

**TOWN OF BRADLEY  
COMPREHENSIVE PLAN**

**2004**

## Introduction

Dear Citizens of Bradley:

We hereby respectfully submit the attached Comprehensive Plan for the Town of Bradley. Drawing upon the same desire for responsible growth as was portrayed by the crafters of the initial Comprehensive Plan of 1974, the contents contained herein is the result of many hours devoted by the diverse cross section of Bradley's citizenry which constitutes the Comprehensive Plan Committee.

To fully appreciate the document we have provided before you, it is important to understand what a Comprehensive Plan consists of and why it is necessary.

First and foremost, a Comprehensive Plan is good planning. This Comprehensive Plan is an expression of the community's vision for its future. It will serve as a guide for making public and private decisions for determining that future. It also contains basic information about the resources and people of Bradley.

You will find that a significant portion of this document was devoted to the inventory and analysis of aspects and components which comprise the town of Bradley. This information is summarized in section 11.

The Comprehensive Plan is neither a zoning ordinance nor a law. It is an advisory document that sets forth Bradley's goals for the future and the specific policies and strategies necessary to achieve those goals. The Comprehensive Plan represents a collective statement by the Town on how it wants to grow and how townspeople want that growth to be managed. The Goals, Policies and Strategies are contained in section 12. Present laws and ordinances in effect at this time will not be affected unless or until the Town of Bradley votes to change those ordinances.

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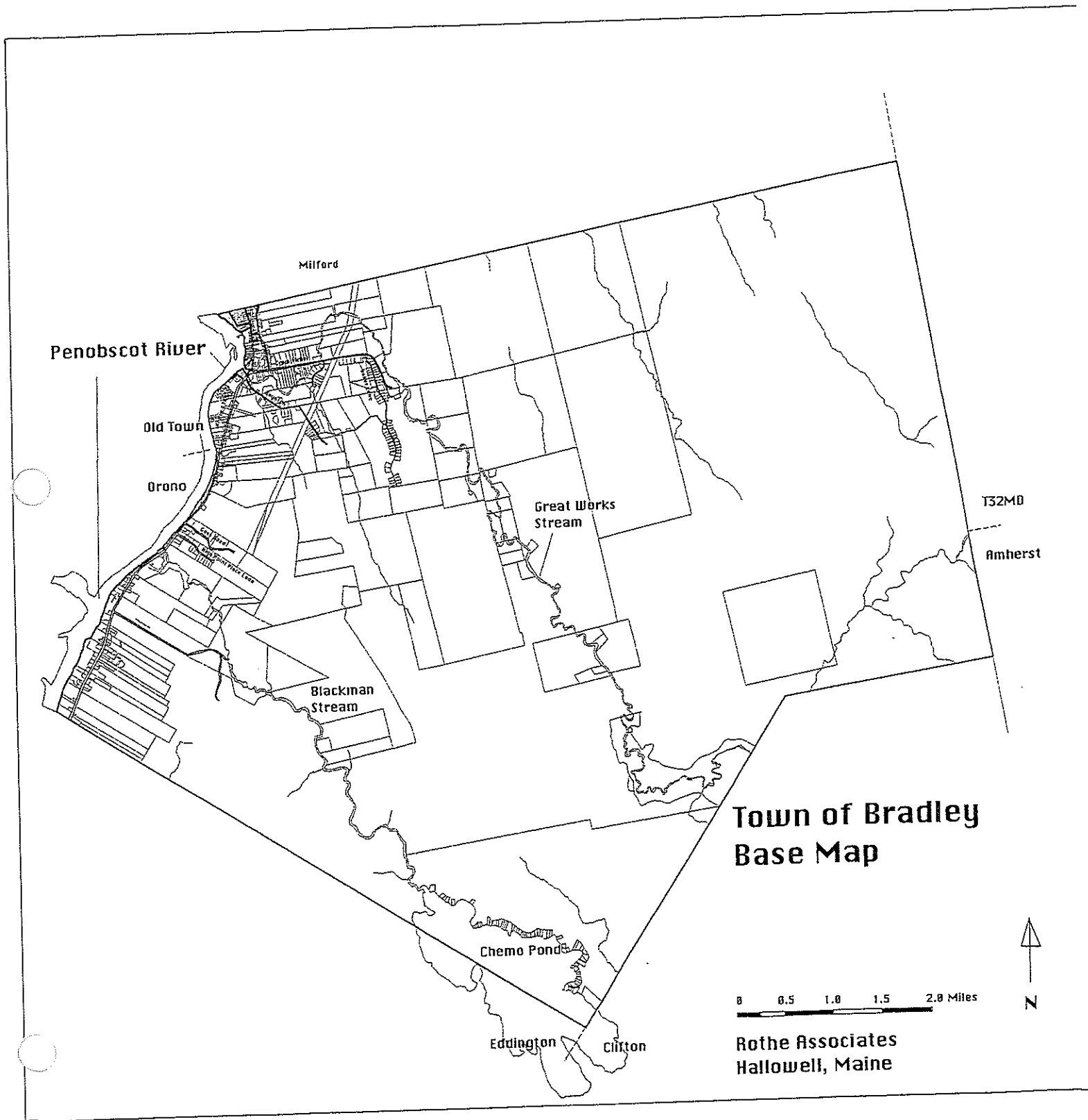
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## 1. HISTORY

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*The following is an excerpt from "Bradley, Maine Sesquicentennial 1835-1985 History:"*

### Early Settlers

Tall virgin forest, mostly pine, covered much of the area which is now Bradley. Game of all kinds was plentiful. The rivers and streams teemed with fish.

Over 4,000 years ago, this area is believed to have been inhabited by an Indian tribe known as the "Red Paint People." The "Red Paint People" were known for the red ochre they used when burying their dead. Several years ago, an ancient "Red Paint" gravesite was found in Bradley. This Indian tribe favored river valleys (especially the Penobscot and Kennebec) and sea coast areas. The Bradley burying site consisted of eight graves and their respective "grave goods," items that were buried with the dead for use by the deceased in the hereafter. The graves were marked by the "red paint" (which is said to find its source from clay in the vicinity of Mt. Katahdin and also from the islands in the Penobscot River off Olamon Stream). It is not known where this Indian tribe came from, where it went, or why it disappeared.

A 1984 archaeological dig site on the north bank near the mouth of Otter Stream yielded evidence of other Indian inhabitants. Carbon dating of artifacts found indicated that the site was occupied by Indians some 2,000 years ago.

Before 1776, Bradley was a part of the territory that belonged to the Penobscot Indians (Terratine Tribe). Probably the first white men that made their way up the river came to fish, to hunt and to trap. They then went further north or back from whence they came. It is possible that the first permanent settlers here had built cabins on Great Works Stream as early as 1783. Chief Orono and his tribe treated these white men kindly. These settlers then began to farm. They were not obliged to clear land for pasturing their cattle since the meadow land adjoining the stream was sufficient. Surplus hay was stacked into high stacks to provide them fodder for the winter.

Early agricultural efforts were family farms located along the river in the western part of the town. It was soon discovered that the town possessed two powerful natural resources—its virgin forest and its fast moving waters. Sawmills began to appear along the streams and river.

As the sawmills flourished the town began to grow. Other businesses were established—general stores, grist mills (for grinding flour), cooper shops (for making barrels), a dry goods store, a shoe repair shop, several blacksmith shops, livery stables, tippling shops (taverns), a millinery shop, a butcher shop and a dance hall.

### Waterways

Waterways have played an important part in Bradley's history. Over the years many mills of various types have been built along these waterways. One of the most important waterways was the Penobscot

River. In the early years it was used primarily as a shipping lane for the numerous forest products that were floated down to the large port in Bangor.

As time passed the importance of the river changed from being a shipping lane to a producer of hydro-electric power. The river was also used to carry waste materials from the mills and homes located along its banks. Through the years the Penobscot River has suffered from these pollutants. The quality of the river had changed so much that the salmon, which were once plentiful, were disappearing. Salmon fishing was an enjoyable pasttime in the town. Many "fish stories" are told about the ones that got away. Recent years have seen the return of the salmon to our section of the river thanks to Federal and State regulations mandating that waste materials be properly disposed of. The river has also been the setting for tragedy. Four local men were electrocuted on the dam on July 9, 1937. Also, three young girls drowned in the river near their home in 1942.

Another important waterway in the town is Great Works Stream. The first inhabitants of the Town of Bradley settled along its banks. There were many meadow areas along the winding stream for farmers. Eventually the swift waters would be harnessed for water power and the forested areas would supply the raw materials to meet the demands of a growing town.

Even today, although the stream is not used as a power resource many sportsmen enjoy Great Works Stream for recreational purposes such as canoeing, fishing, hunting and camping. Nichols Stream, now known as Blackman Stream, was also the site of manufacturing. The Blackman Brothers built a large shingle and stave mill several miles upstream. Today it is the site of the Maine Forest and Logging Museum. Blackman Stream is the outlet for Chemo Pond and winds its way to the Penobscot River.

The other waterways of the town: Oliver Brook, Boynton Brook, and Otter Creek have been used primarily for recreational purposes. Although it is not generally known, Otter Creek through the Otter Chain Ponds, is a run-off route for Sunkhaze Bog and the Penobscot River. This is part of the cause of the many floods that have inundated Bradley village through the years.

Nichols Pond, now known as Chemo Pond (an Indian name for "Big Bog"), lies in the extreme southern corner of the town. The towns of Eddington and Clifton also lay claim to part of its beautiful shores. Chemo Pond is approximately three miles long and two miles wide. Many Bradley residents have summer camps on Chemo.

## Transportation

When it came to modes of transportation, the inhabitants of Bradley did not have much to chose from. Our earliest settlers used the conventional means of the day; horses and wagons were a common sight. As the town grew, a need developed for a means of mass public transportation. In 1842 a petition was filed to establish a ferry for crossing the Penobscot River. This ferry would cross over to Old Town near the foot of the mills in Great Works. Since this ferry was small it only carried passengers to and fro across the river.

Eventually there were two ferries crossing the Penobscot River from Bradley. A larger ferry service was operated between Bradley and Orono. This ferry was a barge type cable ferry operated by hand winches. It was of sufficient size to carry not only passengers, but also horses and wagons. After operating for many years this ferry ceased operation in the early 1900's.



In 1936 a flood took out the wharf and caused much damage to the Bradley-Old Town Ferry House. As a result of the flood destroying the docking facilities of this ferry, John T. Cyr had an opportunity to start a new mode of public transportation. He founded a bus line that ran not only to Old Town, but also made the loop through to Bangor. This bus service provided transportation to the mill in Old Town for its workers. At its peak busses were run seven days a week, twelve runs a day. This service was discontinued in the early 1960's. A special run for mill workers was tried in 1973, at the time of the energy crisis, but failed to get enough riders to make the run profitable. Cyr Bus started bussing students for the Town of Bradley in the early 1950's.

As years passed more people bought their own motor vehicles and there was little need for a public transportation system in town, other than for the students.

Unfortunately for the residents of Bradley, the railroad that was proposed for the west side of the Penobscot River never came to be. Without the railroad the Town of Bradley could not develop its full potential.

### **Town Government**

In the years prior to 1776 what is now known as the town of Bradley was part of the six mile stretch of land extending from the head of the tide of the Penobscot River. In 1776 this portion of land was purchased by the Commissioners of the State of Massachusetts from the Terratine Indians. A few years after this, it was surveyed and opened for settlement and was known as Purchase #4. Some of the first settlers of this period were Oliver, Spencer, Blackman and Knapp.

In 1825 John Wilson, Treasurer of Penobscot County, notified the inhabitants of #4 Indian Purchase that they would be required to pay a county tax and that they must organize themselves into a plantation by choosing officers. They were also required to report their actions on this matter to him or his successors. Thomas Cram, who was acting as Clerk, warned the inhabitants to meet and to plan for the organization of such a plantation. As a result of this meeting Thomas Cram was chosen as Clerk; George Vincent, Thomas Cram, and Frederick Spofford were chosen to be assessors, and Bradley Blackman was chosen as Treasurer.

During this period of time #4 Indian Purchase was classed with the towns of Brewer, Orrington, and Eddington for the purpose of electing a Representative to the State of Legislature.

The years following saw rapid progress and development for the plantation. With vast improvements in the use of water power on the Penobscot River, the village that was known as Great Works soon developed. Accordingly, in 1834 the inhabitants of the village of Great Works petitioned the Legislature to be incorporated as a town. On February 3, 1835, the Governor of the State of Maine signed a bill incorporating the village as a town. This village was to be called Bradley.

This incorporation was not accepted until June 29, 1835, at the first Town Meeting. At this meeting Joseph Williams, Reuben Pratt, and John Carter were elected Selectmen and Bradley Blackman was chosen as Treasurer. At the time of its incorporation there were three hundred inhabitants and the valuation of the estates was \$116,300.

As the Town prospered and changed so did its representation. In 1975 at its Town Meeting, the inhabitants of the Town voted to change from a Selectmen/Town Meeting form of government to a Town Manager/Selectmen/Town Meeting form of government. The first Town Manager hired was

Michael K. Knowles. An addition was added to the currently existing town office to house the town manager and his secretary. Knowles was not only the Town Manager, but also wore many other hats as well. He was Town Treasurer, Town Clerk, Tax Collector, Road Commissioner, and Agent for the Overseers of the Poor.

Another modification in town government was the conversion of the town's fiscal year. As with many other communities, the town of Bradley originally held its Town Meetings in March and the fiscal year ran from the first day of March through the last day of February. At the Town Meeting held in March 1977, the townspeople voted on a sixteen month budget to allow for the switching of the fiscal year to a July 1 - June 30 time period. This change meant that the town's fiscal year would coincide with the State's.

Still another reorganization for Bradley's town government was the approval of the Town Charter in June of 1984. This change was not one to come easily. The Town Meeting of 1982 voted to elect a Charter Commission. Although this Commission wrote a Charter, the town did not vote to accept it because not enough votes were cast to decide the question. A second Charter Commission was elected in June, 1984 and a revised form of the original Charter was presented to the voters of the town for their decision. The Charter was accepted with a three to one vote in November of 1984. The Charter provided for the change to a Town Manager/Council/Town Meeting form of government.

## 2. POPULATION

### Historical Trends

Bradley's year-round population remained relatively constant in the 1920s and 30s, then increased at a gradual rate until 1980. Between 1980 and 1990, the Town's population decreased by 1%, then grew by 9% between 1990 and 2000. Except for the 1980-90 period, the Town's population growth since 1970 has exceeded that of Penobscot County and the State. Bradley's historical growth patterns are shown in the chart below and are summarized in Table 1 which also shows figures for Penobscot County and the State.

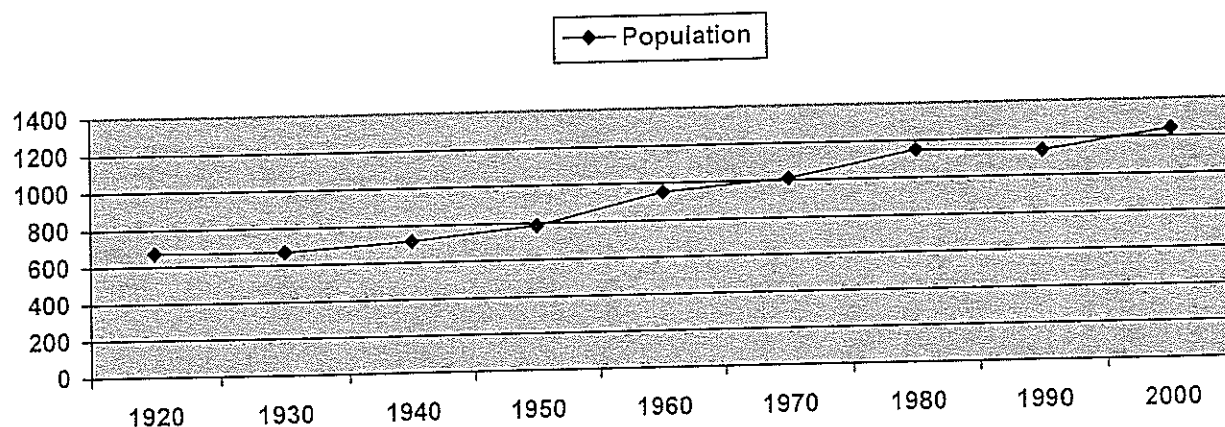


Table 1  
Population of Bradley, Penobscot County, And Maine  
1920-2000

Year	Bradley	Penobscot County	Maine
1920	672	87,684	768,014
1930	671	92,379	797,423
1940	716	97,104	847,226
1950	786	108,198	914,950
1960	951	126,346	970,689
1970	1,010	125,393	992,048
1980	1,149	137,015	1,124,660
1990	1,136	146,601	1,227,928
2000	1,242	144,919	1,274,923
1970-80 change	14%	9%	13%
1980-90 change	-1%	7%	9%
1990-00 change	9%	-1%	4%
1960-00 change	31%	15%	29%

Source: U.S. Census

Factors contributing to Bradley's growth between 1960 and 2000, during which time the Town's population grew by 31%, include the national trend to migrate from urban to rural areas, the proximity of Bradley to Bangor and Brewer, and the relatively low cost of land.

### Comparative Population Change

Table 2 contains a summary of population changes over the past 30 years for Bradley and a number of nearby communities on the east side of the Penobscot River, as well as nearby communities on the west side of the river, Penobscot County and the State. With the exception of Brewer, the communities on the east side of the Penobscot River have grown faster during the 1970-2000 period than those on the west side. The region's four biggest communities (Bangor, Brewer, Old Town and Orono) have lost population since 1970, while all other communities have gained population.

Table 2 Comparative Population Change 1970 - 2000							
	1970	1980	1990	2000	% Change 1970-80	% Change 1980-90	% Change 1990-00
<b>East Side, Penobscot River</b>							
Bradley	1,010	1,149	1,136	1,242	14	-1	9
Brewer	9,300	9,017	9,021	8,987	-3	0	0
Clifton	233	462	607	743	98	31	22
Eddington	1,358	1,769	1,947	2,052	30	10	5
Holden	1,841	2,554	2,952	2,827	39	16	-4
Milford	1,828	2,160	2,884	2,950	18	34	2
<b>West Side Penobscot River</b>							
Bangor	33,168	31,643	33,181	31,473	-5	5	-5
Old Town	9,057	8,422	8,317	8,130	-7	-1	-2
Orono	9,989	10,578	10,573	9,112	6	0	-14
Veazie	1,556	1,610	1,633	1,744	3	1	7
Penobscot Co.	125,393	137,015	146,601	144,919	9	7	-1
Maine	993,722	1,124,660	1,127,928	1,274,923	13	9	4

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

### Age Distribution

Table 3 contains a summary of age distribution for Bradley, Penobscot County and the State for 2000. Bradley's age distribution is virtually the same as that of Penobscot County. Both Bradley and the County have a smaller "18-44" population than the State, but a larger "45-64" population. All other population categories are approximately the same.

Table 3 Population by Age Category, 2000						
	Bradley		Penobscot County		Maine	
	#	%	#	%	#	%
Under 5	64	5	7,768	5	70,726	6
5-17	208	17	25,332	17	230,512	18
18-44	499	40	58,346	40	583,894	46
45-64	293	24	34,553	24	206,389	16
65 and over	178	14	18,920	13	183,402	14
<b>Total</b>	<b>1,242</b>	<b>100</b>	<b>144,919</b>	<b>99</b>	<b>1,274,923</b>	<b>100</b>

Source: U.S. Census, 2000

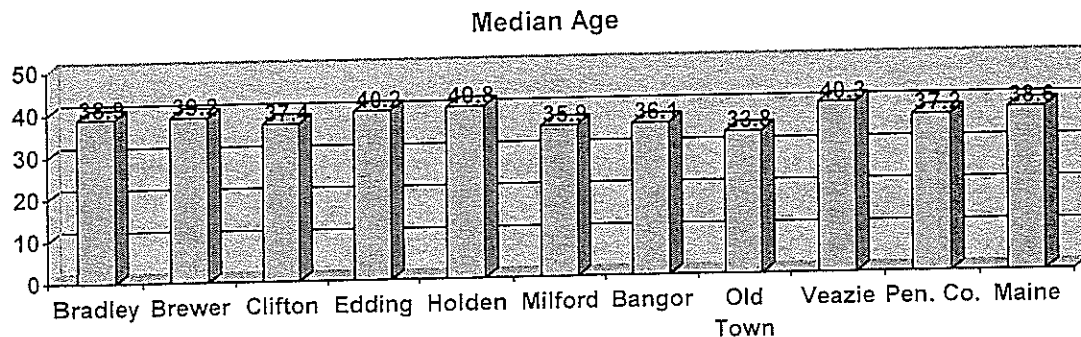
Table 4 provides an overview of how the Town's population changed during the 1990-2000 decade. The Town actually lost population in the "under 5" category. The largest gains were in the "45-64" category and in the "65 and over" category.

Table 4 Bradley Population Growth by Age Category, 1990-2000				
	1990	2000	1990-2000 Change	
			#	%
Under 5	73	64	0	-12
5-17	184	208	24	13
18-44	492	499	7	1
45-64	249	293	44	18
65 and over	138	178	40	29
<b>Total</b>	<b>1,136</b>	<b>1,242</b>	<b>106</b>	<b>9</b>

Source: US Census, 1990, 2000

### Median Age

According to the 2000 Census, the median age in Bradley (38.9) is higher than that of Penobscot County (37.2), but almost the same as the State of Maine (38.6).



## Household Size

The average household size in Bradley (2.42 in 2000) has been declining since 1980, as it has in Penobscot County, the State of Maine and nearby comparison communities (see Table 5). In the year 2000, the number of persons per household in Bradley was greater than at either the County or State level, but smaller than that of all comparison communities on the east side of the Penobscot except Brewer. In general, a higher number of persons per household reflects a higher number of school age children in the general population.

**Table 5**  
**Comparative Household Size, 1980-2000**

	1980	1990	2000	1990-2000 % change
<b>East Side, Penobscot River</b>				
Bradley	2.89	2.58	2.42	-16
Brewer	2.72	2.31	2.30	-15
Clifton	2.80	2.62	2.45	-13
Eddington	3.01	2.63	2.46	-18
Holden	2.79	2.61	2.45	-12
Milford	2.94	2.72	2.50	-15
<b>West Side Penobscot River</b>				
Bangor	2.49	2.31	2.12	-15
Old Town	2.73	2.53	2.30	-16
Veazie	2.73	2.48	2.41	-12
<b>Penobscot County</b>	2.80	2.57	2.38	-15
<b>Maine</b>	2.75	2.56	2.39	-13

Source: U.S. Census, 1980-2000

## Household Type

Table 6 contains a summary of households by type for Bradley and the State of Maine, as shown in the 2000 Census. Bradley has a higher percentage of family households (70.8%) than the State (65.7%), as well as married couple families (59.5% vs. 52.5%). Conversely, the Town has a lower percentage of female householders (6.6% vs. 9.5%) non-family households (29.2% vs. 34.3%) and householders 65 years and over living alone (7.2% vs. 10.7%). There are no persons in Bradley reported to be in group quarters.

**Table 6**  
**Household By Type 2000**

	<b>Bradley</b>		<b>Maine</b>	
	#	%	#	%
All Households	514	100	518,200	100.0
Family Households	364	70.8	340,685	65.7
Married couple Families	306	59.5	272,152	52.5
Female Householder, no male	34	6.6	49,022	9.5
Non-Family Households	150	29.2	177,515	34.3
Householder Living Alone	113	22.0	139,969	27.0
Householder 65+ and Alone	37	7.2	55,483	10.7
Persons in Households	1,242	100	1,240,011	97.3
Persons in Group Quarters	0	0	34,912	2.7
Institutionalized	0	0	13,091	1.0
Other	0	0	21,821	2.7

Source: U.S. Census, 2000

### **Educational Attainment**

Based on 2000 Census data, the population of Bradley that is 25 years and older has less formal education than the State as a whole. Approximately 48% of the Town's population has at least a high school diploma (compared to 38% at the County level and 85% at the State level), and 10% has at least a bachelor's degree (compared to 13% at the County level and 23% at the State level).

**Table 7**  
**Educational Attainment 2000**

	<b>Total # of Persons 25+ Years</b>	<b>% High School Grad or Higher</b>	<b>% Bachelor's Degree or Higher</b>
Bradley	871	48%	10%
Penobscot County	95,505	38%	13%
Maine	869,893	85%	23%

Source: U.S. Census, 2000

### **Median Household Income and Poverty**

Based on the 2000 Census, the median household income in Bradley (\$37,163) is higher than that of Penobscot County (\$34,274), but it's almost the same as the State figure (\$37,240). The percentage of the Town's population living below the poverty level (9.3%) is lower than in the County (13.7%) but higher than in Maine (7.8%).

## Population Projections

In January of 2002, the State Planning Office released population projections by age category for every community in the State. The projections for Bradley show very little growth in the “under 5,” “5-17” and “18-44” categories, but more robust growth in the “45-64” and “65 and over” categories.

<p align="center"><b>Table 8</b> <b>Town of Bradley Population Projections</b></p>												
Age Group	2000	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
0-4	64	70	69	70	71	72	71	72	73	74	74	74
5-17	208	195	193	191	188	186	185	184	184	185	186	188
18-44	499	506	508	506	507	505	505	505	504	507	510	511
45-64	293	319	325	330	334	337	340	343	344	343	341	340
65+	178	188	191	192	195	200	205	209	213	222	231	239
<b>Total</b>	<b>1,242</b>	<b>1,278</b>	<b>1,286</b>	<b>1,289</b>	<b>1,295</b>	<b>1,200</b>	<b>1,306</b>	<b>1,313</b>	<b>1,318</b>	<b>1,331</b>	<b>1,342</b>	<b>1,352</b>

Source: Maine State Planning Office

Table 9 shows how Bradley’s population is expected to change between the year 2000 and 2014, and the extent to which the older age categories will dominate the anticipated increases. Growth in the “45-64” and “65+” categories will account for most of the Town’s future growth. There will be a modest increase (10 people) in the “under 5” population, but a loss of 20 people in the “5-17” (school age) population.

<p align="center"><b>Table 9</b> <b>Bradley’s Population Growth, 2000-2014</b></p>						
	2000 Population		2014 Population		Change, 2000-2014	
	#	%	#	%	#	% of Total
Under 5	64	5	74	5	10	9
5-17	208	17	188	14	-20	-18
18-44	499	40	511	38	12	11
45-64	293	24	340	25	47	43
65+	178	14	239	18	61	55
<b>Total</b>	<b>1,242</b>	<b>100</b>	<b>1,352</b>	<b>100</b>	<b>110</b>	<b>100</b>

Source: US Census, 2000 and Maine State Planning Office

The final table provides a comparison of Bradley’s future population with that of Penobscot County and the State of Maine in the year 2014. Bradley’s “under 5” and “5-17” categories will be about the same as the State’s. There will be more people in the “18-44” category (38% vs. 33%), and also in the “65 and over” category (18% vs. 16%), but fewer in the “45-64” category (25% vs. 30%).



Table 10  
Projected Population by Age Category, 2014

	Bradley		Penobscot County		Maine	
	#	%	#	%	#	%
Under 5	74	5	7,832	5	73,048	5
5-17	188	14	21,069	14	202,619	15
18-44	511	38	54,763	37	454,223	33
45-64	340	25	41,901	28	410,609	30
65 and over	239	18	22,549	15	221,746	16
<b>Total</b>	<b>1,352</b>	<b>100</b>	<b>148,114</b>	<b>99</b>	<b>1,362,245</b>	<b>99</b>

Source: Maine State Planning Office

### 3. HOUSING

#### Changes in Total Housing Stock

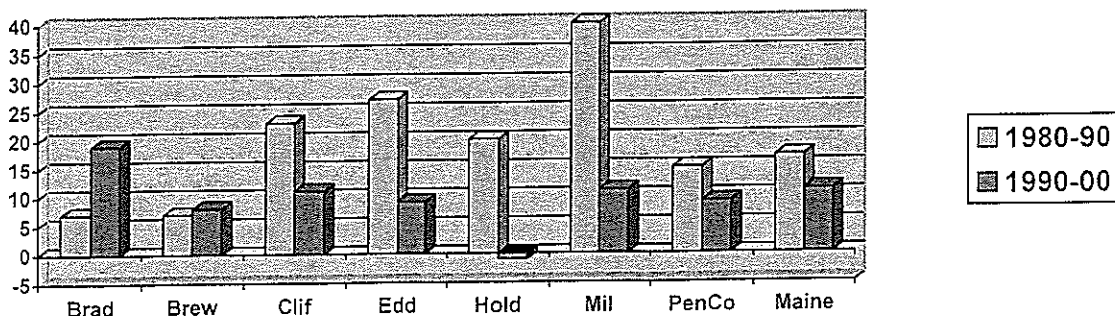
Table 1 includes a summary of the changes in total housing stock since 1980 in Bradley, a number of adjacent communities, Penobscot County and the State of Maine. Between 1980 and 1990, the total housing stock in Bradley (seasonal and year-round) grew by 35 units, or 7%. The Town's rate of increase was about the same as that of Brewer, but was far less than that of all surrounding communities, Penobscot County (15%) and the State of Maine (17%). Between 1990 and 2000, Bradley grew by 98 housing units or 19%. This rate of growth was higher than all jurisdictions shown in Table 1. The changes in the rate of growth are shown in the chart following Table 1.

Table 1  
Changes In Total Housing Stock

	Total Number of Units			Increases, 1980-90		Increases, 1990-2000	
	1980	1990	2000	#	%	#	%
Bradley	481	516	614	35	7%	98	19%
Brewer	3,534	3,780	4,064	246	7%	284	8%
Clifton	305	376	416	71	23%	40	11%
Eddington	664	843	920	179	27%	77	9%
Holden	1,106	1,332	1,320	226	20%	-12	-1%
Milford	805	1,126	1,248	321	40%	122	11%
Penobscot County	53,415	61,359	66,847	7,944	15%	5,488	9%
State of Maine	501,093	587,045	651,901	85,952	17%	64,856	11%

Source: U.S. Census, 1980, 1990, 2000

#### Rate of Growth in Housing Stock, 1980-2000



## Year -Round and Seasonal Dwellings

Table 2 contains information on the total number of dwellings, the number of year-round dwellings, and the number of seasonal dwellings in Bradley, Penobscot County and the State of Maine. In 2000, Bradley had a lower percentage of year-round dwellings (88%) than the County (93%), but a higher percentage than the State (84%). The percentage of seasonal dwellings in Bradley, Penobscot County and the State, as reported in the U.S. Census, has remained relatively constant over the past 20 years.

<p style="text-align: center;"><b>Table 2</b> <b>Year-Round And Seasonal Dwellings, 1980-2000</b></p>					
	<b>Total Dwellings</b>	<b>Total Year Round Dwellings</b>		<b>Total Seasonal Dwellings</b>	
	<b>#</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>Bradley</b>					
1980	481	421	88	60	12
1990	516	465	90	51	10
2000	614	542	88	71	12
<b>Penobscot County</b>					
1980	53,415	49,541	93	3,874	7
1990	61,359	57,321	93	4,038	7
2000	66,847	61,885	93	4,962	7
<b>State of Maine</b>					
1980	501,093	427,377	85	73,716	15
1990	587,045	499,006	85	88,039	15
2000	651,901	550,431	84	101,470	16

Source: U.S. Census

## Housing Types

The predominant housing type in Bradley is the single-family dwelling. Table 3 contains a breakdown of housing units in 2000 by housing type, as reported in the 2000 Census. In 2000, 64% of the housing units in Bradley were single family dwellings (detached and attached). This is about the same percentage as Penobscot County (63%), but it's a lower percentage than for the State as a whole (67%). Bradley has a high percentage of mobile homes (21%), and a low percentage of multi-family dwellings (8%) compared to the other two jurisdictions.

**Table 3**  
**Total Housing Units by Type of Structure, 2000**

	Bradley		Penobscot County		State	
	#	%	#	%	#	%
Single-family, detached	381	62	41,000	61	439,459	67
Single-family, attached	10	2	1,260	2	14,387	2
Mobile home	126	21	9,239	14	63,902	10
Duplex	44	7	4,150	6	36,565	6
Multi-family	51	8	11,040	17	95,777	15
Boat, RV, van, etc	2	-	158	-	1,811	-
<b>Total</b>	<b>614</b>	<b>100</b>	<b>66,847</b>	<b>100</b>	<b>651,901</b>	<b>100</b>

Source: U.S. Census, 2000

### Growth By Type of Structure, 1990- 2000

As shown in Table 4, between 1990 and 2000, most of the housing growth in Bradley was in the form of detached, single-family dwellings (94 units). The number of attached single-family dwellings grew by 7, and mobile homes declined by nineteen. The number of duplexes and multi-family dwellings increased by 14 (in 1990, duplexes were statistically lumped with multi-family dwellings). There is a mobile home park located near the Eddington town line, and there is a multi-family housing complex located across from the Town Office.

**Table 4**  
**Bradley Growth in Housing Types, 1990-2000**

	1990	2000	# Increase 1990-2000	% of Total Increase
Single-Family, detached	287	381	94	98
Single-family attached	3	10	7	7
Mobile Home	145	126	-19	-20
Multi-Family/duplex	81	95	14	15
<b>Total</b>	<b>516</b>	<b>612</b>	<b>96</b>	<b>101</b>

Source: U.S. Census, 1990, 2000

### Owner Occupied vs. Renter Occupied Dwellings

As shown in Table 5, the percentage of owner-occupied dwellings remained relatively constant in Bradley, Penobscot County and the State. Bradley's year 2000 percentage of owner occupied year-round dwellings (81%) was higher than Penobscot County's (70%) or the State's (72%). The number of rental units in Bradley grew from 71 units in 1980 to 97 units in 2000.

**Table 5**  
**Owner Occupied Vs. Renter Occupied Housing**

	<u>Total Occupied</u>	<u>Owner Occupied Dwellings</u>		<u>Renter Occupied Dwellings</u>	
	#	#	%	#	%
<b>Bradley</b>					
1980	398	327	82	71	18
1990	441	356	81	85	19
2000	514	417	81	97	19
<b>Penobscot County</b>					
1980	45,974	32,203	70	13,771	30
1990	54,063	37,679	70	16,384	30
2000	58,096	40,554	70	17,542	30
<b>Maine</b>					
1980	395,184	280,377	71	114,807	29
1990	465,312	327,888	71	137,424	30
2000	518,200	370,905	72	147,295	28

Source: U.S. Census, 1980, 1990, 2000

### Housing Age and Services

Table 6 contains information on the age of housing and the percentage of homes with complete plumbing and kitchen facilities. Statistics on the age of housing have sometimes been used as a measure of the extent of substandard housing, but these are not necessarily a reliable gauge. Old housing in Bradley does not necessarily mean deteriorated housing. As shown in Table 6, Bradley has a lower percentage of homes constructed before 1939 (23%) than the County (28%) and State (29%). Virtually all the homes in Bradley have complete plumbing and kitchen facilities.

**Table 6**  
**Year - Round Housing Age And Other Characteristics - 2000**

	<u>Structure Built Between 1990-2000</u>	<u>Structure Built Before 1939</u>	<u>Complete Plumbing Facilities</u>	<u>Complete Kitchen Facilities</u>
	%	%	%	%
<b>Bradley</b>	15	23	98	100
<b>Penobscot County</b>	14	28	99	99
<b>State of Maine</b>	15	29	99	99

Source: U.S. Census, 2000

### Housing Values and Costs

Based on 2000 Census data as shown in Table 7, the median value of a home in Bradley (\$78,100) was somewhat lower than it was in Penobscot County (\$82,400) but substantially lower than in the State as a whole (\$98,700). Median owner costs with a mortgage (\$781) were also lower than those in

Penobscot County (\$845) and the State (\$923), and median owner costs without a mortgage (\$255) were lower than in the County (\$290) and State (\$299).

Gross rent in Bradley (\$475) was lower than in either Penobscot County (\$468) or the State (\$497). The percentage of people in Bradley paying 30% or more of their income on homeowner costs (19%) is about the same as in the other two jurisdictions, but the percentage of renters paying 30% or more for rent (32%) is lower than in the other two jurisdictions.

Table 7 2000 Housing Costs						
		Median Owner Costs			Median Rental Costs	
	Median Value Owner Occupied Unit	With Mortgage	Without Mortgage	30% or more of Income	Gross Rent	30% or more of Income
Bradley	\$78,100	\$781	\$255	19%	\$475	32%
Penobscot County	\$82,400	\$845	\$290	18%	\$468	38%
State of Maine	\$98,700	\$923	\$299	20%	\$497	35%

Source: 2000 Census

### Housing Affordability

One of the goals set forth in the State's growth management law is to encourage and promote affordable, decent housing opportunities for all Maine citizens." The law is based on the premise that any village or town is a more desirable place to live when composed of citizens of all income levels. Affordable, decent housing to accommodate a portion of all income levels is identified as an important element to providing a foundation for economic balance.

The State's growth management law requires that each municipality "...shall seek to achieve a level of 10% of new residential development, based on a 5-year historical average of residential development in the municipality, meeting the definition of affordable housing." Affordable housing is defined as an owner-occupied unit whose price results in a monthly housing cost that does not exceed 30% of the household's gross monthly income. Monthly cost includes mortgage principal and interest, insurance, real estate taxes and utilities. A rental unit would follow the same formula, where the monthly rate includes utilities.

Based on information obtained from the Maine State Housing Authority, the median home is affordable to the household with a median income, although prices have risen significantly between 2000 and 2002 (the price increase may also be due to a low volume of sales). According to this same information, in 2000 the median priced home was affordable to a low income household at 80% of median income and a very low income household at 50% of the median income. The figures for 2001 and 2002 would indicate that the median home in those years would not have been affordable for low and very low income households. This information (see Table 8) indicates that relative to incomes, housing costs are somewhat less for residents in Bradley than they are elsewhere. Bradley has an affordability index greater than one.

In 2002, the Town's of Bradley, Clifton and Eddington completed a Housing Assessment which also concluded that for homeowners at or near the median income, the purchase price of a single family home is affordable. However, affordability deteriorates rapidly at and below 80% of median income.

Table 8 Town of Bradley - Affordability Index					
Year	Index	Median Income	Median Home	Median Income can Afford	Income Needed
2000	1.97	\$37,163	\$51,950	\$102,240	\$18,883
2001	1.32	\$39,917	\$83,000	\$109,509	\$30,254
2002	1.24	\$35,893	\$80,240	\$99,250	\$29,022

Source: Claritas by indicated year/2000 Census and State Multiple Listing Service

The Housing Assessment used data provided by local realtors to arrive at an average sales price of \$76,980 for 2001, based on sales of 43 homes (there were also four mobile homes sold for an average price of \$44,925).

The Housing Assessment concluded that in the Bangor Metropolitan Statistical Area, a monthly rent of \$478 (it was \$475 in Bradley in 2000) would not be affordable for a family with an income of less than half of the countywide median. "Put simply, the poorest of the area's residents – often the elderly or disabled – could not afford to rent the average two-bedroom apartment in this market (again, these figures apply to the entire Bangor MSA, not just the three communities under study)."

It is clear from just looking at Census figures affordable housing is a problem for some people in Bradley. The 2000 Census documents that while only 5.8% of the population is below the poverty level, 19% of homeowners and 32% of renters are spending more than 30% of their income on shelter costs (see table 7).

### Options for Affordable Housing

The Department of Economic and Community Development has suggested that communities consider options for affordable housing. Affordable housing can include manufactured housing, multi-family housing, government-assisted housing for very low, low and moderate income families, and group and foster care facilities. In addition, decreased unit sizes, smaller lot sizes, increased density, and reduced frontage requirements can contribute to a community's affordable housing stock.

More generally, affordable housing means decent, safe, and sanitary living accommodations that are affordable to very low, low, and moderate-income people. Very low-income households are households with annual income less than or equal to 50 percent of the applicable County (non-Metropolitan Statistical Area - MSA) median annual family income. Low-income households are households with annual incomes more than 50 percent, but less than or equal to 80 percent, of the applicable County (non-MSA) median annual family income. Moderate-income households are households with annual incomes more than 80 percent, but less than or equal to 150 percent, of the applicable County (non-MSA) median annual family income.

**Local regulatory options.** There are a number of options for implementation strategies, which encourage affordable housing.

## Incentives

Density bonuses -- whereby the municipality allows more residential units to be built per minimum lot size than permitted in the ordinance, in return for a certain percentage of affordable housing. Some communities allow a larger density bonus for low-income housing than for moderate-income housing.

Provision of infrastructure by town -- whereby practical the municipality agrees to provide the water, sewer, and/or roads for a development that agrees to provide some percentage of its housing at affordable prices. This, too, would be accompanied by deed restrictions or recapture clauses.

Waiver of impact fees -- whereby town would waive impact fees for developments that provide a percent of its housing at affordable rates.

Cluster housing -- whereby a town allows developers who cluster their housing a density bonus, tied also to providing a certain percentage of it at affordable prices.

## Requirements

Inclusionary development -- that is requiring that developments over a certain size provide a given percent of its housing at affordable prices. This also would most frequently be tied to deed restrictions, etc.

Commercial/Industrial contribution -- that is requiring that commercial or industrial development provide affordable housing at a rate determined by a formula, taking into account the number of employees it expects to hire at low to moderate income wages or requiring that it contribute to a fund to develop such housing.

## Other options

Land trusts -- whereby a town permits development of housing on town-owned land in exchange for the right to control the price of the housing for sale or rent. The housing itself may be sold at a given rate, but the land stays in the ownership of the town.

Town land sales -- whereby the town sells tax-acquired or other town-owned land to a developer at below market rate in return for the development, in perpetuity, of affordable housing.

Modification of infrastructure requirements -- whereby the town reviews its road and other development standards to be sure the requirements are both effective and cost efficient, and, where possible, eliminates costly requirements that do not effectively achieve environmental or other desired ends. For example, runoff control is sometimes better achieved by ditching than by underground piping, and curbs can sometimes prevent natural runoff. Streets that are wider than needed for the traffic they will bear are more expensive to maintain than are narrower ones that are wide enough for a low volume of traffic. In some cases, paths may be more appropriate than sidewalks.



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## 4. ECONOMY

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### Introduction

There are no major employers in the Town of Bradley. There are a number of small, service-oriented businesses in Town located primarily along Route 178 and in the village. None of the local businesses employs more than 20 workers. Most of the employment opportunities for Town residents are located in the four major communities that comprise the Bangor metropolitan area; Bangor, Brewer, Old town and Orono. Major employers in these communities include Georgia Pacific, Old Town Canoe, MBNA and the University of Maine.

### Employment

As shown in Table 1, the majority of the workforce in the region is located in the Bangor metropolitan area. On the whole, unemployment rates are lower in these service center communities than they are in smaller, surrounding communities on the west side of the Penobscot River such as Bradley. In 2001, Bradley had a total labor force of 729 people, and an unemployment rate of 5.8.

Table 1 Summary of Employment, Unemployment, 2001				
	Labor Force	Employed	Unemployed	Unemployment Rate
<b>Bangor Metropolitan Area – Service Centers</b>				
Bangor	18,477	17,921	556	3.0
Brewer	5,299	5,129	170	3.2
Old Town	4,652	4,527	125	2.7
Orono	4,592	4,498	94	2.0
Total	33,020	32,075	945	2.9
<b>Surrounding Towns – West Side of Penobscot</b>				
Bradley	729	687	42	5.8
Clifton	382	359	23	6.0
Eddington	1,209	1,155	54	4.5
Holden	2,018	1,945	73	3.6
Milford	1,736	1,664	72	4.1
Total	6,074	5,810	264	4.3
Penobscot County	79,882	76,577	3,305	4.1
Maine	683,907	656,764	27,143	4.0

Source: Maine Department of Labor, 2003

As shown in Table 2, the unemployment rate in Bradley since 1995 has fluctuated from a low of 4.6% in 1996, to a high of 7.3% in 2000 (the highest of any jurisdiction shown in the table). In general, unemployment rates of service center towns in the Bangor metropolitan area have been lower than those in the surrounding towns on the west side of the Penobscot River. Bradley's unemployment rate has been somewhat higher than rates in Penobscot County and the State of Maine since 1997.

<p style="text-align: center;"><b>Table 2</b> <b>Unemployment Rates, 1995-2001</b></p>							
	1995	1996	1997	1998	1999	2000	2001
<b>Bangor Metropolitan Area – Service Centers</b>							
Bangor	5.7	4.5	4.8	3.6	3.0	2.8	3.0
Brewer	6.0	4.2	4.3	3.5	3.1	2.4	3.2
Old Town	5.6	4.5	5.0	3.6	3.0	2.5	2.7
Orono	2.3	2.3	2.2	1.6	1.9	1.6	2.0
<b>Surrounding Towns – West Side of Penobscot</b>							
Bradley	5.2	4.6	6.2	5.5	5.7	7.3	5.8
Clifton	6.4	6.5	5.8	6.5	7.8	6.0	6.0
Eddington	4.6	5.0	6.5	4.3	2.8	4.2	4.5
Holden	5.6	4.7	4.9	4.2	4.4	3.5	3.6
Milford	6.5	6.2	6.3	4.6	4.9	3.8	4.1
Penobscot County	6.1	5.3	5.9	4.5	4.3	3.8	4.1
Maine	5.7	5.1	5.4	4.4	4.1	3.5	4.0

Source: Maine Department of Labor, 2003

### Place of Work

According to the 1990 Census (data is not yet available from the 2000 Census), of the 528 residents of Bradley who reported their job locations, 43, or about 8.1%, were employed by businesses located in Bradley (see Table 3). The remaining 485, or 91.9% of the total, worked outside of town. The principal job locations outside of Bradley were Bangor (153 persons or 29.0%), Old Town (144 persons or 27.3%), and Orono (91 persons or 17.2%). As shown in Table 4 on the next page, there were 77 people in 1990 who reported working in Bradley. Of these, 43, or 55.8%, lived in Bradley.

<p style="text-align: center;"><b>Table 3</b> <b>Place of Work - Bradley Residents</b></p>					
<u>Place</u>	<u>#</u>	<u>%</u>	<u>Place</u>	<u>#</u>	<u>%</u>
Bradley	43	8.1	Old Town	144	27.3
Bangor	153	29.0	Orono	91	17.2
Brewer	29	5.5	Other	47	8.9
Milford	21	4.0	Total	528	100

Source: U.S. Census, 1990

Table 4 Residence of People who Work in Bradley					
Place	#	%	Place	#	%
Bradley	43	55.8	Old Town	7	9.1
Bangor	9	11.7	Other	11	14.3
Milford	7	9.1	Total	77	100

Source: 1990 Census

### Means of Commuting to Work

As shown in Table 5, a greater percentage of Bradley residents (84.1%) drove alone to work by car, truck or van than at the County (79.2%) or State level (78.6%). However, a slightly greater percentage carpooled (11.7%) than in the other two jurisdictions (10.7% in the County; 11.3% in the State). Mean travel time to work for Bradley residents (23.5 minutes) is more than it is for Penobscot County (20.7 minutes) or the State of Maine (22.7 minutes). Approximately 3.3% of the workforce in Bradley worked at home in 2000. Comparable figures for the County and State were 3.8% and 4.4%, respectively.

Table 5 Commuting to Work						
	Bradley		Penobscot County		Maine	
	#	%	#	%	#	%
Workers 16 and over	640	100	68,652	100	615,144	100
Car, truck or van - drove alone	538	84.1	54,386	79.2	483,317	78.6
Car, truck or van - carpooled	75	11.7	7,332	10.7	69,208	11.3
Public Transportation	-	-	591	0.9	5,217	0.8
Walked	4	0.6	3,129	4.6	24,700	4.0
Other Means	2	0.3	590	0.9	5,740	0.9
Worked at Home	21	3.3	2,624	3.8	26,962	4.4
Mean Travel Time to Work in minutes	23.5	-	20.7	-	22.7	-

Source: 2000 Census

### Employment by Industry

In 1990, approximately 21.5% of the Town's work force was employed in manufacturing. Over the years, the statewide decline in manufacturing jobs, including those in the paper mills, has had an impact on Bradley. Based on 2000 Census data, just 15.9% of the Town's population was employed in manufacturing. However, this is still higher than in Penobscot County (11.9%) or Maine (14.2%).

Table 6 contains a breakdown of the labor force by industry for Bradley, Penobscot County and the State of Maine as reflected in the 2000 Census. The employment breakdown for Bradley is roughly comparable to that of the County and State with several exceptions. The largest single employment category for Bradley residents is "education, health and social services." The Town's employment rate in this category (31.5%) is significantly higher than for the County (28.6%) or the State (23.2%), possibly because of employment at the University of Maine in Orono.

Employment in public administration (2.9%) is below that of the County or State (4.2% and 4.5%, respectively). Employment in "transportation, warehousing and utilities" (2.5%) is also below County and State levels (5.6% and 4.3%, respectively). Employment in "agriculture, forestry, fishing, hunting and mining" is also lower in Bradley (1.7%) than at the County or State levels (2.3% and 2.6%, respectively).

Table 6 Labor Force Employment By Industry – 2000						
	<u>Bradley</u>		<u>Penobscot County</u>		<u>State</u>	
	#	%	#	%	#	%
Agriculture, forestry, fishing, hunting, mining	11	1.7	1,607	2.3	16,087	2.6
Construction	37	5.7	4,037	5.8	42,906	6.9
Manufacturing	103	15.9	8,308	11.9	88,885	14.2
Wholesale trade	21	3.2	2,658	3.8	21,470	3.4
Retail trade	85	13.1	9,745	14.0	84,412	13.5
Transportation and warehousing, utilities	16	2.5	3,899	5.6	26,857	4.3
Information	11	1.7	1,662	2.4	15,294	2.5
Finance, insurance, real estate, rental and leasing	30	4.6	2,859	4.1	38,449	6.2
Professional, scientific, management, administrative	39	6.0	3,908	5.6	43,074	6.9
Educational, health, social services	204	31.5	19,968	28.6	144,918	23.2
Arts, entertainment, recreation, accommodation and food services	42	6.5	4,785	6.9	44,606	7.1
Other services (except public admin)	30	4.6	3,445	4.9	29,182	4.7
Public administration	19	2.9	2,965	4.2	27,871	4.5
<b>Total</b>	<b>648</b>	<b>100</b>	<b>69,846</b>	<b>100</b>	<b>624,011</b>	<b>100.0</b>

Source: 2000 Census

## Employment by Occupation

Table 7 contains an occupational breakdown for Bradley, Penobscot County and the State of Maine as reflected in the 2000 Census. The occupational breakdown for Bradley differs in all categories from that of the County and State, but the most significant difference is probably in the "service" category (23.1% for Bradley, 16.7% for Penobscot County, and 15.3% for Maine).

<b>Table 7</b> <b>Labor Force by Occupation – 2000</b>						
	Bradley		Penobscot County		Maine	
	#	%	#	%	#	%
Management, professional and related	159	24.5	21,156	30.3	196,862	31.5
Service	150	23.1	11,641	16.7	95,601	15.3
Sales and office	140	21.6	18,728	26.8	161,480	25.9
Farming, fishing and forestry	7	1.1	901	1.3	10,338	1.7
Construction, extraction, maintenance	81	12.5	6,844	9.8	64,064	10.3
Production, transportation, material moving	111	17.1	10,576	15.1	95,666	15.3
<b>Total</b>	<b>648</b>	<b>100</b>	<b>69,846</b>	<b>100</b>	<b>624,011</b>	<b>100.0</b>

Source: 2000 Census

The U.S. Census provides another way to view the workforce, and that is by class of worker. The breakdown shown in Table 8, as reported in the 2000 Census, is very similar for Bradley, Penobscot County and the State of Maine.

<b>Table 8</b> <b>Class of Worker</b>						
	Bradley		Penobscot County		Maine	
	#	%	#	%	#	%
Private wage and salary workers	482	74.4	53,065	76.0	473,794	75.9
Government workers	110	17.0	11,600	16.6	90,388	14.5
Self employed workers in own not incorporated business	51	7.9	5,010	7.2	58,153	9.3
Unpaid family workers	5	0.8	171	0.2	1,676	0.3
<b>Total</b>	<b>648</b>	<b>100.1</b>	<b>69,846</b>	<b>100</b>	<b>624,011</b>	<b>100</b>

Source: 2000 Census

## Income Levels

As shown in Table 9, median household income in Bradley (\$37,163) is higher than it is in Penobscot County (\$34,274), but it's just under the State median (\$37,240). Two thirds of households in Bradley (66.7%) fall within the two categories representing incomes from \$25,000-\$99,999, compared to 57.7% at the County level and 60.3% at the State level. It is interesting to note that seven households fell within the \$100,000 - \$199,999 range, while five households made \$200,000 or more.

Table 9 Household Income in 1999						
	Bradley		Penobscot County		Maine	
	#	%	#	%	#	%
Less than \$10,000	39	7.6	7,260	12.5	53,259	10.3
\$10,000 - \$24,999	119	23.3	13,896	23.9	115,864	22.4
\$25,000 - \$49,000	199	38.9	18,950	32.6	168,462	32.5
\$50,000 - \$99,999	142	27.8	14,637	25.1	143,764	27.8
\$100,000 - \$199,999	7	1.4	2,831	4.8	30,214	5.8
\$200,000 or more	5	1.0	561	1.0	6,809	1.3
Total	511	100	58,135	99.9	518,372	100.1
Median hh income	\$37,163	-	\$34,274	-	\$37,240	-
Persons below poverty	115	9.3	18,956	13.7	135,501	10.9

Source: 2000 Census

## Income Sources

As shown in Table 10 on the next page, a little over 80% of the households in Bradley reported income from earnings, with mean earnings of \$42,371 – slightly below mean earnings of \$44,264 at the County level and \$46,990 at the State level. A little over a quarter of Bradley's population (26.2%, compared to 27.8% at the County and 29.9% at the State level) reported income from social security, while just under 20% reported receiving retirement income.

In Bradley, the mean social security income was \$11,593 (higher than County or State figures) and the mean retirement income was \$21,101 (much higher than the County figure of \$14,927 and the State figure of \$15,211).

Table 10  
Income Sources

	Bradley		Penobscot County		Maine	
	#	%	#	%	#	%
With earnings	413	80.8	45,161	77.7	406,912	78.5
Mean earnings (dollars)	\$42,371	-	\$44,264	-	\$46,990	-
With social security Income	134	26.2	16,164	27.8	149,727	29.9
Mean social security Income	\$11,593	-	\$10,500	-	\$10,569	-
With Supplemental Security Income	13	2.5	3,130	5.4	23,712	4.6
Mean Supplemental Security Income	\$8,792	-	\$5,954	-	\$6,084	-
With public assistance income	23	4.5	3,351	5.8	24,918	4.8
Mean public assistance income	\$2,509	-	\$2,374	-	\$2,173	-
With retirement income	95	18.6	9,454	16.3	90,049	17.4
Mean retirement income	\$21,101	-	\$14,927	-	\$15,211	-

Source: 2000 Census

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## 5. NATURAL RESOURCES

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### Introduction

Bradley is located in the south-central portion of Maine in Southern Penobscot County, about 11 miles northeast of Bangor. It is bordered on the west by the Penobscot River which separates Bradley from the City of Old Town and the Town of Orono. The Town is bordered on the north by Milford, on the south by Eddington and Clifton, and on the east by the Town of Amherst and Township T32MD.

Bradley consists of 49.55 square miles, or 31,712 acres. The Town's major road is State Route 178 which runs from the northern to the southern border of the Town and roughly parallels the Penobscot River. There is a power transmission line that also runs north to south through the community approximately one-half mile east of Route 178. Most of the development in Bradley is located in the village in the northwestern part of the town, and along State Route 178. The remainder of the town is largely undeveloped except for the shoreline around Chemo Pond.

The terrain is gently rolling to flat. There are a number of small hills throughout town which, especially east of the power line, are interspersed with large areas of wetlands. One of the highest measured elevation points is Baker Hill, located in the north central part of the community (elevation 252 feet).

### Soils

Knowledge of the types of soils which exist in Bradley can be helpful in planning and/or reviewing land use activities. The various characteristics of soil types present different limitations for development which can often be overcome through special planning, design, construction and/or maintenance.

The Medium Intensity Soil Survey of Penobscot County, Maine, published by the U.S. Soil Conservation Service, describes the different soil types which exist in the County and provides information on their limitations. The soil map displays the predominant soil types for an area, although there may be pockets of other soils. Therefore, a high intensity soil survey is needed for individual site planning.

The U.S. Soil Conservation Service (now the Natural Resources Conservation Service) has prepared a guide entitled "Soil Potential Ratings for Low Density Development," which rates each of the soils in Penobscot County for its suitability for development purposes. Based on a review of a composite soil survey map for Bradley utilizing the ratings guide, approximately 80%-90% of the soils in Bradley have low or very low potential for low density development. Most of the soils in the eastern three quarters of the community fall into one of these two categories. Many of the soils with low or very low potential are hydric soils. A hydric soil is a soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part of the soil. It's clear from soil survey data that most of the interior, undeveloped portions of



Bradley have low potential for low density residential development. These areas are not served by town roads.

Some of the largest concentrations of soils with medium or high potential ratings are located along Route 178, within the village, and in a large area east of Route 178 south of the confluence Great Works Stream and the Penobscot River. In general, the soils with the highest potential for low density development lie within about a half-mile of Route 178. Some of the soils in the village that flood are considered to have medium to high potential.

### **Surface Water**

**The Penobscot River**, which flows along the western edge of Bradley, has a watershed of approximately 8,910 square miles which lies entirely within the State of Maine. In Bradley, the banks of the Penobscot River are moderately steep. The Great Works Dam is located approximately 1,500 feet downstream of the northern corporate limits of the community.

**Otter Stream** flows in a southwesterly direction and joins the Penobscot River in Bradley village. It has a drainage area of approximately 97 square miles of relatively flat area. Included in the drainage area are the Otter Chain Ponds in Milford. Within the Town of Milford, there is a low divide in the hills on the southern side of Sunkhaze Meadows Stream which separates Otter and Sunkhaze Meadows Stream. When the Penobscot River is at flood stage, Sunkhaze Meadows Stream becomes flooded with backwater. The resulting surcharge breaches the divide between the two streams and contributes to significant flood flows to Otter Stream.

**Great Works Stream** flows from Swamp No. 16 in a westerly direction to its confluence with Otter Stream and the Penobscot River. The drainage area is approximately 47 square miles of relatively flat terrain. Tributaries to Great Works Stream include Boynton Brook (drainage area 3.2 square miles) and Oliver Brook (drainage area 1.4 square miles). There is an extensive system of wetlands associated with Great Works Stream.

**Blackman Stream** drains Chemo Pond and flows northwesterly to its confluence with the Penobscot River through the southern portion of town. There is an extensive system of wetlands associated with Blackman Stream. The Penobscot Experimental Forest, owned by the University of Maine Foundation and managed for research purposes by the University, is located along Blackman Stream. Town records indicate that this tract consists of about 2,314.71 acres in the Town of Bradley.

**Baker Brook** flows north from No. 26 Swamp to Sunkhaze Stream in Milford. It passes just to the east of Baker Hill.

**Swamps and marshes** include Chemo Bog (north of Chemo Pond), No. 16 swamp (adjacent to Great Works Stream in the northern part of the town), No. 26 Swamp and No. 32 Swamp (in the southeastern part of town) and Island Swamp (northeast part of town).

**Chemo Pond**, which is a Great Pond, lies at the southern tip of Bradley. Approximately half of the pond is in Bradley and the other half is in Eddington and Clifton. There is no public road access through Bradley to the pond. The surface area of the lake is 1,159 acres and the direct drainage area is 17.8 square miles. The maximum depth is 24 feet and the mean depth is 13 feet.

The Maine Department of Environmental Protection (DEP) and citizens involved in the Volunteer Lake Monitoring Program have collaborated in the collection of lake data to evaluate water quality, track algae blooms, and determine water quality trends. Water quality monitoring data has been collected on the lake since 1984. During this period, four years of basic chemical information was collected, in addition to Secchi Disk Transparency readings.

The water quality of Chemo Pond is considered by DEP to be slightly below average, based on measures of Secchi Disk Transparencies, total phosphorus, and Chlorophyll-a. The potential for nuisance algal blooms is low to moderate. Water quality appears to have been fairly stable since 1984, and includes the following parameters:

- **Color:** Chemo Pond is a moderately colored lake with an average color of 33 Standard Platinum Units (SPU). Lakes with an SPU reading in excess of 30 can have reduced transparency readings and increased phosphorus values.
- **Secchi Disk:** The lake has an average Secchi Disk Transparency (SDT) reading of 3.5 meters (11.5 feet). SDT is a measure of water clarity, or transparency, of the pond. SDT values in Maine vary from .5 meters to 15.5 meters, with the average being 4.9 meters. Unless a lake is highly colored, SDT readings of 2 meters or less indicate a water quality problem that has resulted in an algal bloom. The extensive wetland areas adjacent to Chemo Pond are a source of substances that cause the lake to be somewhat tea-colored and contribute to total phosphorus.
- **Total Phosphorus:** The range of water column total phosphorus in Chemo Pond is 10-55 parts per billion (ppb), with an average of 25 ppb. Total phosphorus is one of the major ingredients needed for plant growth. As phosphorus increases, the amount of algae increases. In Maine, total phosphorus varies from 2 ppb to 134 ppb, with the average being 12 ppb. The potential for total phosphorus to leave the bottom sediments and become available to algae in the water column (internal loading) is low.
- **Chlorophyll-a.** The one reading for Chlorophyll-a obtained for Chemo Pond was 4.0 ppb. Chlorophyll-a is a measurement of the green pigment found in all plants including microscopic plants such as algae. It is used as an estimate of the algal biomass, with higher numbers indicating higher levels of algae. Chlorophyll-a measurements in Maine range from 1.1 ppb to 51.5 ppb, with the average being 4.7 ppb.
- **Dissolved Oxygen.** Recent dissolved oxygen profiles in Chemo Pond show little to no dissolved oxygen depletion in the deep areas of the lake. As a result, the potential for total phosphorus to leave the bottom sediments and become available to algae in the water column (internal loading) is low. Dissolved oxygen levels below five parts per million are considered so stressful that most cold water fish will avoid these areas. Anoxic (no oxygen) conditions can also promote the release of total phosphorus from bottom sediments.
- **Flushing Rate:** The flushing rate is the amount of time required for lake water to be renewed each year. The average flushing rate is about 1- 1.5 flushes per year for Maine lakes. The flushing rate for Chemo Pond is 3.23 flushes per year.

## Floodplains

Floodplains comprise approximately 25-30% of Bradley's total land area. Based on a review of the Flood Insurance Rate Maps for Bradley, prepared by the Federal Emergency Management Agency, most of the village is in the 100-year floodplain.

The following is an excerpt from the Flood Insurance Study for Bradley, prepared by the Federal Insurance Administration in 1977:

"Low-lying areas of Bradley are subject to periodic flooding caused by the overflow of the Penobscot River. The most severe flooding occurs in the early spring as a result of snowmelt and heavy rains, in conjunction with ice jams. Floods generally lower in magnitude also occur in the fall as a result of hurricanes and tropical storms. Repeated damage to bridges and other important structures in the floodplain of the Penobscot River has occurred during floods such as those that occurred in 1846, 1853, 1901, 1923, 1936, 1940, 1950, 1958, 1973, 1974, 1975 and 1987. The 1987 flood was the worst. ...The flood of 1936...resulted in considerable damage due to huge ice jams forming and creating a flood situation. Damage to property, streets, and structures occurred during these floods although no estimate of the damage value was available."

"During large floods on the Penobscot River a unique situation occurs whereby the flow from the Penobscot River flows up the Sunkhaze Stream in Milford and down through the Otter Chain Ponds into Otter Stream. This bypass creates unnaturally large flows in Otter Stream causing flooding of adjacent areas."

"The relatively steep banks of the Penobscot River in Bradley afford the greatest flood protection to the town during flooding of the Penobscot River. The Great Works Dam, owned and operated by the Bangor Hydro-Electric Company, does little to control flooding in the community. Although minor impoundments exist on Blackman and Great Works Streams, they do little to control flooding and are primarily used to retain water flows. There are no flood protection works on any of the other streams in Bradley."

The National Flood Insurance Program is administered by the Federal Emergency Management Agency (FEMA). The program has been designed to provide flood insurance for existing properties and to discourage additional development within the 100-year floodplain. A 100-year flood is a flood that has one chance in 100 of being equalled or exceeded in any one-year period.

FEMA prepared a Flood Insurance Study for the Town of Bradley in 1977 that included Flood Insurance Rate Maps. The following water bodies were studied by detailed methods that included the establishment of flood elevation reference marks and flood elevations at specific cross-section reference points: the Penobscot River for its entire length within Bradley, Otter Stream, Great Works Stream upstream to No. 16 Swamp, and small portions of Oliver Brook and Boynton Brook. The areas studied by detailed methods were selected with priority given to known flood hazard areas and areas of projected development. Chemo Pond, as well as other brooks, streams and swamps were studied by approximate methods. Approximate analyses were used to study these areas because they have a low development potential or minimal flood hazards.

Flood elevations along the Penobscot range from 88.8 feet above sea level near the Bradley/Milford town line to 51.4 feet near the Bradley/Eddington town line.

The Town of Bradley is in the National Flood Insurance Program. As such, subsidized flood insurance is made available to the residents of the community including those living in known flood hazard areas. Under the provisions of the program, the Town is obligated to administer and enforce a flood hazard ordinance. Enforcement of the flood hazard ordinance will limit the amount of development that can occur in floodplain areas, especially in the village, but it will also reduce the potential for future flood damage as the Town continues to grow. The challenge to the Town of Bradley will be to encourage village-type development in areas that are outside the 100-year floodplain.

Currently, there are 12 flood insurance policies in effect, representing \$692,900 in coverage. All of the policies are written on residential structures. There have been 9 claims totaling \$41,076, all of which pre-date 1989. A number of homes in the village are located in the 100-year floodplain (and thus would have a statistical chance of being flooded every 100 years), but are not subject to smaller, more frequent floods.

### **Wetlands**

Wetlands are considered those areas where water is the primary factor controlling the plant and animal life found there. Although often overlooked as simply unbuildable land, wetlands play a significant role in the overall ecological balance of the environment. Wetlands provide many functions beneficial to humans. They serve as both seasonal and year round habitat for a wide number of species, often having high densities of individuals indicating a healthy ecosystem. They act as natural sponges, absorbing large quantities of run-off to be released slowly later. They also filter the run-off, removing silt, contaminants and other pollutants.

Based on the National Wetlands Inventory maps for Bradley, approximately half of the Town consists of wetlands. Major concentrations of wetlands exist in low-lying areas along Great Works Stream and Blackman Stream, and Chemo Bog, No. 16 Swamp, No. 26 Swamp, No. 32 Swamp, and Island Swamp. There are some wetlands within about a half-mile of the Penobscot River, but these are fairly minor in extent.

### **Groundwater**

Groundwater is found below the surface of the land in the pore spaces between sand grains and in fractures in the bedrock. An aquifer is a water-bearing geologic formation capable of yielding a usable amount of water to a well. A sand and gravel aquifer is considered a significant aquifer when a well in that deposit is capable of being continuously pumped at a rate of 10 gallons per minute (gpm) or more. There is only one State-identified sand and gravel aquifer in Bradley. It begins in No. 26 Swamp and extends north along Baker Brook to an area just south of Baker Hill. Because of the remote location of this aquifer, it is unlikely that this area would be a suitable location for future residential development.

According to information obtained from the Maine Geological Survey, bedrock wells in Maine most often yield relatively small quantities of water. The median yield for a bedrock well is between three and six gallons per minute. Approximately 35% of bedrock wells drilled in Maine yield 10 or more gallons per minute. The Maine Geological Survey has data on 11 wells in Bradley, all of which are located in the western part of the Town, either along Route 178 or near Boynton Brook or Great Works

Stream. Most of these wells are between 100 and 200 feet deep. Yields vary from less than five gallons per minutes to between 50 and 100 gallons per minute.

## Forest Resources

Except for limited areas adjacent to Route 178, and some of the wetland areas, most of the Town consists of woodland at various stages of maturity. Stands of hardwood (oak, beech, maple, birch) can be found on higher, drier land while stands of softwood (pine, fir, hemlock, spruce) cover the lower, wetter areas with a lot of mixing in between. The forested areas of Bradley provide numerous benefits, including:

- Economic benefits to landowners when timber is harvested;
- Recreational benefits including hunting, snowmobiling, cross country skiing and other winter sports;
- Wildlife habitat including deer wintering habitat;
- Aesthetic enjoyment; and
- Protection of the Town's streams (the canopy provided by trees and the understory aid in breaking the force of precipitation, thereby decreasing erosion).

(see Land Use section of this Plan for information on timber harvesting).

## Wildlife Habitat

**Beginning with Habitat Program.** A number of State agencies and conservation organizations are working together to secure Maine's outdoor legacy through a program called "Beginning with Habitat." The program is a habitat-based landscape approach to assessing wildlife and plant conservation needs and opportunities. The goal of the program is to maintain sufficient habitat to support all native plant and animal species currently breeding in Maine by providing each Maine town with a collection of maps and accompanying information depicting and describing various habitats of statewide and national significance found in the town. These maps provide communities with information that can help guide conservation of valuable habitats.

The agencies participating in the Beginning with Habitat program include the Natural Areas Program of the Department of Conservation, the Department of Inland Fisheries and Wildlife, the Maine Audubon Society, the State Planning Office, the United States Fish and Wildlife Service, and the Maine Cooperative Fish and Wildlife Service.

**Types of Habitat in Bradley.** The Beginning with Habitat Program has identified three general types of habitat in Bradley:

1. **Riparian habitat.** Riparian habitat is the transitional zones between aquatic habitats and wetlands and dry or upland habitats and includes the banks of shores and streams, rivers, ponds and lakes, and the upland edge of wetlands. Riparian habitat provides habitat for many plants and animals occurring in Maine. Towns have the opportunity to protect a large portion of riparian habitat simply by fully enacting and enforcing Maine's shoreland zoning provisions. This includes a 75-foot buffer around larger streams and a 250-foot buffer around rivers, lakes, ponds and non-forested wetlands greater than 10 acres. There are extensive areas of riparian

habitat, especially in the undeveloped eastern portion of the community, as shown on the Beginning with Habitat maps.

2. **Large habitat blocks.** Large habitat blocks provide habitat for certain plants and animals not already included in riparian habitat (number 1, above) or high value habitats (number 3, below). Large habitat blocks are relatively unbroken areas of habitat which includes forest, grassland/agricultural, water or wetlands. "Unbroken" means that the habitat is crossed by few roads, and has relatively little development and human habitation. These blocks are especially important to species with large home ranges, such as bobcat, and other species such as the black-throated blue warbler, who may have small home ranges but will only be successful over the long term in larger habitat blocks. Large blocks are also more likely to include a wider diversity of species than smaller blocks.

Blocks between one and 19 acres are home to species typical of urban and suburban landscapes (e.g. raccoons, skunks, squirrels). Blocks of 250 acres begin to provide habitat for area-sensitive birds that are uncommon in smaller forests and grasslands such as the veery and scarlet tanager and the grassland species upland sandpiper and grasshopper sparrow. Moose, bald eagles, goshawks and similar species usually require 500 to 2,500 acres while blocks greater than 2,500 acres may hold the full complement of species expected to occur in Maine.

With the exception of land areas along Route 178 and the major roads in the community, the entire town of Bradley is considered to be a large habitat block.

3. **High value plant and animal habitats.** High value plant and animal habitats include rare plant locations, rare or exemplary natural communities, essential and significant wildlife habitats, and rare animal locations (for endangered species and species of special concern), as identified and mapped by the Natural Areas Program and the Department of Inland Fisheries and Wildlife. High value habitat for United States Fish and Wildlife Service priority trust species is also included. Several of these habitats are offered some degree of protection under state law but may warrant further local protection. High value plant and animal habitats in Bradley include the following:

Rare or exemplary communities (field verified within the past 20 years). These include natural communities that are either rare types or outstanding examples of more common types. Rare or exemplary communities in Bradley include the freshwater forested and non-forested wetlands in and around Number 26 Swamp (see map on page 12).

Rare plant locations (field verified within the past 20 years). These include plant species that are rare in Maine (see map on page 12):

1. Sandy lake bottom: eastern and southern edges of Chemo Pond and island
2. Raised level bog ecosystem: Number 26 Swamp
3. American Shore-grass: western edge of Chemo Pond near Blackman Stream outlet (State status: Special Concern)
4. Purple clematis: south of Blackman Stream near Eddington line (State status: Special Concern)
5. Nantucket Shadbush: along Route 178 midway between Blackman Stream and Great Works Stream (State status: Threatened)

6. Orono Sedge: wetland area near Route 178 near Eddington line (State status: Threatened)
7. Spotted Pondweed: Lousy Island in Chemo Pond (State status: Threatened)
8. Orono Sedge: just south of Government Road near Blackman Stream (State status: Threatened)

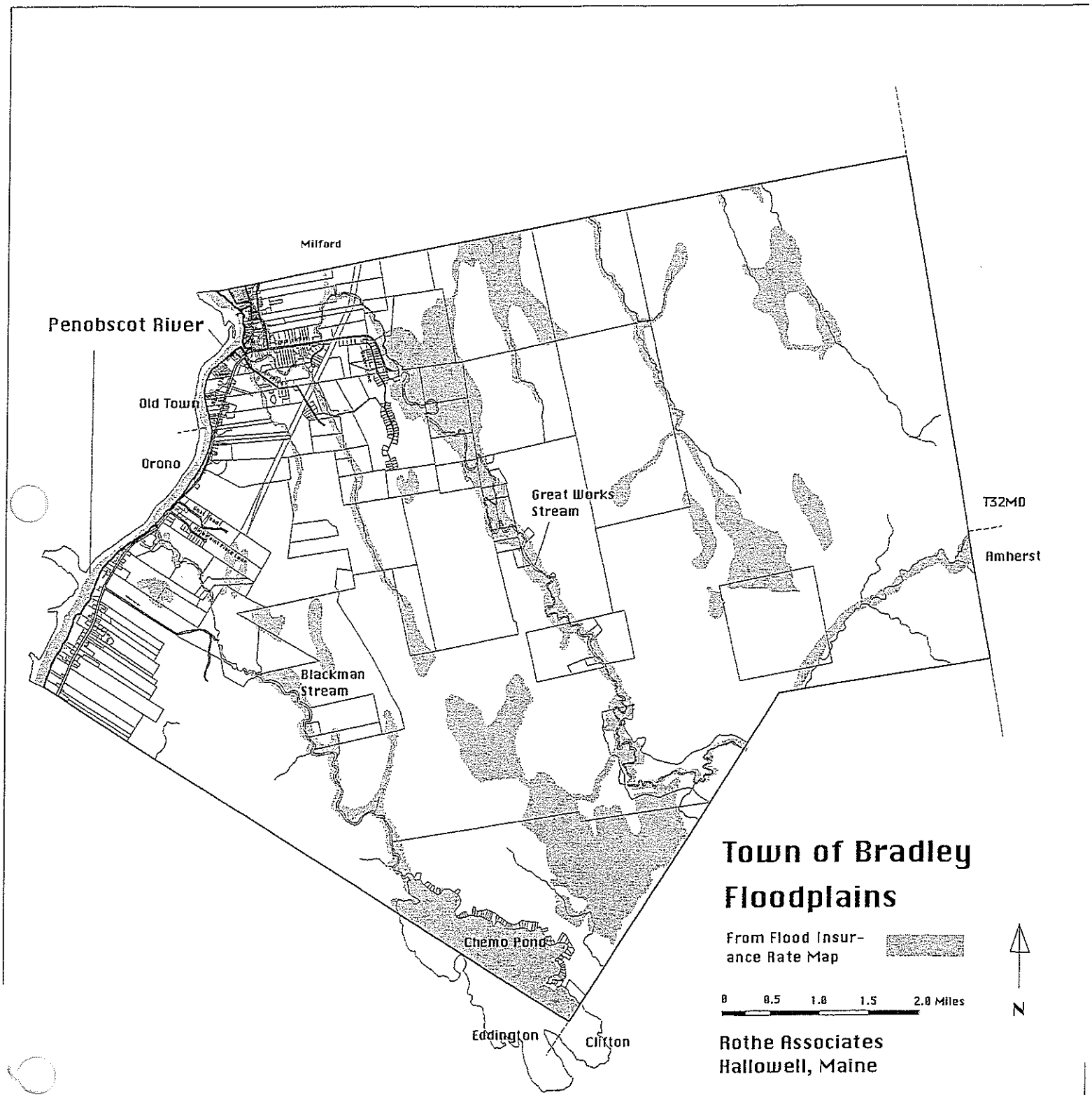
Essential wildlife habitats. These are areas that are protected by Maine's Endangered Species Act. They include areas currently or historically providing physical or biological features essential to the conservation of an endangered or threatened species in Maine and which may require special management considerations. Bradley's single essential habitat includes a bald eagle habitat located along the Penobscot River south of Great Works Stream (see map on page 12).

Significant wildlife habitats. These are habitats of State significance that are protected by Maine's Natural Resources Protection Act. Significant wildlife habitats in Bradley include waterfowl and wading bird habitats in many areas including Chemo Bog, Number 26 Swamp, Number 32 Swamp, Number 16 Swamp, most of Great Works Stream and Blackman Stream (see map on page 12).

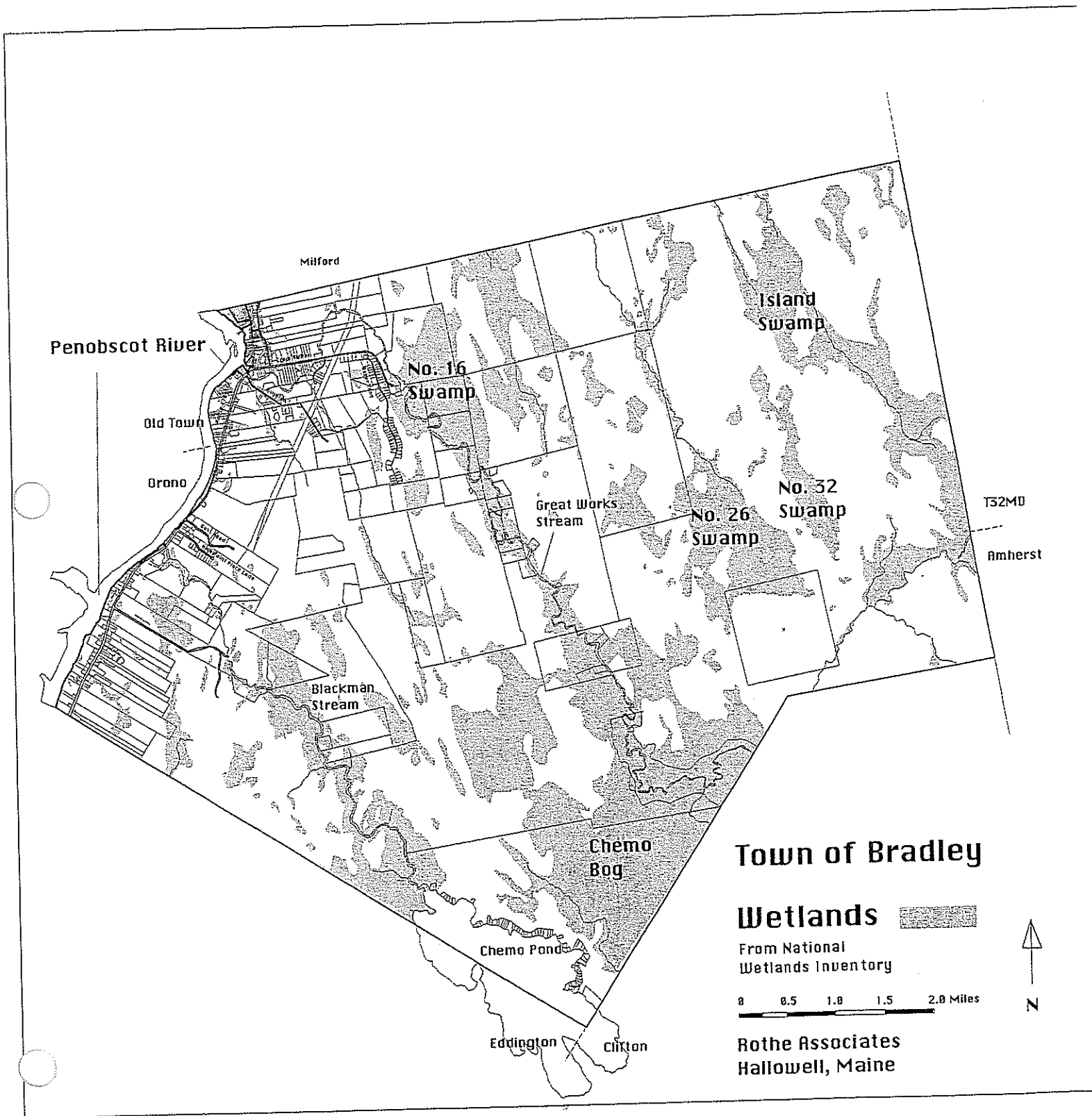
Other rare wildlife habitat/locations (see map on page 12). These include habitats and locations for:

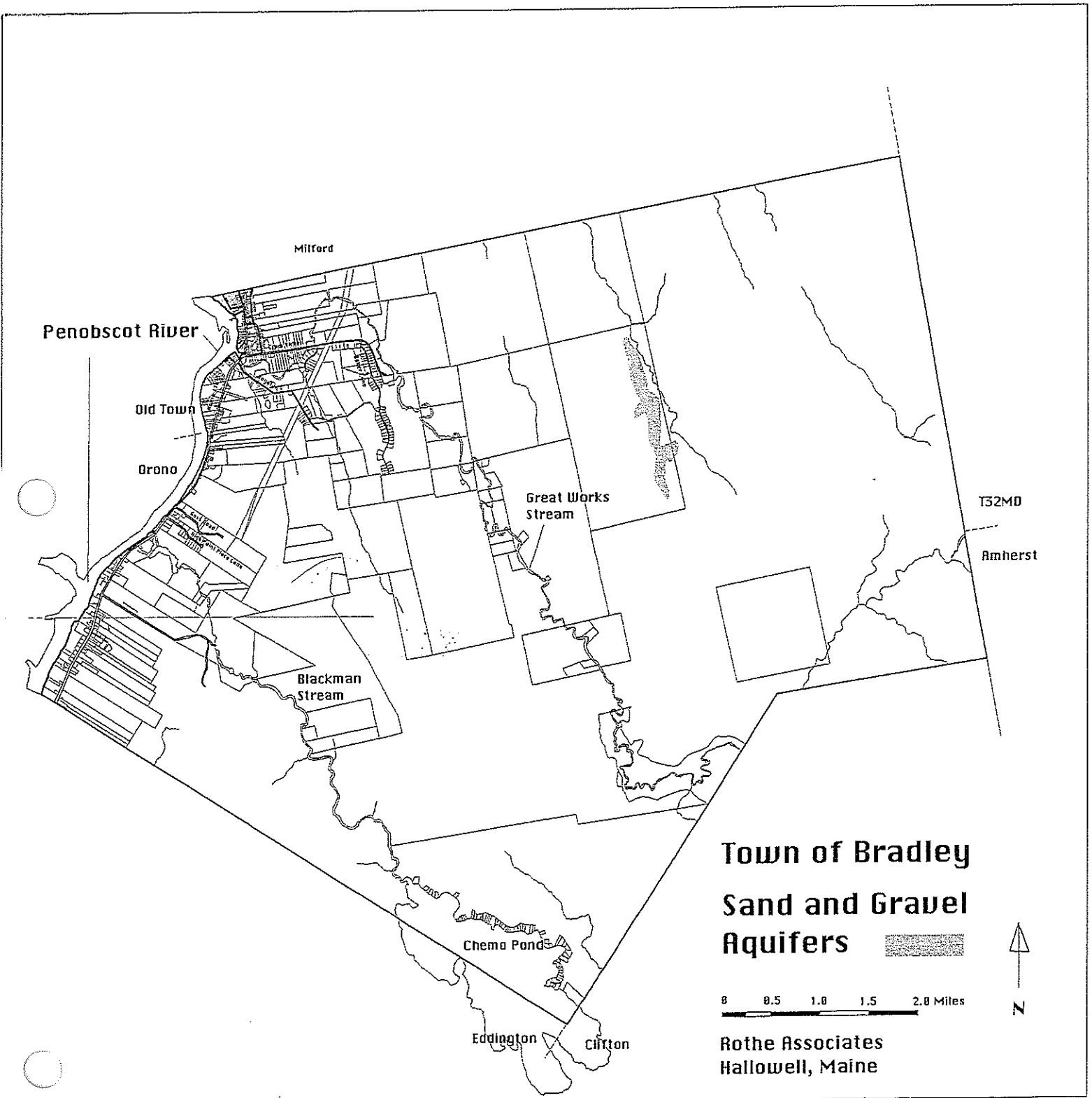
9. Extra-Striped Snaketail: Penobscot River near its confluence with Blackman Stream (State status: Special Concern)
10. Brook Floater: Great Works Stream as it passes close to Milford border (State status: Special Concern)
11. Creeper: Great Works Stream near Otter Stream (State status: Special Concern)

High value habitat for U.S. Fish and Wildlife Service priority trust species (greater than five acres). These include many areas in Bradley including some freshwater wetlands, some areas of grass, shrub and bare ground, and some forested lands. These areas are shown on the Beginning with Habitat maps on file in the Town Office.









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## 6. LAND USE

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### Early Settlement Patterns

The following paragraphs were excerpted from "Bradley, Maine Sesquicentennial 1835-1985 History:"

"Before 1776, Bradley was a part of the territory that belonged to the Penobscot Indians (Terratine Tribe)...It is possible that the first permanent settlers here had built cabins on Great Works Stream as early as 1783. Chief Orono and his tribe treated these white men kindly. These settlers then began to farm. They were not obliged to clear land for pasturing their cattle since the meadow land adjoining the stream was sufficient. Surplus hay was stacked into high stacks to provide fodder for the winter."

"Early agricultural efforts were family farms located along the river in the western part of the town. In 1776 this territory was purchased from the Indians by the Commonwealth of Massachusetts. It was then surveyed and opened up for more settlement. At this time, it was called #4 Indian Purchase...."

"It was soon discovered that the town possessed two powerful natural resources—its virgin forest and its fast moving waters. Sawmills began to appear along the streams and river."

"As the sawmills flourished the town began to grow. Other businesses were established—general stores, grist mills (for grinding flour), cooper shops (for making barrels), a dry goods store, a shoe repair shop, several blacksmith shops, livery stables, tippling shops (taverns), a millinery shop, a butcher shop and a dance hall."

"It was not long before the inhabitants of #4 Indian Purchase were told that they would have to organize into a plantation and pay taxes that would help defray the expense of the County Road. In 1825 the settlers held a meeting for this purpose and #4 Indian Purchase was then called Great Works."

"As a result of the plantation's success a movement was soon started to incorporate as a town. The legislature of 1834 was petitioned and on February 3, 1835, Bradley was officially incorporated as a town in the State of Maine. The town was named in honor of Bradley Blackman, one of its most prominent early settlers."

### Major Land Owners

According to Town tax records for 2002, there are 29,041 acres of land that have been classified for tax assessment purposes (this is somewhat less than State figures for the total land area of the community - 31,712 acres), but surface water areas may account for some of the difference. The Town's major property owners are listed in Table 1 on the next page.

Table 1 Major Property Owners		
Property Owner	Acreage	% of Town
State of Maine	7,224.6	25%
Webber Timber	5,047	17%
H.C. Haynes (formerly International Paper)	4,394*	15%
University of Maine Foundation (part of Penobscot Experimental Forest)	2,669**	9%
<b>Total</b>	<b>19,334.6</b>	<b>66%</b>

\* Excludes 728 acres sold to University of Maine Foundation in 2003

\*\* Includes 728 acres purchased from IP in 2003

### Residential Land Use

Compact residential development exists mainly within Bradley Village, Route 178, along several town roads in the northwestern quadrant of the Town including Cram Street, along Boynton Street, shoreland areas adjacent to Chemo Pond and in the 36-unit Penney Lane mobile home park near the Eddington Town line. Between 1990 and 2000, the total number of housing units increased from 516 units to 614 units, an increase of 98 units or 19%. Much of this growth occurred in scattered locations throughout the community, although some occurred in and adjacent to the village.

The 2000 housing count of 614 units included 391 single-family dwellings (64% of the total), 44 duplex units (7%), 51 multi-family units (8%), and 126 mobile homes (21%). The composition of the housing stock in Penobscot County is very similar to that of the Town of Bradley.

### Commercial Land Use

Commercial establishments, for the most part, are located in Bradley Village and along State Route 178. A partial listing of major town businesses is shown below. The list does not include numerous home occupations and home-based businesses.

Table 2 Partial Listing of Bradley Businesses – 2002		
Alfreda's Beauty Salon	Down to Earth Professional Land Services	Peter Currier (construction)
Bergeron's Quality Cabinets	Duffy's Electric	Powerlines Inc. (power tools)
Bradeen's Electric	Guay Fire Suppression Systems	Ritchie's (auto)
C-Auto	Jones Cedar Shop	Richard Swan (honey processor)
Claudia's Seafood	Lulu's Luncheonette	Russell Appliance
Climo's Electric	M.D. Smith	Sandra Morin (accountant)
Concept Autoworks, Inc.	Morin & Son (Electrical Contractor)	Spencer's Market
Crawford Precision Whee	Morin Fuel	Wilcox Electric
Dave LeClaire's (construction)	Pat's Perennials	
Dick's Garage	Pete's Custom Paintwork	

## Public and Quasi-Public Land

**Town-owned land.** The Town of Bradley owns a fairly large number of parcels. Some of these are used for public purposes such as the town office and the fire station, while others are found in remote locations and may have been acquired by the town for non-payment of taxes. These properties are summarized in the table below and are shown on a map of town land at the end of this section of the plan.

Table 3 Town-Owned Property			
Tax map/lot	Acres	Use	Comment
5/5	325	vacant	Bog on Great Works Stream near Clifton line
9/1-2	11	Vacant	Block of lots on Great Works Stream east of Ten R
9/4	18	Vacant	Block of lots on Great Works Stream east of Ten R
9/5	15	Vacant	Block of lots on Great Works Stream east of Ten R
9/6	17	Vacant	Block of lots on Great Works Stream east of Ten R
9/7	27	Vacant	Block of lots on Great Works Stream east of Ten R
9/8	18	Vacant	Block of lots on Great Works Stream east of Ten Road
11/13	109	Vacant	Bog area on Great Works Stream east of private portion of Cram Street
11/17	6	Vacant	Small lot between Cram Stream Street and Great Works Stream
13/1/B9	?	?	?
14/9	0.14	Fire station	On 178
14/65	0.13	Vacant	On Pine Street adjacent to Otter Stream
15/32	0.25	Vacant	Small lot between Maine St. and Otter Stream
15/34	0.25	Vacant	Small lot between Maine St. and Otter Stream
15/47	0.29	Town Park	Between Boynton St. and Great Works Stream
16/16		Viola Rand School	On Highland Avenue
18/47	7.10	Town Office	On 178
18/47-1	1.24	Cemetery	On Penobscot River near Carter Woods
18/47-2	0.76	Vacant	Small lot between Maine St. and Otter Stream
21/8	0.11	Vacant	On 178 across highway from salt shed
21/11	0.42	Salt shed	On 178
21/12	1.00	Vacant	On 178
22/15	0.23	Vacant	Along Penobscot River
22/17	4.96	Vacant	Along Penobscot River
<b>Total</b>	<b>562.88</b>	-	-

There are no known timber management plans for any of the town's larger holdings.

**State of Maine.** The State of Maine owns 7,224.6 acres of land in Bradley which includes Lousy Island in Chemo Pond (1.6 acres), and 7,223 acres which was transferred to the State from International Paper and the Webber heirs in the 1980's as part of the public lands lawsuit settlement. The State of Maine initiated the public lands lawsuit during the 1970's to recover "forgotten" public lands in the unorganized parts of the State that had been used for timber

harvesting purposes by various paper companies for many years without payment to the state. As part of the settlement process, the State of Maine traded land with paper companies throughout the State for the purpose of disposing of small, scattered parcels of land while consolidating parcels elsewhere. Most of the resulting, consolidated parcels were located in the unorganized part of the state, but three were located in organized communities (Bradley, Bradford and Lagrange).

The consolidated State land in Bradley is managed by the Maine Department of Conservation, Bureau of Parks and Lands from its regional office in Old Town. The mission of the Bureau with respect to public lands is to manage the natural and cultural resources under its care in order to offer a wide range of recreational and educational opportunities and provide environmental and economic benefits for present and future generations. The location of the State land is shown on the tree growth tax map at the end of this section of the plan.

The State of Maine has not harvested much timber on this parcel because it was heavily cut prior to its transfer to the State. Even though there is no overall management plan for the property, the Bureau of Parks and Lands has undertaken some management activities:

- A harvesting plan was prepared for a timber harvesting operation on part of the property;
- A fishway was installed on the dam on Great Works Stream;
- The State hired a private consultant to undertake a detailed resource assessment of the property; and
- Part of the land near Great Works Stream has been designated as a non-harvest area.

The State of Maine pays a fee to the Town in lieu of taxes (in 2003, this amounted to about \$4,500). According to the state manager of the property, the state does not have a deeded access to the property. The state pays for access to the property via the Baker Brook Road. The public uses this property for recreational purposes, even though the woods roads are in poor condition. There are about 13-14 leased properties with hunting camps on them. The state has right of first refusal in the event that these camps are sold.

**Penobscot Experimental Forest.** The Penobscot Experimental Forest is located in the Towns of Bradley and Eddington and is owned by the University of Maine Foundation and the USDA Forest Service. This 4,200 acre forest (about 2,669 acres of which is located in Bradley) is managed by the University Forests Office and is used primarily to provide opportunities for research. In addition to University-sponsored research, the Northeast Forest Experiment Station of the U.S. Forest Service conducts long-term research on the property. The location of this property in Bradley is shown on the tree growth tax map at the end of this section of the plan.

According to information obtained from the University Forests Office web site, "The University of Maine's forestlands (including the Penobscot Experimental Forest) are managed as working forests. This means that the forests are thinned and harvested periodically according to management plans prepared for them...Harvesting is carried out by University Forest Employees, including student workers, independent logging contractors and forest companies under contract with and supervision of the University Forests Office. Our management plans and harvesting operations consider the multiple benefits forests provide

including wildlife habitat, water and soil productivity, unique natural features as well as the timber potential.”

“Some parcels provide scholarships from net revenues. Green endowment holdings (including some of the parcels in the Experimental Forest) provide financial support to undergraduate students in Forestry and wildlife.”

**Maine Forest and Logging Museum.** Leonard’s Mills is the centerpiece of the Maine Forest and Logging Museum, Inc., a non-profit organization incorporated in 1960 and dedicated to preserving and sharing artifacts, documents, tools, equipment and stories of Maine’s rich forest heritage. Leonard’s Mills, located on 265 acres on Blackman Stream, contains the site of a 1790’s era pioneer settlement identified years ago by the remains of a stone dam and several house foundations. The site includes a covered bridge that crosses Blackman Stream, a water-powered sawmill, a mill pond and dam, a saw pit, an authentic log cabin, a blacksmith’s shop, a trapper’s line camp, and a hovel for animals. The museum also offers an extensive picnic area and an outdoor amphitheater. A Lombard log hauler allows visitors a look into early 1900’s logging.

Events for 2003 include Woodmen’s Day, Children’s Day, Living History Days, and Lumbering in the Maine Woods: Men and their Machines. There are also self-guided walks and educational tours.

### Tree Growth Classification

According to 2002 tax records of the Town, there are 27 parcels of land, totaling 20,929.6 acres, or 72% of the land area of the town, that have been placed by their owners under the provisions of the tree growth tax law (this land includes property owned by the State of Maine and the Penobscot Experimental Forest, both of which are tax-exempt). This land includes 14,514.6 acres of softwood, 5,481 acres of mixed woods, and 934 acres of hardwoods. The majority of these parcels are located in the eastern three-fourths portion of the community (see tree growth tax map at the end of this section). There are no parcels, that have been placed by the owners under the provisions of the Farm and Open Space Tax Law. The parcels placed under tree growth are summarized in Table 4.

Owner	Tax Map/Lot	Softwood Acreage	Mixed Acreage	Hard-woods	Total Acreage
Blakeley, Bogart	8/15	29	10	7	46
Boynton, Merrill & Dorothy	7/19	-	-	33	33
Cote, Ronald	11/20-6		39		39
Guay, Stephen & Stenzel, Daniel	8/18/1	21			21
IP Maine Forests, LLC	5/2	2,011	1,055	59	3,125
IP Maine Forests, LLC	6/1	412	201	10	623
IP Maine Forests, LLC	8/1	571	63	183	817
IP Maine Forests, LLC	12/2	411	120	26	557
Lakeville Shores, Inc.	8/18	79	364	-	443

Owner	Tax Map/Lot	Softwood Acreage	Mixed Acreage	Hard-woods	Total Acreage
Madden, Anthony and Cindy	12/3	156	241	-	397
Madden, Anthony and Cindy	12/3-1	12	216	31	259
Maine Forest & Logging Museum	8/17	30	70	-	100
Newkirk, Mark	5/1	65	104	-	169
Newkirk, Mark	9/2	399	351	-	750
Old Town Lumber Co., Inc.	8/9	41	14	30	85
Old Town Lumber Co., Inc.	8/14	385	108	78	571
Richard, Lester & Karen	7/5	4	56	13	73
State of Maine	1/2	1.6	-	-	1.6
State of Maine	11/12	300	-	-	300
State of Maine	13/1	6,923	-	-	6,923
University of Maine Foundation	3/1	1,226	414	301	1,941
Webber Timber LLC	1/1	-	620	-	620
Wilcox, Brian and Paula	11/38	-	163	-	163
Wilcox, Charles	8/11	-	52	-	52
Wilcox, Charles	11/20	147	42	26	215
Wilcox, Charles	11/20-13	-	43	0	43
<b>Total</b>	-	<b>14,514.6</b>	<b>5,481</b>	<b>934</b>	<b>20,929.6</b>

Source: Bradley tax records, 2002

### Timber Harvesting

The Maine Forest Service compiles statistics on forest harvest based on reports submitted by landowners. Table 5 contains a summary of forest harvests for Bradley since 1990.

Table 5 Timber Harvest Information					
Year	Selection Harvest, Acres	Shelterwood Harvest, Acres	Clearcut Harvest, Acres	Total Harvest, Acres	Number of Harvests
1991	378	0	0	378	5
1992	180	269	14	463	5
1993	239	417	625	1,281	6
1994	503	608	40	1,151	7
1995	75	369	5	449	7
1996	265	290	0	555	10
1997	234	192	30	456	6
1998	598	60	0	658	5
1999	202	84	0	286	7
2000	67	240	0	307	6
2001	180	38	0	218	5
2002	106	64	0	170	4
<b>Total</b>	<b>3,027</b>	<b>2,631</b>	<b>714</b>	<b>6,372</b>	<b>73</b>

Source: Maine Forest Service



## Agricultural Land

While farming was part of the early history of the community, there are no longer any farms in Bradley.

## Historic and Archaeological Resources

The following is a summary of historical and archaeological sites in Bradley, based on information obtained from the Maine Historic Preservation Commission (MHPC).

**Prehistoric archaeological sites.** There are 16 sites known, most of which are located on the banks of the Penobscot River which was surveyed during the hydroelectric re-licensing process. The MHPC report states that the seasonal terrace of the Penobscot River up to 100 meters from the river needs to be surveyed.

**Historic archaeological sites.** There are three sites in Bradley:

Blackman Mills # 1

Blackman Mills # 2

Fort de Sauvage - a contact period fort known only from a 1671 map

The MHPC report states that future survey work should concentrate on the first wave of European/American settlement which began just before 1800. Also, work should be directed toward a survey/inventory of mills located in the town at the outlet of Chemo Pond, Great Works Stream, and along the rivers.

**Historic buildings and structures.** There are no structures on the National Register of Historic Places. The MHPC report states that a comprehensive survey of Bradley's historic, above-ground resources needs to be conducted in order to identify those properties which may be eligible for nomination to the National Register of Historic Places.

**Areas of archaeological resource potential.** Maps provided by MHPC have identified a number of areas of archaeological potential including Blackman Stream, the Penobscot River in the village area, No. 16 swamp along the Great Works River, and Chemo Bog.

## Land Use Ordinances

Land use ordinances serve to provide a balance between public interests and private property rights. The courts in Maine and the United States have consistently confirmed that some rights of the community come before some private property rights. However, the courts have also said that land use regulations must be reasonable and must be applied fairly and impartially. The Town of Bradley does not have a zoning ordinance, but it does have several other ordinances that regulate land use activity:

1. **Land Use Ordinance.** The current version of Bradley's Land Use ordinance was adopted on September 25, 2001. It does not divide the Town into districts, but it does contain dimensional lot requirements for all structures, as well as performance standards. Dimensional requirements include a lot size requirement of one acre, 150 feet of road and shore frontage, a 50-foot front

setback from the edge of the right-of-way, a 20-foot side and rear setback, and a 10-foot accessory structure setback. Performance standards include:

- Access to the site
- Buffering and screening
- Campgrounds
- Conversions to multi-family dwelling units
- Dust, fumes, vapors, gases, odors, glare and explosive materials
- Erosion and sedimentation control
- Junkyards
- Nuisances
- Land not suitable for development (to be excluded from lot size calculations)
- Mineral exploration and extraction
- Mobile home parks
- Mobile homes and recreational vehicles
- Municipal services
- Off-street loading/unloading requirements
- Off-street parking
- Oil and chemical storage
- Pollution levels
- Private right-of-way
- Signs

2. **Shoreland Zoning Ordinance.** The Town of Bradley has a Shoreland Zoning Ordinance that is based in the State's model shoreland zoning ordinance. The town's ordinance divides the 250-foot shoreland area into one of three districts: a Resource Protection District, a Limited Residential District, and a Stream Protection District. The ordinance contains a number of performance standards such as those regulating timber harvesting and clearing, as well as a lot size requirement that varies by use as follows: for residential dwelling units – 40,000 square feet/unit and 200 feet of shore frontage; for governmental, institutional, commercial or industrial structures – 60,000 square feet/unit plus 300 feet of shore frontage; for public and private recreational facilities – 40,000 square feet/unit and 200 feet of shore frontage. The ordinance also contains setback requirements that vary according to shoreland district (in general, the setback is 100 feet from a great pond and 75 feet from other water bodies).
3. **Floodplain Management Ordinance.** The town's Floodplain Management Ordinance, which is based on a model prepared by the Federal Emergency Management Agency, regulates land use activities in the Town's designated flood hazard zones. The town's adoption, administration and enforcement of this ordinance enables land owners in flood prone areas to purchase federally subsidized flood insurance for their dwellings or businesses.
4. **Bradley Subdivision Regulations.** The subdivision regulations contain provisions for a preliminary plan and final plan, and cluster development. The standards are limited to requirements for lots (one-half acre) and roads. There are no environmental performance standards.

## Scenic Resources

In 2003, the Bradley Comprehensive Plan Committee compiled a list of the Town's scenic resources. The resources fall into one of three categories as shown in Table 6, below: specific sites; general features; and structures.

Table 6 Bradley Scenic Resources		
Specific Sites	General Features	Structures
Ball Field	Chemo Pond	Bullen Street bridge
Brown St., trail to dam	Chemo Pond back side	Churches
Camp Molly Molasses (YWCA)	Power lines	Fire Station
Cemeteries	Snowmobile trails	Post Office, Municipal Building
Dam on West St.	Streams and brooks	
Great Works Meadows (dam)	Views of mill	
Great Works Stream back mills		
Leonard's Mills		
Old school site (off School St)		
Springhill Farm		
Shoreline by dam on Penobscot		
Town Park		

## Growth and Rural Areas

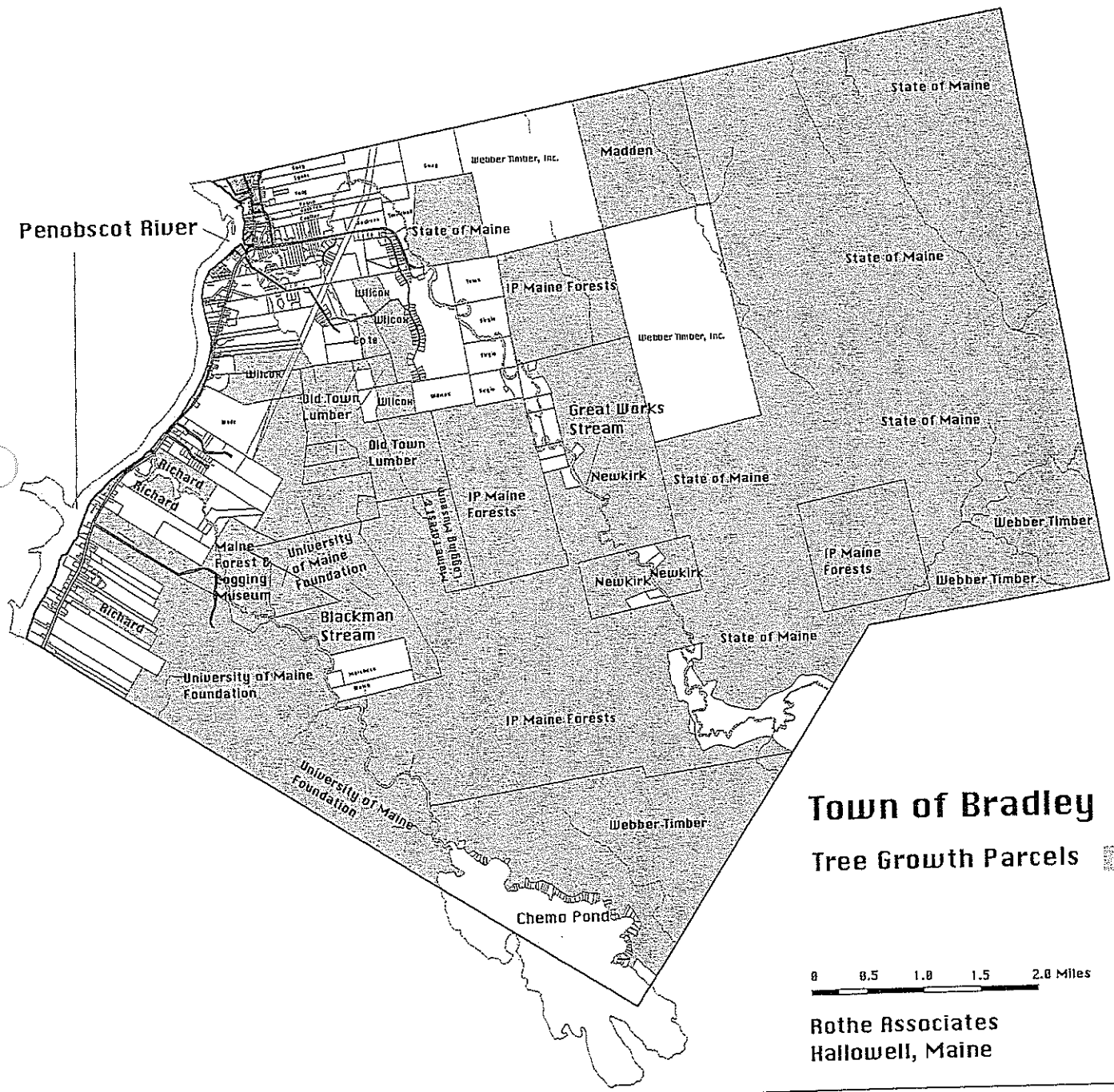
The Comprehensive Planning and Land Use Regulation Act, Title 30-A MRSA Section 4326, Subsection 3, requires that communities identify at least two basic types of geographic areas:

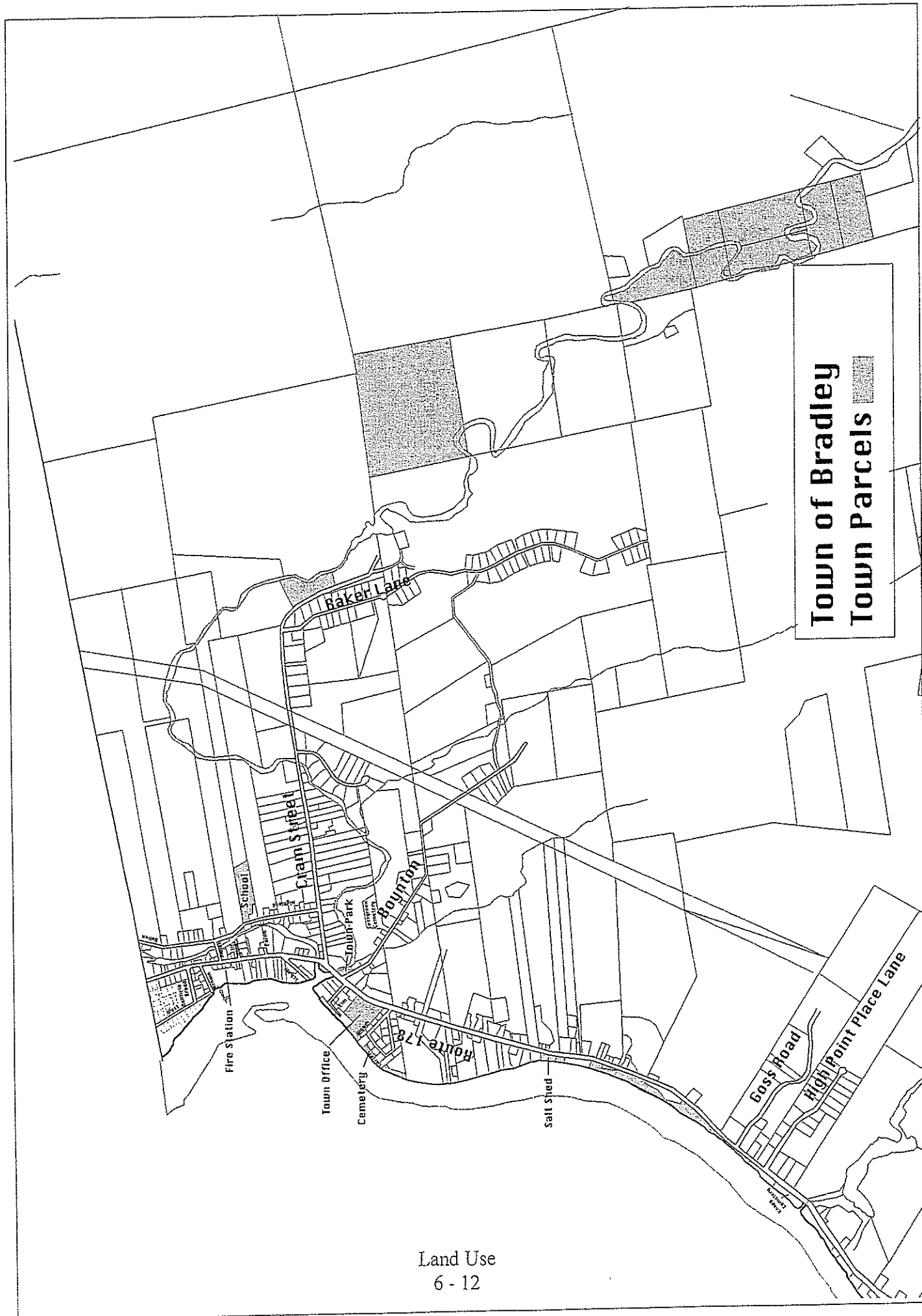
1. Growth Areas, which are those areas suitable for orderly residential, commercial and industrial development or any combination of those types of development, forecast over the next 10 years. Each municipality shall:
  - a) Establish standards for these developments;
  - b) Establish timely permitting procedures;
  - c) Ensure that needed public services are available within the growth area; and
  - d) Prevent inappropriate development in natural hazard areas, including flood plains and areas of high erosion; and
2. Rural areas, which are those areas where protection should be provided for agricultural, forest, open space and scenic lands within the municipality. Each municipality shall adopt land use policies and ordinances to discourage incompatible development."

The Town of Bradley is a rural, largely undeveloped town with a village located in the northwest corner of the community. Three fourths of the town has remained undeveloped in large part because of extensive wetland areas and the fact that large blocks of land are held by entities that manage the land for non-development purposes.

In planning for future development, it makes sense to allow for continued growth of the village, particularly in areas that are served or could be served by the public water system. Some areas farther from the village might be suitable for residential development, but perhaps at lower densities than in the village. Those portions of town classified or suitable for classification under the tree growth tax law could be considered rural areas where development could be permitted, but at very low densities.

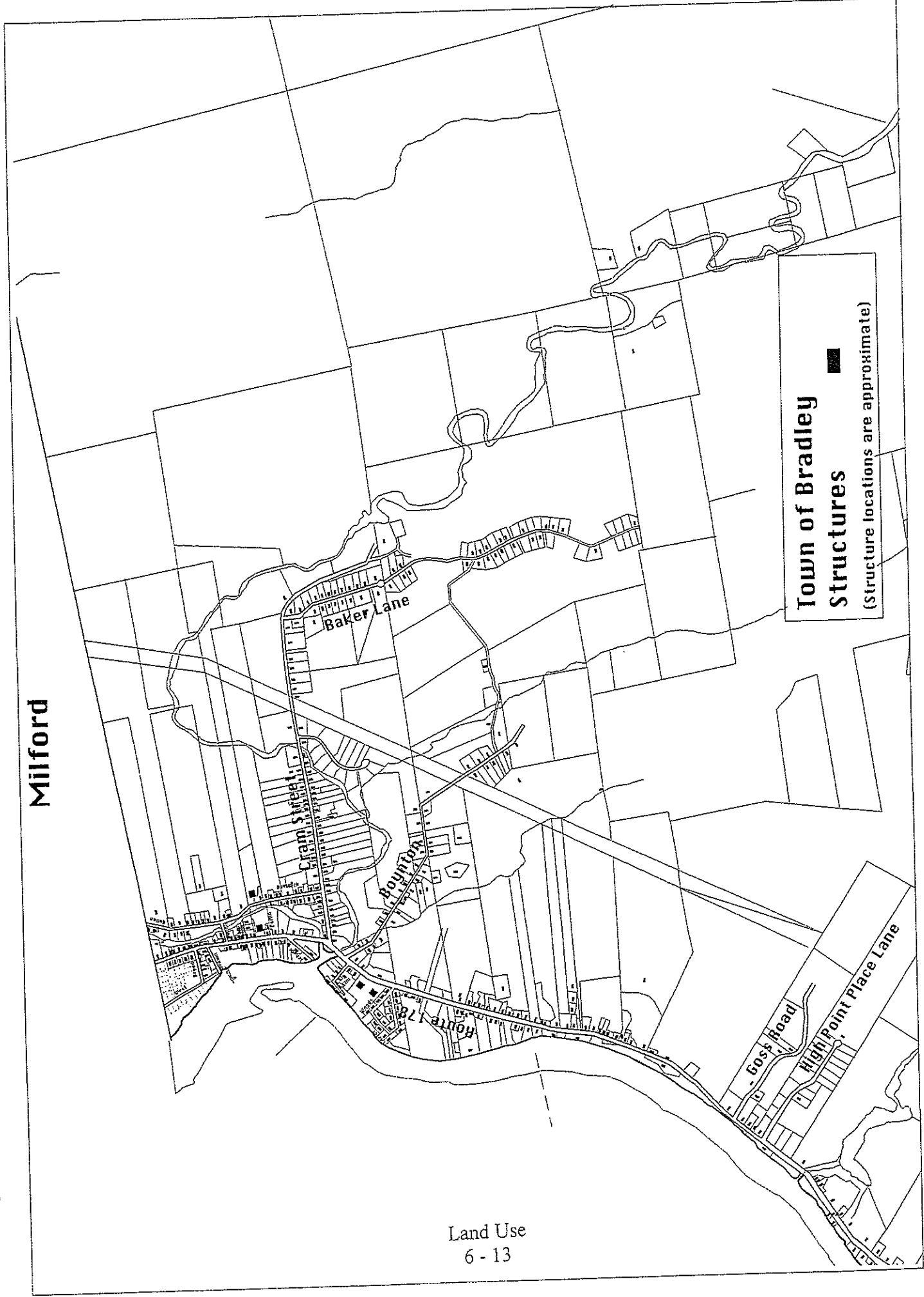
Penobscot River





# Milford

**Town of Bradley  
Structures**  
(Structure locations are approximate)



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## 7. TRANSPORTATION

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### Introduction

The transportation network and the accessibility it provides is one of the primary determinants of the pattern of future development. The system must tie together the various facilities and uses and must remain efficient and functional to ensure the continued well being of the community.

State Route 178 (Bradley Road/Main Street), which runs north to south for the full length of Bradley and roughly parallel to the Penobscot River, is the Town's only access to the outside world. To the south, Route 178 first intersects Route 9 in Eddington, which in turn provides access to points east in Hancock and Washington Counties. Farther south, Route 178 enters Brewer where it connects to Route 15 which, in turn, provides access to Bucksport, as well as Route 1A south to Ellsworth. Route 15 also connects with Route 395 which, in turn, provides access to the Interstate, Route 9 to the south and Routes 100/2 to the west. To the north, Route 178 enters Milford, where it intersects with Route 2/2A. Route 2A crosses the Penobscot River and enters Old Town as Stillwater Avenue, where it continues to I-95 and other points north, west and south.

### Federal Transportation Role

The Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) has had and will continue to have a major impact on the State's transportation system and on Route 178 in Bradley. TEA-21 was enacted by Congress in 1998 and is the major source for Federal transportation funds for the period 1998-2004. Congress is currently considering a renewal of this legislation. Funds from the Federal fuel tax are sent to Washington and are channeled back to the states through TEA-21. The majority of TEA-21 funds are used to improve the State's arterials and major collectors (but not minor collectors), as well as State and local bridges. Federal enhancement funds are also made available on a competitive basis every two years through TEA-21 for the improvement of bicycle and walking facilities.

The State of Maine also receives and administers other Federal funds for the maintenance and improvement of railroads and airports.

### State Transportation Role

The Maine Department of Transportation (MDOT) is responsible for the planning, development and preservation of a multi-modal transportation system including highways and bridges, air transportation, ferry systems, transit systems and rail transportation. MDOT's investments in the transportation system are guided by the following

1. **Twenty-Year Plan.** MDOT's Twenty Year Plan is a policy document that describes the current condition of the State's transportation infrastructure, outlines some of the factors likely to affect performance, and describes the steps to be taken to meet broad goals for all modes of travel.



2. **Six-Year Transportation Improvement Plan.** MDOT's Six Year Plan provides a link between the Twenty-Year Plan, which is policy based, and the Biennial Transportation Improvement Program (BTIP), which is project-based and fiscally limited. The Six Year Plan provides municipalities with the opportunity to plan for anticipated improvements in a more timely manner than is allowed by the BTIP. There is a reasonable expectation that projects listed in the Six-Year Plan will be implemented within the next six years, subject to funding availability. There are no projects listed in the Six Year Plan for Bradley.
3. **Biennial Transportation Improvement Program (BTIP).** The BTIP for specific projects for the FY 2002/03 biennium will be developed based on the Six Year Plan. There are no projects listed in the 2002/03 BTIP for Bradley.
4. **Regional Transportation Advisory Committee (RTAC).** The Regional Transportation Advisory Committee for Region 3 advises MDOT on transportation policy issues. Region 3 includes Penobscot and Piscataquis Counties.

## Highways

Based on data obtained from the Maine Department of Transportation and the Town of Bradley, there are a total of 12.24 miles of public roadway in Bradley. There are three types of public roads:

1. **Arterials** - Arterial roads are comprised of a system of connected highways throughout the State that serve a high volume of through traffic. This is generally defined as 10,000 to 30,000 annual average daily traffic (AADT) trips. There are no arterials in Bradley.
2. **Collectors** - Collectors serve as feeder routes that connect local service roads to the larger arterial roads, and are generally defined as those roads that carry between 2,000 to 8,000 AADT trips. Collectors include numbered State highways and roads. According to MDOT, State Route 178, which runs for a distance of 4.74 miles in Bradley, is a major collector. The State is responsible for the maintenance of major collectors.
3. **Public Town Roads (Town Ways)** - public town roads are all other town roads not otherwise classified as arterials or collectors, and are defined as carrying 100 to 500 AADT trips. These roads are maintained by the municipality and serve primarily as local service roads that provide access to adjacent land as well as access to private roads. Based on information obtained from the Town, there are 15 public town roads with a combined mileage of just under 7.5 miles, as shown in Table 1 on the following page. These roads are generally in good condition. Many of them were repaved in 1996 under the provisions of a \$100,000 bond issue approved by the Town.

## Private Roads

There are a number of private roads in Bradley, some of which are accessible from Route 178 and some of which are not. Roads which are not directly accessible from public roads in Bradley include the Kingsbury and Baker Brook Roads which are accessible through the Town of Milford. There are a number of private roads around Chemo Pond which are accessible through Eddington and Clifton, but not directly from any public road in Bradley. Private roads may include a public easement, but they are essentially not local roads. Maintenance and improvement of these roads is the responsibility of the private owner(s).

Table 1 - Local Roads		
Road Name	Length in Miles	Condition
Baker Lane	1.0	
Boynton Street	1.2	
Broad Street	0.1	
Brown Street	Less than 0.1	
Bullen Street	0.6	
Carter Woods	0.4	
Cram Street	1.2	
Elm Street	0.1	
Highland Avenue	0.4	
Parlin Street	Less than 0.1	
Penney Lane	0.2	
Pine Street	Less than 0.1	
School Street	0.1	
Ten Road	1.6	
West Street	0.3	

### Traffic Counts

Traffic volumes for Route 178 and a few other roads are shown in Table 2. The information is based on traffic counts performed by MDOT between 1995 and 2001. The Average Annual Daily Traffic counts are average counts that are generally lower than the actual field counts. Based on the limited data contained in Table 2, Route 178 has adequate traffic carrying capacity to serve the Town and the surrounding region.

Table 2 Traffic Count Information					
Road	Description	AADT 1996	AADT 1997	AADT 1998	AADT 2001
Route 178	At Eddington line	2,880		3,020	2,970
Route 178	North of Government Road	2,880			
Route 178	South of Boynton Street	3,790		3,740	3,850
Route 178	Just north of Town line (in Milford)	6,250		5,310	
Cram Street	Just east of Highland Avenue	650		790	700
Boynton Street	Near Otter Stream crossing		700		
Bullen Road	Just east of Main Street (178)	670		560	

## Road Safety and Accident Summary

MDOT has identified vehicle accident locations on public roads in Maine (both State and town owned), and has provided a summary of this information to Maine towns. For the period January 1, 1999 through December 31, 2001, there were a total of 31 accidents in Bradley including 9 accidents on Route 178 in the village (7 at intersections), 15 accidents on Route 178 south of the village, and 7 on all other Town roads combined. Based on a review of this data, there are no clear patterns, as illustrated in Table 3 for the Route 178 accidents.

A critical rate factor (CRF) is listed for each accident location. The CRF is a comparison of the actual accident rate to the expected accident rate based on road type, vehicle miles traveled, and statewide average accident ratios. A CRF greater than one indicates an accident rate higher than would be expected at that location based on State data. Overall, the CRF is less than one for all but one of the locations.

**Table 3**  
**Town of Bradley**  
**Accident Summary, Route 178**

NUMBER OF ACCIDENTS			
		# of Accidents	Critical Rate Factor
<b>In the village</b>			
178/Boynton Street intersection		1	.43
178/Pine Street intersection		2	.78
178/Bullen Street intersection		3	1.06
178/Broad Street intersection		1	.35
Between Pine and Bullen		1	.35
Between Broad Street and Milford line		1	.22
<b>South of Village</b>			
Between Eddington line and Government Road		5	.38
Between Government Road and Boynton Street		10	.27
<b>Total</b>		7	-
TYPE OF ACCIDENT			
Type	# of Accidents	Type	# of Accidents
Object in road	1	Ran off road	3
Rear end/sideswipe	7	Deer	5
Head on/sideswipe	4	Non-collision	1
Intersection movement	3	<b>Total</b>	<b>24</b>

## Access Management

The Maine Department of Transportation has adopted access management regulations which require that property owners obtain a permit from the Maine Department of Transportation prior to constructing driveways and entrances on the State's arterial and collector highways. The regulations contain standards for:

- Sight distance
- Driveway width
- Corner clearances
- Turnaround area/parking
- Drainage standards
- Intersection angle/radius of edges
- Double frontage lots

The Town of Bradley will need to be aware of the new rules to avoid unintentionally supporting the creation of lots that cannot be granted an access management permit because they do not meet MDOT's standards. In the long run, the Town may want to consider adopting MDOT's standards to ensure that the regulations are properly enforced.

### **Public Transportation System**

Public transportation is provided to Bradley residents on a limited basis by THE LYNX, which is operated by Penquis Community Action Program's Transportation Service Center. Penquis Cap's primary mission is to provide non-emergency services to the low income, elderly, disabled and general population of its service area which includes Penobscot and Piscataquis Counties. THE LYNX provides door-to-door public and social service transportation in agency vehicles. Medicaid-covered and some social service transportation is also offered in private vehicles with volunteer driver services and are available by appointment only.

### **Air Transportation**

Maine's aviation system consists of 36 publicly owned airports, six of which are served by regularly scheduled passenger service. The Portland International Jetport serves the majority of domestic flights. Bangor International Airport specializes in international flights. The closest general aviation airport to Bradley is Dewitt Field in Old Town.

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## 8. PUBLIC FACILITIES AND SERVICES

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There are a number of public facilities and services available to the residents of Bradley. Some of these are provided by the Town, but others are made available by volunteers, private groups and organizations, nearby communities, and Penobscot County.

### Town Government

The Town of Bradley is governed by the Town Manager/Council form of government. The Council also serves as the Board of Assessors. The Town Council is assisted on a day-to-day basis by the Town Manager and other office staff. The Town Manager is Bradley's only full-time employee. He also serves as Tax Collector, Welfare Director, Road Commissioner, and Registrar of Voters. There are three part-time office people, a part-time code enforcement officer, and a part-time assessor.

Elected officials and their terms of office include the following:

Town Council (5)	3 years (staggered terms)
School Board (5)	3 Years (staggered terms)

### Appointed Positions Include

- Town Manager
- Planning Board (5)
- Code Enforcement Officer
- Plumbing Inspector
- Director, Public Health
- Animal Control Officer
- Board of Appeals
- Comprehensive Planning Committee
- Director, Emergency Management
- Budget/Finance Committee

Bradley's form of government appears to work well for the community. There does not appear to be a need to change the form of government over the next ten years.

### Municipal Buildings

Municipal buildings (exclusive of the school) include:

1. **The Town Office** is located on Route 178/Main Street just south of the Main Street/Boynton Road intersection and just north of the Main Street/Carter Woods intersection. The Town Office is located in a new building that was constructed in 2000 and occupied in January of 2001. Adjacent to the Town Office is the Post Office which was built at the same time on the same parcel as the Town Office. The Town of Bradley leases the building and one acre of land to the Post Office for about \$41,500 per year.

2. **The Fire Station**, located on Route 178/Main Street opposite Bullen Road, is an old frame building that was constructed prior to 1920 when the Town's Fire Department was organized. Over the years, the structure has been expanded, and it now houses the Town's three fire-fighting vehicles. It is located in the floodplain. Town officials have discussed the need to replace the fire station with a new building located on a larger site out of the floodplain, possibly on the same site as the new Town Office.
3. **The Salt/Sand Shed**, is also located on Route 178/Main Street south of the Town Office.

### **Town Road Maintenance**

The Town of Bradley does not have its own public works department. The Town contracts out specific road maintenance activities, as well as snow removal on Town-owned roads.

### **Fire Protection**

The Town of Bradley is served by a volunteer Fire Department with 19 volunteer fire-fighters. None of the volunteers are Emergency Medical Technicians (EMTs). The Town of Bradley leases 43 fire hydrants from the Old Town Water District; these are located throughout the village area and along Route 178. One of the challenges facing the Fire Department is that many of the members are older and there are not enough younger volunteers (currently only 7) to take their place. Unless additional people join the Department, it will eventually become a much smaller fire-fighting force. On average, there are about 35 calls per year of all types including local house fires, brush fires and mutual aid calls. Bradley has mutual aid agreements with Milford and Eddington.

In 2002, the Town invested in a new fire truck. Currently, the Fire Department's three vehicles include a 2002 GMC tanker/pumper, a 1989 GMC tanker, and a late 1960's Jeep 4x4 brush truck. All of the vehicles and fire-fighting equipment are in very good condition. In the long run, the Town may have to replace the brush truck.

### **Rescue Services**

The Town of Bradley relies on Old Town for rescue services.

### **Police Protection**

The Town of Bradley does not have its own police force, but relies on the State Police and the Penobscot County Sheriff's Office for police protection.

### **Dispatching**

As of early 2003, dispatching services are provided through 911 calls by the Penobscot Regional Communication Center in Bangor. Individual fire personnel are notified of an emergency by pagers. By joining the County system, Bradley may be asked on occasion to provide mutual aid to other towns served by the County system.

## **Water Supply**

While some residents of Bradley depend on well water, the people living and working in Bradley Village and along Route 178/Main Street are served by a central water system. The Old Town Water District provides drinking water to 282 customers, or about 690 people (56% of the Town's 2000 population). Water is delivered to Bradley by a 10-inch water transmission line that crosses the Penobscot River at the bridge in Milford; this becomes a 12-inch line in Milford, then an 8-inch line in Bradley as far south as Elm Street, then a 6-inch line from Elm Street south along Route 178 to a point about a mile south of the Town Office. Six-inch water mains serve Brown Street, Pine Street, Highland Avenue/Bullen Road, Cram Street, Elm Street, Carter Woods and Boynton Street. The water main on Cram Street is about 3,300 feet long, and the one on Boynton Street is about 1,800 feet long.

The water lines serving Bradley village are cast iron lines that were installed in the 1930's. Despite their age, the lines appear to be in good condition, although the lines are not large enough to provide ideal fire flows. The Water District has installed bleeder valves at the dead-end portions of the system to avoid water quality problems caused by stagnant water.

The Old Town Water District gets its water from three gravel packed wells. Water is treated for iron and manganese, as well as PH (acidity level). The water is chlorinated and fluoride is added. The Water District is considering adding another well to the system to ensure sufficient capacity for the future. Currently, the system averages 1.1 to 1.2 million gallons per day of excess capacity. The system has sufficient capacity to accommodate Bradley's residential development over the next 10 years, but water mains may have to be upgraded if a large water-using industry or large residential development were to locate in Bradley.

## **Sewage Treatment**

The Town of Bradley does not have a public sewerage system. The community is served by individual, subsurface sewage disposal systems.

## **Solid Waste**

The Town of Bradley does not have its own solid waste disposal facility or transfer station. The Town currently contracts with Griffin's Disposal Service in Levant for curbside pickup of solid waste and recyclable material. Wastes are hauled to the Pine Tree Waste facility in Hampden, and recyclables are taken to the Bangor recycling facility.

Twice each year, the Town sets up a temporary transfer station at the salt shed for bulky wastes and brush. The bulky wastes are then hauled by the Town's private contractor to the Pine Tree facility in Hampden, and the brush is taken to a mill in the local area to be chipped.

## **Education**

**Overview.** Bradley is one of four towns in Maine School Union #90. The other communities include Alton, Greenbush and Milford. Each year, the costs of operating School Union 90 are distributed to the four member towns, using a formula based on numbers of staff and students. Bradley's increased enrollment in recent years has led to an increase in Bradley's share of School Union 90 costs. In

addition, tuition costs for the Town's high school students have also continued to rise, and are a matter of continuing community concern.

Viola Rand Elementary School in Bradley is located in the population center of the community in a residential neighborhood that allows many children to walk and bicycle to school. Viola Rand School serves students in grades K-5. Students in grades 6-8 typically attend Leonard Middle School in Old Town, but may attend other schools, while students in grades 9-12 are sent on a tuition basis to schools in other communities (mostly Old Town).

**Enrollment.** Historical enrollment data and enrollment projections are shown in the tables below. Enrollment at all levels has continued to increase, and is expected to grow over the next 10 years.

**Table 1**  
**Viola Rand Elementary School**  
**October Historic Enrollments**

Year	Special	K	1	2	3	4	5	6	7	8	K-8 Total
1993		17	8	17	18	11	12	10	15	13	121
1994		11	16	9	17	21	12	14	11	14	125
1995	3	14	12	15	9	20	19	11	16	9	128
1996	7	10	13	13	17	12	17	13	13	19	134
1997	5	18	10	13	14	19	14	20	12	14	149
1998	4	18	18	11	13	12	17	11	18	11	133
1999	3	18	17	17	11	13	12	13	14	15	133
2000	18	19	20	17	18	16	14	11	8	18	159
2001	3	9	20	15	18	18	13	15	13	14	138
2002	2	17	13	22	17	20	20	13	15	14	153

Source: Maine Department of Education

**Table 2**  
**Grades 9-12 and Total Town**  
**October Historic Enrollments**

Year	9	10	11	12	Special	9-12 Total	K-12 Total
1993	12	9	13	18		52	173
1994	11	14	9	13		47	172
1995	16	9	13	10		48	176
1996	9	16	9	9		43	177
1997	20	10	19	8		57	196
1998	14	19	10	16	1	60	193
1999	14	16	18	9		57	190
2000	14	12	15	4		45	204
2001	15	18	16	14		63	201
2002	16	14	17	18	1	66	219

Source: Maine Department of Education



Table 3 Projected Enrollments						
Year	K-5	6-8	9-12	Special Elementary	Special Secondary	Total
2000	104	30	58	6	4	202
2001	104	32	50	4	1	191
2002	115	35	47	4	1	202
2003	118	42	44	4	1	209
2004	125	47	40	4	1	217
2005	118	53	44	4	1	220
2006	118	56	50	4	1	229
2007	131	47	56	4	1	239
2008	127	50	63	4	1	245
2009	127	52	70	4	1	254
2010	119	67	61	4	1	252

Source: School Union 90 Superintendent's Office

**School Condition.** In 2001, School Union 90 applied for but did not receive State funds for the replacement of Viola Rand School. School officials based their application on the growing student population and on a 2000 assessment of the building by the Ames Corporation, which identified a number of deficiencies. Excerpts of the Ames Report follow:

"The Viola Rand School was originally constructed in 1953, with additions and renovations in 1959, 1965 and 1997. The building is well maintained and is generally in good condition."

"There are several major deficiencies with the Viola Rand School that were noted during the facility assessment field survey. These are: inadequate electrical system, outdated septic system, lack of classroom space, lack of parking and vehicle movement areas, flooring reported to contain asbestos throughout the school, and ADA compliance issues. These items should be addressed as soon as possible so as not to (a)ffect the health and safety of the students and staff."

"The electrical system serving the school is in poor condition. The service entrance cables are over 40 years old. The entrance panels and branch circuits are presently beyond their design capacity. Interior lighting fixtures are inefficient and light levels are poor in many of the rooms. It is the recommendation of this report that a complete electrical system upgrade should be considered for the school."

"The building's septic system was installed in 1965 as part of an addition project. The system incorporates a leaching bed with an overflow discharge directly to Otter Stream. This type of system requires permitting from the MEDEP on a yearly basis and may soon be non-conforming. It is the recommendation of this report that a new septic system should be considered for the school."

"The basement of the school is currently being used for offices, classes and storage. The room is divided by plywood partition walls that are not up to code. The access stairways are substandard. The

basement also leaks and floods every spring. It is the recommendation of this report that a new addition should be considered for the school. This addition could relocate activities taking place in the basement and alleviate current overcrowding.”

“There is presently very limited parking for school staff and visitors. Traffic flow in and out of the school is poor, requiring busses to back out after discharging students. It is the recommendation of this report that the traffic patterns and parking issues at the school be further investigated.”

“A large portion of the school’s tile flooring is reported to contain asbestos. Most of the flooring appears to be in good condition at this time, but should be replaced as soon as funds are made available. Some of the flooring is in poor condition and should be replaced as soon as possible. It is the recommendation of this report that the school should develop an aggressive asbestos abatement plan for the school.”

“The school currently does not meet ADA code and standards. Doors and hardware are improper. The existing ramp in the main hall is not to code. The bathrooms are noncompliant. It is the recommendation of this report that all ADA issues be addressed as soon as funds are available.”

“It is considered good practice to provide funding on an annual basis for the larger dollar items that can normally be expected to wear out. The components that make a building function reach the end of their life cycles at different time periods. In order to care for and maintain these components to get the maximum life from them, money should be put into them on a predicted schedule basis rather than let them all wear out at the same time and create an unbearable situation.”

“The generally accepted formula for determining how much money to put into the systems is based on the current replacement value of the system. The current replacement value of the Viola Rand School is \$1,177,025. The annual expenditure required is two percent (2%) of replacement value. Therefore, you should put \$23,540 in your capital outlay line of your annual budget.”

## **Outdoor Recreation**

Outdoor recreation facilities include:

- A small Town Park on Boynton Street that can be used for passive recreation. It includes a flag, a flower area, and a place to walk down to Great Works Stream. Town officials are considering placing a picnic table in the park.
- A baseball field off Broad and West Streets that was donated to the Town by the mill.
- Playground facilities at the school.

The Town does not have a recreation program, but children can participate in recreation programs in Old Town.

## **Library**

The Old Town Library is available to residents of Bradley.

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## 9. MUNICIPAL FINANCES

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### Historical Valuations and Taxes

Both the Town of Bradley and the State of Maine compute valuations for the Town. The State compiles and adjusts its figures to reflect actual property transactions, and hence market values. Bradley's valuations will reflect market value only in those years in which the Town conducts a revaluation and adjusts values to reflect market conditions (Bradley's most recent valuation was 1990). State valuation figures for any given year are two years old, and thus do not reflect recent changes in overall property values. State law requires that when a municipality's valuation drops below 70% of the State valuation, a revaluation must be undertaken.

Table 1 provides a summary of Bradley's State valuation, municipal valuation, the tax assessment and tax rate for the years 1993 through 2001, as reflected in municipal valuations prepared by the State Bureau of taxation and in municipal valuation returns.

During the period 1993 through 2001, Bradley's State valuation rose from \$33.5 million to \$41.95 million, or 25%. During the same period, the municipal valuation (the valuation calculated by the Town of Bradley) rose from \$36.9 million to \$49.5 million, or 34%. The increase in Bradley's valuation relative to the State valuation may reflect construction of the Maritimes and Northeast Pipeline spur which runs through Bradley.

Even though Bradley has no major businesses or manufacturers, the Great Works dam brings in approximately \$32,000 annually of tax revenues.

**Table 1**  
**Historical Valuation And Taxes**

	<b>State Valuation</b>	<b>Municipal Valuation</b>	<b>Bradley Tax Assessment</b>	<b>Tax Rate</b>
1993	\$33,500,000	\$36,925,400	\$450,490	.01220
1994	\$33,950,000	\$37,060,900	\$567,032	.01530
1995	\$35,600,000	\$37,105,000	\$549,154	.01480
1996	\$35,650,000	\$38,380,800	\$606,417	.01580
1997	\$35,000,000	\$39,075,400	\$605,669	.0155
1998	\$37,250,000	\$38,086,100	\$590,335	0.155
1999	\$39,450,000	\$39,189,600	\$607,439	.0155
2000	\$41,500,000	\$48,514,300	\$684,052	.01410
2001	\$41,950,000	\$49,449,000	\$830,743	.01680

Source: Municipal Valuation Returns Statistical Summary, 1993-2001, State Bureau of Taxation

## Valuation Comparisons

State valuation comparisons and per capita valuations are two measures of a community's wealth relative to other communities. Table 2 contains a summary of State valuations and per capita valuations for Bradley and a number of comparison communities. Bradley's 2002 State valuation (\$49.6 million) is lower than that of all comparison communities except Clifton (\$38.1 million). Bradley has the third lowest per capita State valuation (\$39,895) of any community shown in Table 2 (Orono's and Milford's are lower). The Town's per capita valuation is below that of Penobscot County (\$45,202) and is significantly below the State figure (\$64,941).

**Table 2**  
**Comparative Valuation Figures**

	2000 Population	2002 State Valuation	Full Value Per Capita
<b>Bangor Metropolitan Area – Service Centers</b>			
Bangor	31,473	\$1,606,250,000	\$51,036
Brewer	8,987	\$477,950,000	\$53,182
Old Town	8,130	\$402,100,000	\$49,459
Orono	9,112	\$244,800,000	\$24,671
<b>Surrounding Towns – West Side of Penobscot</b>			
<b>Bradley</b>	<b>1,242</b>	<b>\$49,550,000</b>	<b>\$39,895</b>
Clifton	743	\$38,100,000	\$51,279
Eddington	2,052	\$84,850,000	\$41,350
Holden	2,827	\$143,750,000	\$50,849
Milford	2,950	\$112,900,000	\$38,271
<b>Penobscot County</b>	<b>144,919</b>	<b>\$6,550,700,000</b>	<b>\$45,202</b>
<b>Maine</b>	<b>1,274,923</b>	<b>\$82,794,230,000</b>	<b>\$64,941</b>

Source: Municipal Valuation Returns Statistical Summary, 2001, State Bureau of Taxation and U.S. Census, 2000

## Industrial Valuation

Table 3 shows that Bradley has the second highest personal property valuation (\$7,615,600) of the communities shown in the table that are on the western side of the Penobscot River (Milford's is higher at \$12,277,900). Bradley also has the highest per capita personal property/industrial valuation of any community shown on the west side of the Penobscot. It is even higher than that of Bangor (\$10,918) and Orono (\$2,699). However, the Town's per capita figure is not as high as the average for Penobscot County (\$14,191) or the State of Maine (\$13,256).

## Total Property Tax Burden

The Maine Municipal Association has compiled comparative tax burdens for municipalities, based on the 1999 full value tax rate. Two measures are used to illustrate the tax burden at the taxpayer level; the tax paid on a median value home and tax paid as a percent of the median household income. In the

Property Tax Burden column (last column) in Table 4, the numbers represent statewide rankings where 1 is the highest tax burden, and 487 is the lowest. The tax burden in Bradley (282) is lower than in all comparison communities except Eddington (336).

**Table 3**  
**Personal Property And Industrial Property – 1999**

	Personal Property Valuation	Industrial Valuation	Per Capita Personal Prop/Ind. Valuation
<b>Bangor Metropolitan Area – Service Centers</b>			
Bangor	\$241,682,200	\$101,944,200	\$10,918
Brewer	\$74,642,900	\$72,577,700	\$16,382
Old Town	\$130,060,100	\$138,850,400	\$33,076
Orono	\$22,724,300	\$41,870,400	\$2,699
<b>Surrounding Towns – West Side of Penobscot</b>			
Bradley	\$7,615,600	\$7,377,500	\$12,072
Clifton	\$2,664,900	\$3,484,100	\$8,276
Eddington	\$6,125,670	\$845,510	\$3,397
Holden	\$1,604,900	0	\$568
Milford	\$12,277,900	\$7,050,600	\$6,552
<b>Penobscot County</b>	\$1,292,956,394	\$763,604,042	\$14,191
<b>Maine</b>	\$8,735,219,496	\$8,164,674,667	\$13,256

Source: Municipal Valuation Returns Statistical Summary, 2000, State Bureau of Taxation

**Table 4**  
**Property Tax Burden**

	1999 Full Value Mil Rate	1999 Median HH Income	1999 Median Home Value	Taxes Paid Median Home	Tax as % of Household Income	Property Tax Burden
<b>Bangor Metropolitan Area – Service Centers</b>						
Bangor	22.78	\$31,079	\$87,434	\$1,992	6.41	19
Brewer	22.17	\$35,025	\$89,744	\$1,989	5.68	36
Old Town	20.65	\$28,303	\$73,631	\$1,521	5.37	43
Orono	23.96	\$35,971	\$104,149	\$2,495	6.94	11
<b>Surrounding Towns – West Side of Penobscot</b>						
Bradley	15.37	\$31,878	\$66,353	\$1,020	3.20	282
Clifton	13.46	\$31,596	\$78,893	\$1,062	3.36	255
Eddington	12.91	\$39,022	\$86,232	\$1,114	2.85	336
Holden	15.89	\$38,326	\$106,440	\$1,691	4.41	111
Milford	18.90	\$31,807	\$76,852	\$1,452	4.57	98

Source: 2001 Property Tax Burden, Maine Municipal Association

## Educational Tax Burden

The Maine Municipal Association has also compiled comparative educational tax burdens for municipalities, based on the 1999 full value tax rate. In the Education Tax Burden column (last column) in Table 5, the numbers represent statewide rankings where 1 is the highest tax burden, and 487 is the lowest. The educational tax paid on the median value home in Bradley (\$788) was lower than in all comparison communities except Old Town (\$781) and Clifton (\$783), and the educational tax burden in Bradley (250) was lower than in all other comparison communities except Eddington (264).

**Table 5**  
**Educational Property Tax Burden**

	1999 Education Mil Rate	1999 Median Household Income	1999 Median Home Value	Education Taxes Paid Median Home	Education Tax as % of Household Income	Education Tax Burden Rank
<b>Bangor Metropolitan Area – Service Centers</b>						
Bangor	11.27	\$31,079	\$87,434	\$986	3.17	112
Brewer	12.33	\$35,025	\$89,744	\$1,107	3.16	116
Old Town	10.61	\$28,303	\$73,631	\$781	2.76	195
Orono	13.96	\$35,971	\$104,149	\$1,454	4.04	23
<b>Surrounding Towns – West Side of Penobscot</b>						
Bradley	11.87	\$31,878	\$66,353	\$788	2.47	250
Clifton	9.92	\$31,596	\$78,893	\$783	2.48	249
Eddington	10.93	\$39,022	\$86,232	\$942	2.42	264
Holden	11.36	\$38,326	\$106,440	\$1,210	3.16	117
Milford	13.75	\$31,807	\$76,852	\$1,056	3.32	90

Source: 2001 Educational Tax Burden, Maine Municipal Association

## Town Revenues and Expenditures

Table 6 contains a summary of municipal revenues and expenditures for the period 1997 through 2001, as reflected in the Town's annual audits. In 2001, the Town's revenues amounted to \$1,735,884, or a slight increase of 1.2% from the level in 1997 (\$1,715,527). In 1997, property tax revenues provided about 35% of the Town's revenues; it was 39% in 2001.

Education is by far the largest expenditure category, accounting for 60% of all expenditures in 1997 (\$875,947) and 69% in 2001 (\$1,164,654).

The Town voted in a budget cap effective July, 1997. Under the provisions of this budget cap, the Town's annual budget will be allowed to increase at a rate not exceeding the social security cost of living's annual increase. However, the Town can vote to override the cap as it has on several occasions for specific expenditures. The budget cap may not be realistic, given the fact that certain costs beyond the Town's control, such as the county tax and educational expenses, are rising at a rate higher than that set by the budget cap.

## Capital Plan

A key element of any plan for the future of Bradley is the balancing of the Town's needs and wishes with the ability to pay for them. A capital investment plan develops projected capital expenditures for improvements to roads, buildings, equipment and other Town infrastructure that will be needed to support Town services in the next few years, and indicates the timing and funding sources which can be used for them. It also provides a basis for residents and town officials to discuss major issues and the options available for dealing with them, including priorities of needs, timing of projects, and ability and willingness to pay for them.

Obviously Bradley can simply borrow for needed improvements, but there are alternatives. The principal possibilities are:

1. Level funding, which is spending only that amount available from the annual appropriation;
2. Reserve funds, which is the use of funds previously set aside for specific purposes; and
3. Grant monies, if the Town is fortunate enough to qualify.

Bradley has a number of reserve funds which it uses to address capital needs. The Town's reserve funds, and the amounts in them as of June 30, 2001, include:

Municipal capital improvements	\$38,937
Fire department capital reserve	\$19,013
School boiler replacement	\$23
Highway improvements	\$16,317
<b>Total:</b>	<b>\$474,290</b>

The Comprehensive Plan Committee recommends that the Town Councilors develop, adopt and annually update a capital investment plan by appointing a committee of residents qualified in areas such as construction, fire protection, roads, finance, education, real estate, and planning. The Committee should be charged with the task of working with the Town Manager to thoroughly investigate and recommend specific courses of action for renovation, expansion, replacement or substitution of capital assets and/or existing or proposed facilities for the Town of Bradley. A capital investment plan can serve to:

1. Help smooth out abrupt changes in the property tax burden by providing a multi-year view of projected capital expenses. This would let Bradley anticipate future projects and prepare for their financial impact.
2. Enable a more focused discussion of priorities by permitting examination of all major projects under consideration, including their projected costs and timing, rather than looking at such projects one by one, as the need for each develops.
3. Serve as a tool for current year budget development in evaluating the impact of deferring proposed projects, reserving funds for future projects, or applying various other financing alternatives.
4. Remain a flexible working document by periodic updates as new information becomes known.

**Table 6**  
**Bradley General Revenues and Expenditures in dollars**  
**For the Year Ending June 30 (in dollars)**

	FY1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
<b>Revenues</b>						
Property Tax	594,583	606,897	591,891	624,845	680,166	
Excise Tax	110,621	118,548	137,580	144,995	146,468	
Intergovernmental	1,715,527	600,340	688,730	748,787	755,833	
Teacher Pension – from State	51,450	55,400	59,400	59,018	57,525	
Interest Income	41,846	39,578	41,559	44,807	50,916	
Other	17,097	22,871	26,413	31,062	43,949	
<b>Total Revenue</b>	<b>1,364,637</b>	<b>1,443,634</b>	<b>1,545,573</b>	<b>1,653,515</b>	<b>1,734,907</b>	
Operating Transfer in	350,890	950	856	889	977	
<b>Total Revenue and other</b>	<b>1,715,527</b>	<b>1,444,584</b>	<b>1,546,429</b>	<b>1,654,404</b>	<b>1,735,884</b>	
<b>Expenditures</b>						
General Government	94,651	115,195	112,051	95,699	114,513	
Protection	98,307	102,410	98,958	108,410	126,183	
Waste management	59,026	58,705	48,131	52,381	69,573	
Highways and streets	26,703	22,284	19,629	18,649	19,938	
Social services	5,817	11,997	9,352	10,246	6,649	
Recreation	6,560	1,660	1,867	2,387	2,248	
Cemeteries	4,516	3,210	3,938	4,366	4,112	
Education	875,947	938,712	977,303	1,029,191	1,164,654	
Teacher pension paid by State	51,450	55,400	59,400	59,018	57,525	
Unclassified	20,763	1,710	1,810	9,225	200	
County tax	31,515	30,555	32,966	35,426	38,595	
Capital outlay	194,943	254,769	7,444	2,146	1,757	
Debt service principal	-	35,000	35,000	35,000	35,000	
Debt service interest	-	20,230	18,235	16,133	37,831	
<b>Total Expenditure</b>	<b>1,470,198</b>	<b>1,651,837</b>	<b>1,426,084</b>	<b>1,478,278</b>	<b>1,675,779</b>	
Excess of revenues over expenditures	245,329	(207,253)	120,345	176,126	60,106	
Fund Balance July 1	328,699	574,028	366,775	487,120	663,245	
Fund Balance June 30	574,028	366,775	487,120	663,245	723,351	

## Debt

As of June 30, 2001, the Town's long term debt stood at \$660,000. Total debt consists of three general obligation bonds including:

1. Road and school repair bond, July 26, 1996; originally \$350,000, \$210,000 as of 6/30/01.
2. Municipal building construction dated May 25, 2000; originally \$125,000, \$125,000 as of 6/30/01.
3. Post office construction dated May 25, 2000; originally \$325,000, \$325,000 as of 6/30/01.



A capital investment plan generally focuses on major capital needs in excess of a specified amount (such as \$1,500). The following is a proposed capital improvement plan prepared by the Town Manager. If accepted by the Town Council, the Plan will need to be refined and updated on an annual basis by the committee appointed by Town Councilors.

Capital Improvement Item	Estimated Total Cost	Proposed Finance Method	Annual Operating, Maintenance Costs
July 1, 2003 – June 30, 2004			
Main office computer	\$1,500	Local appropriation	About \$50 first 3 years
Generator	\$1,000	Local appropriation	Less than \$50/year
July 1, 2004 – June 30, 2005			
Portable radios Fire Dept (4)	\$3,200	Local appropriation	-
Carter woods reconstruction	\$150,000	Local appropriation +carry fwd	-
Office computer	\$1,500	Mun. Capital reserve	About \$50 first 3 years
Bunker gear 16 sets FD	\$16,000	F.D. Capital reserve	About \$100/year
4" hose 1,500 ft for fire dept	\$7,500	F.D. Capital reserve	-
Imaging camera	\$21,000	Grant	About \$100/year
July 1, 2005 – June 30, 2006			
Portable pumps (4) F.D.	\$6,000	Local appropriation	About \$100/year
Holding tank F.D.	\$1,000	F.D. Capital reserve	
S.C.B.A.'s (4)	\$7,200	Grant	\$ About 100/year
July 1, 2006 – June 30, 2007			
Boynton St. & Ten Rd. Pave	\$65,000	Local appropriation +carry fwd	-
Brush truck FD	\$18,000	Grant	About \$500/year
July 1, 2007 – June 30, 2008			
4-bay fire station	\$350,000	Bond issue	About \$2,500-\$3,500/year

#### Notes to Table

1. Need for computers based on evaluation of current computers by computer repair technician.
2. Carter Woods project based on engineer's study.
3. Road projects based on Town Manager's assessment of road needs.
4. Fire department items based on changing federal and state requirement, to ensure safety of firemen, and/or to improve the level of service the fire department provides.

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## 10. REGIONAL COORDINATION

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Bradley is linked in a number of ways to other nearby communities.

**Housing.** In 2002, the Towns of Bradley, Clifton and Eddington completed a housing assessment which examined in detail the housing needs of these three communities.

**Economy.** The residents of Bradley are highly dependent upon the service center communities just across the river for employment opportunities. Approximately 73% of Bradley's work force is employed in Bangor, Old Town and Orono.

**Fire Protection:** Dispatching service is provided by the Penobscot Regional Communications Center in Bangor to the Fire Department volunteers through pagers. The Fire Department provides mutual aid to other towns served by the County system. The Town of Bradley leases 43 fire hydrants from the Old Town Water District. Bradley relies on Old Town for rescue services.

**Police Protection.** Bradley has no police force of its own. Law enforcement is provided by the Penobscot County Sheriff's Department and the Maine State Police.

**Schools:** Bradley is one of four towns in Maine School Union #90. The other communities include Alton, Greenbush, and Milford. Students in grades K-5 attend Viola Rand School in Bradley. Students in grades 6-8 typically attend Leonard Middle School in Old Town, while students in grades 9-12 are sent on a tuition basis to schools in other communities (mostly Old Town).

**Outdoor Recreation.** Bradley does not have its own recreation program, but children from Bradley can participate in recreation programs in Milford and Old Town.

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## 11. SUMMARY OF FINDINGS

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### Population

- Between 1990-2000, Bradley's population grew from 1,136 to 1,242 people, a 9% increase.
- During that same period, the towns on the east side of the Penobscot River (including Bradley) grew faster than the service center communities on the west side of the River.
- Between 1990 and 2000, there was a 13% growth in school age children, but a decline of 12% in the "under 5" population. There was also a 29% growth in the "65 and over" category.
- Based on population projections prepared by the State Planning Office, by 2014 the Town can expect a decline in the school age population of about by 18%. Most of the Town's growth will be in the "45-64" category (43%) and in "65 and over" category (55%).

### Housing

- Between 1990 and 2000, there was a 20% increase in Bradley's housing stock (this was the highest rate of growth in the immediate area).
- 98% of the growth in the Town's housing stock between 1990 and 2000 has been in the form of single-family dwellings.
- Affordability is less of a problem in Bradley than in other places. In 2000, the median value of a single family dwelling was \$78,100, compared to \$82,400 at the County level and \$98,700 statewide. In 2000, the median home was affordable to the median income household, as well as to low and very low income households.

### Economy

- Bradley does not have any major employers, but does have a number of small service-oriented businesses and small retail businesses.
- The Town is highly dependent on service center towns on the west side of the Penobscot River. 29% of the workforce works in Bangor; 27% work in Old Town; and 17% work in Orono, for a total of 73% working in these three communities. Only eight percent of work force works in Bradley.
- In 2000, the Town's median household income was \$37,163, which was just about the same as the State figure of \$37,240, but was higher than the County figure of \$34,274.
- Mean retirement income in Bradley (\$21,101) was higher than in the County as whole (\$14,927) and also higher than at the State level (\$15,211).

### Natural Resources

- Wetlands cover about 50% of the land area of Bradley.
- Flood plains cover about 25-30% of the town.
- Approximately 80-90% of the soils have low or very low potential for low density development.

- The Town has a number of valuable wildlife resources including riparian habitat, large habitat blocks, and a number of high value plant and animal habitat.

## Land Use

- The Town of Bradley consists of approximately 29,041 acres.
- Development in Bradley is concentrated in Bradley village, located in the northwest corner of the community, although there is some development around Chemo Pond in the south.
- The largest landowners occupy about 66% of the land area of Bradley. They include the State of Maine 7,725 acres (25% of the Town); Webber Timber 5,047 acres (17%); H.C. Haynes 4,394 acres (15%); and the University of Maine Foundation 2,669 acres (9%).
- The Town owns approximately 563 acres.
- Land classified under the Tree Growth Tax Law includes 20,930 acres, or 72% of the town.
- The Town has a Land Use Ordinance which requires a lot size of 1 acre, 150 feet of road and shore frontage, a 50-foot setback from the edge of the road, a 20-foot side and rear setback, a 10-foot setback for accessory structures, and a number of land use standards.

## Transportation

- There are about 12.24 miles of public roadway in Bradley including one major collector (Route 178) that runs the length of the town parallel to the Penobscot River, and about 4.74 miles of town roads, most of which are located in the northwest corner of the community.

## Public facilities

- Town buildings include the town office, the fire station and the salt/sand storage shed.
- Bradley is one of four towns in School Union 90. Viola Rand Elementary School serves grades 1-5. Students in junior high school typically attend school in Old Town, and high school students are sent on a tuition basis to schools in other communities. There are major deficiencies in Viola Rand School, but the Town has been unable to obtain State funds.
- The Old Town Water District provides water to 282 customers, or about 690 people (56% of the Town's 2000 population). The District serves the village area of Bradley. There are no public sewers.
- The Town does not have much in the way of local outdoor recreation facilities and programs. Children participate in recreation programs in Old Town.

## Municipal Finances

- Bradley does not have any major business, but the Great Works dam brings in about \$32,000 of tax revenues annually.
- Bradley per capita valuation (\$39,895) is well below the Penobscot County average (\$45,202) and significantly below the State figure (\$64,941).
- Bradley's overall tax burden is lower than all communities in the immediate area except Eddington.
- Bradley has a budget cap set at the Social Security's cost of living index. The cap may not be realistic, given the fact that certain costs beyond the Town's control, such as the County tax and educational expenses, are rising at a higher rate than that set by the cap.

## 12. GOALS, POLICIES, STRATEGIES

### A. HOUSING

#### Goals

1. Encourage and promote affordable, decent housing opportunities for all citizens of Bradley.

Policies	Strategies	Responsibility/Date
<p><b>1. Affordable Housing.</b> Ensure that affordable housing opportunities are included in new developments.</p>	<p><b>A. Multi-Complex Housing.</b> Strongly encourage construction of new multi-complex housing to offer affordable housing.</p> <p><b>B. Housing Rehabilitation.</b> Complete Phase II materials and otherwise implement the CDBG Housing Rehabilitation grant in accordance with the recommendations of the 2002 Housing Needs Assessment report.</p> <p><i>Additional steps, as outlined in the report, include hiring a part-time CDBG director, soliciting contractors, soliciting applications for housing assistance, completing housing inspections, assisting homeowners in completing applications, inspecting work, and otherwise meeting all grant requirements.</i></p> <p><b>C. Housing Development Resources.</b> Work with area banks and financial institutions, and with not-for-profit organizations, to take full advantage of the housing development resources available under the Community Reinvestment Act and the Tax Reform Act of 1986 (See Housing Needs Assessment, page 96 and Appendices).</p>	<p>Council/Planning Board/Ongoing</p> <p>community development advisory committee or similar entity/2003</p> <p>community development advisory committee or similar entity/2003</p>

Policies	Strategies	Responsibility/Date
	<p><b>D. Community Development Advisory Committee.</b> Encourage the Community Development Advisory Committee to work with real estate brokers and bankers, and housing assistance agencies to help citizens to take advantage of home buying resources (see Assessment, page 96).</p> <p><b>E. Section 8 Vouchers.</b> Work with the Maine State Housing Authority, the Department of Housing and Urban Development, Penquis CAP and other agencies to increase the number of Section 8 housing vouchers available to low income renters (see Assessment, page 96).</p> <p><b>F. Housing Assessment Recommendations.</b> Consider implementing other recommendations contained in the 2002 Housing Assessment for Eddington, Bradley and Clifton</p>	<p>Town Manager/ Council/Ongoing</p> <p>community development advisory committee or similar entity /2003</p> <p>RCDAC /Ongoing</p>
<p><b>2. Elderly/Disabled Housing.</b> Address elderly housing needs.</p>	<p><b>A. Support Services.</b> Continue to support services such as Meals For ME, health care, emergency services, and personal care services that allow people to remain in their own homes for as long as possible.</p> <p><b>B. Subsidized Housing.</b> Encourage owners of multi-unit complexes to make units available and accessible to the elderly and disabled to the maximum extent possible.</p> <p><i>Hillside Apartments was an elderly housing project until 1995. The owners could not keep it filled so it was converted to family units.</i></p>	<p>Council/Ongoing</p> <p>Council/Ongoing</p>

Policies	Strategies	Responsibility/Date
3. <b>Village Character.</b> Preserve the village character of Bradley village.	A. <b>Lot Size, Frontage, Setbacks.</b> For areas of the village served by central water, and for new areas identified for future village growth, review and amend the Land Use Ordinance by incorporating lot size, frontage and setback requirements consistent with the pattern of development already in place and State regulations pertaining to on-site subsurface sewage disposal.	Planning Board/ Council/2005
4. <b>Manufactured Housing and Mobile Home Parks.</b> Regulate the quality of manufactured housing and mobile home parks.	<p>A. <b>Safety Standards – Individual Units.</b> Amend the Town of Bradley Land Use Ordinance to prohibit manufactured homes made prior to June 15, 1976, from being brought into the community unless applicants can demonstrate that these units meet minimum health and safety standards such as those set forth in Rule 02-385 of the Maine Department of Professional and Financial Regulation.</p> <p>B. <b>Development Standards – Individual Units.</b> Amend the Town of Bradley Land use Ordinance to require that all manufactured housing units brought into the community and located outside of mobile home parks meet aesthetic and development standards.</p> <p>C. <b>Mobile Home Park Ordinance.</b> Adopt a mobile home park ordinance by using as a guide standards for mobile home park development recommended in the latest version of the handbook entitled “Maine’s New Mobile Home Park Law.”</p>	<p>Planning Board/ Council/2005</p> <p>Planning Board/ Council/2004</p> <p>Planning Board/ Council/2005</p>
5. <b>Floodplain Relocation.</b> Ensure that new homes continue to be in compliance with floodplain management regulations.	A. <b>Floodplain Management Ordinance.</b> Continue strict administration of the Town’s Flood Hazard Ordinance so as to maintain the Town’s eligibility for and participation in the federal flood insurance program.	Code Enforcement Officer/ Planning Board/Ongoing

## B. ECONOMY

### Goals

1. Promote an economic climate that increases job opportunities and overall economic well-being, consistent with Bradley's rural, small-town atmosphere.

Policies	Strategies	Responsibility/Date
1. <b>Business Growth.</b> Encourage the development and growth of businesses and industries which strengthen the tax base and provide jobs for residents, consistent with the goal of preserving Bradley's small-town atmosphere.	<p><b>A. Primary Point of Contact.</b> Designate a specific point of contact (e.g. Town Manager) as the primary point of contact for inquiries regarding business start-ups and expansions.</p> <p><b>B. Economic Development Agency.</b> Continue to support and participate in the efforts of the Penobscot River Tourism Association, Eastern Maine Development Corporation and other agencies seeking to bring business growth to the Greater Bangor Area and the Town of Bradley. Maintain the Town's two positions on the Eastern Maine Development Corporation.</p> <p><b>C. Government Programs.</b> Take advantage of state and federal programs to the maximum extent possible so as to provide land, buildings and services for new businesses.</p> <p><b>D. Locations for Business Growth.</b> Designate on the future land use map one or more specific locations with reasonable access to transportation routes and utilities where the Town will encourage business and industry.</p> <p><b>E. Site Plan Review Ordinance.</b> Adopt a site plan review ordinance for commercial development. Include provisions regulating the size and type of structure, as well as impacts on Town facilities and services and the environment.</p>	<p>Council/2005</p> <p>Council/Ongoing</p> <p>Council/Town Manager/ Ongoing</p> <p>Comprehensive Plan Committee/2003</p> <p>Planning Board/ Council/2006</p>



Policies	Strategies	Responsibility/Date
	<p><b>F. Home Occupations.</b> Continue to allow home occupations throughout the community, but include standards in the site plan review ordinance regulating the scale and intensity of the home occupation, and the impact on abutting properties including, but not limited to, noise and hours of operation.</p> <p><b>G. Web Site.</b> Add a section to the Town's web site dealing with economic development.</p>	<p>Council/Ongoing</p> <p>Town Manager/2005</p>

## C. NATURAL RESOURCES

### Goals

1. Protect the quality of Bradley's water resources.
2. Protect Bradley's critical natural resources including, without limitation, wetlands, wildlife and fisheries habitat, shorelands, forests, scenic vistas and unique natural areas, from inappropriate land use activities.

Policies	Strategies	Responsibility/Date
1. <b>Chemo Pond.</b> Protect and improve the quality of Chemo Pond	<p><b>A. Water Quality Monitoring.</b> Continue to support and encourage volunteer efforts to work with the Department of Environmental Protection to monitor the quality of the lake and reduce non-point source pollution.</p> <p><b>B. Shoreland Zoning.</b> Continue strict administration and enforcement of the Town's Shoreland Zoning Ordinance.</p> <p><b>C. Future Growth.</b> Ensure that growth in Bradley is located so as to minimize or avoid adverse water quality impacts on Chemo Pond.</p>	<p>Council/Planning Board/Ongoing</p> <p>Code Enforcement Officer/Planning Board/Ongoing</p> <p>Planning Board/Town/Ongoing</p>

Policies	Strategies	Responsibility/Date
	<p><b>D. Regional Cooperation.</b> Continue to meet periodically with representatives of Clifton and Eddington to discuss common goals and strategies to protect the quality of Chemo Pond, and to develop a regional approach to controlling phosphorus loading of Chemo Pond.</p> <p><b>E. Phosphorus Loading.</b> Work with the Department of Environmental Protection to develop phosphorus control standards for Chemo Pond that would maintain or improve water quality on a long term basis.</p>	<p>Council/Planning Board/Ongoing</p> <p>Council/Planning Board/2005</p>
<p><b>2. Floodplain Management.</b> Manage the use of floodplains in Bradley so as to minimize the threat of future losses from inappropriate development.</p>	<p><b>A. Floodplain Management Ordinance.</b> Continue to strictly administer and enforce the Town's Floodplain Management Ordinance.</p> <p><b>B. Growth District.</b> Designate on the future land use map growth areas that are outside the floodplain.</p> <p><b>C. Future Town Facilities.</b> Continue efforts to locate town facilities out of the floodplains and explore use of grant funds to provide assistance.</p>	<p>Code Enforcement Officer/Planning Board/Ongoing</p> <p>Comprehensive Plan Committee/2003</p> <p>Council/Ongoing</p>
<p><b>3. Wetlands.</b> Continue to protect wetlands from the adverse impacts of development.</p>	<p><b>A. Shoreland Zoning.</b> Continue strict administration of the Town's Shoreland Zoning Ordinance.</p> <p><b>B. Public Facilities.</b> Minimize adverse impacts on wetlands during the relocation/construction of public buildings and facilities.</p>	<p>Code Enforcement Officer/Planning Board/Ongoing</p> <p>Council/Ongoing</p>
<p><b>4. Ground Water Resources.</b> Protect the Town's ground water resources</p>	<p><b>A. Hazardous Waste.</b> Include provisions in a site plan review ordinance to regulate any new activity involving the processing, storage, generation or handling of hazardous waste as defined by the Maine Department of Environment Protection (not including normal household uses and materials and heating fuel).</p>	<p>Planning Board/Council/2006</p>

Policies	Strategies	Responsibility/Date
5. <b>Forest Resources.</b> Encourage the wise use of forest resources	<p><b>A. Shoreland Zoning.</b> Continue to regulate timber harvesting through the Town's Shoreland Zoning Ordinance.</p> <p><b>B. Penobscot Experimental Forest.</b> Encourage the University to continue to manage the Experimental Forest on a sustained yield basis.</p> <p><b>C. Shoreland Zoning.</b> Continue strict administration of the Town's Shoreland Zoning Ordinance.</p>	<p>Code Enforcement Officer/ Planning Board/Ongoing</p> <p>Planning Board/Council/ Ongoing</p> <p>Code Enforcement Officer/ Planning Board/Ongoing</p>
6. <b>Wildlife Resources.</b> Protect wildlife and wildlife habitat to the maximum extent possible.	<p><b>A. Subdivision/Site Plan Wildlife Requirements.</b> Amend subdivision requirements and include provisions in a site plan review ordinance providing for the protection of wildlife areas while protecting the property rights of the applicant.</p> <p><b>B. Development Review Assistance.</b> Request review assistance from the Maine Department of Inland Fisheries and Wildlife when development proposals would impact resources identified by the Department, including deer yards and waterfowl and wading bird habitat.</p>	<p>Planning Board/Council/ 2006</p> <p>Planning Board/Ongoing</p>
7. <b>Scenic Areas and Vistas.</b> Protect scenic areas and vistas to the maximum extent possible.	<p><b>A. Development Review.</b> Encourage the preservation of scenic areas and vistas during the development review process.</p>	<p>Planning Board/Ongoing</p>

Policies	Strategies	Responsibility/Date
	<p><b>E. Direct Town Road Access.</b> Recommend that subdividers provide direct access to a public road in Bradley, rather than to a private road or a public road in another community. Where subdividers do not provide such access, require a clause in deeds that access is to roads for which the Town of Bradley has no responsibility.</p> <p><b>F. Cluster Development.</b> Amend local ordinances to allow cluster development.</p>	<p>Planning Board/Ongoing</p> <p>Planning Board/Town Council/2005</p>
<p><b>3. Historic, Archaeological Sites.</b> Protect historic and archaeological sites.</p>	<p><b>A. State Notification.</b> Amend town ordinances to require developers to notify the State Archaeologist about the location of proposed developments to determine the impact of the development on identified archaeological sites.</p> <p><b>B. Requirements for Applicants.</b> Amend town ordinances to require that applicants identify any above-ground historic resources on the property. If any portion of the site has been identified as containing historic or archaeological resources, require that the development include appropriate measures for protecting those resources, including but not limited to modification of the proposed design of the site, timing of construction, and limiting the extent of excavation.</p>	<p>Planning Board/Town Council/2005</p> <p>Planning Board/Town Council/2005</p>
<p><b>4. Comprehensive Plan Implementation.</b> Ensure that the comprehensive plan is implemented on a continuing basis.</p>	<p><b>A. Implementation.</b> Establish an implementation committee to oversee the implementation of the comprehensive plan.</p>	<p>Town Council/2004</p>

Policies	Strategies	Responsibility/Date
	<p><b>D. Rural District.</b> Amend the land use ordinance by creating a Rural District as shown on the Draft Land Use Districts map.</p> <ul style="list-style-type: none"> <li>• Resource-based (forestry and farming) and open space/recreational uses are most appropriate, with sensitively sited, low-density residential development and home occupations as compatible uses, as well.</li> <li>• To apply to all tree growth areas and land not shown as Village, Mixed Use or Residential</li> <li>• Lot size to be 10 acres</li> <li>• Road frontage to be 150 feet</li> <li>• Road setback to be 50 feet</li> </ul>	Planning Board/Town Council/2005
<p><b>2. Subdivision Development.</b> Manage subdivision development to ensure that it is a positive addition to the community.</p>	<p><b>A. Upgrade Ordinances.</b> Upgrade the town's Building Permit, Land Use, Subdivision, and Flood Plain Management ordinances to better manage development.</p> <p><b>B. Fee System.</b> Consider a system of fees to at least partially offset the costs of code enforcement.</p> <p><b>C. Public Road Access.</b> Amend the Subdivision Regulations to require that in areas where public roads or access are not adequate to serve the needs of the subdivision, developers upgrade the roads or access.</p> <p><b>D. Abandoned or Discontinued Roads.</b> Review the status of abandoned or discontinued roads to ensure that the Town does not unknowingly incur road-building liabilities because of future subdivision development.</p>	<p>Planning Board/Town Council/2005</p> <p>Planning Board/Town Council/2005</p> <p>Planning Board/Town Council/2005</p> <p>Town Manager/Town Council/2007</p>

## D. LAND USE

### Goals

1. Provide for orderly growth and development in appropriate areas of the community.
2. Protect Bradley's rural character and small town atmosphere, making efficient use of services and preventing development sprawl.

Policies	Strategies	Responsibility/Date
<b>1. Growth and Rural Areas.</b> Designate growth and rural areas in accordance with state law.	<p><b>A. Village District.</b> Amend the Land Use Ordinance to create a Village District as shown on the Draft Land Use Districts map.</p> <ul style="list-style-type: none"> <li>• Allow a range of residential, home occupation, commercial, public and institutional uses</li> <li>• Lot size to be one-half acre if served by public water (otherwise one acre)</li> <li>• Road frontage to be 50 feet</li> <li>• Road setbacks to be 50 feet</li> </ul> <p><b>B. Mixed Use District.</b> Amend the Land Use Ordinance to create a Mixed Use District as shown on the Draft Land Use Districts map.</p> <ul style="list-style-type: none"> <li>• Allow a mix of residential and commercial uses</li> <li>• Lot size to be one acre</li> <li>• Road frontage to be 150 feet (200 feet along Route 178)</li> <li>• Road setbacks to be 50 feet</li> </ul> <p><b>C. Residential District.</b> Amend the Land Use Ordinance to create a Residential District as shown on the Draft Land Use Districts map.</p> <ul style="list-style-type: none"> <li>• Limit uses to residential and home occupation uses</li> <li>• Lot size to be one acre</li> <li>• Road frontage to be 150 feet (200 feet along Route 178)</li> <li>• Road setbacks to be 50 feet</li> </ul>	<p>Planning Board/Town Council/2005</p> <p>Planning Board/Town Council/2005</p> <p>Planning Board/Town Council/2005</p>

## E. TRANSPORTATION

### Goals

1. Plan for and support improvements to the Town's transportation facilities.

Policies	Strategies	Responsibility/Date
1. <b>Access Management.</b> Provide better land use controls for development along Route 178.	<p><b>A. Access Management Standards.</b> Include provisions in the Land Use Ordinance requiring that all new developments along Route 178 comply with the state's access management standards.</p> <p><b>B. Residential Development.</b> Amend the Subdivision Ordinance to require a common entrance for new subdivisions, where feasible, when the subdivision abuts Route 178.</p> <p><b>C. Information to Applicants.</b> Make information available at the Town Office about the State's and the Town's access management rules to applicants for local permits (Land Use Ordinance, Shoreland Zoning Ordinance, Subdivision Ordinance).</p>	<p>Planning Board/ Council/2005</p> <p>Planning Board/ Council/2005</p> <p>Town Office/Code Enforcement Officer/Ongoing</p>
2. <b>Rural Character.</b> Protect the rural character of Route 178.	<p><b>A. Green Space, Scenic Values.</b> Amend the Subdivision Ordinance and enact a site plan review ordinance requiring that all new development along Route 178 or within its viewing area be developed in a manner that preserves green space, aesthetic character and scenic values, to the maximum extent possible.</p> <p><b>B. Route 178 Landscaping.</b> Encourage businesses to provide an unpaved, landscaped buffer along Route 178 for all commercial developments and for redevelopment of existing commercial properties. Prohibit parking within this area.</p>	<p>Planning Board/ Council/2006</p> <p>Planning Board/ Council/2006</p>

Policies	Strategies	Responsibility/Date
<p>3. <b>Town Road Maintenance.</b> Plan for the long-term, cost effective maintenance of the Town's roads.</p>	<p><b>A. Road Improvement Plan.</b> Develop a long-range plan for maintaining and improving the Town's roads.</p> <p><b>B. Reserve Fund.</b> Continue to use a reserve fund for a 10-year paving program sufficient to maintain the paved public roads in the community and add funds on a yearly basis.</p> <p><b>C. Standards for Public Roads.</b> Update the Town's road construction standards, using state standards as a guide, to ensure that private roads are built to high standards prior to acceptance by the Town.</p>	<p>Council/Road Commissioner/2005</p> <p>Council/2005</p> <p>Planning Board/Council/2006</p>



## F. PUBLIC FACILITIES AND SERVICES

### Goals

1. Plan for, finance and develop an efficient system of public facilities to accommodate growth and development.
2. Maintain Bradley's public facilities and services, and make needed improvements where feasible.
3. Promote and protect the availability of outdoor recreation opportunities for all Bradley residents, including access to surface waters.

Policies	Strategies	Responsibility/Date
<p>1. <b>General.</b> Take steps to ensure that the Town has the financial capacity to provide for the long-range needs of the community.</p>	<p><b>A. Budget Cap.</b> Consider amending the budget cap to allow the Town to utilize the additional property valuation that comes from development so as to better respond to town needs and respond to increasing costs, particularly those over which the town has no control.</p> <p><b>B. Town-Owned Forest Land.</b> Request assistance from the University to develop management plans for large tracts of town-owned property, to include forest management and recreational opportunities. Manage the forests in accordance with the plan and consider placing the resulting timber harvesting revenue in reserve funds for major capital improvements.</p> <p><b>C. Town-owned land.</b> Consider selling town-owned parcels of land that have little or no potential value for town.</p>	<p>Town Council/2004</p> <p>Planning Board/Council/2005</p> <p>Town Council/Ongoing</p>
<p>2. <b>Emergency Services.</b> Ensure that the residents of Bradley continue to receive high quality emergency response services.</p>	<p><b>A. Fire Station.</b> Continue to plan for a new fire station to be located outside the floodplain. Design a facility large enough to house current and future vehicles. Explore the suitability of the town office site as a location for the fire station. Construct the facility.</p> <p><b>B. Fire-Fighting Capability.</b> Continue to review the town's fire-fighting capabilities in light of a growing population, financial constraints and numbers of volunteers, and make recommendations to the town where appropriate.</p>	<p>Town Council/Fire Department/2007</p> <p>Town Council/Fire Department/Ongoing</p>

Policies	Strategies	Responsibility/Date
	<p><b>C. Mutual Aid.</b> Continue to participate in mutual aid agreements with other communities.</p> <p><b>D. Dispatching.</b> Periodically evaluate the effectiveness of dispatching services provided by the Penobscot Regional Communication Center in Bangor, and take any necessary action.</p> <p><b>E. Rescue.</b> Continue to rely on rescue services from Old Town, provided that quality service can continue to be obtained at reasonable cost.</p> <p><b>F. Police Protection.</b> Continue to rely on the State Police and the Penobscot County Sheriff for police protection, but periodically evaluate whether population growth is creating a need for additional police services.</p>	<p>Fire Department/Ongoing</p> <p>Town Manager/Town Council/Fire Department/Ongoing</p> <p>Town Manager Town Council/Ongoing</p> <p>Town Manager/Town Council/Ongoing</p>
<p><b>3. Solid Waste.</b> Provide for an efficient system of solid waste disposal.</p>	<p><b>A. Recycling.</b> Work with one or more private haulers to improve the quality of recycling services.</p> <p><b>B. Fees.</b> Following improvement of recycling services, consider a fee system if voluntary recycling percentages do not improve.</p>	<p>Town Manager/Town Council/Ongoing</p> <p>Town Manager/Town Council/Ongoing</p>
<p><b>4. Education.</b> Ensure that students from Bradley received a cost effective, quality education.</p>	<p><b>A. Viola Rand School.</b> Continue to work with officials at School Union #90 on options for addressing deficiencies at Viola Rand School, including rehabilitating or replacing the existing structure, or consolidating with another community system.</p>	<p>Town Manager/Town Council/Ongoing</p>
<p><b>5. Public Works Maintenance.</b> Provide for the maintenance of town roads, ditches and lands in a cost-effective manner.</p>	<p><b>A. Private Contractors.</b> Continue to utilize private contractors for meeting the public works needs of the community.</p> <p><b>B. Minor, Odd-Jobs.</b> Establish a fee for service contract with one or more contractors for undertaking minor maintenance jobs on a town-requested, hourly rate basis.</p>	<p>Town Manager/Town Council/Ongoing</p> <p>Town Manager/Town Council/2005</p>

Policies	Strategies	Responsibility/Date
	<p><b>C. Road Commissioner.</b> Appoint a road commissioner other than the Town Manager for the maintenance of local roads.</p>	Town Council/2005
<p><b>6. Outdoor Recreation.</b> Provide opportunities for outdoor recreation for the residents of Bradley.</p>	<p><b>A. Park and Open Space Plan.</b> Form a committee to develop a park and open space plan that includes recreational use of some of the land owned by the Town of Bradley.</p> <ul style="list-style-type: none"> <li>• Evaluate the continued availability of recreation programs and facilities in nearby communities, especially Old Town.</li> <li>• Consider developing public access to the Penobscot River and Chemo Pond for residents of Bradley.</li> <li>• Consider trails and water-related facilities on land owned by the Town of Bradley adjacent to the Penobscot River.</li> <li>• Consider improvements to the ball field, as well as the playground located at the school.</li> </ul> <p><b>B. Old Town Programs.</b> Continue to rely on recreational opportunities provided by Old Town.</p> <p><b>C. Large Land Owners.</b> Work with major land owners, including the State of Maine, for the establishment of recreational facilities and services in Bradley.</p>	<p>Town Council/Park and Recreation Committee/2006</p> <p>Town/Ongoing</p> <p>Town Council/Park and Recreation Committee/2006</p>

## F. MUNICIPAL FINANCES

### Goals

1. Plan for, finance and develop an efficient system of public facilities to accommodate growth and development.

Policies	Strategies	Responsibility/Date
1. <b>General.</b> Plan for the public facility needs of the community on a long-range and continuing basis.	<p><b>A. Budget.</b> Continue to rely upon the Town Manager to advise the Town Council about various municipal expenditures.</p> <p><b>B. Reserve Funds.</b> Continue the practice of using Reserve Funds to fund at least a portion of major capital projects and for equipment replacement.</p> <p><b>C. Capital Improvements Plan.</b> On an annual basis, develop a capital improvements plan for financing the maintenance, repair and/or improvement of public facilities. Prioritize needs and indicate how needs from the previous biennial plan have been met. Consider the appointment of a Committee to help the Town Manager prepare the capital improvement plan.</p>	<p>Council/Ongoing</p> <p>Town Manager/ Council/Ongoing</p> <p>Council/2003 and Ongoing</p>
2. <b>Grant Programs.</b> Use grant programs to the maximum extent possible to meet Bradley's needs	<b>A. Pro-Active Grant Approach.</b> As a town-policy, continue to give grant applications a high priority. Meet with state and other officials, and actively and systematically seek grants to help Bradley meet its needs.	Town Manager/ Council/ RCDAC/Ongoing

