table 1-7 Median Household Income 1989	
Rumford	**$21,608**
Andover	$23,673
Bethel	$27,188
Dixfield	$24,782
Mexico	$21,671
Peru	$26,354
Roxbury	$25,781
Oxford County	$24,535

Source: 1990 U.S. Census

According to the U.S. Census, per capita income for Rumford matched that of Oxford County in 1989. In 1979, Rumford's per capita income was above Oxford County's and ranked second of the six communities considered. If the declining value of the dollar due to inflation is considered, per capita income in real dollars increased by approximately $425 between 1979 and 1989.

Table 1-8 Per Capita Income 1979-1989		
	1979	**1989**
Rumford	$6,394	$11,448
Andover	$5,528	$11,140
Bethel	$5,545	$12,472
Dixfield	$5,725	$10,796
Mexico	$5,762	$10,557
Peru	$5,849	$10,265
Roxbury	$7,022	$11,885
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 (609 or 21%) is in the $15,000 to $25,000 income range. This is likely the reflection of the high concentration of the service sector occupations and fixed income households. The $10,00 and less income range alone include 600 fixed-income households. Approximately 27 percent or 760 households fall within the $35,000 to $75,00 income bracket. This reflects the paper mill employees and two-worker households.

Table 1-9
Distribution of Households by Income
Rumford
1989

	Count of Households	Percent of Households	Oxford County Percent of Households
Less than $5,000	206	7.1%	4.9%
$5,000 to $9,999	393	13.6%	12.7%
$10,000 to $14,999	410	14.1%	11.2%
$15,000 to $24,999	609	21.0%	22.1%
$25,000 to $34,999	429	14.8%	18.4%
$35,000 to $49,999	445	15.4%	17.2%
$50,000 to $74,999	321	11.1%	10.2%
$75,000 or more	86	3.0%	3.3%
Total	2,899		

Source: 1990 U.S. Census

Population Projections

Year-Round Population Projections

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.

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 reported 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 MDHS, Rumford has experienced a population decline of 280 persons between 1990 and 1995. Out migration was the controlling factor in the MDHS estimate. The known natural increase was 54 and out migration of 337.

Many population forecasting techniques use past trends as an important factor in the forecasting formula. Forecasts for Rumford's year 2008 population, therefore, resulted in an estimated population of 6,800. This was due to the trend in population decline over the past thirty years. It is believed that over the 10-year planning period the rate of natural increase will remain or increase slightly over the 1990 to 1995-rate. It is also expected that the rate of out migration will decline over the period. This is based on the assumption of a stable paper industry and successful efforts in Rumford and the River Valley to expand employment opportunities. Therefore, the plan assumes a reversal in the 30-year tend of population decline and estimates a 2008 population of 7,000.

The aging baby boom generation is reflected in both Rumford's and Oxford County's estimated 2008 population age distribution. The age distribution of Rumford's 2008 population will reflect an increase in the 45-64 age category to 30 percent. The 5-17 age category will decrease slightly by the year 2008 to 22 percent reflecting fewer people in the child bearing ages. The 65-year-old and older category will also increase.

Table 1-10
Population Distribution by Age
2008

	Rumford		Oxford County	
	Number	**Percent**	**Number**	**Percent**
Less than 5	350	5%	3361	6%
5-17	1190	17%	9400	16%
18-44	1820	26%	20610	35%
45-64	2100	30%	16225	27%
65+	1540	22%	9693	16.00%
Total	7000		59289	

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

HOUSING

Findings and Implications

- Between 1990 and 1996, 62 new residential dwellings were permitted.
- The median household size decreased from 2.25 in 1980 to 2.11 in 1990.
- Sixty percent of the dwellings in Rumford were constructed prior to 1940.
- Vacancy rates for lower priced rental units may approach 30 percent.
- Areas of dilapidated and deteriorated housing exist.

Introduction

Local housing characteristics are an essential part of a comprehensive plan. An understanding of housing supply, trends, availability, conditions, and affordability is important in the overall planning process.

Rumford's housing characteristics, largely, reflect the industrial development period of the early 1990s. Sixty-six percent of the dwelling units were constructed before 1940 and nearly half are found in multi-family structures. High density residential areas and well-designed neighborhoods are around the central business areas and industrial area. This design reflects the early industrialization of Rumford and the lack of the influence of the automobile. Housing issues during the planning period will include a surplus of multi-family dwellings and deteriorating structural conditions in some locations.

Housing Trends

According to the 1990 U.S. Census, the number of total housing units in Rumford increased by 128 or 4.0% between 1980 and 1990. This rate of growth was well below that of surrounding communities except Mexico and Peru. This somewhat slow growth rate reflects the population trends and surplus housing supply.

Table 1-11 Number of Housing Units 1980-1990				
	1980	**1990**	**# Change 1980-1990**	**Percent Change**
Rumford	**3180**	**3308**	**128**	**4.0%**
Andover	445	560	115	25.8%
Bethel	993	1266	273	27.5%
Dixfield	845	1081	236	27.9%
Mexico	1423	1459	36	2.5%
Peru	809	843	34	4.2%
Roxbury	382	423	41	10.7%
Oxford County	23796	29698	5902	24.8%

Source: U.S. Census - 1990

New housing starts from the period between July 1990 and June 1996 suggests a continuation of the rate of housing growth that occurred between 1980 and 1990. During the first half of the 1990 decade, building permits have been issued for 44 new residential structures and 18 mobile/manufactured homes for a total of 62 residential structures.

Type of Dwelling Unit

Slightly more than half of the total dwelling units in Rumford are found in 1-unit detached or attached structures. Dwellings in multi-family structures approach 45 percent of the total dwelling units. Manufactured homes/mobile homes comprised 5 percent of the total housing stock. Rumford's history as an industrial center and the nature of the housing that developed around that industry has made the town's dwelling types significantly different from that of Oxford County. Major differences are found in the percentage of multi-family and mobile homes. Rumford has a much greater percentage of multi-family units and much lower percentage of mobile homes. The small percentage of mobile homes reflects the availability of affordable single-family dwellings and rental units in Rumford.

While seasonal or second homes are an important part of Oxford County's housing characteristics, it is not in Rumford. The 1990 Census reported 33 units held for seasonal use.

Table 1-12 Distribution of Housing Units by Type 1990				
	Rumford		Oxford County	
	Number	Percent	Number	Percent
Total	3,308		29,689	
Single-family	1,721	52.0%	20,444	68.9%
Multi-family	1,434	43.4%	5,020	16.9%
Mobile home	153	4.6%	4,225	14.2%
Vacant Housing Units	354	10.7%	9,625	32.4%
# for seasonal or recreational use	33	1.0%	7,922	26.7%
Owner Occupied	1,771	64.2%	15,262	76.1%
Renter Occupied	1,183	35.8%	4,802	23.9%

Source: 1990 U.S. Census

Owner/Renter Patterns

In 1990, the majority of occupied dwelling units (60%) in Rumford were owner occupied. This percentage of owner occupied dwellings remained unchange between 1980 and 1990. The remainder of occupied dwelling units (40%) were renter occupied. The percentage of renter occupied dwelling units was the greatest of any community in Oxford County.

Median Household Size

As with most Maine communities and the nation, the number of persons per dwelling unit declined between 1980 and 1990 from 2.25 o 2.11 in Rumford. It is expected that this trend will continue through the middle of the next decade when household size will stabilize or increase slightly.

Table 1-13 Median Persons Per Dwelling Unit			
	1980	**1990**	**% Change 80-90**
Rumford	**2.25**	**2.11**	**-6.4%**
Andover	N.A.	2.73	
Bethel	2.31	2.2	-4.7%
Dixfield	2.45	2.32	-5.3%
Mexico	2.38	2.22	-8.0%
Peru	2.49	2.42	-2.8%
Roxbury	N.A.	2.5	
Oxford County	2.39	2.25	-5.8%

Source: 1990 U.S. Census

Vacancy Rates

While vacancy rates fluctuate, based on housing demand and economic conditions, vacant housing units are needed to provide housing opportunities within a community. Based on the 1990 Census on April 1, 1990, Rumford had a rental vacancy rate of 11 percent and a homeowner vacancy rate of 2 percent or 430 dwelling units. Since the time of the 1990 Census, vacancy rates for multi-family dwellings are reported to have increased. Interviews with real estate professionals and rental property owners showed that for the lower priced rental units vacancy rates may approach 30 percent. This high rental vacancy rate has lead to a deterioration of units particularly in some structures in absentee ownership. The availability of single-family homes for sale is reported to be adequate to meet current demands.

Based on population forecasts for the ten-year planning period and market demands, it is expected that rental vacancy rates will remain high.

Housing Conditions

The condition of a town's housing stock is an indicator of its economic vitality and important to the perception of community character. Analysis 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 77% of Rumford's housing stock was built before 1950 and 66% was constructed in 1939 or earlier. If it can be assumed that the age of housing stock reflects physical condition, then a significant portion of Rumford's housing stock may be in need of upgrading.

A visual exterior review of residential structure conditions conducted in 1997 found isolated dilapidated conditions and areas of deterioration. These conditions are primary found in multi-family structures. Other areas exhibit fine examples of older well maintained residential structures. In 1997 the town appropriated funds to acquire and remove dilapidated structures.

Table 1-14
Age of Housing Stock/Year Structure Built
1990

	Rumford		Oxford County	
	Number	**Percent**	**Number**	**Percent**
1989- March 1990	48	1.5%	873	2.9%
1985-1988	66	2.0%	2,994	10.1%
1980-1984	112	3.4%	2,327	7.8%
1970-1979	308	9.4%	5,716	19.3%
1960-1969	235	7.2%	2,945	9.9%
1950-1959	170	5.2%	1,860	6.3%
1940-1949	161	4.9%	1,232	4.1%
1939 or earlier	2,174	66.4%	11,742	39.6%
Total	3,274		29,689	

Source: 1990 U.S. Census

Housing Assistance Programs

Information provided by the Maine State Housing Authority identifies four federally-assisted multi-family housing developments in Rumford. The majority (139) of the housing units are multi-family low income elderly units and 24 are for low income.

Table 1-15 Federally Assisted Multi-Family Housing Development (As of March 1994)					
		Total Units		Low Income Units	
Sponsor	Program	Elderly	Family	Elderly	Family
FmHA	515	0	24	0	24
FmHA	515	24	0	24	0
HUD/MSHA	8SR	27	0	27	0
HUD/MSHA	8SR	88	0	85	0

Source: Maine State Housing Authority

Affordability of Housing

Essential to community growth and development is the availability of affordable housing either renter or owner-occupied. The 1990 Census provides information relating to gross rent paid for renter occupied dwelling units. The majority of Rumford residents (90%) paid less than $500 per month for rent. In Oxford County, 85% of the residents paid less than $500. In 1990, Rumford's housing rental prices were below that of Oxford County.

Table I-16 Gross Rent Specified Renter Occupied Housing Units 1990				
	Rumford # of Units	**Rumford % of Total**	**Oxford County # of Units**	**Oxford County % of Total**
Less than $299	588	52%	1,579	38%
$300 - $499	481	42%	1,895	46%
$500 - $749	55	5%	558	14%
More than $750	10	less than 1%	70	2%
TOTAL	1134		4,102	

Rental rates in Rumford have remained in the $60 to $100 per week range since the early 1990s. This has been due in part to the surplus of rental units.

The real estate transfer tax declaration forms provide sales prices of all homes sold including mobile homes. As the table below shows, Rumford's average sale price of residential housing increased from $54,800 in 1990 to $66,230 in 1994. The annual number of homes sold has remained constant over the five years.

Table 1-17 Average Sales Price Residential Structures 1990-1994			
	Rumford		
	Number of Sales	Average Sale Price	Median Sale Price
1990	43	$54,890	$51,415
1991	48	$54,304	$32,000
1992	33	$63,924	$62,000
1993	39	$61,629	$64,000
1994	44	$66,213	$68,750

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 which 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 Rumford was $21,600. As shown in the table below, a household that earned no more than $10,800 would be considered as a very low income household, no more than $17,280 a low income household and no more than $25,920 a moderate income household.

Table I-18 Moderate, Low-Income, and Very Low-Income Households As a Proportion of Total Households Rumford 1989		
Household Income Level	**Income Amount**	**Approximate Percentage of Total Households**
Moderate	$25,920	21%
Low	$17,280	18%
Very Low	$10,800	21%

Source: U.S. Census, 1990

Median household income figures for the years since the 1990 Census are not available for Rumford. 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 is the low-

income (80% of median) and very low-income (50% of median) threshold figures for Oxford County, and amounts which 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 exist in Rumford. However, because of the town's housing stock size, it should be expected that the lower priced dwellings may have need in electrical and/or insulation upgrading.

Future Housing Demand

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

Rumford's population is expected to reach approximately 7,000 by the year 2008. Based upon an average household size of 2.11 persons in the year 2008, a demand will not exist for additional year-round dwelling units. The normal housing demand forecasting methods do not show a housing demand based on the current number of available units. However, an increase in new dwellings will occur. This will be the result of a loss of dilapidated multi-family structures, new single family development and market demand for modern upper scale town houses.

ECONOMY

Findings and Implications

- With some 1,400 employees and an annual payroll of some $85 million, Mead Paper is a major force in the local and regional economy.
- Rumford plays a major role as a service and shopping center.
- Retail sales in Rumford increased by approximately $1.4 million between 1991 and 1996.
- For the first time in recent history, more individuals are employed in service occupations than in manufacturing.

Regional Economic Perspective

Rumford is located along the major east/west corridor, Route 2, between the towns of Bethel and Mexico in northern Oxford County. Rumford 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 Rumford, Mexico, Dixfield, Hartford, Roxbury, Carthage, Woodstock, Peru, Bethel 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 includes a variety of manufacturing, service and retail employers. The largest employers with more than 200 employees include Mead Paper, Sunday River Skiway, School Administrative District #43, and the Rumford Community Hospital.

Total non-farm wage and salary employment from 1992 to 1995 increased approximately one percent. Highlights of employment characteristics of the Rumford LMA are listed.

- From 1992 to 1993, total non-farm wage and salary employment increased by 2.8%.
- From 1994 to 1995, total employment increased by less than 1%.
- From 1992 to 1993, the lumber and wood products, logging and wholesale trade - durable goods had the highest increase.
- Non-manufacturing employment consisted of 69% in 1994 and 70% 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%, finance, insurance and real estate declined 14% while construction increased 14%.
- From 1994 to 1995, total manufacturing increased by less than 1%. 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-21. 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 decreased to 25.9%. Service sector employment grew to the highest percentage of employment at 30.3%. By 1990, retail trade employment consisted of 17.1% of the employment for Oxford County residents.

Table 1-21
Number of Employees by Type of Industry
Oxford County
1980-1990

Industry	1980	Percent of Total	1990	Percent of Total
Agriculture, Forestry & Fisheries	701	3.46%	701	3.10%
Mining	8	0.04%	33	0.15%
Construction	1521	7.51%	2200	9.74%
Manufacturing	8201	40.49%	5843	25.86%
Transportation & Public Utilities	799	3.94%	1114	4.93%
Wholesale Trade	348	1.72%	524	2.32%
Retail trade	2708	13.37%	3855	17.06%
Finance, Insurance & Real Estate	520	2.57%	852	3.77%
Services	4923	24.30%	6835	30.25%
Public Administration	527	2.60%	636	2.82%
Total	22236		24583	

Source: U.S. Census - 1980, 1990

NOTE: Census employment is resident employment or how residents of a given town or country are employed, but not where they are employed. This information is the result of a 20% sample of the county population.

Rumford's Economy

From the turn of the century, Rumford's economy has been driven by the pulp and paper industry. In early 1902, 44 tons of paper were being produced each day at the Oxford Paper Company. By 1906, six paper machines were running and the mill employed 900. Today, the Mead Paper Mill has eight paper machines and one market pulp machine with a total capacity of more than 600,000 tons of paper per year. Over the past 20 years, more than $1 billion has been spent at the mill in capital investments for paper machine rebuilds, environmental improvements, and other mill modernizations. With an annual payroll of $85 million and approximately 1400 workers, the mill is critical to both the local and regional economy.

Besides an industrial center, Rumford serves as a service and retail center for the Dixfield, Mexico and Peru area. With a year-round population of approximately 16,000 in Rumford and five surrounding communities, the town plays an important regional role as a service provider and location of shopping opportunities. While some businesses are directly related to the wood and pulp industries, logging equipment and supplies and trucking, the majority are general consumer oriented including automobile repair, personal services, restaurants, food, banking, and other retail goods.

The Maine State Planning Office tracks data on taxable retail sales derived from sales tax collections. The table below details consumer and total retail sales in Rumford for the years 1991- 1996. Total retail sales are the sums of consumer retail sales and business operating sales that include utility sales and heating oil sold to commercial and industrial establishments. Consumer retail sales do not include these business operating purchases and thus provides a more accurate picture of what is commonly thought of as retail store sales.

Between 1991 and 1996, consumer retail sales increased by 4.1 percent or approximately $1,400,000 not considering the rate of inflation over the period. In terms of real dollars, consumer sales increased by $1,200,000 over the six-year period. Rumford's consumer retail sales increased from 1991 to 1995, however, a 2.5 percent decrease occurred between 1995 and 1996.

In 1995, 40 percent of the total consumer retail sales in the Rumford Economic Summary Area occurred in Rumford. This area includes 14 communities including Bethel, Mexico and Newry.

Table 1-22 Rumford Taxable Retail Sales 1991-1996 (in thousands of dollars)				
	Consumer Sales	**Percent Change**	**Total Sales**	**Percent Change**
1991	34653.2		78894.2	
1992	35072.2	1.2	63214.2	-19.9%
1993	35100.7	0.1	76068.4	20.3%
1994	36399.9	3.7	57305.2	-24.7%
1995	36969.3	1.6	58341.1	-0.1%
1996	36057.3	-2.5		1.9%

Source: Maine State Planning Office

Over the period between 1991 and 1996, food store sales increased the greatest of all consumer retail trade store types. Food stores include large supermarkets to small corner food stores. The sales represent snacks and non-food items only since food intended for home consumption is not taxed. Sales at these stores increased by approximately 33 percent or $1,950,000. The restaurant and lodging group increased by $1,230,000 or 18 percent over the same period. The other retail store group that includes dry good stores, drug stores, jewelry stores, book stores, gift shops, etc. realized an increase in sales of $680,000 or 15 percent. The greatest decline in consumer retail sales occurred in the general merchandise sales group. These stores carry product lines generally carried in large department stores that include clothing, furniture, household durable goods, etc. Sales decreased by some $2,300,000 or 25 percent over the six-year period. The greatest decline occurred between 1995 and 1996 when sales dropped by $1,700,000 or 19 percent.

Consumer retail sales remain constant throughout the year in Rumford. An examination of total consumer retail sales by quarter for the six-year period from 1991 to 1996 shows the first quarter, January-March, accounts for approximately 20 percent of the total annual retail sales. The remaining three quarters fall within three percentage points of each other. This information suggests that Rumford serves as a consistent source of goods throughout the year. Sales associated with the summer and/or winter tourist seasons are not currently a major factor in the local economy.

Table I-23 PERCENT OF TOTAL CONSUMER SALES BY QUARTER				
Year	Quarter			
	1st	2nd	3rd	4th
1991	19.9	25.7	27.7	26.7
1992	20.4	26.5	26.0	27.1
1993	20.8	25.0	26.2	27.5
1994	20.8	24.4	26.5	28.3
1995	20.8	25.3	26.2	27.7
1996	21.6	25.4	26.6	26.4

Labor Force

Since 1992, Rumford's labor force has decline by approximately 170 based on information collected by the Maine Department of Labor. However, since 1994 there has been reported growth of some 110 in the labor force. The decline and growth in the towns 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. Another indication of improving economic conditions is the decline in the unemployment rates since 1994 which peaked at 11 percent. By the end of 1996, the rate had fallen to 6.8 percent of the labor force. While this rate exceeds that of Oxford County (6.2%) and the States (5.4%), there were 200 more individuals in the labor force employed in 1996 than in 1994.

Table I-24 Average Annual Labor Force 1992-1996					
	Town of Rumford		Oxford County		Maine
	Labor Force	Unemployment Rate	Labor Force	Unemployment Rate	
1992	3,104	9.2	28,080	8.2	7.1
1993	3,072	10.5	25,600	9.9	7.9
1994	2,818	11.1	24,630	9.6	7.4
1995	2,898	7.5	25,700	7.1	5.7
1996	2,931	6.8	26,180	6.2	5.4
Change in Labor Force 1992-1996	-173		-1,900		

Rumford's employment patterns reflect the importance of paper industry. In 1990, 22.3 percent, or 640 persons, of the labor force were employed in the manufacture of non-durable goods. However, since 1980, the impacts of modernization and other actions within the non-durable manufacturing sectors is reflective in the fact that in that year, 1,100 individuals living in Rumford were employed in the manufacture of non durable goods.

For the first time in recent history, more individuals in Rumford's labor force were employed in the service sectors than manufacturing. Employment in health services (12% of the labor force) and educational services (7% of the labor force) employed the greatest numbers in the service sector. Employment in health services was greater than that of Oxford County (8.9%) and the State (9.4%). This reflects the presence of the Rumford Community Hospital and other health service providers.

After services and manufacturing, retail trade sectors employ the third largest (17%) percentage of Rumford's labor force.

Table 1-25 Distribution of Labor Force by Industry 1990				
Industry	**Rumford**		**Oxford County**	
	# of workers	**% of Total Employed Labor Force**	**# of Workers**	**% of Total Employed Labor Force**
Agriculture, Forestry	29	1.0%	701	3.10%
Construction	332	11.5%	2200	9.74%
Mining	0	0.0%	33	0.15%
Manufacturing	833	28.9%	5743	25.86%
Durable goods	189	6.6%	3116	13.79%
Nondurable Goods	644	22.3%	2727	12.07%
Transportation	83	2.9%	756	3.35%
Public Utilities	34	1.2%	358	1.58%
Wholesale Trade	41	1.4%	524	2.32%
Retail Trade	484	16.8%	3855	17.06%
Finance Inc. Real Est.	132	4.6%	852	3.77%
Services	852	29.6%	6835	30.25%
Business & Repair	50	1.7%	619	2.74%
Personal Services	122	4.2%	957	4.2%
Health	334	11.6%	2025	8.96%
Educational	198	6.9%	2021	8.85%
Entertainment	59	2.0%	250	1.11%
Other Professional	89	3.1%	963	4.3%
Public Administration	57	2.0%	636	2.8%
Total	2877		22593	

Source: 1990 U.S. Census

As evidenced by the 1990 U.S. Census information on commuting patterns to work, business and industry in Rumford provided significant employment opportunities for Rumford residents. In 1990, 72% of Rumford residents worked in Rumford. In addition, more than 3,000 commuters traveled to work locations in Rumford.

Table 1-26 Distribution of Rumford's Labor force by Place of Employment 1990		
Place of Employment	**Number of Persons**	**Percent of Total**
Rumford	2,077	72.2%
Mexico	208	7.2%
Bethel	99	3.4%
Dixfield	82	2.9%
Andover	34	1.2%
Peru	25	0.8%
Jay	18	0.6%
Farmington	13	0.5%
Other & Not Reported	321	11.2%
Total	2,877	

Source: 1990 U.S. Census

Economic Expectation

The stabilization of employment at the Mead Paper Mill will have a positive impact on the local and regional economies. Expansions in the retail and service sectors due to growth in recreation and tourism in the region will develop over the planning period. The aggressive efforts of the region's municipalities and other organizations will lead to improvements to the economy.

MUNICIPAL SERVICES AND FACILITIES

Findings and Implications

* Municipal services and facilities are adequate to meet current needs and needs of the planning period.

* The quality of municipal services and facilities can serve as an attraction for new growth and development.

Introduction

An examination of Rumford's municipal services and facilities and their capacities are an important element of the comprehensive plan. In addition, the future demands upon the Town's public facilities and services must be considered. Future demands will be based upon projected population and economic growth. This section of the plan reviews current municipal services and facilities and assesses if public facility or service system additions and improvements will be needed to adequately accommodate growth and development over the planning period.

Water Supply

The Town of Rumford is served by the Rumford Water District. Private wells meet the water needs of development found outside the District's service area.

The Rumford Water District, a quasi-municipal district, is overseen by an appointed board of trustees. The District provides water service to residential, commercial, industrial and government entities such as schools. In addition, there are 182 fire hydrants maintained by the District. Presently, 750,000 gallons a day are used. Two new underground storage facilities constructed in 1991, the (Hillside) Blanchard Reservoir and Maple Street Reservoir, have a combined storage capacity of 2 million gallons.

In the early 1990's, a new ground water source was developed to serve as the District's primary water supply source. The Milligan Well in a sand and gravel aquifer between Route 5 and the Ellis River replaced the Mt. Zircon Reservoir as the District's primary source. The Mt. Zircon Reservoir served as the District's primary source since 1913 and is held for emergency supply. The Milligan Well is sized to pump 750 gallons per minute. The town has enacted a Wellhead Protection Ordinance for the Milligan Well. The Scotty Brook Wells serve as secondary source that have a capacity of approximately 600 gallons per minute.

Public Sewer System

The more densely developed areas of Rumford and Rumford Point are served by public sewer systems. The town is responsible for collecting sewerage and pumping it to the treatment plant in Mexico and operated by the Rumford-Mexico Sewer District. Rumford maintains approximately 40 miles of sanitary sewer lines and 17 pumping stations. This District includes the four communities of Rumford, Mexico, Dixfield, and Peru. (Peru has no sewer lines but pays into the District.) The treatment plant is in good condition with an annual average flow approximately 1.25 million gallons per day with future capacity of 2.6 million gallons per day. The sewage treatment plant has sufficient capacity for the planning period. The stormwater system in Rumford is separate from the sewer system.

Rumford maintains a multi-year sewer system improvement/extension program. Funds for extensions are placed in a reserve account annually. When roads are reconstructed, sewer lines are replaced as needed. Sewer system extensions are prioritized by two methods. These include an analysis of the number of houses per lineal mile and areas with growth potential for industrial, commercial or residential uses. The final decision on sewer extensions rests with the Board of Selectmen.

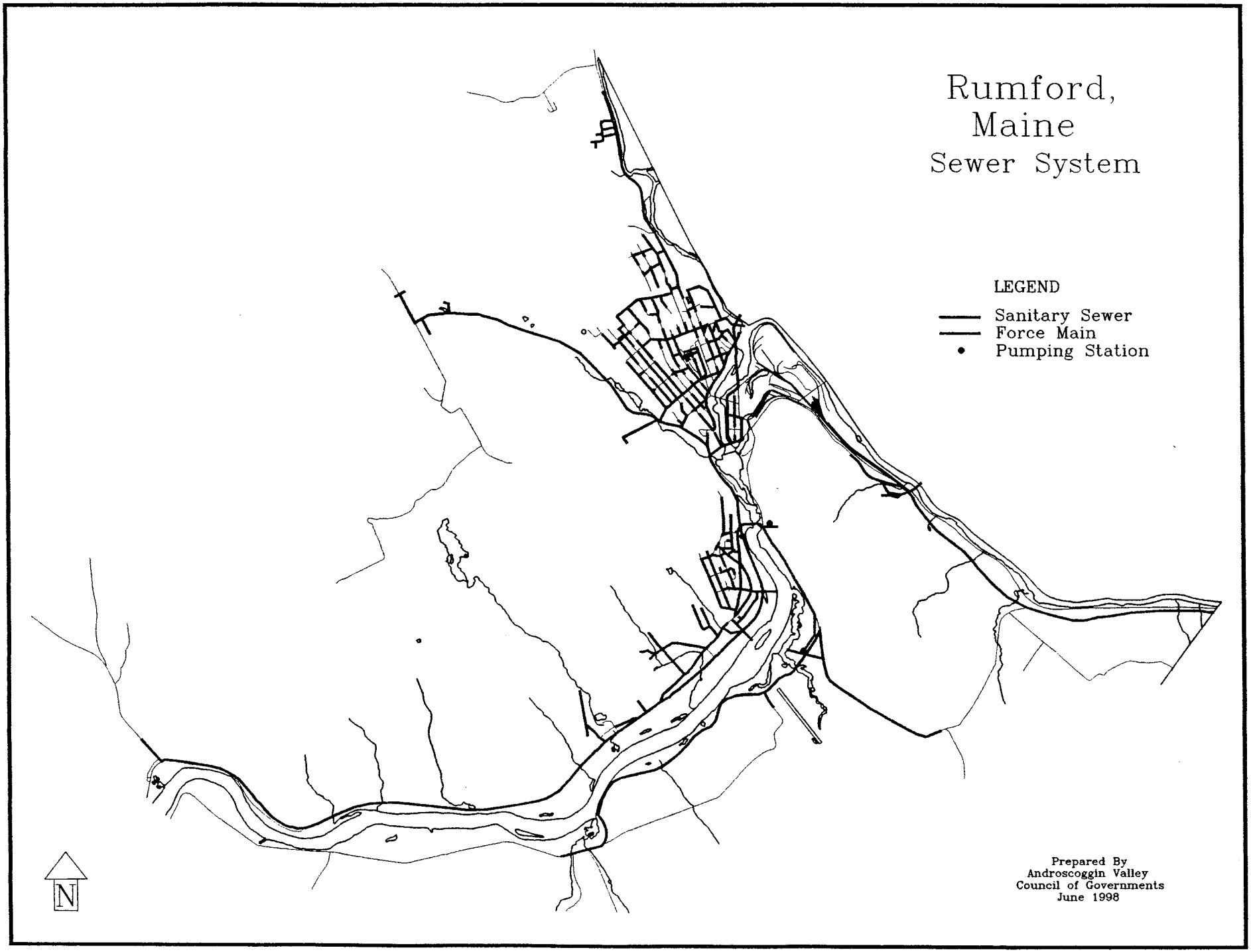
Waste water is treated with an average removal efficiency of 90%. This means that approximately one ton per day of material is eliminated from entering the Androscoggin River and was diverted to a composting process.

The composting program has been relicensed by the Maine Department of Environmental Protection for five years and continues to provide an economical disposal for the treated residual bio-solids. Since its inception six years ago, the district's users have saved more than $600,000 that would have been spent to dispose of bio-solids in a sludge landfill.

Solid Waste Disposal

The Town is a member of the Northern Oxford County Regional Solid Waste Board (Mexico, Rumford, Dixfield, Roxbury, Byron, and Peru). The town contracts for curbside pickup for both recyclables and solid waste. The Board's Transfer Station and recycling center is in Mexico and both are in excellent condition. Waste is transferred to a commercial landfill in New Hampshire.

Solid waste collection and disposal systems have sufficient capacity for the planning period.


Rumford,
Maine
Sewer System
LEGEND
Sanitary Sewer
Force Main
Pumping Station
N
Prepared By
Androscoggin Valley
Council of Governments
June 1998

Public Safety

Fire Protection: The Town of Rumford's central fire station is on Congress Street and is in very good condition. The Fire Department includes one Fire Chief and 12 full-time firefighters, and volunteer fire fighters. A substation is in Rumford Point and is operated by volunteers.

The Fire Department provides service to the entire town. During 1996, a total of 280 calls were answered. Dispatching of calls is handled locally. The Department has a Mutual Aid Agreement with several adjacent and nearby communities.

There are approximately 180 fire hydrants to provide water for fire fighting purposes. The fire protection rating is 4/9. The fire services provided to the town are adequate to meet existing and future needs.

Table I-27 lists the Fire Department's major equipment including its age.

Table I-27
Fire Department Equipment
Rumford, 1998

Equipment	Model /Year
Chief's Vehicle	Cherokee/1997
Utility/Rescue	Ford F250/1996
Mobile Command	International/1957
Ladder #1	American LaFrance 85'/1971
Engine #1	American LaFrance 750gpm pumper/500 gal.tank/1961
Engine #2	American LaFrance Tele-Squirt35 500 gal. tank/1979
Engine #3	International R-185 750 gal. tank/1967
Engine #4	Wilson/International 2574 6X4 2,000 gal tank/1993
Engine #5	Metalfab/International 2674 6X4 2,500 gal tank/1994
Engine#6	International R-185 750 gal tank/1966
Source: Fire Department	

Ambulance and Rescue Service: The town is a member of Med-Care, a regional ambulance and rescue service. Representatives from each member community form the Med-Care Board. The town pays an annual fee to Med-Care for its services. The Med-Care headquarters are on Main Street in Mexico. Sleeping quarters are available at the headquarters for the paramedics who are available on a 24-hour basis. Med-Care community members include Rumford, Mexico, Carthage, Dixfield, Canton, Andover, Byron, and Roxbury.

Police Protection: The Rumford Police Department operates from the basement of the Municipal Building. The Department includes the Police Chief, 13 full time officers, court officer and three crossing guards. The Department provides 24 hours per day coverage and dispatching for its own force and for the Dixfield and Mexico Police Departments. The Department also has lock up facilities. Office space for the Police Department is adequate to meet the needs of the Department.

The Police Department provides police protection to the entire Town. Backup police service is provided by the State Police and Oxford County Sheriff's Office. The Department receives approximately 8,000 calls for service annually. The most frequent complaints or requests for service include motor vehicle, criminal trespass, harassment, and police information. The Police Department maintains three marked cruisers, one unmarked cruiser, DARE vehicle and Chief's car. Marked cruisers are replaced on a one per year rotating basis.

The police protection service provided by the Town is adequate to meet the needs of the existing and projected population.

Public Works

The Town's road and sewer systems are maintained by the Public Works Department. Besides road maintenance, the Public Works Department reconstructs roads, sidewalks, parks and lays sewer lines. The Department's 14 employees include the Superintendent of Public Works, town engineer and mechanics. All highway equipment is stored at the Highway Garage on Route 2. This 10,000 square foot building is in good condition. The following table provides a list of the Public Works Department's major equipment including its life expectancy. The Department replaces equipment annually on a rotating schedule.

Table I-28 Public Works Department Major Equipment Rumford, 1998		
Equipment	**Year Purchased**	**Life Expectancy (Years)**
Mich. Loader	1989	15
Gallion Grader	1993	15
Cat Loader	1997	15
Cat Loader	1992	15
Fiat Allis Dozer	1994	15
Bucyrus Erie Shovel	1964	30
JD 790DLC	1989	10
JD Dozer	1977	15
JD Backhoe	1990	15
Ford Tractor	1980	20
Int. 4X4 Truck	1980	20
Int. 4X4 Truck	1988	20
Int. Truck	1996	10
Int. Truck	1988	10
Int. Truck	1989	10
Int. 4X4 Truck	1988	20
Int. Truck	1991	10
Int. Truck	1991	10
Ford Truck	1994	10
Ford Wheeler	1993	10
Chevy PU	1993	Good
GMC PU	1993	5
GMC PU	1994	5
Chevy PU	1995	5
Snow Blower	1997	10
Holder SW Plow	1989	15

Source: Town of Rumford

Education

Rumford is a member of SAD #43 with the communities of Byron, Mexico and Roxbury. Public school facilities in Rumford are Rumford and Virginia Elementary Schools and the Mt. Valley High School. The elementary schools house grades K-5. Middle school students grades 6-8 attend the Mountain Valley Middle School in Mexico. District high school students attend Mountain Valley High School in Rumford. The high school is in good condition. Options are under consideration for expansion to enable the Northern Oxford Vocation program to be located at the high school facilities.

Table I-29
SAD #43 Enrollment
1989/90 - 1994/95

School Year	Total SAD #43 Enrollment	Rumford Enrollment	% of Total Enrollment
1989-1990	1,871	1,080	58%
1990-1991	1,819	1,050	58%
1991-1992	1,796	1,067	59%
1992-1993	1,816	1,056	58%
1993-1994	1,776	1,031	58%
1994-1995	1,778	1,026	58%
1995-1996	1,792	1,035	58%
1996-1997	1,808	1,058	59%
1997-1998	1,802	1,056	59%

Source: Superintendent of School Office: April 1, Enrollment

The University of Maine, Rumford/Mexico Center, is in Mexico. The Center provides up to 60 interactive television courses per semester and 8-12 on-site instructional courses. More than 200 students per semester undertake course work at the Center. While many curriculums are offered, traditionally Associate Degree programs in social services, business, and liberal arts are the most frequently pursued. The Center is also connected to the ITE Educational Network of Maine that can provide both courses from within and outside the University of Maine system.

The St. Ahanasius & St. John Parochial School is located on Maine Street with enrollment of approximately 190 students from preschool through eight grades.

Rumford Public Library

The Rumford Public Library, built in 1903 and enlarged in 1969 is in good condition. The town funds the library budget with other monies coming from donations. Annual total circulation is approximately 80,000. Library holdings include more than 31,000 books, periodicals, recordings and videos. Public computers are available at the library with many programs.

The library serves as a cultural center with year-round events including the children's Summerfest program, a Summer Reading program.

Health and Human Services

Rumford is served by a wide array of health and human services. The Rumford Community Hospital provides a full range of medical services including 24-hour emergency services, radiology, laboratory services, and physical therapy. In addition to the Rumford Community Hospital, there is Swift River Health Care and the Rumford Community Health Center. Rumford and surrounding communities are served by several physicians, dentists, and chiropractors.

A complement of social service agencies provided a wide array of services to Rumford. These agencies include: Androscoggin Home Health, Community Concepts, Tri-County Mental Health, Western Area Agency on Aging, Western Maine Transportation, and Red Cross.

Town Administration Offices Facilities

Administration

Rumford's town government is organized according to the general laws of the State of Maine as contained in Title 30-A of the Maine Revised Statues 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 discuss local issues, and vote on items of town business such as the budget, ordinances, and bylaws. The Town Manager, who administers the day-to-day operations of town government, is hired by the five-member Board of Selectmen. The manager also serves as the community development director.

The Planning Board, appointed by the Selectmen, consists of five members and two alternates. The Board is responsible for reviewing and acting upon subdivision applications and shoreland zoning permits. In addition, the Board administers the Floodplain Management Ordinance and Wellhead Protection Ordinance. It is the responsibility of the Planning Board to maintain and recommend amendments to the town's land use ordinances.

Other elected boards and committees include the School Committee, Med-Care Board, Rumford Water District Board, Northern Oxford County Solid Waste Board, Board of Appeals, Board of Assessors, Finance Committee, Library Trustees, Park Commission and Rumford-Mexico Sewage District Board.

Municipal Office

Municipal functions are carried out at the Town Office on Congress Street. Constructed in 1916, the building houses the municipal offices, the police department, and office of the Oxford County Sheriffs Department and the Northern Oxford County District Court. The facility is sufficient to meet current and planning period demands.

TRANSPORTATION

Findings and Implications

- There are several high accident locations in Rumford.
- Public roads in Rumford are in good condition.
- The major highways have adequate capacity of future growth.
- There is no designated location for taxi or paratransit bus pick up in Rumford Falls.
- Rumford maintains a system of sidewalks that connects residential areas with schools and the business districts.

Introduction

The major transportation systems for people and goods in Rumford and into and out of Rumford are State and local roads and highways, rail and sidewalks. The nearest airport is in Bethel. The major highways into Rumford are Routes 2 and 108. Secondary Routes are 5, 120 and 232. Route 2 is a major east/west travel corridor through Maine. There are approximately 60 miles of local roads and 11 miles of sidewalks. The Town maintains a five-year road and sidewalk improvement program. Rail freight service to Mead Paper Company is provided by Maine Central Railroad. The rail line ends at the mill.

There are several high accident locations (HALs) within Rumford. High accident locations are defined by the Maine Department of Transportation as those locations of eight or more accidents in a three-year period with a critical rate factor for greater than 1.00. These locations include Prospect Avenue and Bridge Street, Bridge Street and Franklin Street and Waldo Street and Lincoln Avenue.

Rumford contains approximately 95 miles of public roads. The town has total maintenance (summer and winter) of 59 miles. The Maine Department of Transportation maintains 37 miles of summer roads and 14 miles of winter roads.

Table I-30 Road Mileage by Maintenance Responsibility	
Responsibility	**Miles**
Town	59
State-Summer	36
State-Winter	14

SOURCE: Town of Rumford

The Maine Department of Transportation (MDOT) has classified highways functionally within Rumford 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. Routes 2 and 108 are arterials.

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. These include Routes 5, 120 and 232.

Local Highways: All 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, Rumford contains approximately 17 miles of arterial highways, 33 miles of collector highways and 45 miles of local highways.

Route 2 is a major east/west travel corridor through Maine. Outside the compact area, Route 2 has an annual average daily traffic (AADT) of some 9,000 vehicles. Inside the compact area, the AADT increases to more than 13,000 vehicles. Route 2 carries a significant amount of industrial traffic associated with the Mead Paper Mill, commuter traffic and tourist traffic. Route 2 passes through the center of Rumford via Lincoln Avenue, Hancock Street, Rumford Avenue, Franklin Street, Bridge Street and Prospect Avenue. Those vehicles traveling Route 2 can take an alternate route via Route 108 to avoid the compact areas of Mexico and Rumford. However, businesses feel strongly that traffic should not be directed over this alternate route because of the potential impact on business.

Route 108 is the second most important highway in Rumford with an annual daily traffic volume of approximately 3,600 vehicles. Traffic is associated with the Mead Mill and commuter traffic. Because of its location next to Androscoggin River, steep banks on its opposite side and curves, traffic functions are reduced.

Routes 5, 120 and 232 are secondary travel corridors. Route 5 leads to Andover and the Richardson Lakes Region and has an annual daily traffic volume of approximately 900. Route 120 also provides access to the Andover region via Roxbury Notch and has a traffic volume of some 1,500 vehicles per day. Route 232 connects with Route 26 in Bryant Pond and has an annual average traffic volume of approximately 1,100 vehicles.

Local Highway Conditions

The examination of local highway conditions is important for several reasons. Road conditions can help direct future development and suggest the need for capital expenditures for reconstruction. The town maintains a five-year road and sidewalk improvement program that establishes reconstruction and paving priorities.

Fifty-six miles of roads that the town has total maintenance responsibility are paved. Of these, 50 miles are rated as being in good condition and six miles in fair condition. Roads serving the compact areas of Rumford are generally in good condition. The 2.3 miles of graveled surfaced roads are in good condition and are low -volume traffic carriers.

The town maintains the Hartford Street Bridge that crosses the canal that separates Shoppers Island from the Mead mill complex. Improvements are planned for the bridge under the Local Bridge Program.

Highway Capacities

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. The major highways in and out of Rumford operate a high level of service currently and should continue over the planning period. However, additional driveways entering Routes 2 and 108 could reduce their level of service.

The 1994 Rumford Area Route 2 Corridor Study reported that several intersections in Rumford have a low level of service, and the level of service is expected to decline in the future as the result of greater traffic volumes. The combined north and south bound turning movements at the Lincoln Avenue and Waldo Street intersections operate at a level of service C/D and are expected to decline to E/F by the year 2013. Other intersections with a low level of service are Hancock Street and Maine Avenue, Bridge Street and Franklin Street and Route 2 and Prospect Avenue. The corridor study made recommendations to improve the functions of these intersections.

Motor Vehicle Accident Data

The Maine Department of Transportation maintains accident reports of all reportable accidents (those involving $500 damage or personal injury). A report entitled "Maine Accident Records Summary" provides summarized data 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 and eight or more accidents within a three-year period should be of concern because they can be potential high-accident locations. Based upon the information provided by MDOT, there are several locations with a critical rate factor greater than 1.00 and eight or more accidents in Rumford. The table below presents these locations and their critical rate factors.

Table I-31
High Accident Locations
1993 - 1995

Location	Number of Accidents	CRF
Waldo St./Lincoln Ave.	12	1.89
Prospect Ave./Bridge St.	10	1.18
Bridge St./Franklin St.	10	1.22

SOURCE: Maine Department of Transportation

Besides these locations, the Rumford Area Route 2 Corridor Study identified the intersections at Lincoln Avenue and Hancock Street and the Hancock Street and Maine Avenue as locations that should be improved because of the high number of accidents.

Sidewalk System

Rumford maintains approximately 11 miles of sidewalks with the majority in Rumford Falls. This system allows pedestrian movement from the compact residential areas to schools and the business district.

Parking

The town owns and maintains several parking lots. These include parking areas at the information booth off Bridge Street, to the rear of the town hall, the River Street lots, Falmouth Street and Essex Avenue and the library. These parking lots are meeting current demand. On- street parking is provided on Shopper's Island and most other streets in the compact areas.

Railroads

Rail freight service to Mead Paper Company is provided by Maine Central Railroad. The rail line ends at the mill. Although Mead is the primary user of the railroad, other businesses receive or ship goods. However, the yard lacks facilities for regular transfer of goods for those other than the Mead Mill.

Air Transportation

Commercial airports available for Rumford residents and businesses include Central Maine Regional Airport in Norridgewock, Augusta State Airport, the Auburn-Lewiston Municipal Airport in Auburn, and the Portland International Jetport.

The closest airfield to Rumford is Colonel Dyke Field in Bethel approximately 20 miles west of Rumford. The field is publicly owned and has one 3,150-foot long by 60-foot wide paved runway.

Public Transportation

There are no regular scheduled public transportation services in or into Rumford. Western Maine Transportation Services is the regional paratransit provider and offers door-to-door services to the elderly, disabled and others with special needs. Two cab companies operate in the Rumford Area. Currently there is no designated stop for Western Maine buses or taxies.

OUTDOOR RECREATION RESOURCES

Findings and Implications

- ❖ Outdoor recreation facilities in Rumford are of high quality and well maintained.
- ❖ Black Mountain and the Chisholm Ski Club are widely recognized for their nordic ski facilities and races.

Introduction

Recreation opportunities both organized and unstructured are important elements of Rumford's quality of life. Rumford has a long tradition of providing quality outdoor recreation opportunities. Municipal organized recreational activities are directed by the Parks Commission appointed by the Board of Selectmen. The Parks Department maintains town recreation facilities and is staffed by two full-time and one part-time employees. The Commission is responsible for overseeing municipal provided recreation facilities. The Greater Rumford Community Center, a non-profit organization owns and operates Black Mountain, operates the Community Center on Congress Street and runs many sport programs. The Chisholm Ski Club has a long history of sponsoring local, regional and nationally recognized nordic ski events at Black Mountain.

Public Recreation Facilities

The town owns and maintains several recreation areas. The largest is Hosmer Field. This seven-acre site in Rumford Falls is the center piece of Rumford's outdoor recreation facilities. The site contains a regulation baseball field, lighted football/soccer field, 1/4 mile paved running track, four tennis courts, skating rink and area, 20 horse shoe pits and practice field. Within the past two years a ½ mile walking trail has been developed along the Swift River. In the final planning stage is the development of four basketball courts and additional parking. Besides public use, the Mountain Valley High School uses the facilities at Hosmer Field.

Falmouth Field on the opposite side of Lincoln Avenue of Hosmer Field contains three little league/softball fields. Little league teams and the men and women softball leagues use these fields. The Virginia Ball Field found between Front Street and Route 2 is used by little league farm teams. The Rumford Point CAA field is in Rumford Point and contains little league and Babe Ruth fields. The so-called Spaghetti Bowl contains a soft ballfield.

The town also maintains four passive recreation type areas. These include Memorial Park, Morency Park, The Information Booth Area and the DARE Park. Memorial Park at the head of Congress Street bordering the canal contains 10 benches, four picnic tables and grill. Morency Park is a small open space type park between River Street and the Androscoggin River with benches and a gazebo. The open space at the information booth is at the bottom of Great Falls and provides picnic tables and outstanding river views. The DARE park on Falmouth Street was completed in 1993/94 and contains swings and a slide. While not maintained by the Recreation Department, playgrounds are found at the Rumford and Virginia Elementary Schools.

The Greater Rumford Community Center also plays an important part in recreation in Rumford. This private non-profit organization operates the Community Center on Congress Street that contains indoor basketball, racket ball, weight room and pool tables. The Community Center also sponsors the Little League, Babe Ruth baseball programs, and flag football. Other programs include summer track, summer soccer, swimming program, Black Mountain day camp and boxing, jujitsu and karate. The town, through local appropriations, financially supports the programs of the Greater Rumford Community Center.

The Community Center owns and operates Black Mountain. The Mountain is internationally recognized for its nordic skiing facilities that include 35 kilometers of cross country race trails and a 65-meter ski jump. Local, regional, national and international nordic competition is held at Black Mountain under the direction of the Chisholm Ski Club. Alpine skiing is also an important component of Black Mountain. The slopes are served by a t-bar and are lighted for night skiing. Snowmaking and modern grooming equipment maintains good snow conditions. In the winter of 1997/98 snow tubing was introduced and is served by its own handle tow. Alpine skiing terrain is expandable with improved lift. Summer activities at Black Mountain include swimming at a 40' X 80' pool, hiking, mountain biking and picnicking.

Improvements considered for Black Mountain include installation of a chair lift to replace the t-bar, covering the pool and parking lot improvements.

Access to Surface Waters

The major surface water system in Rumford is the Androscoggin River. The State of Maine has constructed a public boat launch on the Androscoggin approximately two miles west of the Great Falls. The site provides a hard surface launch and parking.

Snowmobile Trail System

The local snowmobile club, the Rumford Polar Bears, maintains the local trail system for snowmobile use that connect to other local snowmobile trail systems and the ITS system.

Walking and Hiking Trails

Besides the Swift River Walking Trail maintained by the Parks Department, several other popular trails are used. These are found on private property and use has traditionally been allowed by land owners. These include Falls Hill Trail, Mount Zircon Trail and Whitecap Trail.

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 is based on facilities owned by the Town of Rumford and the Greater Rumford Community Center and SAD # 43.

I-32
Outdoor Recreation Facilities and Needs

Type of Facility	Recommended Stds. per 1000 pop.	Existing Facilities	1998[A] Surplus/ (Deficiency)	2008[B] Surplus/ (Deficiency)
Neighborhood Playground	C	3	0	0
Community Recreation Area (12-25 acres)	C	1	0	0
Community Park (100+ acres)	C	1	0	0
Baseball Diamond (90 ft. basepaths)	.16	2	1	1
Softball/Little League Diamond*	.75	6	1	1
Basketball Court*	.5	1	(3)	1
Tennis Court*	.67	4	(1)	(1)
Multi purpose Field (Football, Soccer, Field Hockey)*	.5	3	0	(1)
Swimming Area (square feet)	3,200	5,500	(2,300)	(2,500)
Ice Skating Area* (square feet)	5000	34,000	0	0
Picnic Table	2	20	6	6
Nature Study Area	C	1	0	0
Horse Shoe Pits		20	0	0

[A] Based on a population of: 6,800
[B] Based on a 2008 population of: 7,000
[C] Standards are as follows:

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

Based on this analysis which used accepted facility standards there is currently a need for outdoor basketball courts, one tennis court and additional swimming area. Four basketball courts are planned for Hosmer Field which will meet the current and future demand.

NATURAL RESOURCES

Findings and Implications

* **Rumford's natural resources have and continue to be important to its character and economy.**

* **Soils in Rumford are stony with limitations being depth to bedrock and high water table.**

* **Ground water is an important natural resource in Rumford.**

* **The natural landscape provides for several outstanding scenic views.**

Introduction

The natural resource base of a community play an important role in overall community development. Natural resources can enhance or limit the growth potential of a community and are significant factors in the planning of a community's future. Various natural resources are also factors in "quality of life."

Rumford is a part of the West Central Maine Region in the New England upland physiographic area. This area is characterized by forested mountains and hilly upland topography. The climate is humid continental with cold winters with abundant snowfall while summers are pleasant and warm. Precipitation averages approximately 40 inches annually and is distributed rather evenly throughout the year.

Topography

Topography relates to the general land form of an area. Often a locale may be called mountainous, hilly or flat. Knowledge of the topographic characteristics of a community is important because of its influence on development, scenic views and aesthetics. In general, Rumford's topography is characterized by three valleys associated with the Androscoggin, Ellis and Swift Rivers with rugged mountainous and hilly topography over the remainder of the town.

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 Rumford is approximately 2,340 feet above mean sea level atop Black Mountain and the lowest elevation is approximately 400 feet above mean sea level along the Androscoggin River at the Rumford/Peru line. Therefore, local relief is some 1,940 feet. Other significant points of high elevations include Whitecap (2,200), South Twin (2,150) and Glass Face (1,900).

Slope or the amount of 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%, construction and other land use activities are more difficult and the potential for environmental degradation increases. Twenty percent slopes generally do not present the engineering problems associated with development on slopes of greater than 20%. Approximately 65 percent of Rumford's land area has slopes more than 20%. These steeper slopes are found throughout the town except in areas associated with the plains of the rivers and streams.

Soils

Soils and their properties are extremely important to past, current, and future community characteristics. In Maine, where soils were highly suitable for agriculture, its presence is still 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.

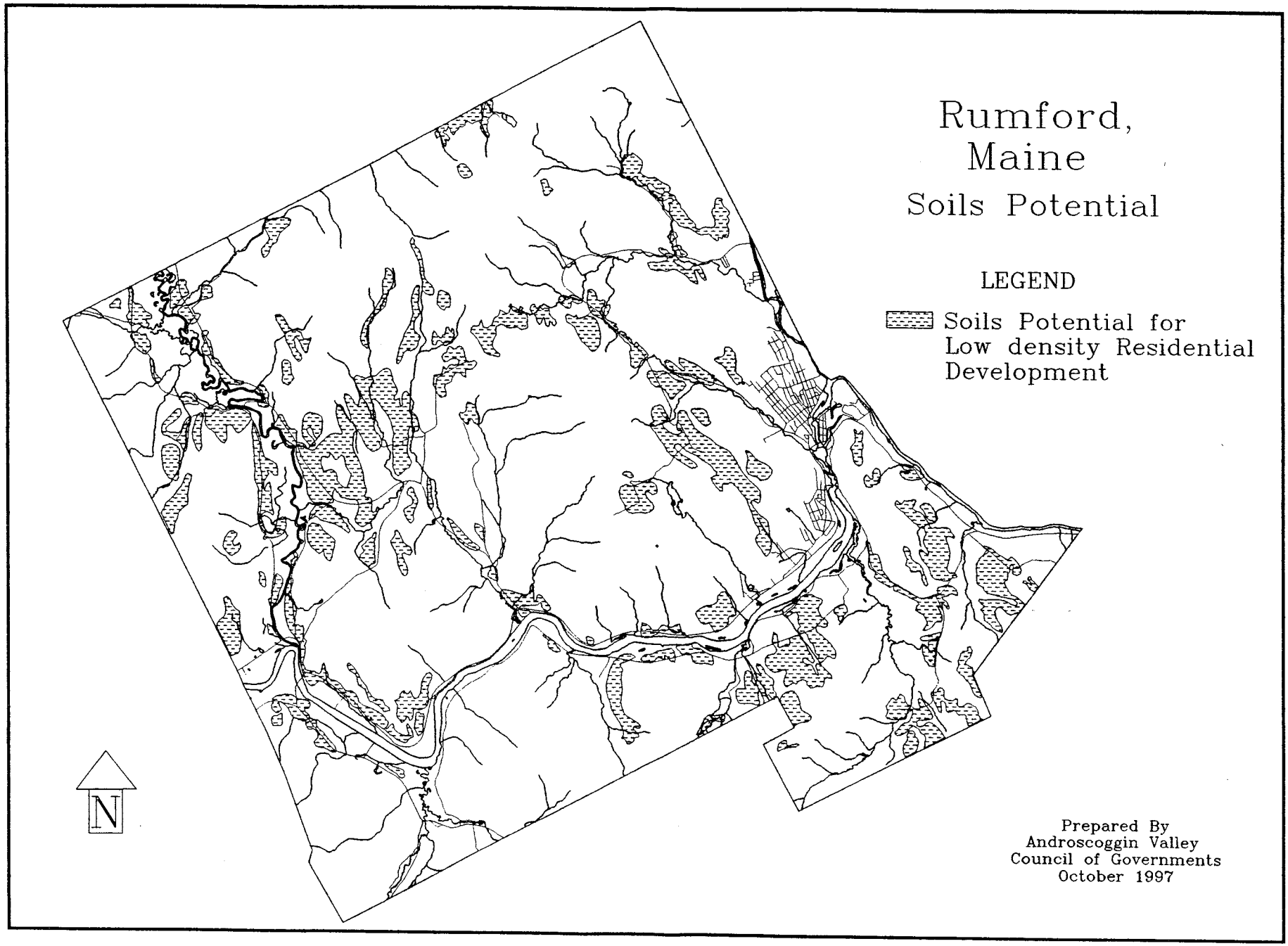
The United States Department of Agriculture, Soil Conservation Service has identified and mapped the soils within Rumford. This information is presented in a soil survey report which locates and identifies soil types. The soil mapping has identified many different soil types in Rumford. Each soil type has its own characteristics, and descriptions of each are beyond the scope of the Comprehensive Plan. The vast majority of soils can be categorized as very stony with moderate to steep slopes. These soils include: Hermon and Monadnock Association, Lyman-Turnbridge-Monadnock complex, Dixfield-Marlow Association, Herman & Monadnock Association, Dixfield Colonel Association and Abram-Rock out crop-Lyman complex. The general characteristics of these soils are very stony, wetness, and frost action.

Soil potentials for low density residential development have been identified and mapped as an element of the Comprehensive Plan. Soil potential ratings for low density residential development (single-family residences with basements, subsurface sewage disposal, with or without an on-site source of water and newly constructed paved roads) are useful in the comprehensive planning process to plot areas generally suitable for residential development utilizing subsurface waste water disposal. Soil properties considered to determine development potential includes texture, permeability, slope, surface stones, water table, flooding, depth to bedrock, restrictive layer, and drainage.

Based upon the soil's potential ratings, approximately 20 percent of the land area in Rumford has received a high or medium soils potential rating for low density residential development. While these soils are scattered throughout the town, concentrated areas are shown on the following map. The remainder of the soils have received a "low" rating due to flood plains and excessive slopes and 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 farm land soils in Rumford are found along the flood plains of the Androscoggin and Ellis Rivers. These areas are currently used for row crops and hayland.


Rumford,
Maine
Soils Potential
LEGEND
Soils Potential for
Low density Residential
Development
N
Prepared By
Androscoggin Valley
Council of Governments
October 1997

Forest Resources

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

Recent work on forest quality site identification has found that routing 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 Rumford has generally good forest sites. The same slopes which diminish site quality for housing development makes excellent sites for growing trees. Those more limited sites with restricted routing zones created either by higher seasonal water tables or shallow ledge is normally characterized by softwood forest of spruce, fir, and cedar. The mixed hardwood/softwood species forests normally occur on intermediate sites.

Rumford is approximately 85% forested. The total acreage in town is approximately 50,000 acres, so this means there are some 42,000 acres of forest. Of the approximately 42,000 acres of forest land, 27,000 acres are registered in the tree growth program. In 1994, Rumford had 327 parcels registered in the program, the greatest number of any municipality or plantation in the state. Rumford also ranked 7th in the total number of acres in tree growth. Most sites are well stocked with commercial size trees. If an estimate of 12 cords per acre is made, then Rumford's forests have more than 500,000 cords growing in them. These forests are owned by a variety of private owners with a variety of objectives. Most of them have harvested wood from their land in the past and intend to in the future.

Forests are generally characterized by a mixture of hardwood species on the better drained sites and softwood more poorly drained sites. The forests of Rumford 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 10 to 40 years.

Floodplains

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 floodplain is called the flood hazard area. During a flood, water depths in the floodplain may range from less than a foot in some areas to more than 10 feet in others. However, regardless of the depth of flooding, all areas of the flood plain are subject to the requirements of the Flood Insurance Program. Floodplains 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 and some land area adjacent to its banks.

The areas of Rumford most susceptible to flooding are along the banks of the Androscoggin, Concord, Ellis and Swift Rivers and Logan Brook. Ice is a major hazard during spring flooding, posing a threat to bridges and other structures. The flood of record occurred in 1936 with a peak flow on the Androscoggin River of 74,000 cubic feet per second (cfs). After the 36 floods, a flood wall was constructed on the west side of Shopper's Island. This wall prevents erosion and offers protection to the commercial district. The April 1987 flood event had a recorded flow of 63,000 cfs with a recurrence interval of more than 100 years. This flood resulted in approximately $2.5 million in flood damage related assistance.

Rumford participates in the National Flood Insurance Program which allows owners of property that is in the 100-year floodplain to purchase flood insurance. The town has also enacted floodplain management standards. The Shoreland Zoning Ordinance places undeveloped areas of the 100-year flood plain with 250 feet of the Androscoggin River in a resource protection district. The entire 100-year floodplain adjacent to the Ellis River is also zoned resource protection.

In 1996, there were 63 flood insurance policies issued in Rumford with a total coverage of approximately $3.4 million. Since 1978, there have been 37 claims with a total paid out of $650,000. This amount represents 28 percent of the total paid out for all of Oxford County.

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 (gpm) up to 2,000 gpm, while wells in fractured bedrock generally yield from 2 to 25 gpm.

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.

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. Commonly, 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 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.

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. The degree of 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 several significant aquifers associated with the Androscoggin, Ellis and Swift Rivers. The largest of these aquifers is associated with the Ellis River which has the capability of containing wells with yields of greater than 400 gallons per minute. The new Rumford Water District wells are in a high yield portion of this aquifer. The Swift River Aquifer is considerably smaller than the Ellis River Aquifer but has produced significant volumes of water for both the Rumford Water District and Mexico Water Districts. Wells in this aquifer have been reported to produce up to 400 gallons per minute.

Rumford has enacted a Wellhead Protection Ordinance for the Ellis River Aquifer. This ordinance set forth permitted and prohibited uses in each of the three zones. Zone 1 consists of land owned or fully controlled by the Water District and within the 200-day travel time. Zone 2 is the area between the 200 and 2500-day travel time and zone 3 is the remainder of the Ellis River watershed. There has been no similar ordinance or land use standards enacted for the Swift River aquifer. Existing uses in both Rumford and Mexico could be a threat to water quality in this aquifer.

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.

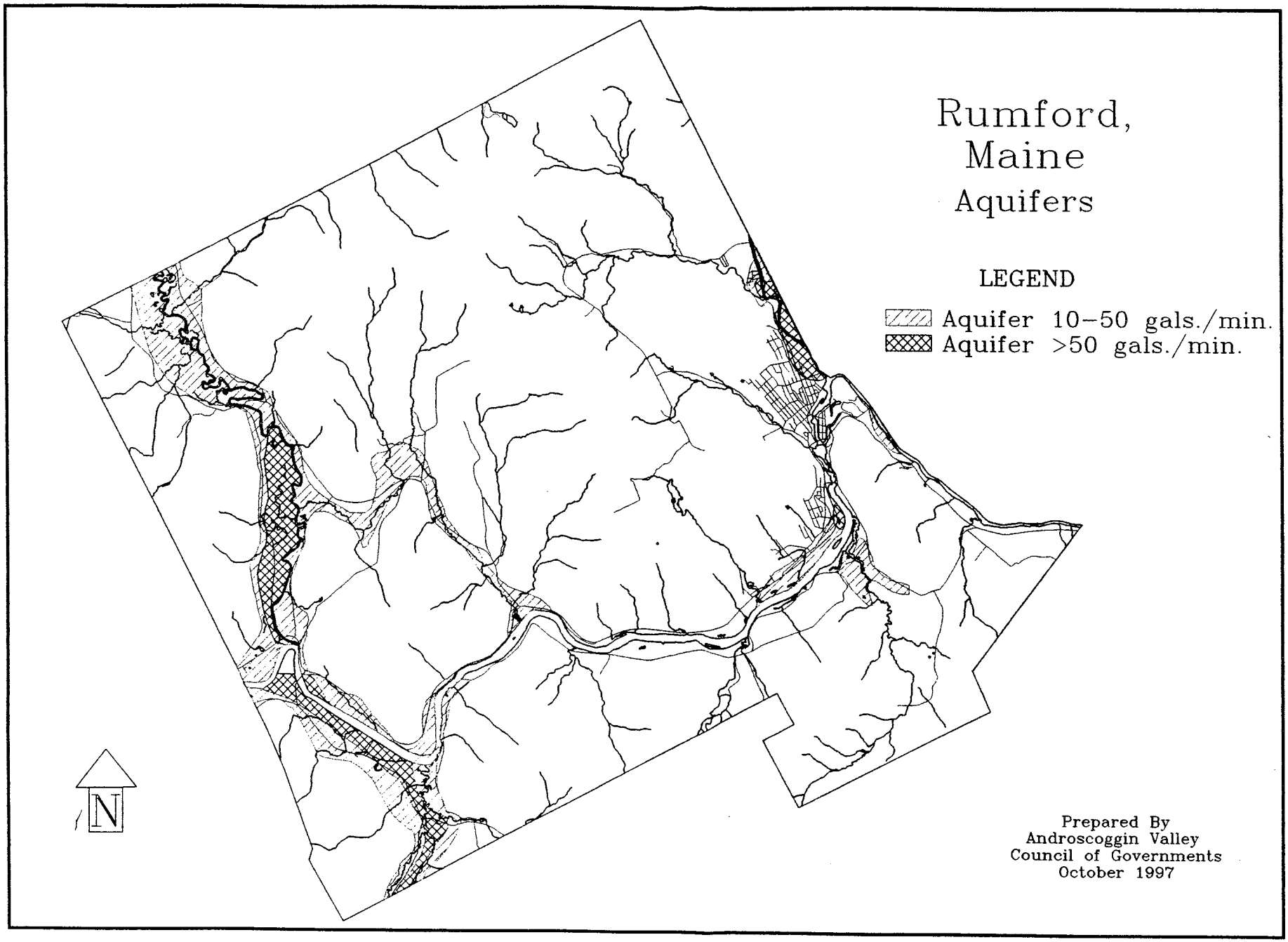
Contamination of both sand and gravel aquifers and bedrock wells are possible. Common ground water contaminants include petroleum products, hazardous substances, failing septic systems, and road salt.

Wetlands

Wetlands are important natural resources because they store large amounts of water which helps to reduce flooding. In addition, wetlands provide habitats for many species of game and non-game wildlife. Degradation or the filling of wetlands can significantly increase flood levels and add to the loss of significant wildlife habitats. Wetlands are characterized by wetland hydrology and wetland plants (hydrophytes) which are used to identify wetlands.

The United States Department of Interior has published a series of National Freshwater Wetlands Maps which identify wetlands as small as two acres in size. Major wetland systems in Rumford are adjacent to Logan and Meadow Brooks and the Concord and Ellis Rivers. In addition, numerous smaller wetlands are found throughout the town. These wetlands are classified palustrine scrub-shrub, emergent and forested.

Under the Mandatory Shoreland Zoning Law, the town is required to regulate various land use activities adjacent to 19 fresh water non-forested wetlands that are 10 acres or greater in size. Four of these wetlands have been assigned a high or medium wildlife value rating, and the area within 250 feet from their upland edge have been zoned resource protection. Shoreland zoning adjacent to open fresh water non-forested wetlands should be updated based on the National Wetland Inventory Maps.


Rumford,
Maine
Aquifers
LEGEND
Aquifer 10–50 gals./min.
Aquifer >50 gals./min.
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Androscoggin Valley
Council of Governments
October 1997

Surface Water Resources

The Androscoggin River is the major surface water resource in Rumford. The Androscoggin flows for approximately 15 miles through the southern portion of town and forms the eastern border with Mexico. By the time the Swift and Androscoggin Rivers join, the Androscoggin has drained some 2,070 square miles.

The river has a highly regulated flow management system. Several 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 which 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 industrial and municipalities have constructed treatment plants which treat waste before they are discharged to the river. Under the State of Maine Water Classification Program, the Androscoggin is classified as "B" to its confluence with the Ellis and from that point to Merrymeeting Bay "C." The Water Classification Program defines Class B waters as the 3rd highest classification and shall be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, Section 403; and navigation; and as habitat for fish and other aquatic life. The habitat shall be characterized as unimpaired.

Rumford, Maine
Environmental Constraints

LEGEND

- Steep Slopes >20%
- Floodplains
- Wetlands

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Class C waters shall be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; recreation in and on water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; and navigation; and as a habitat for fish and other aquatic life. The dissolved oxygen content of Class C water shall be not less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where water quality is sufficient to ensure spawning, egg incubating, and survival of early life stages, that water quality sufficient for these purposes shall be maintained.

Discharges to Class C waters may cause some changes to aquatic life provided that the receiving waters shall be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community.

The Swift River which originates at Swift River Pond in Township E has a total drainage area of 125 square miles and joins the Androscoggin in the Rumford/Mexico line. The Swift flows through a portion of northeast Rumford and has been assigned water quality classification of "B." The Maine River Study published in 1982 by the Maine Department of Conservation identified the Swift as having significant geological/hydrologic, scenic, and white water boating values.

The Ellis River begins in Ellis Pond in Roxbury and flows for 20 miles and drains some 160 square miles before joining with the Androscoggin at Rumford Point. The Ellis has been assigned an "A" classification, the second highest classification. The Maine Rivers Study cited the Ellis River for its canoe touring and historic landmark values.

Class A waters shall be of such quality that they are suitable for the designated uses of drinking water after disinfection; fishing; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation except as prohibited under Title 12, section 403; and navigation; and as habitat for fish and other aquatic life. The habitat shall be characterized as natural.

The dissolved oxygen content of Class A water shall be not less than 7 parts per million or 75% of saturation, whichever is higher. The aquatic life and bacteria content of Class A waters shall be as naturally occurs.

Rumford contains three great ponds or surface water bodies of 10 acres or more. These include Davis Pond (15 acres) located between Route 5 and the Ellis River, Joes Pond (15 acres) at the eastern base of Glass Face Mountain and the Mt. Zircon Reservoir (18 acres). The Mt. Zircon Reservoir was created in 1913 by the damming of Zircon Brook and served as the town's primary public drinking water source until the development of the Ellis River Aquifer wells. With a watershed of 1660 acres, only 197 are in Rumford. Joes Pond is a shallow warm water pond with all of its 291 acres forested watershed in Rumford. Davis Pond is a shallow pond in the flood plain of the Ellis River. Its watershed is primarily forested and totals 646 acres with 625 acres in Rumford. Due to the location and purposes of these great ponds their shore lands are undeveloped.

Studies over the past decade show phosphorus, which acts as a fertilizer to algae and other plant life in the lake, is a major threat to lake and pond 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.

The Maine Department of Environmental Protection assigned a moderate/sensitive water quality classification to the ponds in Rumford. This means the ponds have average water quality but a high potential for phosphorous recycling from bottom sediments. Table I-33 is a listing of the ponds from the Department of Environmental Protection's Vulnerability Listing. It lists the names, the direct drainage area in Rumford, the percentage of the total watershed in Rumford and the phosphorus load from land within Rumford which would produce an increase in phosphorus concentration of 1.0 parts per billion.

Table I-33
Vulnerability Listing
Rumford

Pond Name	Drainage Area in Rumford (Acres)	Percent of Total in Rumford	Phosphorus Coefficient (#/ppb/year)
Davis Pond	625	96.8	4.49
Joes Pond	291	100	2.80
Mt. Zircon Reservoir	197	11.9	1.19
Horseshoe Pond	2	1.1	0.02

Scenic Resources

Rumford's and the River Valley Region's topography and other natural features provide some striking views. The Comprehensive Plan has identified several scenic areas and views in Rumford. While there are many scenic areas in Rumford, those identified are believed to be the most noteworthy areas. To quantify these views, a rating system was employed to rank each scenic view. The system considered three variables and a scoring system described below:

1. Distance of Vista or View Shed: This variable considers how long a distance a vista can be viewed. It assumes that a view or vista which is blocked only a few hundred feet from the observer have relatively lesser value than a view that can be seen for miles.

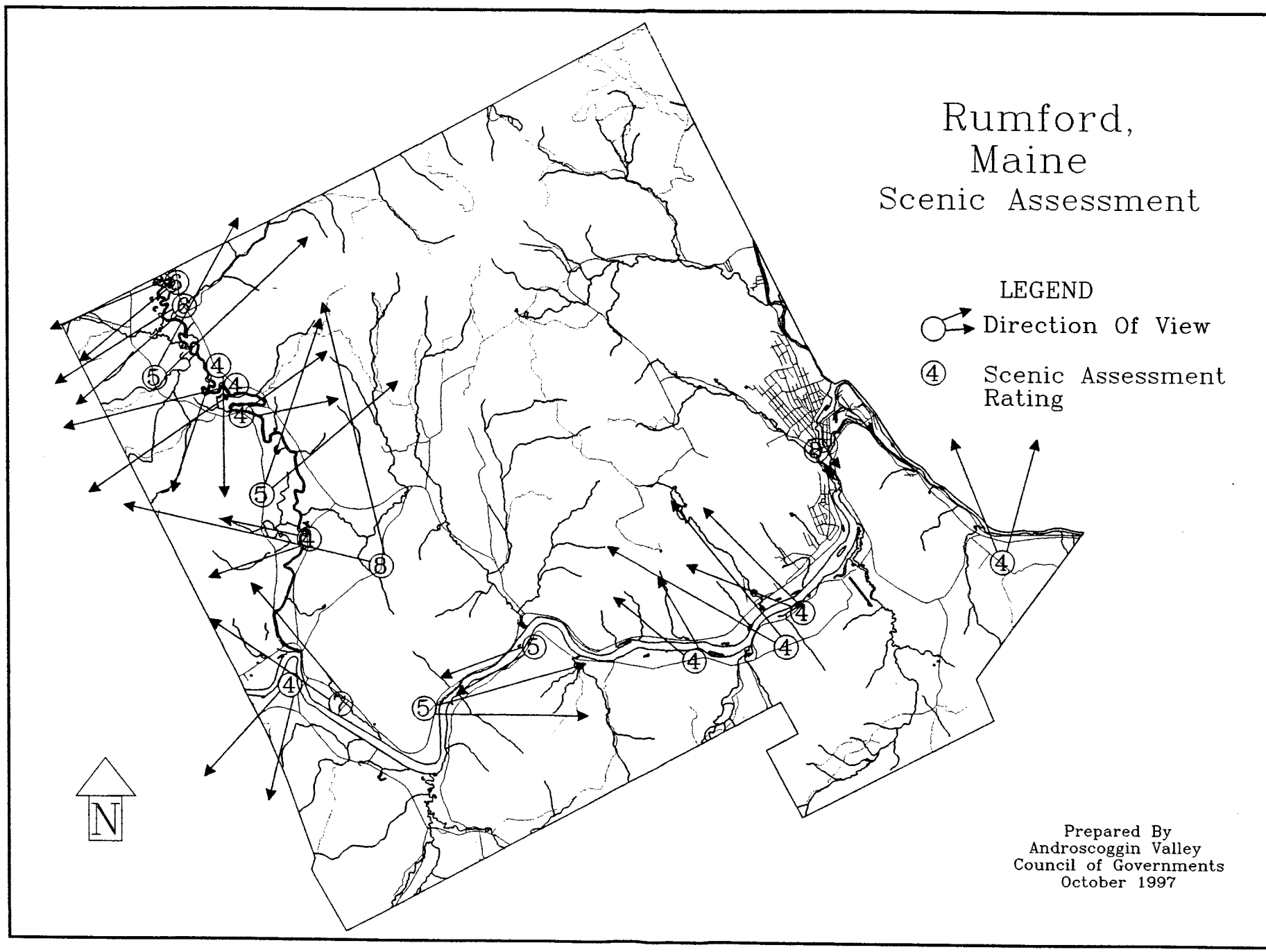
2. Uniqueness: Although not always impressive, the features in the landscape which are rare contribute "something special" to that landscape.

3. Accessibility: A given scenery has lesser importance if there is no public access to it or access is difficult.

A scale of one to three was used to score each variable with one being the lowest and three the highest. The criterion was as follows:

Distance of Vista:	1 Point - immediate foreground 2 Points - up to one mile 3 Points - more than one mile
Uniqueness:	1 Point - contains no unique qualities 2 Points - contains some characteristic 3 Points - contains impressive/unique qualities such as mountains, views of water, etc.
Accessibility:	1 Point - access difficult such as along "path" or trail 2 Points - access via public road 3 Points - access via scenic turnout or similar area

The location and view sheds are shown on the following map.


Rumford,
Maine
Scenic Assessment
LEGEND
Direction Of View
④ Scenic Assessment Rating
N
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October 1997

Wildlife

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 many species, there are four which are considered critical which are wetlands, riparian areas (shorelands of 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.

In addition to 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 a variety of aquatic furbearers, land adjacent to brooks, streams and rivers provide travel lanes for many wildlife species. Buffer strips along waterways provide adequate cover for wildlife movements, and maintenance of water temperatures is 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.

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 including deer wintering areas and waterfowl and wading bird habitat. In addition, they may identify other locations of special concern for wildlife. The IF&W has mapped two deer wintering areas which are near the head waters of Split Brook and the second north of Rumford Center. The two deer wintering areas have been assigned an indeterminate habitat value meaning that the necessary field investigation has yet to be completed to establish a habitat value of high, medium or low. Waterfowl and wading bird habitat including nesting and feeding areas have also been mapped. Five areas have been determined to be of significance. These include the Ellis River, a wetland north of Dimmock Mountain, the Meadow Brook wetland, the Logan Brook wetland, a wetland west of Route 5, and Joes Pond. A number of other surface waters and wetlands offer value to waterfowl but are not considered as significant.

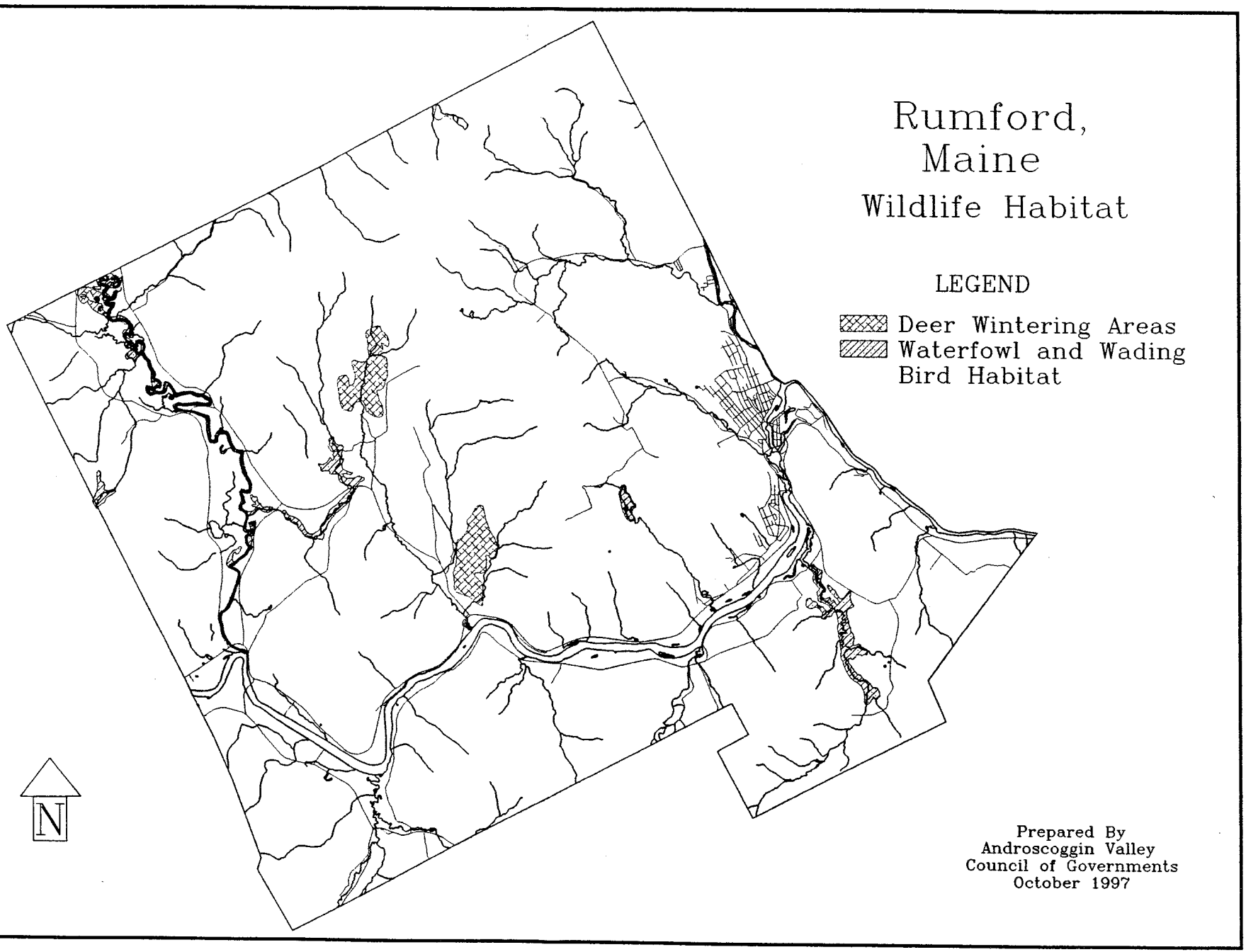
In addition to the above, the IF&W reports that transient Bald Eagles are known to occur along the Androscoggin River, Peregrine Falcons have been observed at the Mead Mill, and the Squawfoot mussel has been identified in the Ellis River in North Rumford and the Androscoggin at Rumford Corner.

Critical Areas, Rare, Endangered Species and Other Natural Features

The Critical Areas Act provides for the Register of Critical Areas. A critical area is any natural area documented by the Natural Areas Program that is conserved or protected in its natural state through voluntary action. Rumford contains two privately owned areas contained on the Register of Critical Areas. They include the Black Mountain Tourmaline Locality and the Rumford Whitecap Rare Plant Station.

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. Usually, information on natural features is not the result of comprehensive field surveys. Consequently, 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 Aureolaria pedicularia (fern-leaved false foxglove), Circumneutral talus community (circumeutral talus), Dryoperis fragrans (frangrant cliff wood-fern), Minuartia glara (smooth sandwort), Minuartia groenlandica (mountain sandwort) and Paronychia argyrocoma (silverling) that can be found or may be found in Rumford.

The Mount Zircon Spring and the Rumford Falls are other significant natural features. The spring is a moontide spring whose flow is governed by the gravitational pull of the moon. Its normal flow is 43 gallons per minute but increases to 60 gallons per minute at a full moon. It is believed that the spring is one of only two in the world. Rumford Falls drops 180 feet in one mile and is the greatest drop east of Niagara Falls.


Rumford,
Maine
Wildlife Habitat
LEGEND
Deer Wintering Areas
Waterfowl and Wading
Bird Habitat
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Council of Governments
October 1997

LAND USE AND DEVELOPMENT PATTERNS

Findings and Implications

- Traditional residential land use patterns allow for the efficient delivery of municipal services.
- Fifty percent of the land area in Rumford is registered in the tree growth program.
- Land areas well suited for industrial and commercial development are limited by the natural terrain.
- Town ordinances that manage land use are in need of updating.

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 that will direct future development characteristics of the community.

The Town of Rumford has approximately 50,000 acres of total area. Only a small portion, 900 acres of the town's total area is surface water.

Rumford's land use and development patterns reflect its two economic periods and the natural landscape that place limitations on suitable developable areas. The first economic period centered around agriculture and the development of small villages including Rumford Corner, Rumford Center and Rumford Point. These agricultural-based villages still provide a picture of early day Rumford. The second economic period that began in the late 1890s transformed an agricultural community of 900 people to an industrial center of 7,000 people in just twenty years. The pulp and paper industry begun by Hugh J. Chisholm changed the character of Rumford Falls that is still prevalent today. The great influx of mill workers, Chisholm's

apparent eye for worker housing, planning and architecture and lack of influence of the automobile resulted in the community of Rumford Falls. In an area of a little more than one square mile, the "Falls" developed into to one of Maine's most important industrial centers containing the mill, commercial center and residential areas to house more than 7,000 people. A second area known as Virginia at the head of the falls developed as a second compact residential neighborhood.

This development pattern is still prevalent today although newer commercial and residential development has dispersed from the traditional Rumford Falls because of lack of suitable developable land and the desire of newer residents to live in more suburban and rural locations.

Woodland/Forest

As with most Maine communities, forested land occupies the greatest amount of land area in Rumford. It is estimated that approximately 42,000 acres or 85 percent of the town's total area is forested. Of this amount, 27,000 acres in 327 different parcels are registered in the tree growth program. The 27,000 acres in tree growth ranked 7th in Maine among all municipalities and plantations in 1994 for the largest number of acres registered. Over the planning period, the majority of commercial forest of Rumford will remain as such due to available markets and their unsuitableness for other types of land uses caused by slope, soils and inaccessibility.

Agricultural Land Use

In a 1977 analysis of land use patterns in Rumford prepared by Androscoggin Valley Council of Governments, 2,900 acres of land was classified as in agricultural use. Since that analysis, the number of acres devoted to active agricultural land use has decreased. This decrease is primarily due to reverting of open fields to woody vegetation. It is estimated that in 1997, there were approximately 2,000 acres of land in active agriculture. This land is used for row crops (potatoes), corn, and hay.

The largest concentrated area of active agricultural land is found near Rumford Corner and Rumford Point. The land area between the Androscoggin River and Routes 2 and 232 is rich floodplain soil and is the most intensive agricultural area in Rumford. Found here are row crops and hayland. The second most active agriculture area is found on the floodplains of the Ellis River.

Over the planning period, significant loss of this important agriculture land to development is not expected. This is due to its location within floodplains and a limited demand for new residential development.

Industrial/Manufacturing Land Use

Manufacturing and industrial activity is often the most intense use of land. In Rumford, the Mead Paper Mill dominates the town's industrial land use. The mill's site of approximately 120 acres beside the Androscoggin River dominates the urban landscape. Future expansion of the Mead site in relation to land area is restricted by the river, topography and commercial areas. In the late 1980's, the town developed the Rumford Industrial Park at Smith Crossing reached by Route 108. This site containing approximately 40 buildable acres is served with all needed infrastructure. The park currently contains three firms, S.W. Young Construction, Cormier Construction Equipment, and Motion Industries. The Rumford Power Associates Limited Partnership (Energy Management Company) has proposed the construction of a gas fired energy plant within the park. The third site of manufacturing land use is found next to Route 2 and contains J.A. Thurston.

Rumford's topography and flood plains limit suitable areas for future manufacturing and industrial use. While scattered sites are identifiable, suitable locations with developable land areas of more than 50 acres are limited. Over the planning period, new suitable manufacturing and industrial sites will require identification and development.

Institutional/Public Land Use

Institutional and public land uses are centered in the Rumford Falls. On Shoppers Island is found the town hall and municipal offices, fire station and post office. Off the Island but in the Falls is the Rumford Community Hospital, Swift River Health Care, Rumford Elementary School, St. Athanasius-St. John School, the Rumford Public Library and several churches. Located on the fringe of the traditional compact area is the Mountain Valley High School.

Commercial/Service Land Use

Commercial and service land use in Rumford can be placed into one of four categories: Shoppers Island; downtown commercial; highway commercial; and scattered commercial. The traditional commercial and service area of Rumford is found on Shoppers Island. Bordered on one side by the Androscoggin River and on the other by the Upper Canal, the 25-acre Shoppers Island serves as an important commercial and service center. Besides government offices, the Island is the location of three banks, some 50 restaurant and retail establishments and professional services such as real estate, legal and medical. In addition to business, an 88-unit elderly housing complex and the offices of Mead Paper are on or next to the Island. Vacant land for development does not exist on the Island. However, there are several sites with structures that could be redeveloped and some upper floors are not used or are underutilized. In the early 1980s, a Shoppers Island improvement program was undertaken to improve pedestrian movement, building facades and other amenities.

Downtown commercial land use is commercial/service type land use that is found in the compact area of Rumford but not on Shoppers Island. Several concentrated areas of this land use type exist. These are Waldo Street, the corner of Hancock and Lincoln Streets, Bridge Street and Prospect Avenue and Prospect Avenue in Virginia.

The Waldo Street commercial area is developing by way of conversion of multi-family residential uses to commercial. In this area, retail including hardware, furniture and other similar goods are found. The Hancock and Lincoln Streets corner that is also Route 2 is automobile oriented with service stations and auto sales and parts. The Bridge Street/Prospect Street commercial area is auto and hardware oriented. Additional developable area in these three locations are restricted by residential uses or natural features.

The Prospect Avenue commercial area in Virginia is generally auto oriented with service stations, auto repair and sales. This area is limited to expansions by Route 2, floodplain and existing structures.

Rumford contains two major travel corridors, Route 2 and Route 108. Route 2 is the greater traveled route with an annual average daily traffic volume of more than 9,000 and has the greatest amount of highway commercial land use. While there is approximately 9 miles of Route 2 from Virginia to the Rumford/Hanover line, highway commercial development is found primarily in a one mile stretch west of Virginia. Uses include fast foods and other restaurants, lodging, and the Abbott Farm Plaza. The Abbott Farm Plaza contains a large department store and several smaller retail and service establishments. Through the remainder of the Route 2 corridor, other commercial/service land uses are scattered. Much of the land adjacent to Route 2 has limited development potential as the result of floodplain or slope.

While Route 108 is the second major travel corridor in Rumford, highway commercial type land use is limited as the result of the proximity of the Androscoggin River and slope. Several businesses are found at Smith Crossing as is the Rumford Industrial park.

Village Land Use

Rumford contains several traditional villages. The two largest are Rumford Point and Rumford Center. Others include Rumford Corner and South Rumford. The traditional villages of Rumford were established during the agricultural economic period of development. Rumford Center and Rumford Point still maintain their early village characteristics although Route 2 passes through them. These two compact areas contain structures of historic value, small retail business, churches and traditional village residential.

Residential Land Use

Rumford's residential development patterns reflect the influence of the town's industrial development period. Most residential dwelling units are found in an area of compact high density served by public water and sewer. Of the approximately 3,300 total dwelling units in Rumford, it is estimated that two-thirds are found in two areas, Rumford Falls and Virginia. This compact residential development pattern allows for the efficient delivery of municipal services. Other areas of concentrated residential land use are in South Rumford and Smith Crossing. Much of the residential growth over the past 25 years has been away from the traditional compact area. Several factors have influenced this pattern of residential development. Most important is the home owner's choice to live in a rural area. Newer residential land uses have occurred next to town roads in the more rural areas of the town including Hall Hill Road, Isthmus Road, and Whippoorwill Road.

The Rumford compact residential area contains a mixture of residential types. Much of the area was developed in the early 1900s to house construction and mill workers and their families. Residential types include large single family homes, two family dwellings and large multi- tenement structures. Lots are small ranging from 2,000 to 5,000 square feet reflecting residential development patterns before the popularity of the automobile. The area was laid out in the traditional grid pattern with street rights-of-ways of 60 or 50 feet and blocks of approximately 600 feet in length. The Falmouth, Rangeley and Cumberland Street area consists of large multi-tenant structures. Waldo Street reflects similar residential land uses, however, a movement toward retail and services have occurred. Hancock and Erchles Street contain the brick structures of Strathglass Park and are two-family and multi-tenant. Penobscot Street south of Lincoln Avenue is one and two-family and changes to multi-family as it nears Maine Avenue. Somerset Street is also multi-family. Washington Street south to Maine Street is larger older single-family. Franklin Street, Knox Street and Pine Street contain neighborhoods of a mixture of single, two and multi-family structures. Maple Street is primarily a single-family neighborhood. The Piscataquis Street, Strafford Avenue, Kennebec Street, Hall Street and Swift Avenue area is a more recently developed area of single-family homes.

The Virginia residential area is the second area of compact residential land use. While much smaller than Rumford Falls, approximately 150 acres in size, it contains some 300 dwellings. Situated on a side hill above the Falls of the Androscoggin River, expansion is restricted due to slopes. Structures are a mixture of single-family and multi-family.

The Smith Crossing residential area was developed in the late 1800s by Italian families who came to Rumford to work in the mills. This area is small when compared with Rumford Falls and Virginia containing less than 100 dwelling units.

South Rumford is a residential area of primarily single-family dwellings on lots ranging in size from 25,000 to 40,000 square feet.

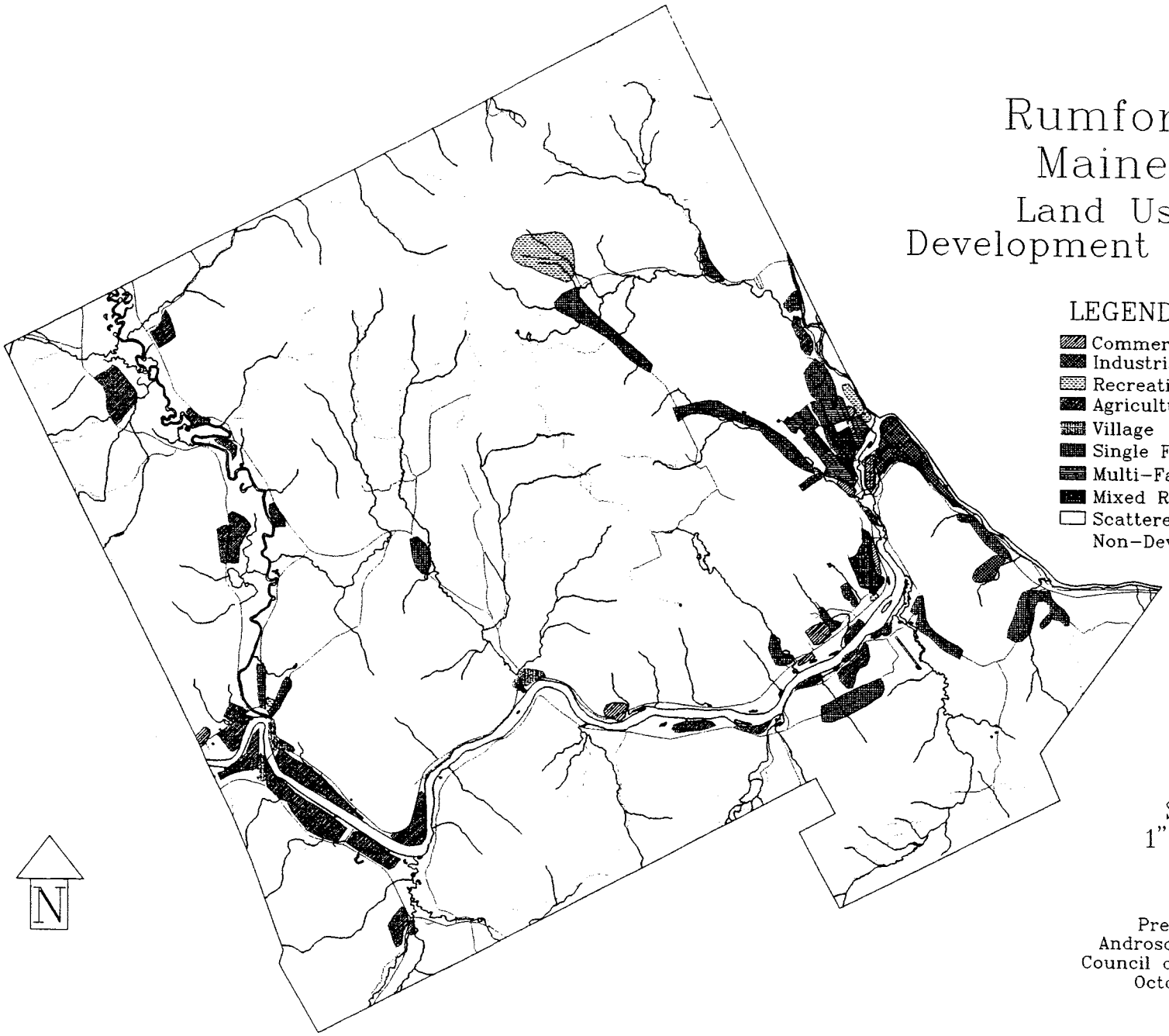
Recreational Land Use

Two areas of recreational land use are significant in Rumford. Black Mountain provides nationally recognized competitive cross country ski trails and the largest ski jump in Maine. Alpine skiing on lighted trails is also provided at the Mountain. A swimming pool, biking and hiking trails are also found at the Black Mountain complex.

The compact area of Rumford in Hosmer Field provides fields for baseball, football, track and other field events.

Future Land Use Trends

Over the 10-year planning period, it is expected that scattered residential development will continue next to the rural roads, and there will be a net loss in land used for large multi-tenant structures. Highway commercial land uses next to Route 2 will also increase. The greatest demand will exist from Virginia west to the Abbott Farm Plaza area.



Rumford, Maine
Land Use Development Patterns

LEGEND

- Commercial/Services
- Industrial/Manufacturing
- Recreation
- Agriculture
- Village
- Single Family Residential
- Multi-Family Residential
- Mixed Residential
- Scattered Residential/ Non-Developed/Woodland

N

Scale:
1"=6000'

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Land Use Ordinances

Rumford's most recent comprehensive plan was adopted in the early 1960s. That plan contains a future land use plan, but ordinances were not developed to carry out that plan.

The town has adopted a Shoreland Zoning Ordinance, a Flood Plain Management Ordinance, Subdivision Ordinance, Wellhead Protection Ordinance and Building Code. Presently, the town has no local review authority through its Planning Board for non-residential development such as commercial unless it should require a shoreland zoning or floodplain hazard permit.

The Shoreland Zoning Ordinance has been approved by the Commissioner of the Department of Environmental Protection. The compact and industrial area shoreland's have been placed in a general development district. Non-developed flood plains have been placed in a resource protection district that prohibits most structural development. The areas within 250 feet of the upland edge of 19 fresh water wetlands have been zoned as well. These wetlands were identified based on mapping prepared by the Maine Geological Survey in the early 1980s. The designation of freshwater wetlands for shoreland zoning purposes could be improved by using the National Wetlands Inventory Maps prepared by the U.S. Department of the Interior, Fish and Wildlife Service.

The town, through the planning board, reviews subdivisions based on a Subdivision Ordinance first adopted in the early 1960s and the State Subdivision Law. Subdivision activity has been minimal during the past 20 years. Local subdivision review standards need to be updated and brought into compliance with the State Subdivision Law. Particular consideration needs to be given to the street construction standards so to not discourage development served by new streets and to create attractive residential areas.

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

In 1994, the town adopted the Wellhead Protection Ordinance for the Ellis River Aquifer to protect the newly developed wells of the Rumford Water District. The ordinance establishes three protection districts or zones. Zone 1 is the land owned or controlled by the Water District and within the 200-day travel time area. Zone 2 is the area between the 200-day and 2,500-day travel time. The third zone consists of the remainder of the Ellis River watershed in Rumford. The ordinance identifies permitted and prohibited uses in each of the three zones. The ordinance should be reviewed and amended to clarify inconsistencies and improved performance standards. While the wells located in the Ellis River Aquifer have been offered protection by the ordinance, other wells used as a back up supply have not.

The Town has adopted the BOCA National Building Code with amendments. The building code is administered and enforced by a part-time building inspector.

Locations outside areas regulated by the Shoreland Zoning Ordinance and not served by public water and sewer require a minimum lot area of 20,000 square feet.

FISCAL CAPACITY

Findings & Implications

- ❖ Property taxes are the largest source of town revenues.
- ❖ Mead pays approximately 78 percent the total property taxes.
- ❖ Total municipal expenditures remained stable between 1993 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 needs through public expenditures. As Rumford develops over the next ten years, demands to provide various municipal services, facilities and equipment will be placed upon its fiscal capacity. 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 Rumford's fiscal capacity - its ability to finance such improvements.

Revenue

The largest source of revenue for the town is property taxes. Table I-34 lists the local valuation, property tax revenue, and the town's mil rate for fiscal years 1991 to 1996.

TABLE I-34
Valuation and Mil Rate
Rumford
Fiscal Years 1990-1996

Fiscal Year	Assessed Valuation (Local)	Annual % Change	State Valuation	Annual % Change	Mil Rate	Property Taxes
1991	519,160,141		552,150,000		0.01900	9,864,042
1992	576,931,715	11.1	608,800,000	10.3	0.01700	9,601,977
1993	580,867,406	0.7	659,600,000	8.3	0.01900	9,842,955
1994	544,004,009	(6.3)	651,900,000	(0.3)	0.01900	10,928,449
1995	519,049,040	(4.6)	670,450,000	1.9	0.02100	10,322,170
1996	504,192,256	(2.9)	682,300,000	1.8	0.02127	10,873,144

Source: Town of Rumford Annual Reports

Between fiscal years 1991 and 1993, the local assessed valuation increased by approximately $60 million. Much of this increase was associated with personal property assessments at the Boise Cascade (Mead) Paper Mill. Local assessed valuation declined by approximately $77 million between the fiscal years 1993 and 1996. Overall local assessed valuation decreased by some $15 million over the six-year period. The decrease in local assessed valuation between 1993 and 1996 can be attributed to an agreement between the town and Boise Cascade to reduce assessed valuation by $14 million per year for a three-year period due to a decline in the paper market. Deprecation in production machinery equipment was also a factor. Local assessed valuation of land and buildings rose during the period. The state valuation of Rumford increased from $552 million in 1991 to $682 million in 1996 representing a 24 percent increase.

The mil rate has remained stable throughout the six-year period increasing by approximately 2 mils. Mead Paper is the largest single property taxpayer accounting for approximately 78 percent of all property taxes paid in Rumford. Property taxes collected increased by approximately $1 million between 1991 and 1996. When the 1996 dollars are converted to 1991 dollars using the consumer price index, property taxes raised in adjusted dollars was less in 1996 than in 1991.

Other major consistent sources of revenues are excise and non-property taxes, intergovernmental funds and sewer fees. Excise taxes collected increased from $492,000 in 1991 to $515,000 in 1996. In 1995, $531,000 was collected in excise taxes the highest single year amount ever recorded in Rumford. Excise tax collection remained stable throughout the period while a general municipal trend was a decline in excise tax collections between 1991 and 1993 due to a weak economy.

Intergovernmental revenues are primarily comprised of state revenue sharing dollars, local road assistance, and general assistance reimbursement. The largest is from state revenue sharing.

Table I-35 Municipal Revenue Rumford						
Fiscal Year	1991	1992	1993	1994	1995	1996
Property Taxes	9,864,000	9,602,000	9,843,000	10,928,000	10,322,000	10,873,000
Excise/Other Taxes	535,000	520,000	730,000	963,700	671,500	574,600
Intergovernmental Revenues	540,600	606,800	667,700	966,500	474,900	584,300
Investments	247,400	190,600	167,708	155,000	315,300	319,300
Other	135,000	737,600	829,500	526,600	855,300	844,800
TOTAL	11,322,000	11,657,000	12,238,000	13,677,000	12,639,000	13,196,000

SOURCE: Town of Rumford Annual Reports

Expenditures

Total municipal expenditures increased by approximately $2.2 million or 21 percent in the six-year period between 1991 and 1996. However, in the period between 1993 and 1996, the total expenditures increased by less than 1 percent. Considering the CPI for adjusting dollars for inflation municipal expenditures were less in 1996 than in 1993. The largest expenditure item is special assessments that included in 1996 an educational appropriation of $5,878,000 and a county tax of $444,500.

Table I-36 Significant Expenditures Rumford Fiscal Years 1991 - 1996						
Category	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**
General Government	584,100	590,200	802,500	570,100	566,700	666,900
Public Safety	1,875,000	2,020,000	1,933,000	1,953,500	1,906,000	1,956,000
Health & Sanitation	516,000	812,700	846,800	658,700	642,700	638,900
Public Works	751,300	1,007,000	1,059,000	1,067,000	1,138,000	945,000
Town Garage	256,400	179,700	309,300	114,700	323,900	322,700
Welfare	60,300	60,500	84,000	45,400	63,000	58,000
Public Services	335,100	350,000	355,300	299,400	286,800	314,900
Debt Service	86,500	86,500	81,900	81,900	82,000	78,800
Special/Assessments	4,627,000	5,020,000	5,285,000	5,896,000	6,061,000	6,322,000
Unclassified	897,000	1,031,000	815,800	955,400	855,500	497,200
Transferred Out	---	---	644,300	666,000	387,900	667,900
TOTAL	10,304,000	11,475,000	12,431,000	12,308,000	12,343,000	12,469,000

Source: Town of Rumford Annual Reports

Capital Projects Fund

The town maintains a capital projects fund used for the construction or acquisition of significant capital facilities which in 1995 totaled approximately $1,374,000. Capital project funds have been established for the highway, fire, police, and parks departments, town hall, public library and other town properties, sewer extensions and computers.

Municipal Debt

As of the end of fiscal year 1995, the Town of Rumford had an outstanding long-term of approximately $445,000. This debt was composed of general obligation bonds accepted in 1988 to finance the municipal sewer system. The bonds will be retired in 2003. How much 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 state valuation, the maximum debt under state law, including debt associated with specials districts, Rumford could carry what would be approximately $100,000,000. Presently, Rumford has an outstanding municipal debt of approximately $445,000. Rumford 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 financing of major capital expenditures compared with the ability of the tax base to support such costs. In considering Rumford's capacity to fund normal municipal services and capital projects, two areas are important. First, in recent years, annual increases in valuation (not considering the agreement with Boise) have been approximately equal to the rate of inflation. Such a rate of increase in valuation does not allow new services or programs to be implemented without a mil rate increase. Rumford 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.