

# PENOBSCOT COMPREHENSIVE PLAN, 1997

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**The committee acknowledges the invaluable assistance of Sherman H. Perkins and dedicates this plan to his memory.**

With technical assistance from the Hancock County Planning Commission.

## **Introduction**

A comprehensive plan is an advisory document, which reflects a town's desired future. It consists of an inventory and analysis of current conditions; goals, objectives and policies; and implementation measures. Overall, it identifies current problems and opportunities that the town faces and discusses what is expected to happen in Penobscot over the next five to ten years. While the policies are intended to set a direction for Penobscot, they are meant as general guidelines and must be reviewed regularly to see if any modifications are needed to address unanticipated changes.

The plan can be used by the selectmen, planning board, and other town groups to guide their decisions and provide continuity in town policy. It can also be used to help Penobscot seek funding from various state and federal grant programs. While the plan is the legal basis of any changes to zoning and other land use ordinances, all such changes must be voted upon at a town meeting and require separate public hearings before any vote.

Residents are reminded that planning is an on-going process. This plan should be reviewed annually to see if its assumptions are still valid. A more thorough review may be needed in five years.

NOTE: This plan is in draft form until adopted at town meeting.

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**PART I:**

**INVENTORY AND ANALYSIS**



## **A. POPULATION**

### **1. Purpose**

Population is one of the most basic elements of a comprehensive plan. In order to understand the town's current and future needs, a detailed examination of population characteristics is necessary. This section aims to:

- a. describe Penobscot's recent population trends;
- b. discuss how these trends relate to and contrast with those in Hancock County and the state; and
- c. review likely future population trends.

### **2. Key Findings and Issues**

While Penobscot's year-round population grew rapidly during the 1970s, it increased by only 2.4 percent between 1980 and 1990. The estimated 1992 year-round population is 1,162. While there are many second homes in town, a good portion of these are owned by local residents. Thus, the summer peak population may be somewhat less than normally expected in a town with large numbers of second homes. The nursing home in town means that there is a much higher proportion of elderly residents than in Hancock County as a whole.

### **3. Public Opinion Survey Results**

According to the 1990 public opinion survey, 33 percent of the 349 respondents wished Penobscot's population to stay the same. About 63 percent favored a slow increase in population and the remaining 1 percent either wanted the town grow rapidly or to lose population. Rapid population growth was also one of the features that some residents disliked about living in Penobscot.

### **4. Historical Trends**

Like many coastal Maine towns, Penobscot lost population during the second half of the 19th century. (The historical context of these changes is discussed in the Historical and Archaeological Resources chapter.) In fact, Penobscot's year-round population continued to decrease until 1940 when it had 680 residents compared to 1,557 in 1860 (see Table A.1 and Figure A.1). The town gained only 26 residents between 1940 and 1960. By contrast, the town gained 318 residents (from 786 to 1,104) between 1970 and 1980, a 40 percent growth rate. Year-round population increased by only 27 residents (or 2.4 percent) between 1980 and 1990. According to estimates by the State Planning Office, Penobscot had 1,162 residents in 1992.

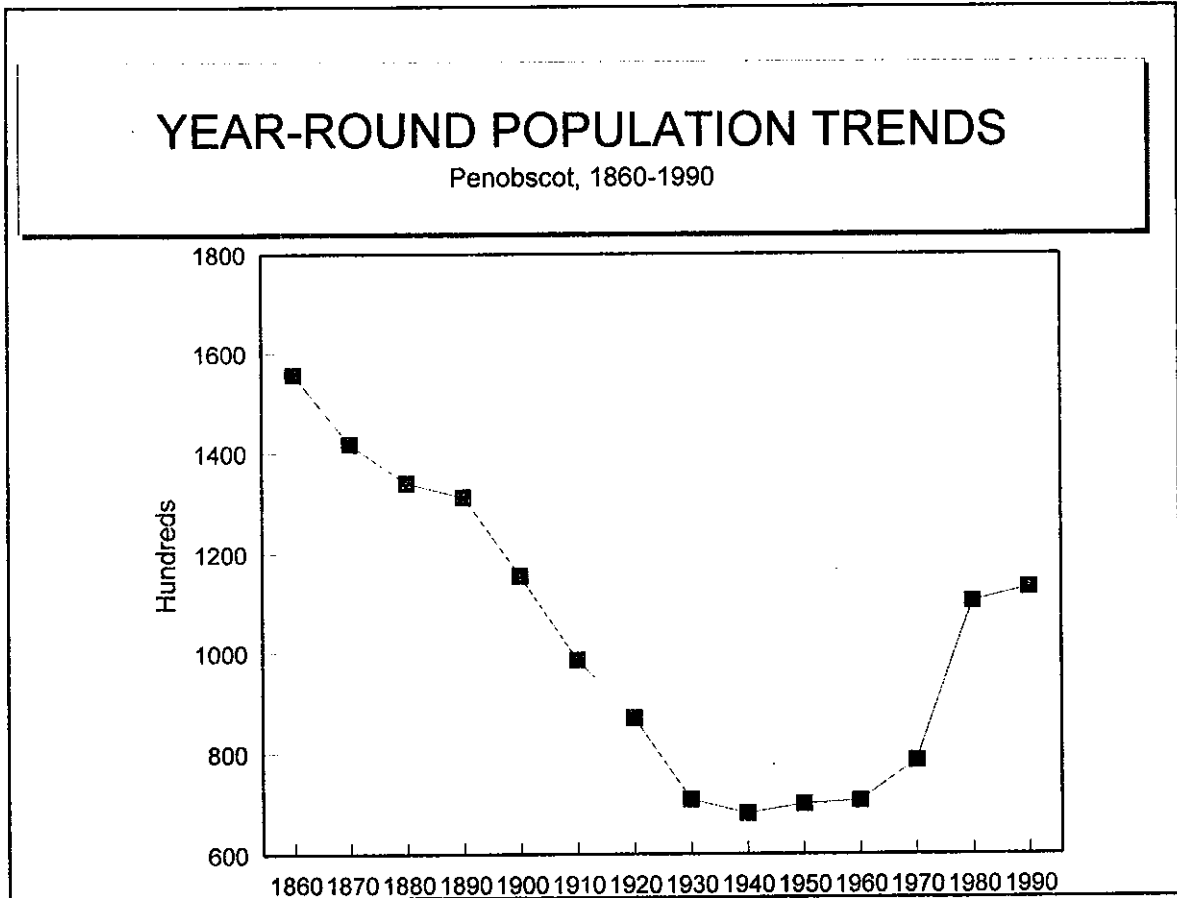
**Section A: Population**

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While the town still has fewer year-round residents than it did a century ago, the impact of these residents on the town is more pronounced. First, as will be discussed below, average household sizes are smaller than they were, meaning that more homes are being built in town. Second, it is more expensive to provide municipal services to these homes, which means a greater impact on the tax base. Third, these population figures do not include Penobscot's seasonal residents.

<b>Table A.1 Historical Year-Round Population Trends Penobscot</b>	
<b>Year</b>	<b>Population</b>
1860	1,557
1870	1,418
1880	1,341
1890	1,313
1900	1,156
1910	985
1920	870
1930	708
1940	680
1950	699
1960	706
1970	786
1980	1,104
1990	1,131
<b>Source: U.S. Census Historical Records</b>	

Figure A.1



## Section A: Population

**Table A.2**  
**Age Distribution**  
**Penobscot and Hancock County: 1970, 1980, 1990**

	Years of Age	1970	%	1980	%	1990	%
Penobscot	0-4	76	10%	66	6%	46	4%
	5-17	188	24%	254	23%	210	19%
	18-44	244	31%	374	34%	393	35%
	45-64	136	17%	220	20%	252	22%
	65 or more	142	18%	190	17%	230	20%
	Penobscot Total	786		1,104		1,131	
Hancock County	0-4	2,652	8%	2,610	6%	3,205	7%
	5-17	8,491	24%	8,409	20%	8,130	17%
	18-44	10,912	32%	15,865	38%	19,057	41%
	45-64	7,596	22%	8,465	20%	9,401	20%
	65 or more	4,939	14%	6,432	16%	7,155	15%
	Hancock County Total	34,590		41,781		46,948	

Source: U.S. Census

### 5. Current Conditions

#### a. Age Characteristics

The change in age distribution in Penobscot between 1970 and 1990 is shown in Table A.2. Overall, the median age increased from 33.8 in 1980 to 40.5 in 1990. There was a decrease in the number and percentage of pre-school-aged children over the 20-year period. While the number of school-aged children increased between 1970 and 1980, it decreased between 1980 and 1990. This trend is significant since school costs are a major component of the municipal budget. Enrollment trends are discussed further in the Public Services and Facilities chapter.

There was a slight increase in the 18-44 age group. As of 1990 this group accounted for about 35 percent of the total population compared to 31 percent in 1970. This increase is significant since this is the group in prime child-bearing years meaning that future increases in school enrollment are possible. Penobscot, however, has a lower proportion of persons in this age bracket than does Hancock County as a whole.

**Penobscot Comprehensive Plan: Inventory and Analysis**

There was a more significant (14.5 percent between 1980 and 1990) increase in those between 45 and 64 years old. By contrast, this group grew by 11 percent in Hancock County. This group constitutes the pre-retirement group, who are less likely to have school-aged children.

The age group with the fastest growth rate (21 percent compared to 11 percent for the county) was those 65 years and older. In 1990 this group accounted for 20 percent of Penobscot's population, far more than the 15 percent proportion for Hancock County. This high proportion of elderly residents is due in part to the nursing home in town.

According to the 1990 U.S. Census, Penobscot had 96 institutional residents. If this population is subtracted from the total population over 65, there were only 134 residents over age 65. This group would then account for about 13 percent of the household (i.e., non-institutional) population. This proportion is actually less than the Hancock County average.

**b. Educational Attainment**

According to the 1990 Census, about 81 percent of Penobscot residents 25 years and older were high school graduates, compared to about 83 percent for Hancock County. About 16.5 percent of this age group had a bachelor's degree or higher, compared to a 21.4 percent rate for the county. Thus, educational attainment levels in Penobscot are only slightly less than those of Hancock County.

**c. Household Size**

According to the 1990 Census, Penobscot had a median household size of 2.56, compared to 2.48 for Hancock County. The nursing home population is not included in the household size figures. In 1980, average household size in Penobscot was 2.96, compared to 2.62 in Hancock County as a whole (see Table A.3). In recent years household sizes in Penobscot have remained above the Hancock County average.

	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
<b>Penobscot</b>	3.23	2.96	2.56	2.47
<b>Hancock County</b>	2.96	2.62	2.48	2.35

**Source:** U.S. Census; year 2000 estimates are linear extrapolations

## Section A: Population

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Household sizes in Penobscot and Hancock County show a steady decrease between 1970 and 1990. This is consistent with national trends, such as higher divorce rates and the tendency for families to have fewer children. Smaller household sizes mean that more units of housing will be needed for a given number of residents than was once the case.

### **d. Income**

According to the 1990 Census, Penobscot's 1989 median household income was \$25,391, which is very close to the county median of \$25,247. There was a more noticeable gap in 1979 when Penobscot's median income was \$14,120 compared to \$12,146 for the county.

These figures do not necessarily mean that economic conditions in Penobscot are worsening. For example, the town's 14.9 percent poverty rate in 1979 had dropped to 10.6 percent by 1989. Hancock County had a 10 percent poverty rate in 1989. Poverty is thus less of a problem in Penobscot than in Hancock County.

The various age groups in 1989 had different poverty rates. For persons eighteen years and older, the rate was 8.3 percent compared to a 14.1 percent rate for related children (those living together in a family) under eighteen. About 12.7 percent of those related children under age five lived in poverty compared to 7.4 percent of those 65 years and older. The highest poverty rate (14.5 percent) was for related children between five and seventeen. Poverty would appear to be the greatest problem for those families with school-aged children. Thus, this is the group that may have the greatest need for human service-type programs.

### **e. Other Information**

Racially, Penobscot is 99.5 percent white. In 1990, there were two blacks, one Native American, and three Asian Pacific Islanders. There were eighteen persons whom the U.S. Census described as "not speaking English well, but who spoke Spanish."

The 1990 Census figures indicate a moderate rate of mobility. About 58 percent of those aged five or older had lived in the same house in 1985. About 32.5 percent had lived in Maine, 2.3 percent had lived in a different county, and 8.5 percent had lived in a different state. By contrast, 6.6 percent of Hancock County had lived in a different county and 12.1 percent had lived in a different state. Therefore, Penobscot residents are slightly less mobile than the county as a whole.



## **6. Seasonal Population**

Penobscot has many seasonal residents and visitors. Many own homes in town and are part-time residents. There also are many day visitors. There is no reliable way to estimate the total number of seasonal visitors. Unlike many coastal towns, there are no transient facilities in Penobscot that might contribute to the seasonal population. The number of day trippers can be estimated only through subjective methods such as the amount of traffic and patronage at local businesses.

It would be misleading to assume that all of those living in second homes added to the summer population, since many of these homes are owned by year-round residents. This is especially the case around the various ponds. However, at least a portion of the second homes are owned by non-residents. There is no reliable way to estimate how many, and thus no estimate of peak summer population can be made.

## **7. Institutional Population**

As mentioned above, the nursing home is another component of Penobscot's population. According to the U.S. Census, there were 78 institutional residents in 1980 compared to 96 in 1990. This portion of the population grew by 23 percent. Major future expansions of the nursing home are unlikely unless problems with wastewater disposal are resolved. Water quality problems are discussed in the Water Resources chapter.

## **8. Projected Population**

Small town populations are very difficult to project due to the large number of factors that affect their growth and decline. Any estimate made must be considered general and should be revised when more detailed projections are available from the Maine Department of Human Services.

While Penobscot grew by 40 between 1970 and 1980, it grew by only 2.4 percent between 1980 and 1990. This is considerably slower than the Hancock County's 12.3 percent growth rate. Given the relatively slow economy for the first part of the 1990s, it is unlikely that Penobscot's year-round population would increase by more than five percent during this decade. This would give the town a population of approximately 1,187 by the year 2000.

Projections for the Maine Department of Transportation give the town a population of 1,221 by the year 2115. These numbers were developed for estimating future transportation needs and will be revised periodically. They do, however, indicate that the dramatic growth of the 1970s is not presently expected to recur.

## B. ECONOMY

### 1. Purpose

An understanding of the local and regional economy is important in assessing a town's current and future needs. Specifically, this section will:

- a. describe employment trends and the local and regional economy; and
- b. discuss likely future economic activity in Penobscot.

### 2. Key Findings and Issues

Apart from the nursing home and school system, there are few sources of jobs in Penobscot. Most people who are in the labor force commute to jobs out of town. Blue Hill, Ellsworth, Bucksport, and Castine are common destinations. Penobscot's unemployment rate has been increasing in recent years. Penobscot's future local job potential probably rests with home-based occupations and "telecommuting" (relying on modern technology such as computers, facsimile machines, and modems to "commute" to jobs elsewhere in the state or nation).

### 3. Community Survey Results

According to the 1990 public opinion survey, most residents favored small-scale retail development. As for "business development," the most favored were home occupations, nursing homes, and professional offices, respectively. The least popular were "businesses emitting noxious odors, heavy industry, and light manufacturing." Most residents wish development consistent with the town's rural atmosphere.

### 4. Recent Employment Trends

#### a. Employment by Sector

Table B.1 compares employment by sector for Penobscot and Hancock County in 1990. This table refers to jobs held by Penobscot residents whether they work in town or commute. Penobscot had a slightly higher percentage of its labor force employed in agriculture, forestry, and fisheries than did Hancock County as a whole. This is probably due in part to Penobscot's rich agricultural land. (Farming issues are discussed at greater length in the Agricultural and Forestry Resources chapter of the Inventory and Analysis.)

The manufacturing of non-durable goods also accounts for a higher proportion of Penobscot's labor force than in Hancock County. This is probably due to commuting to the Champion mill in

**Section B: Economy**

Bucksport. Commuting patterns are discussed later in this chapter (see Table B.4).

<b>Table B.1 Employment by Sector, 1990 Hancock County &amp; Penobscot</b>				
<b>Category</b>	<b>Town</b>		<b>County</b>	
	<b>Numbers</b>	<b>Percent</b>	<b>Numbers</b>	<b>Percent</b>
Agriculture, Forestry Fisheries	33	7.0%	1,108	5.3%
Mining	0	0.0%	22	0.1%
Construction	36	7.7%	2,297	10.9%
Manufacturing, Nondurable Goods	52	11.1%	1,406	6.7%
Manufacturing, Durable Goods	35	7.4%	1,254	6.0%
Transportation	7	1.5%	681	3.2%
Communications and other Utilities	8	1.7%	399	1.9%
Wholesale Trade	5	1.1%	636	3.0%
Retail Trade	72	15.3%	3,799	18.1%
Finance, Insurance & Real Estate	13	2.8%	913	4.3%
Business & Repair Services	19	4.0%	801	3.8%
Personal Services	27	5.7%	1,089	5.2%
Entertainment & Recreation Services	2	0.4%	175	0.8%
Health Services	68	14.5%	1,958	9.3%
Educational Services	59	12.6%	1,993	9.5%
Other Professional & Retail Services	29	6.2%	1,653	7.9%
Public Administration	5	1.1%	816	3.9%
<b>Total</b>	<b>470</b>	<b>100.0%</b>	<b>21,000</b>	<b>100.0%</b>
<b>Source: U.S. Census</b>				

Penobscot Comprehensive Plan: Inventory and Analysis

Penobscot also has a higher proportion of people employed in health services and education sectors. The major health service employer in town is the nursing home and the Penobscot Elementary School would account for most of the jobs in education. Other residents commute to teaching jobs outside of town. Employment in most other sectors is either roughly the same or less than the county average.

About three-quarters of Penobscot's labor force in 1990 were in the private sector, compared to just over two-thirds of Hancock County's (see Table B.2). This may be partly due to the town's proximity to major employers such as Champion. Penobscot is relatively close to the county average for public sector employment (federal, state and local government). These jobs accounted for 15.5 percent of local jobs, compared to about 14 percent for Hancock County. Maine Maritime Academy, a major source of public sector employment, is in the adjoining town of Castine.

Only 9.6 percent of Penobscot's labor force was self-employed in 1990 compared to a 15.8 percent rate for the county. Unpaid family members account for a fractional proportion of the labor force. As will be discussed below, economic conditions have deteriorated since 1990.

	Penobscot		Hancock County	
	number	percent	number	percent
Private Wage & Salary	350	74.5%	14,604	69.5%
Federal, State & Local Governments	73	15.5%	2,998	14.2%
Self-Employed	45	9.6%	3,325	15.8%
Unpaid Family Member	2	0.4%	73	0.4%
<b>Total</b>	<b>470</b>	<b>100%</b>	<b>21,000</b>	<b>100%</b>

**Source:** U.S. Census

**Section B: Economy**

**b. Employment and Unemployment**

Employment rates for Penobscot residents are compared to those of Hancock County in Table B.3. As seen, unemployment in Penobscot has remained below the county average. These figures represent those that the Maine Department of Labor considers employed or looking for work. They do **not** include those not looking for work or the self-employed.

The unemployment figures show a steady increase since 1989, although rates remain below the county average. The overall size of the labor force in Penobscot has decreased during that time. While the labor force had increased from 609 to 677 between 1989 and 1991, it had dropped to 549 by 1993. Hancock County showed a similar pattern. This decline is related to the overall slowdown in Maine's economy. It means that many stopped looking for work or, in some cases, might have become self-employed.

		1989	1990	1991	1992	1993
		Penobscot	Labor Force	609	662	677
	Employment	595	638	649	537	513
	Unemployment	14	24	28	30	36
	Unemp. Rate	2.29%	3.62%	4.13%	5.30%	6.60%
Hancock County	Labor Force	24,970	26,950	27,683	26,090	25,490
	Employment	23,900	25,620	25,782	24,160	23,330
	Unemployment	1,070	1,330	1,901	1,940	2,160
	Unemp. Rate	4.3	4.9	6.9	7.4	8.5

**Source:** Maine Dept. of Labor, Bureau of Employment Security

c. Commuting Patterns

The employment data cited above refer to Penobscot residents, regardless of where they work. As in all towns, many residents commute to jobs out of town and residents from other towns commute to work in Penobscot. The 1990 U.S. Census reported 439 commuting trips by Penobscot residents (see Table B.4).

The most common destination for these trips was Penobscot itself, which accounted for 77 trips (or 18 percent). Blue Hill was the next most common with 70 trips, followed by Ellsworth, Bucksport, and Castine. Bangor (16 trips) was the most common destination outside of Hancock County. "Other Towns" refers to those towns with five or fewer trips from Penobscot. These included other destinations in Hancock County as well as the greater Bangor area and Searsport.

<b>Table B.4 Commuting From Penobscot, 1990</b>		
Town	Number of Trips	Percent
Blue Hill	70	16%
Brooksville	15	3%
Bucksport	59	13%
Castine	48	11%
Deer Isle	15	3%
Ellsworth	62	14%
Orland	15	3%
Penobscot	77	18%
Sedgwick	7	2%
Surry	7	2%
Bangor	16	4%
Other Towns	48	11%
<b>Total</b>	<b>439</b>	<b>100%</b>
<b>Source: 1990 U.S. Census</b>		

**d. Major Employers**

As a primarily rural community, Penobscot does not have a large employment base. Two of the major employers in town are the Nursing Home (with 100 employees) and the Penobscot Elementary School (with 30 employees). Most of the other employers are small-scale operations such as home occupations, farms and "mom and pop" type stores. These home businesses and small employers are summarized on Table B.5.

<b>Table B.5 Businesses in Penobscot</b>	
Type	Number of Firms
Agricultural & Farming	12
Art/Craft Studios, Galleries, Shops	10
Automobiles, Sales & Service	4
Contractors & Carpenters	12
Cottage Rentals	1
Cat Boarding	1
Equipment Manufacturing, Service, Sales	2
Fishing & Marine Life Harvest	1
Food Markets/Retailers	3
Marine Services	3
Plumbing & Heating	1
Professional Services	7
Restaurants	3
<b>Source:</b> Comprehensive Plan Committee Survey, 1992 as updated in 1995	

**5. Projected Future Employment and Regional Issues**

Penobscot's small size and limited road access means that it is unlikely to become a major employment center when compared to Bucksport or Ellsworth. Rather, future job increases are more likely to occur as a result of gradual expansions of existing employers or the opening of new, small businesses. Such changes are not likely to result in dramatic increases in employment.



## Section B: Economy

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Penobscot's future prosperity is inextricably linked to the health of the regional economy. Therefore, it is important that Penobscot participate in any regional economic development efforts. One specific regional trend is expansion of the "information superhighway." One likely consequence would be more telecommuters, as professionals with high skill levels seek rural areas to live in while "commuting" to jobs via computers, facsimile machines, and telephones.

Penobscot may want to plan for this trend by assuring that any zoning regulations anticipate the needs of telecommuters. It is important that home occupation standards allow such uses. Business support services such as copy centers may be needed. Such services should be allowed in at least some zoning districts.

Penobscot's farms play a small but important role in the local economy. It is important that any future development plans for the town respect the needs of its farmers. This would best be done in consultation with the farmers and others involved in agricultural activity. For example, conflicts may occur if high-density uses are permitted adjacent to farms. In such cases, neighbors might complain about the noise of farm equipment or spraying operations.

## **C. HOUSING**

### **1. Purpose**

A comprehensive plan should contain a thorough analysis of a town's housing trends. Critical issues include housing conditions, affordability, and the projected rate of new house building. Specifically, this section will:

- a. describe recent trends in Penobscot's housing stock in terms of the types and number of units created;
- b. discuss housing affordability; and
- c. project future housing needs.

### **2. Findings and Key Issues**

Penobscot's year-round and seasonal housing stock increased rapidly (by about 40 percent) during the 1970s. The rate of growth for year-round homes during the 1980s dropped to about 10 percent while that for second homes decreased to 44 percent from 60 percent. Even this lower rate represents a substantial increase in second homes.

Nearly nine-tenths of the homes in Penobscot are single-family houses, and the rest are mostly mobile homes. Housing prices in Penobscot are slightly below the county average. Penobscot also has a greater incidence of substandard housing than the county. A modest (about 5 percent) increase in housing is expected during the 1990s.

### **3. Public Opinion Survey Results**

The 1990 public opinion survey showed that there was the greatest support among residents for single-family housing, followed by "medium income" housing. Condominiums and mobile home parks received the least-favorable ratings. Only 27 percent felt that cluster housing should be allowed, while 39 percent of the respondents wanted to discourage this form of housing and 26 percent favored its prohibition.

### **4. Recent Housing Trends**

#### **A. Total Number of Year-Round and Seasonal Units**

Between 1970 and 1990, the total number of housing units (year-round and seasonal) in Penobscot increased from 351 to 578. As seen in Table C.1, the number of year-round units increased by about 37 percent between 1970 and 1980; this was an unusually rapid rate of increase when compared to other Hancock County towns. As discussed in the Population chapter, this was a time of rapid

## Section C: Housing

population growth. During the same ten years, the number of seasonal units increased from 58 to 93, a rate of about 60 percent.

Year-round homes increased at a much slower rate (about 10 percent or 42 units) during the 1980s. Second homes, however, increased from 93 units in 1980 to 134 units (about 65 percent) in 1990. This was due in part to development of seasonal "camps" around Toddy Pond. In other cases, these second homes were built along the shore or elsewhere in town.

This distinction between types of second homes is significant. Many of the "camps" are small units on seasonally maintained roads. Such units are unlikely to be converted into year-round dwellings. Other seasonal homes have better road access and may be more likely to become year-round homes when their owners retire.

It should be cautioned that U.S. Census estimates of seasonal homes are at times subject to error. The census is taken in April during mud season. This means that some seasonal homes on back roads may not be accessible. Furthermore, some year-round residents take their vacations at that time of the year, so their homes may be reported as seasonal. Also, census takers may assume that a vacant year-round house is a seasonal residence.

	1970	1980	% Change 1970- 1980	1990	% Change 1980-1990
Year-Round Units	293	402	37.2%	444	10.4%
Seasonal	58	93	60.03%	134	44.08%
Total	351	495	41.03%	578	16.77%

**Source:** U.S. Census

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**B. Housing Unit Type**

Table C.2 shows that the overwhelming majority of dwelling units in Penobscot are single-family homes. Duplexes and multi-family units account for a minute proportion of all units. There has been a moderate increase in the number of mobile homes, from 33 in 1980 to 52 in 1990. As home construction costs increase, mobile homes and pre-site-built modular homes have become an affordable alternative for many households.

The quality of mobile homes has increased significantly in recent years. All mobile homes built since June 15, 1976 have been built in accordance with the National Mobile Home Construction and Safety Standards Act of 1974. Thus, newer mobile homes aren't subject to the physical deterioration for which older homes were known. Many of the new mobile home models are double-wide and have pitched roofs. This means that some of the mobile homes recorded by the census may be mistaken for single-family homes by the casual observer.

<b>Table C.2 Change in Dwelling Unit Types Penobscot: 1980 &amp; 1990</b>				
<b>Total Dwellings</b>	<b>1980</b>		<b>1990</b>	
	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>
Single Family	358	72.3%	390	88%
Duplex	11	22%	0	0%
Multi-Family	0	0%	2	0%
Mobile Home	33	6.6%	52	12%
Total Year-Round	402	81.2%	444	77%
Total Seasonal	93	18.7%	134	23%
Total Units	495		578	
<b>Source: U.S. Census</b>				

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Under 30-A MRSA 4358 (the state statute regulating manufactured housing), municipalities must allow mobile homes on individual lots in a number of locations where other single-family residences are permitted. Mobile homes may not be restricted solely to mobile home parks, and towns may not impose overly restrictive standards on parks. Towns may, however, establish design criteria to assure that mobile homes are well sited and look attractive, provided that these standards don't have the effect of banning mobile homes.

**C. Rental Housing**

Table C.3 shows the percentage breakdown of renter- and owner-occupied units. Vacant and seasonal units are **not** included in this table. These figures show that the number of rental units held steady between 1980 and 1990, although their proportion of all units decreased slightly. The number of owner-occupied units increased from 299 to 358. Most Penobscot households (88 percent) lived in their own homes. Thus, home ownership is not a problem for **current** residents. As will be discussed under the section of affordable housing, housing prices may deter younger families from buying a house in Penobscot.

<b>Table C.3 Estimated Tenure of Year-Round Housing Penobscot: 1980, 1990</b>				
	<b>1980</b>		<b>1990</b>	
	<b>number</b>	<b>percent</b>	<b>number</b>	<b>percent</b>
<b>Renter Occupied</b>	47	13.6%	47	11.6%
<b>Owner Occupied</b>	299	86.4%	358	88.4%
<b>Total Occupied Units</b>	346		405	
<b>Source: U.S. Census</b>				

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According to the U.S. Census, the median monthly rent in Penobscot in 1990 was \$300 compared to \$325 for Hancock County, (see Table C.4). Only one unit had a rent between \$500 and \$749 and none had rents greater than \$750. Thus, year-round rents in Penobscot are below the Hancock County average.

Monthly Rent	Penobscot		Hancock County	
	number	percent	number	percent
Less than \$250	6	12.7%	1,072	24%
\$250 to \$499	15	31.9%	2,152	48%
\$500 to \$749	1	2.1%	252	6%
\$750 or more	0	0%	19	<1%
Rent Not Specified	25	53.1%	971	22%
Total	47	100%	4,466	100%
Median Rent	\$300		\$325	

**Source:** U.S. Census, Table 11, page 86, 1990 CPH-1-21 Summary of Population and Housing Characteristics

A similar pattern can be seen in the median value of owner occupied units (see Table C.5). The median value of units in Penobscot was \$67,700 in 1990, compared to \$85,200 for Hancock County. For the lower quartile (one-fourth) of units, the value in Penobscot was \$45,100 compared to \$58,700 for the county. The value of upper quartile of units in Penobscot was \$95,000, compared to \$126,300 for Hancock County. Overall, prices in Penobscot are

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below the county average, in spite of the many shorefront properties in town.

<b>Table C.5 Value of Specified Owner-Occupied Housing Units</b>				
<b>value</b>	<b>Penobscot</b>		<b>Hancock County</b>	
	<b>number</b>	<b>percent</b>	<b>number</b>	<b>percent</b>
Less than \$50,000	57	30%	1,535	18%
\$50,000 to \$99,999	95	49%	3,894	46%
\$100,000 to \$149,999	20	10%	1,573	18%
\$150,000 to \$199,999	10	5%	718	8%
\$200,000 to \$299,999	8	4%	517	6%
\$300,000 or more	3	2%	315	4%
Median Value	\$67,700	--	\$85,200	--
Lower Quartile	\$45,100	--	\$58,700	--
Upper Quartile	\$95,000	--	\$126,300	--

**Source:** 1990 Census, CPH-1-21 Summary Population and Housing Characteristics, Table 9, Page 70

In 1990, Penobscot had a 1.1 percent vacancy rate for owner-occupied homes compared to a 2.1 percent rate for Hancock County. Normally, planners consider a 2 percent vacancy rate desirable for

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such units. A lower rate may mean that there are insufficient units for sale, indicating a possible housing shortage. A significantly higher rate may mean a depressed housing market. Penobscot's vacancy rate was within the acceptable range, indicating a relatively stable market.

Penobscot has a 4.1 vacancy rate for rental housing, compared to an 8.5 percent rate for the county. A 5 percent vacancy rate is normally considered desirable for rental housing to allow people reasonable opportunities to find lodging. Hancock County's relatively high rate is explained in part by the large number of rentals available in the off-season.

### **D. Housing Conditions**

Housing is generally rated as standard and substandard. A standard home is one that is in good repair and has all basic amenities such as adequate heating and complete plumbing and kitchen facilities; a substandard house requires repairs beyond normal maintenance or lacks such amenities.

While there are no data on the number of homes that are substandard due to overall condition, the U.S. Census has data on basic amenities. As seen in Table C.6, about 11 percent of the occupied year-round units in Penobscot in 1980 lacked complete plumbing. This compared to 9.2 percent for Hancock County.

<b>Table C.6 Housing Units Lacking Complete and Exclusive Plumbing, Penobscot and Hancock County 1980 and 1990</b>				
<b>Year</b>	<b>1980</b>		<b>1990*</b>	
	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>
Penobscot	39	11.27	97	17.0
Hancock County	1,421	9.2	1,752	5.7

**\*Note:** The 1990 figures are for both occupied and vacant units while those for 1980 were only for occupied units.

**Source:** 1980 Census, STF1A, Page 6, Table 47, 1990 Census CPH-L-83, Table 4



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While the figures show an increase in the number of units lacking complete plumbing in 1990, this is probably due to the U.S. Census not distinguishing between occupied and vacant units as it did in 1980. Since many vacant units are probably used on a seasonal basis, they cannot be considered substandard. Housing conditions in Penobscot, however, appear worse than in the rest of Hancock County. This may help explain why housing prices are below the county average.

Another indicator of overall housing conditions is water supply and sewage disposal methods. Here again, Penobscot is significantly worse than the county average. Fourteen percent of the units in Penobscot depended on a water source other than a well or public or private system, compared to 7.4 percent of the units in Hancock County. Generally, such units depend on a spring or an open source of water that may be unsafe. Some of these units, however, may be lake-front cottages that get their water from a pond. Such units may be used as seasonal residences and would thus not be considered substandard.

About 5.7 percent of Hancock County dwellings disposed of their wastewater by a method other than a septic tank, cesspool, or public sewer, compared to 14 percent of the units in Penobscot. This means that unhealthy conditions may exist, such as overboard discharges of untreated sewage into water bodies. There are matching state grant monies available through the Maine Department of Environmental Protection's Small Community Grants Program to help install acceptable disposal systems.

A home also is considered substandard if it is overcrowded, having more than one person per room. Overcrowding, however, is not a problem in Penobscot. The 1990 U.S. Census reported that only eight units (1.9 percent of all occupied units) had more than one person per room. This is the same percentage as for Hancock County.

### **5. Affordable Housing**

Affordable housing is a concern for most coastal Maine towns. While even middle-income households are affected by the high cost of housing, it is a particular problem for low- and moderate-income (LMI) households. A low-income household is defined as having an income at or below 50 percent of the county median income. Moderate-income households are defined as those at or below 80 percent of the county median.

As of 1993, the county median household income was \$31,100. A family of four would be considered moderate-income if its income were \$24,480 or less, and low-income if its income were at or below

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\$15,550. According to the 1990 Census, about 37 percent of Penobscot's household population was LMI.

The State of Maine, for comprehensive planning purposes, defines affordable housing as decent, safe, and sanitary living accommodations that are affordable to LMI households. To be considered affordable, such housing should cost less than 30 percent of income for renters and less than 33 percent of income for homeowners. The state encourages all towns to assure that 10 percent of all new housing is affordable to low- and moderate-income groups.

Table C.7 shows how affordable housing rental and purchase prices were defined in 1994. For very-low-income households, renting is usually the only choice. As seen in Table C.4, there are a limited number of rentals in Penobscot that would be affordable to such households. A low-income family could not afford a house costing more than \$69,000, and such homes are rare in Hancock County.

<b>Table C.7 Affordable Housing Rents and Selling Prices* Hancock County, 1994</b>				
Income Group	Income Range	Percent of Total Households	Affordable Monthly Rent	Affordable Selling Price
Very Low	Up to \$15,550	27%	\$300	\$37,800
Low	\$15,550 to \$24,880	20%	\$530	\$69,000
Moderate	\$24,880 to \$46,650	33%	\$1,050	\$134,900

**\*Note:** Assumes 8 percent interest rate  
**Source:** State of Maine, Office of Community Development, 1994

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According to the State of Maine's draft 1995 Consolidated Housing and Community Development Plan, home purchase prices in Hancock County were the third least affordable in the state. Median income for Hancock County in 1992 was about 76 percent of the amount needed to buy the median-priced house. This report also maintains that selling prices for residential properties in Hancock County increased by 41 percent between 1988 and 1992. Median prices for Hancock County are somewhat inflated by the very-high-value waterfront and water view properties.

Actual sales prices of waterfront and other properties as compiled by the Maine State Housing Authority (MSHA) and the Multiple Listing Service are shown in Table C.8. Data for Penobscot are too limited to draw any meaningful conclusions except that the volume of recent sales has been very low. Many local observers maintain that prices in Penobscot are generally below the county average.

**Table C.8  
Average Selling Prices of Residential Units  
Penobscot and Hancock County, 1987-1991**

Year	Type of Unit	Sales Volume		Average Price	
		Penobscot	Hancock County	Penobscot	Hancock County
1991	Non-Waterfront	2	292	\$87,350	\$93,024
	Waterfront	0	105	--	\$150,966
1990	Non-Waterfront	5	491	\$102,136	\$105,258
	Waterfront	2	147	\$282,500	\$171,075
1989	Non-Waterfront	0	498	\$90,500	\$94,201
	Waterfront	3	171	\$167,667	\$197,619
1988	Urban	--	196	--	\$91,152
	Rural	5	399	\$79,675	\$76,277
1987	Urban	--	142	--	\$85,075
	Rural	2	530	\$75,000	\$70,417

**Source:** Maine State Housing Authority, Real Estate Transfer Tax Residential Sales Information (for county), Multiple Listing Service (for Penobscot)

**6. Dwelling Unit Projections**

The number of year-round homes needed in the future can be estimated by dividing the household projected population by the projected household size. The household population is distinct from the total population since it does not include those living in the nursing home. As seen in Table C.9, a total of 442 year-round units are expected by the year 2000, a 5.4 percent (56-unit) increase. Given recent trends in Penobscot, it is likely that most of these units will be single-family homes.

<b>Table C.9 Projected Year-Round Occupied Dwelling Units, Penobscot</b>		
	1990*	2000
Projected Population Residing in Households	1,035	1,091
Projected Household Size	2.56	2.47
Projected Occupied Dwelling Units	405	442
<b>*Note:</b> 1990 figures are actual numbers from the U.S. Census. These figures do not include the nursing home population.		
<b>Source:</b> Analysis by the Hancock County Planning Commission		

The figures in Table C.9 do not include vacant units or second homes. As mentioned earlier, some vacant units are needed to avoid a housing shortage. The number of second homes is very difficult to project since this market is largely driven by the national rather than the local economy.

A few general predictions can be made, however. First, the slower economy for the first half of the 1990s means that the rapid expansion of second homes experienced in the previous decade is unlikely to be repeated. Second, at least some of the homes presently used on a seasonal basis may be converted to year-round use. Third, high property taxes in Penobscot will mean that more second home owners may rent their properties in the off-season to reduce their costs.

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Since the dwelling unit projections in Table C.9 show that only 56 year-round homes are likely to be added to Penobscot's housing stock by the year 2000, the overall need for new housing is likely to be modest. Using the state's recommended proportion of 10 percent affordable housing, about six of these units should be "affordable." Therefore, no major program to promote affordable housing is presently needed.

Penobscot, however, should consider steps to assure that some new units are created in the event that the town grows at a much faster rate than is presently expected. These strategies could include conversion standards in town land use ordinances for existing, older homes that could have room for a small apartment. Some "empty nesters" facing increasing property taxes and heating costs might be interested in converting an unused portion of their house into a small apartment.

Mobile home parks are another affordable housing option. While the public opinion survey showed that most respondents did not favor this type of housing, state law prohibits its total exclusion. Thus, the focus should be on developing appropriate local standards for parks that are consistent with state standards.

### **7. Regional Housing Issues**

Since neighboring towns are also wrestling with affordable housing issues, Penobscot may want to explore the potential of cooperative ventures in affordable housing with its neighbors. Such ventures may save money through economies of scale and avoid overlap. Specifically, Castine may be exploring such ventures. One option may be an affordable housing trust, that could acquire land and sell or lease it for affordable housing purposes. Specific housing policies are discussed in the Policy section of the plan.

## **D. TRANSPORTATION and ROADS**

### **1. Introduction**

A transportation system is one of the most important factors influencing a town's growth. This section will discuss the major transportation issues facing Penobscot. Specifically, it will:

- a. discuss the extent, use, condition, and capacity of Penobscot's transportation systems;
- b. assess the adequacy of these systems to handle current and projected demands; and
- c. discuss any parking problems.

### **2. Key Findings and Issues**

While Penobscot still has a relatively low volume of traffic when compared to much of coastal Maine, traffic has been increasing over the past 20 years as the town and region have grown. The most hazardous intersection is of Routes 175 and 199. Truck traffic is a major concern to residents.

One potential traffic issue in Penobscot is bicycle-motorist conflicts. The town is popular with bicycle touring groups in the summer. Addressing bicycle safety concerns is important. Recreational bicycle use is a growing factor in the use of highways and must be considered in future highway planning.

### **3. Community Survey Results**

Fifty-six percent of the respondents felt that road maintenance was adequate while about 40 percent felt it needed some improvement. Nearly three-quarters felt that snow plowing was adequate and 71 percent were satisfied with road sanding. About 79 percent were satisfied with traffic safety.

About half of the respondents felt that parking at the Town Hall was inadequate while about one-third felt there was a parking problem at the Elementary School. Respondents were about evenly divided on the need for bike paths. About 40 percent were in favor of such facilities while 41 percent were opposed. The survey comments included several complaints about fast traffic on narrow roads. There was one complaint about bicycle tourists and another about pedestrian safety.

### **4. Administrative Classification of Roads**

Administrative classification refers to who is responsible for maintaining a given road. The three major administrative categories are state highways, town ways, and private roads. The

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state assumes complete responsibility for the maintenance of state highways, and the town maintains town ways. MDOT (Maine Department of Transportation) records show that there are 35.07 miles of public road in Penobscot, of which 26.32 miles (75 percent) are state highways and the remaining are town ways (see Table D.1).

### **5. Functional Classification of Roads**

Roads can also be classified by their function. The three primary functional classifications used by the MDOT are arterials, collectors, and local roads defined as follows:

- arterials                    Such roads connect major areas of settlement and are generally designed for high-speed travel with limited or restricted access; they carry a high proportion of through traffic. There are no arterials in Penobscot; the nearest one to town is Route 1.
- collectors                   These roads handle internal traffic movements within a town or group of small, rural towns. They are designed for moderate-speed travel and carry a moderate proportion of through traffic. All state highways in Penobscot are collectors.
- local                         These are lightly traveled streets whose primary purpose is to serve residential areas. They are designed for low-speed travel and to carry low volumes of traffic relatively short distances. The MDOT classifies all of Penobscot's 8.75 miles of town ways as local roads.

The major value of a functional classification is to identify potential traffic problems that may arise from an inappropriate use of a road. For example, if a series of major subdivisions were to locate along Route 199 (a collector) in which all lots fronted on the existing highway, some traffic problems would result. Traffic flow would be disrupted by turning movements to and from the individual driveways.

Similarly, a high proportion of through traffic on a local street could increase the likelihood of accidents. The functional classification of roads is one of the factors that should be considered when planning growth and rural areas for the future development of the town. Local streets are best suited for either village-residential-type or very-low-density rural development. While some commercial and other non-residential development might be appropriate for collectors, it is important that such development be designed so that it minimally disrupts traffic flow.

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<b>Table D.1 Penobscot Roads &amp; Mileage*</b>				
<b>DOT #</b>	<b>Road Name</b>	<b>Collector Miles</b>	<b>Local Miles</b>	<b>Total Length</b>
0015X	Route 15	3.25	.00	3.25
0166X	Route 166	1.89	.00	1.89
0175X	Route 175	10.86	.00	10.86
0177X	Route 177	1.87	.00	1.87
0199X	Route 199, Peat Bog Road	8.45	.00	8.45
00389	Back Ridge Road	.00	1.22	1.22
00390	Dog Town Road	.00	2.59	2.59
00405	Downeast Farm Road	.00	1.06	1.06
00406	County Road	.00	.80	.80
01294	Wardwell's Point Road	.00	1.40	1.40
01682	Stover Road	.00	1.10	1.10
02707	Dorr Road	.00	.58	.58
<b>Total</b>		<b>26.32</b>	<b>8.75</b>	<b>35.07</b>
<p><b>*NOTE:</b> Does not include private roads  <b>Source:</b> MDOT and the Comprehensive Plan Committee</p>				



## Section D: Transportation and Roads

### **6. Road Conditions**

Most of Penobscot's roads are relatively narrow and winding. While traffic is forced to move slowly on unpaved town roads, vehicles tend to drive fast on the state highways. As will be seen in the discussion of accident data, inappropriate speed is a problem.

The Dog Town Road already has a limited ability to handle its current traffic flow. A more serious problem could develop if more homes were built along this road. The town could find itself paying for major road improvements.

### **7. Usage and Capacity of Roads**

An understanding of usage and capacity of a town's roads is important in identifying potential congestion problems and traffic hazards. This information is important in planning for future growth in town. For example, a major subdivision may not be appropriate at a hazardous intersection. Similarly, stricter standards for commercial development may be needed in areas with traffic congestion.

Since Penobscot is a rural town with a relatively low volume of through traffic, it does not have major traffic problems when compared to many coastal towns in Maine. Nowhere in town does the traffic level approach the capacity of the highways. This can be seen in a review of traffic count and automobile accident data. The town does, however, have some traffic problems, particularly in the summer months.

#### **a. Traffic Counts**

The Maine Department of Transportation (MDOT) conducts periodic counts in Penobscot using portable traffic counters for 24 or 48 hours. These counts are then factored for seasonal variations from counters that run 365 days a year on similar types of highways. An estimate of Annual Average Daily Traffic (AADT) is then made.

Traffic count data are shown in Table D.2. As seen, the highest AADT was 2,230 vehicles in 1993 on Route 15. While these levels are very low by statewide standards (the nearest permanent traffic counters in Hancock and Bar Harbor had respective 1993 AADT's of 13,489 and 15,993), trend data show a steady increase in traffic.

For example, AADT on Route 15 west of the Route 199 intersection increased from 1,150 to 2,230 between 1972 and 1993.

## Penobscot Comprehensive Plan: Inventory and Analysis

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On Route 166, at the Penobscot town line, the increase was from 600 to 1,500. On Route 175 north of the Route 175/166 intersection, traffic had increased from 850 to 1,860.

These increases are a reflection of the population growth and increased tourist activity in the Penobscot area. While traffic flows in Penobscot are well below levels experienced by many coastal communities, increased traffic is affecting residents. Traffic is a particular problem during the summer months.

One specific traffic problem is heavy trucks. Many trucks pass through town on their way to Castine or Deer Isle-Stonington. Given the narrowness of the roads and the high speed of travel, they are potential traffic hazards. Since there is no local police department and a limited State Police presence, it is difficult to enforce speed limits and load restrictions.

Another problem is heavy traffic during special events such as the Blue Hill fair and various activities in Castine. Traffic is well above the annual averages during such times. Such traffic detracts from the town's rural character and increases the risk of accidents.

**Section D: Transportation and Roads**

<b>Location</b>	<b>1972</b>	<b>1979</b>	<b>1988</b>	<b>1991</b>	<b>1993</b>
Rte 15 W of Rte 199 intersection	1,150		1,760	2,050	2,230
Rte 199 S of Rte 15	590		820	880	950
Rte 199 N of Rtes 175/199	880	730			
Rte 177 E of Rte 175	410	490	480	560	590
Rte 175 N of Rte 177	1,280	1,320	1,270	1,550	1,760
Rte 175 S of Rte 177	970	1,000	900	1,080	1,110
Rte 175 at Blue Hill line	890	1,120		840	1,150
Rtes 199/175 N of Rte 175 intersection	470	650			
Rtes 199/175 S of Rte 175 intersection	280	370			
Rte 199 at Castine town line	100	380			
Rte 166 at Castine town line	600	650	1,240		1,500
Rte 175 N of Rtes 175/166 intersection	850	760			1,860
<b>Source:</b> MDOT 24- and 48-hour traffic counts factored for seasonal variations					

**b. Accident Records and Road Safety**

The MDOT compiles data from files for reported accidents. During the 1990-1992 period, 57 accidents were reported. Thirty-three of these accidents were "running off the road," eleven were head-on/side-swipes, six involved hitting animals, four were rear-end/side-swipes, and three were intersection movements.

There were 22 accidents on Route 199, making this road the most frequent site. Nine of these accidents were on the North Penobscot portion of the road between the nursing home and Route

## Penobscot Comprehensive Plan: Inventory and Analysis

15, and five on the section near the Castine line. There were nine accidents each on Routes 177, 166, and 175. Route 15 had eight reported accidents between 1990 and 1992.

The Maine Department of Transportation evaluates the accident rate of a road segment through a critical rate factor (CRF). A segment with a CRF greater than 1.00 has an accident rate greater than the average comparable segment elsewhere in Maine. In Penobscot, only the intersection of Routes 175 (the New Road) and 199 near Littlefield Cove, with a CRF of 3.65, and the section of Route 199 south of that intersection (CRF = 1.14) had accident rates significantly higher than state averages for this type of road/intersection. Poor visibility is a problem at this intersection, and the frequency of accidents will likely worsen as traffic flows increase.

Most accidents nationwide are caused by speed, alcohol, or driver inattention. The North Penobscot portion of Route 199 (between the nursing home and Route 15), however, should be examined for possible improvements that could reduce its relatively high accident rate. Specifically, some sharp curves could be eliminated. However, improvements in roadway design won't eliminate the danger of vehicle-animal collisions or the tendency of drivers to exceed the speed limit.

Since overall volumes of traffic in Penobscot are low and the MDOT has limited resources, it is likely that the state will have a limited ability to address the problems identified in this section. Therefore, it is important to identify priorities that can be discussed with the MDOT. It's also important to consider road safety conditions when reviewing various land development proposals. A subdivision could aggravate traffic problems if driveways and/or access roads were poorly placed.

### **8. Parking**

According to the public opinion survey, residents have expressed concern over parking problems at the Town Hall and, to a lesser extent, at the Elementary School. Another parking-related problem is the lack of places for carpoolers to park their cars; there are no official lots for such uses. Some commercial enterprises have provided insufficient on-site parking, so customers park on the street, creating a traffic hazard.

Most towns with town-wide zoning require that any commercial property (or other non-single family residential use) provide adequate on-site parking. These standards may include set-back requirements from the road as well as general landscaping standards. They can also assure that there is sufficient turning space on the parking lot so that vehicles do not back out into traffic.

## Section D: Transportation and Roads

### **9. Pedestrian and Bicycle Facilities**

Although no firm numbers are available, Penobscot does attract considerable bicycle traffic in the summer. The town may want to explore ways to improve the separation of bicycle and vehicular traffic. Under recently passed federal and state legislation, there is now increased state funding for such improvements.

One possible improvement could be the provision of bicycle lanes along some highways. The narrow shoulders mean that bicyclists have little room on the pavement when a motorist is passing. Pedestrian facilities could also be explored; increased traffic means that residents are less safe walking along the road.

### **10. Public Transportation Facilities and Services**

There is no regular public transportation service in Penobscot. Limited service is provided by the Washington-Hancock Community Agency for eligible clients referred to them by the Maine Department of Human Services. The closest year-round scheduled intercity bus service is in Bangor. Greyhound Bus Lines has regular service to Portland and Boston and offers connections to Aroostook County and other locations. St. Croix Bus Lines provides year-round, daily (excluding Sundays) service between Machias and Bangor with a stop in Ellsworth. Concord Trailways also serves Bangor and points south.

Penobscot's small size limits the potential of any public transportation service. The town could explore the possibility of van pools and other ride-sharing measures to reduce the amount of commuting to and from town. Some help in promoting such measures may be available from the Region 2 Regional Transportation Advisory Committee. This group is working with the MDOT in setting transportation planning priorities for Hancock and Washington Counties.

### **11. Airports**

Bangor International Airport is the nearest major commercial and cargo airport. An 11,000-foot runway serves scheduled domestic flights and refuels flights from Europe. There is also short-haul scheduled service to Boston available at the Hancock County Airport in Trenton.

### **12. Rail Service**

The nearest freight rail service is in Bucksport. As of 1995, there is no regularly scheduled passenger service in Maine, although service is proposed between Boston and Portland.

### **13. Local Transportation Issues**

Many small towns have found that their road costs have increased due to increased traffic and road maintenance associated with new subdivisions. It is possible through subdivision ordinances to address both on and off-site traffic impacts. For example, the ordinance could require that all subdivision roads be built to town standards. This would reduce the cost of maintaining such roads if they are ever accepted as town ways.

Subdivision ordinances can also address off-site traffic impacts. An increased flow of traffic from a given subdivision can often affect the capacity of a road. The ordinance can require that a traffic impact study be prepared by the developer to determine what specific road improvements may be needed. The developer can be asked to contribute the development's fair share of the costs needed for the improvements.

### **14. Regional Transportation Issues**

Penobscot does not appear to face any serious regional traffic issues. However, traffic in town would be affected by any major land development activity in adjoining towns. Therefore, the planning board may want to ask the planning boards of these towns for an opportunity to comment on any proposed subdivision located near the Penobscot town line. Similarly, the Penobscot planning board could share traffic impact information on any major proposals near the boundary of another town.

Another potential regional transportation issue is the use and condition of Route 15. The MDOT is, as of 1995, undertaking a study of improvements in this corridor. Penobscot may want to follow these plans to assure that they address local concerns. As mentioned above, Route 15 is the most heavily traveled road in town. Much of this traffic, however, is through traffic rather than locally generated.

## **E. PUBLIC FACILITIES AND SERVICES**

### **1. Purpose**

A thorough understanding of a town's public services is necessary to determine any current constraints to growth and identify any growth-related problems that the town is likely to face in the future. A plan should also identify likely future capital improvements. Specifically, this section will:

- a. Identify and describe Penobscot's public facilities and services; and
- b. assess the adequacy of these services to handle current and projected demands.

Town expenditures are discussed in detail in the Fiscal Analysis Chapter. The complete Capital Investment Plan (CInP) is included in the Implementation Section.

### **2. Key Findings and Issues**

As a rural community, Penobscot provides its residents with minimal town services. Overall, these services appear adequate and the major public service issue facing the town is that continued increases in property taxes mean that taxpayers are hard pressed to pay for current services, let alone fund new ones. One major public service deficiency is the poor condition of the present fire house. Health care services, while not a town government responsibility, are another deficiency.

### **3. Public Opinion Survey Results**

Most survey respondents gave adequate ratings to law enforcement (61 percent), fire protection (59 percent), and street lights (67 percent). Only half, however, felt that health services were adequate, and 45 percent felt that ambulance service was adequate. About 65 percent felt that traffic control was adequate.

About two-thirds of the respondents felt that town government was adequate, and 56 percent felt it was sensitive to public needs. Just over half felt that enforcement of codes and ordinances was adequate, while only 44 percent felt that shoreland zoning and enforcement was adequate. About 72 percent felt that opportunities for public participation in local government were adequate.

### **4. Town Government**

#### **a. Current Conditions**

Penobscot has a town meeting form of government. Day-to-day affairs are handled by the three selectmen. There is no paid town

## Penobscot Comprehensive Plan: Inventory and Analysis

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administrator or manager. There are no immediate plans to create such a position.

### **b. Current and Future Adequacy**

While the selectmen must cope with a heavier work load than they did a generation ago, current town government arrangements appear adequate. Should the town grow at a faster than anticipated rate, a part-time town administrator position may have to be considered.

## **5. Solid Waste Disposal**

### **a. Current Conditions**

Since the local landfill ceased operation in January 1993, the town has been operating a transfer station on the old landfill site off Route 175-199 in the Pierce Pond area. All municipal solid waste is presently being hauled to the PERC incinerator in Orrington. As of May 1995, the town was paying \$55 a ton on the spot market to dispose of its waste at PERC. The disposal price varies during the year; in March 1995 the fee was \$45 a ton.

According to the Maine Waste Management Agency definitions, the town recycles about 37 percent of its municipal solid waste. This includes newspapers, magazines, tin, plastic jugs, cardboard, and glass. Town officials estimate that about 85 percent of residents recycle a portion of their trash. White goods (such as old washing machines and refrigerators) are presently hauled to Lewiston.

There is a separate pile for construction and demolition debris (CDD). Presently, there is little separation of CDD apart from wood, which is burned on-site. Other CDD is stockpiled on-site for eventual hauling.

### **b. Current and Future Adequacy**

One solid waste related expense facing the town is the formal closing of the landfill. Current closure costs are estimated at \$100,000; 70 percent of this cost should be funded by the state. While the town presently generates a low volume of CDD, it cannot stockpile the material on-site indefinitely. Therefore, it may have to examine additional management/recycling efforts to reduce the volume of CDD and arrange to have the remainder hauled to an approved disposal site. Many towns have enacted a disposal fee system to encourage more recycling of CDD.



**Section E: Public Services and Facilities**

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**6. Fire Protection**

**a. Current Conditions**

Fire protection in Penobscot is provided by the 20-person volunteer Fire Department. The fire station is a leased building on Route 175 in South Penobscot. There are no branch stations, and, since the facility is centrally located, no need for such stations is foreseen for the future. Penobscot has mutual aid arrangements with other Hancock County towns. This means its volunteers and equipment are supplemented by those of other towns.

Demand for service has fluctuated in recent years. As seen in Table E.1, calls for service have ranged from 51 per year to 24. As will be discussed below, however, the average fire department call is more complex than was once the case.

Year	Number of Calls
1987	24
1988	46
1989	18
1990	28
1991	30
1992	36
1993	51
1994	49

**Source:** Fire Department Records

**1. Facilities**

The station is single-story 1,600-square-foot structure. It includes a 200-square-foot meeting room and an 117-square-foot radio room. There are three heated bays. The furnace, however, is old and in need of replacement.

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There are no toilet or shower facilities at the station. Apart from the inconvenience this situation creates, the town also risks citations from the Maine Department of Labor. The lack of shower facilities poses a potential health and safety threat. Current federal safety standards require prompt washing after any blood contact, due to concern over blood-borne pathogens such as H.I.V. and Hepatitis B. Volunteers could come into contact with blood when responding to an accident.

The building has several deficiencies. The roof needs to be re-shingled and the chimney replaced. The siding also needs to be replaced. The meeting room is too small to accommodate the volunteers who attend training sessions. The room is too cold in winter and infested with mosquitoes in the summer. The building also lacks a storage room and needs another equipment bay.

### **2. Staffing**

While the Department has 20 volunteers, sometimes none are available during weekdays, as many work out of town. According to the Fire Chief, there should be at least two volunteers available during the day. There are usually ample volunteers for the evenings and weekends.

The only other staffing problem noted by the Fire Chief is that volunteers had trouble finding the time to complete the necessary training. Due to increased standards through OSHA and other state and federal regulations, local fire departments face a range of training demands that were not required a generation ago. This makes it difficult to retain fully trained volunteers.

Today, any fire department must concern itself with a range of public safety matters such as hazardous materials, responding to vehicle accidents, and the handling of blood-borne pathogens. Also, the average building fire is likely to be more hazardous and complicated to fight than it was 50 years ago due to greater use of plastics and other potentially toxic materials in home construction and furnishings. Volunteers face a far more hazardous job than they once did.

### **3. Equipment**

The Department has three primary vehicles. The 1990 Ford is in very good condition and has about 20 years of service left. The 1979 GMC tanker is in very poor condition and is due for replacement. The 1977 Ford is in good condition and has about seven years of service left.

## Section E: Public Services and Facilities

In addition to these three basic vehicles, the department has a utility truck, which was donated by Blue Hill in 1995. Over the next five years it would also like to replace the tanker and the turnout gear, and purchase new hose.

### **b. Current and Future Adequacy**

One major deficiency facing the Fire Department is the inadequacy of the fire station. The facility is too small to meet the vehicle and other equipment storage needs. There is insufficient room for training and other activities required of a modern fire-fighting operation.

Given the inherent limitations of this building, the best option would be to have it replaced with a new building. Town officials are reluctant to invest too much money in the building since it is leased. Even if it were possible to buy the building, the lot is too small to allow for expansion.

The new facility would need an additional bay for the utility vehicle. It should also offer enough room for training and equipment storage. It would have to meet all Maine Department of Labor standards in terms of sanitary facilities as well as all OSHA guidelines.

One possibility would be to design a structure that could be expanded at a later date to accommodate other town government functions. This would allow the eventual replacement of the town hall with a structure that is more suitable for the conducting of town government. It would also allow more room for parking than is presently available at the town hall site.

An important factor in locating a fire station is to assure that all parts of town are within easy reach. The average response time to a call in Penobscot is eight to ten minutes. For the most remote part of town, the response time is fifteen minutes. Any new station should be located so that these response times can be maintained. The ideal location would be near the current station.

There are some important links between comprehensive planning and fire protection. It is important that any new development be assured of adequate water supply for fire-fighting purposes. Many towns include standards in their subdivision ordinances that give the planning board the option to require that a developer provide an on-site water supply for fire-fighting purposes. This could involve a dry hydrant adjacent to a pond or an underground cistern.

In some cases, it may not be practical for a development to have an on-site supply. Another option in some cases is to ask

## Penobscot Comprehensive Plan: Inventory and Analysis

developers to contribute their proportionate share of the cost of providing an off-site source. According to the Fire Chief, water supplies are presently inadequate in North Penobscot, South Penobscot, and West Penobscot. Fire ponds or other sources of supply are needed in these areas. Fire ponds could also be built as a public service project with volunteer labor.

Another comprehensive planning issue is prompt emergency vehicle access. Spring mud and other poor road conditions may limit access to certain parts of town. This is an important factor to consider when reviewing new subdivision proposals. In some cases, it may be appropriate to require the developer to contribute to the cost of upgrading roads that lead to the development so that safe emergency vehicle passage is assured and town road maintenance costs are minimized.

The Fire Department has noted access problems in the Johnson Point area, as well as in roads around Toddy Pond and off the Dog Town road. It is also a problem on portions of the Pierce Pond Road. A related problem is long driveways that are not wide enough to accommodate fire trucks. Quite often, these roads are not easily visible.

Subdivision ordinances can address some of the road access problems. For example, they can require that cul-de-sacs have an adequate turnaround area for the largest fire truck likely to serve that fire. Many towns set a maximum length for cul-de-sacs. One risk of overly long cul-de-sacs is that a road might be blocked by a fallen tree or other debris, putting a house out of the reach of fire hoses.

Another planning-related problem is street names and addresses. There is a state-wide initiative for street naming and numbering as part of the Enhanced 911 project. This project would allow prompt identification any of address from a call made to a 911 emergency telephone number. This service requires consistent street names and numbers for each residence. Street naming in Penobscot was nearing completion in 1995. Street name requirements can be incorporated into subdivision ordinance standards.

### **7. Police Protection**

#### **a. Current Conditions**

There is no municipal police department in Penobscot. Police protection is provided by the County Sheriff's department and the State Police. According to the public opinion survey, about 72 respondents said they never used law enforcement services, and 28 percent said that they used such services "on occasion."

## Section E: Public Services and Facilities

Therefore, demand for police services in Penobscot is low.

### **b. Current and Future Adequacy**

Given the town's rural nature and low demand for police services, current police protection arrangements appear adequate. Even if the town should grow at a faster rate than presently expected, it is unlikely that additional police protection would be needed over the next ten years. The costs of establishing a local police department would be far beyond Penobscot's limited budget.

## **8. Ambulance**

### **a. Current Conditions**

Penobscot has no contract for ambulance service. Residents depend primarily on the Peninsula Ambulance Corps in Blue Hill. The Bagaduce Ambulance Corps in Castine also provides limited service to the town.

### **b. Current and Future Adequacy**

The 1990 public opinion survey indicated that only 45 percent of the respondents felt that ambulance service was adequate. This may be due to the distance to area hospitals. The presence of the nursing home means that Penobscot has a higher than average demand for ambulance service than most towns its size. This places additional burdens on local ambulances.

## **9. Libraries and Cultural Facilities**

### **a. Current Conditions**

The only libraries in Penobscot are in the school and nursing home. There are no other public cultural facilities in Penobscot. Residents, however, do benefit from the many cultural activities on the Blue Hill peninsula and elsewhere in eastern Maine.

### **b. Current and Future Adequacy**

Given the rapid increase in local property taxes over the past ten years, it is unrealistic to expect local taxpayers to fund any new public cultural facilities. Therefore, no change in current arrangements is foreseen.

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### 10. Education

#### a. Current Conditions

Penobscot is a member of School Union 93, which includes Blue Hill Consolidated School (elementary), Adams Elementary School (Castine), Brooksville Elementary School, Penobscot Consolidated School (elementary), and George Stevens Academy (secondary) in Blue Hill. The office of the Superintendent of Schools is located in Blue Hill.

Penobscot students attend grades K-8 at the Penobscot Elementary School. This facility has nine classrooms and a rated capacity of between 140 and 160 students. Present enrollment is at 145, so the building is within its overall capacity.

Core facilities consist of a 3,120-square-foot gymnasium and a 557-square-foot library. While the gymnasium is adequate, the library is not handicapped accessible. The Union would like to expand or replace it with an 850-square-foot room that would also serve as a computer laboratory. The school also needs a 405-square-foot special education room.

There are currently 30 full- or part-time staff at the school. The Union would like to add a guidance counselor (for one day a week), an art teacher (two days a week), and a physical education teacher (two days a week). These positions are needed to meet current rather than projected enrollment.

The most recent addition to the school was in 1984-1985. Two additional classrooms have been added through conversion of the library area since that time. The library is now in the basement and has no inside entrance.

As seen from the enrollment figures shown in Table E.2, elementary school enrollment increased during much of the 1980s, but has been declining since 1991. While there was a slight decrease in high school enrollment during the late 1980s, enrollment increased between 1991 and 1993. As the elementary school population ages, this increase may continue for a few years. It is then likely that the decreases in elementary school enrollment will also occur in the high school population unless more new residents move into Penobscot.

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<b>Table E.2 School Enrollment Trends, Penobscot<sup>1</sup> 1982-1994</b>					
	K-8	9-12	Penobscot Total	9-12 Other Towns	Total Union 93
1982	121	84	205	182	390
1983	116	80	196	182	383
1984	112	77	189	205	388
1985	125	75	200	214	415
1986	137	70	207	229	432
1987	141	73	214	216	421
1988	138	64	202	189	392
1989	152	55	207	171	378
1990	158	50	208	171	386
1991	158	51	209	157	367
1992	151	54	205	181	389
1993	153	65	218	181	394
1994	145	78	223	194	417

<sup>1</sup> NOTE: Enrollments are as of October 1.  
Source: School Union 93 and Selectmen

**b. Current and Future Adequacy**

The building has several current needs and limitations that must be addressed. One need is overall building repair and maintenance. Another is the heating system; it is difficult to control and adjust the heat throughout the building. A third problem is asbestos flooring; the entire building needs new carpeting to cover the asbestos.

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While the Union has no projections on future enrollment, they foresee several facility needs over the few years. These include a new special education room, and more guidance and nursing space. An art room and storage area are also needed. Additional paved parking will be needed as well.

### **11. Town Buildings**

#### **a. Current Conditions**

The primary town building is the Town Hall. Originally built as a store around 1904, this building was extensively renovated between 1990 and 1993. The renovations included vinyl siding, new windows, and a new furnace. The building meets handicapped access requirements. The second floor of the building is leased to the Masons. This section has separate heating and electrical systems.

#### **b. Current and Future Adequacy**

While the Town Hall is structurally sound, it needs additional insulation and interior gypsum wallboard. The town also needs a fire proof vault for town records. Presently, town records are stored in the Historical Society's vaults. This improvement may be deferred until the facility is replaced.

The major problem with the present Town Hall is there is little room on the lot for parking. An effort to acquire an adjoining property that could have been used for parking was rejected by voters at the 1995 town meeting.

The lot is too small to hold a septic system; the town presently uses a holding tank for waste disposal and shares a well with an adjoining property. Even if the adjoining property were acquired, the lot would still be too small for a septic system. As mentioned in the Fire Protection section of this chapter, one long-term option would be a joint fire station-municipal building.

### **12. Public Works**

#### **a. Current Conditions**

Road maintenance in Penobscot is the responsibility of the Road Commissioner. Any paving jobs are contracted, but the town handles minor road paving jobs. The town does not own any trucks, but does own two plows, two push-gears, and two sander attachments. It also has a pull grader.

Town equipment is stored in a 24-square-foot shed in the summer. There is no salt-sand storage shed in town. Since the salt



## Section E: Public Services and Facilities

pile is adjacent to salt water, there is no immediate threat of ground water contamination. Therefore, Penobscot is very low on the state's funding list for salt-sand storage sheds.

### **b. Current and Future Adequacy**

Penobscot's current public works maintenance arrangements appear adequate for the immediate future. As with fire protection, there is an important link between road maintenance and community planning. Development in areas served by remote, rural roads usually has high road maintenance costs. Such roads were designed for minimal traffic, and unpaved roads can be very costly to maintain since they must be graded often.

Many towns have been pressured by residents of such roads to spend considerable money on their improvement. Town subdivision ordinances can require that developers pay for their fair share of upgrading any public roads that lead to the development. These costs can be estimated through a traffic impact statement prepared by the developer as part of the initial subdivision application process.

## **13. Health Care**

### **a. Current Conditions**

Penobscot residents must rely on other towns for health care services. Some residents use Castine Community Health Services in Castine. The staff includes a certified family practice physician and a certified family nurse practitioner. Ancillary services include on-site diagnostic X-ray and laboratory. The health service, located in the facilities of Castine Community Hospital which closed in 1988, is owned and operated by the Castine Community Hospital Corporation, a community-owned not-for-profit corporation. Castine Community Health Services (CCHS) also serves patients from Castine and Brooksville. The CCHS branch in Penobscot is now closed.

Other residents use facilities in Blue Hill, which has the nearest hospital. Apart from medical doctors, there are also many alternative practitioners in the Blue Hill area. Citizens also use Maine Coast Memorial Hospital in Ellsworth and St. Joseph's Hospital and Eastern Maine Medical Center in Bangor.

### **b. Current and Future Adequacy**

The public opinion survey and the comments made at the February 1995 comprehensive planning committee's public

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informational meeting showed that many residents felt that health services in Penobscot were inadequate. Several residents mentioned that they missed having a doctor in town. The Peninsula Primary Care Association is exploring long-term health care needs for the greater Blue Hill-Sedgwick area. Penobscot residents may want to participate in this planning effort.

## F. RECREATION

### 1. Introduction

A comprehensive plan should contain an inventory of current recreational facilities and needs in a community and determine what may be needed in the future. Specifically, this section will:

- a. describe current recreational resources in Penobscot;
- b. assess the current and future adequacy of these resources; and
- c. predict whether the availability of open space areas for public recreation and access will be threatened by future growth and development.

### 2. Key Findings and Issues

Penobscot has limited recreational facilities. The town's permanently protected open space is similarly limited; there are two islands in the Bagaduce River and another conservation easement on a portion of Toddy Pond. It will be difficult for the town to address these deficiencies given the many other demands on the tax base.

*Plus Shain Peilans's Park, Wadsworth Pond & Es.*

### 3. Public Opinion Survey Results

The public opinion survey indicated serious deficiencies in Penobscot's recreational facilities and services. Only 25 percent of the respondents felt park and recreation services were adequate, while over half felt they needed improvement. There was even less satisfaction with recreational opportunities for youth; only 18 percent felt they were adequate while 58 percent felt improvements were needed.

About 52 percent felt that public access to ponds was adequate, while only 44 percent felt public access to salt water was adequate. Thirty-five percent felt that access to ponds was inadequate, while 34 percent of respondents felt the same way about access to saltwater. Fifty percent were satisfied with current boat launching facilities, while 34 percent felt they needed improvement.

### 4. Current Recreational Resources

#### a. Facilities

Penobscot's recreational facilities are summarized on Table F.1. As seen, these facilities are limited. Public facilities consist of a softball field at the Elementary School, the town-owned Zig-Zag field, and boat launching sites at Northern Bay and Pierce Pond. There is also a privately owned boat launching site at Wight Pond.

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**Table F.1 Recreation Resources: Penobscot, 1991**

Facility Name	Owner (town, private)	Water Body	Acres	Play ground	Ball Fields	Multi- Purpose Field	Parking capacity	Other
Elementary School	T	--	1.0	yes	yes	no	0	gym
Municipal Field	T	--	1.0	no	no	yes	0	no
Northern Bay Boat Ramp	T	Bagaduce River	0.2	no	no	no	6	no
Carpenters Cove Scenic Turnout	T	Bagaduce River	0.2	no	no	no	2	2 picnic tables
Pierce Pond Boat Ramp	T	Pierce Pond	0.5	no	no	no	2	no
Wight Pond Launch Site	P	Wight Pond	1.0	no	no	no	2	no

**Source:** State of Maine, Dept. of Conservation, Bureau of Parks

## Section F: Recreation

### **b. Recreational Programs and Activities**

There are several formal and informal recreational activities in Penobscot. These include baseball, softball, and basketball teams. Pierce Pond is a popular place for hockey games in the winter, and the school gymnasium is used for a variety of recreational activities on weekends and evenings. Most recreation, however, is organized by individual groups with relatively little town sponsorship.

### **5. Current and Future Adequacy of Penobscot's Recreational Resources**

The adequacy of Penobscot's recreational resources can be evaluated in two ways. First, the town's current facilities and programs can be compared to recommended state standards for communities of comparable size. The town's projected population can be used to determine future adequacy. Second, the subjective impressions of residents and information gathered through public meetings may be used. Since every town is different, the state standards should be considered as general guidelines.

Table F.2 shows the recommended state standards for towns in the 1,000 to 1,500 population range as well as those between 1,500 and 2,000. Penobscot meets some of these suggested standards. For example, there is a skating area on Zig-Zag field. However, this site is exposed to the wind and has no benches.

There are playground facilities at the school and a picnic area at the Carpenters Cove scenic turnout. The only indoor facilities are at the Penobscot Elementary School. The gym doubles as an auditorium and a dance floor. Maine Maritime Academy's indoor swimming pool is no longer available to Penobscot residents.

Penobscot may want to explore options for sharing some facilities with Castine and Orland. The town may also want to develop a long-range recreation plan so that facilities could be upgraded gradually in a manner that reflects the limited tax dollars available. Improving public access to salt water would be one priority in such a plan. Another priority could be a picnic area that is not on a heavily traveled road.

Some residents have expressed interest in a hiking and/or snowmobile trail system. A local boy scout troop has done some initial work on a trail. In the past, there have been limited state matching funds for such projects.

**Penobscot Comprehensive Plan: Inventory and Analysis**

<b>Figure F.2 Guidelines for Recreation and Park Services</b>		
<b>Population Criteria</b>	<b>1,000-1,500</b>	<b>1,500-2,000</b>
<b>I. Administration</b>		
A. Recreation & Park Board or Committee	X	X
<b>II. Leadership</b>		
1. Summer Swim Instructor	X	X
2. Summer Recreation Director	X	
3. Winter Skating Supervisor		X
<b>III. Program</b>		
A. Swim Instruction Program	X	X
B. Supervised Playground Program		X
C. Senior Citizen Club		X
D. Teen Program		
E. Skiing Instruction Program		X
F. Ice Skating	X	X
G. Community-wide Special Events	X	X
H. Arts and Crafts Program		X
I. Evening Adult Educ. Recreation Program		X
<b>IV. Facilities (to include School Area)</b>		
A. Outdoor Facilities		
1. Community Recreation Area: 12-25 acres w/ ballfields, tennis courts, swimming, ice skating, etc.	X	X
2. Special Facilities		

**Section F: Recreation**

<b>Figure F.2, continued: Criteria</b>		
<b>Population Criteria</b>	<b>1,000 - 1,500</b>	<b>1,500 - 2,000</b>
a. Softball &/or Little League Diamond (.75 per 1,000 pop.)	X	X
b. Basketball Court (.50 per 1,000 pop.)	X	X
c. Tennis Court (.67 per 1,000 pop.)		X
d. Multi-purpose Field: football, soccer, field hockey (.5 per 1,000 pop.)		X
e. Ice Skating (5,000 s.f. per 1,000 pop.)	X	X
f. Playgrounds (.50 per 1,000 pop.)	X	X
g. Horseshoe Courts		X
h. Shuffleboard Courts		X
i. Picnic Areas w/ tables & grills (2 tables per 1,000 pop.)	X	X
j. Outdoor Educ. Area or Nature Center		X
<b>B. Indoor Facilities</b>		
1. School Facilities Available for Public Use	X	X
2. Gym or Large Multi-purpose Room (.20 per 1,000 pop.)	X	X
3. Auditorium or Assembly Hall	X	X
4. Public Library	X	X
<b>V. Finance (funds for operation and maintenance - not capital)</b>		
A. Minimum \$6 per capita for part-time program		X
Source: Recreation and Open Space Planning Workbook, Office of Comprehensive Planning, Dept. of Economic and Community Development; May 1991.		

## Penobscot Comprehensive Plan: Inventory and Analysis

### 6. Open Space

#### a. Inventory

*Shawn Perkins Park or North Bay*

There is very little permanently protected open space in Penobscot. The Castine Conservation Trust holds conservation easements on Wood Island (one acre) and Hermit Island (two acres) in the Bagaduce River. The Blue Hill Heritage Trust holds an easement on a portion of Toddy Pond.

#### b. Assessment of Threats to Open Space

Since Penobscot has minimal protected open space areas, many areas presently taken for granted could be developed in the future. Even if the outright acquisition of conservation easements isn't possible, some open space areas could be preserved from development through the use of cluster subdivisions. Clusters allow for lot layouts that preserve areas of open space by concentrating individual building lots in one portion of a development. Many studies have shown that a well-laid-out cluster development will have higher property values than a conventional subdivision.



## **G. MARINE RESOURCES**

### **1. Introduction**

It is important that a Comprehensive Plan provide a thorough analysis of marine resources. Specifically, this section will:

- a. describe Penobscot's marine resource areas, facilities, and water-dependent uses;
- b. assess the adequacy of existing facilities, and public access points to handle current and projected use demands;
- c. predict whether these facilities and resources will be threatened by the impacts of growth and development; and
- d. assess the effectiveness of existing measures to protect and preserve marine resource areas and important water-dependent uses.

### **2. Key Findings and Issues**

Penobscot's marine resources are very limited when compared to what was in town a generation or two ago. Some residents, however, still depend on marine resources for employment. Clam harvests have fluctuated considerably, and yields are well below the levels of ten years ago. Two major marine resource issues are the closure of shellfish areas due to contamination and the lack of public access to the shore. These issues must be addressed if Penobscot is to realize maximum economic and recreational use of its marine resources.

### **3. Community Survey Results**

There were no specific questions relating to marine resources in the community survey. Many of the unsolicited comments, however, stressed the value of the Bagaduce and living in a coastal area. There were also complaints about pollution of waterways and the lack of saltwater facilities such as a park and town dock. The survey also showed strong dissatisfaction over public access to salt water.

### **4. Marine Resource Areas**

#### **A. Shellfish**

As seen in Table G.1, clam harvests in Penobscot have been very limited in recent years. While they peaked at around 2,044 bushels in 1982, only one bushel was reported in 1987 and 320

## Penobscot Comprehensive Plan: Inventory and Analysis

in 1991. Thus, clams do not presently contribute much to the local economy. This is in dramatic contrast to the past when clams were a major source of local jobs.

The figures in Table G.1 are for harvests reported to the Maine Department of Marine Resources (DMR) only. While DMR figures are not available after 1991, local accounts indicate that some previously closed flats that opened around 1992 were very productive. There were anecdotal reports of some clam diggers harvesting as much as 100 bushels a week.

One factor that limits shellfish harvests in Penobscot is poor marine water quality. According to the DMR, the Northern Bay area, Tills Cove, and the area between Castine and West Penobscot is closed to Shellfish. Water quality issues are discussed at greater length in the Water Resources Chapter. A related problem is the lack of public access points to salt water.

Section G: Marine Resources

Table G.1 PENOBSCOT CLAM HARVEST TRENDS	
Year	Bushels
1977	0
1978	0
1979	4
1980	0
1981	164
1982	2,044
1983	1,234
1984	102
1985	8
1986	64
1987	1
1988	289
1989	N/A
1990	320
1991	320
N/A = not available	
<b>SOURCE:</b> Department of Marine Resources	

Lobster and crab harvesting also plays a minor role. According to DMR data, there were only three retail dealer shellfishing licenses issued to Penobscot residents in 1991. The dealer license figures represent the total number of residents who do not have an Interstate Commerce Commission license. Thus, they may underestimate the actual number of seafood transporters.

Marine fishing licenses show a similar pattern. As seen in Table G.2, there were relatively few marine harvest licenses issued

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in 1994. The largest number of licenses, fifteen, were for Class I lobster and crab. The next largest number, four, were issued for commercial shellfish.

The license sales represented here are the licenses sold to Penobscot residents. These figures include those residents who may fish elsewhere, but do not include residents of other towns who fish out of Penobscot. Discussions with the local fishing community reveal that many do fish out of other towns. The lack of a deep water harbor and the many closed clam flats mean that there are limited opportunities for fishing and other marine-related activities within Penobscot.

License Type	Number
Scallop Dragger	2
Sea Urchin Diver	3
Sea Urchin Tender	2
Sea Urchin Dragger	1
Lobster & Crab, Over Age 70	2
Lobster & Crab, Class II	3
Lobster & Crab, Class I	15
Commercial Shellfish	4
Commercial Fishing, Single Operator	2

**SOURCE:** Department of Marine Resources, computer print-out, January 13, 1995

**5. Public Access to the Shore**

**A. Publicly owned points**

Public access to the shore is very limited. There are two town-owned public access points on Northern Bay. The first is at

## Section G: Marine Resources

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the town landing at the outlet of Winslow Stream. The other is at Carpenters Cove on Northern Bay at the scenic turn-out. This site is tidal and is seldom used except by kayakers and others with light-weight craft that can be carried across the flats.

Another public access point is near Mill Creek, off Route 175-199. This site is "public" since it lies within the state highway right of way. There is no designated parking area at this site, forcing users to park along the road, creating a safety hazard.

### **B. Privately Owned Access Points**

The only deep-water access is at Devereaux Marine on Morse Cove. This site suffers from erosion problems and the build-up of silt. It is difficult to launch a boat from the beach. At low tide, one must go about 300 to 400 feet from the beach to launch a sailboat.

Clammers also depend on private rights of way. Most now reach Northern Bay by crossing private property. Use of these rights of way generally depends on informal arrangements with the landowner. Local observers maintain that about half the clamdiggers reach the flats from boats launched in other towns. There are no restrictions on non-residents digging clams in Penobscot.

### **C. Adequacy of Access**

The public opinion survey showed that many residents were dissatisfied with current public shore access. While there may be some informal access points to salt water, these are not secure. Changes in land ownership may result in these points being fenced off or posted for trespassing. The current public sites have limited potential due to their limited parking and lack of deep-water access. Additional sites are clearly needed.

## **6. Water-Dependent Uses**

Penobscot's existing water-dependent uses are shown on Map 1. Water-dependent uses are defined as those uses that would require direct access to coastal waters and cannot be located away from these waters. These would include fishing operations, piers, and the like.

The State Planning Office shows five water-dependent uses in Penobscot. These include Devereaux Marine on Morse Cove and the three public access points on Northern Bay. The fifth site shown in state records is off Tills Point near Battle Island. This site was used in the past as a pier, but is not presently a water-dependent use.

## Penobscot Comprehensive Plan: Inventory and Analysis

In addition to these existing uses, Penobscot has several sites which, according to the State Planning Office, have the potential for water-dependent uses. These are sites which meet the following criteria:

1. they are generally sheltered from excessive wind and seas year-round;
2. they have at least 5 feet of water within 150 feet of the shore at mean low water; and
3. they have an average land-side slope of 15 percent or less to 250 feet back from the high tide mark.

It must be stressed that these sites are based on natural features of the land. They do **not** consider preferences of the current land owner, road access, and surrounding land uses. These are all factors that must be considered when recommending the development of new water-dependent uses.

### **7. Harbors & Marinas**

#### **A. Facilities**

While there are no major harbors in Penobscot, there is a dredged channel from Bridges Point to the old Bowdens Wharf site. The Army Corps of Engineers had proposed that this channel be 100 feet wide and six feet deep. According to a 1976 analysis by the Corps, work on this channel was 55 percent completed by 1902 and no dredging has been done since that time. The channel was only 40 feet wide and 6 feet deep except at Winslow Island where the depth was 4 feet.

There has been further siltation since the last Corps study was done. According to local observers, the channel now may be 2 to 3 feet deep at low tide. A nearby stream has prevented further siltation.

#### **B. Adequacy**

While this channel is adequate at high tide, it does not offer good access at other times. If pending plans to cut U.S. Army Corps dredging monies are approved by Congress, there is little likelihood of this channel being eligible for future Corps dredging. This will make it very difficult to improve this channel.

## Section G: Marine Resources

### **8. Effectiveness of Existing Measures to Protect and Preserve Marine Resources**

The primary way that marine resources are protected in Penobscot is through the state-imposed shoreland zoning ordinance. This is the basic ordinance that all Maine towns are required to have. This ordinance offers no specific protection for water-dependent uses. Some towns have amended their ordinances to assure that water-dependent uses are protected from conversion to other uses. This would, for example, protect local fishing operations from having a fish pier converted to a non-marine-related use such as a restaurant.

When Penobscot is revising its land use ordinances, it may also want to consider other water quality issues such as storm water runoff from development. The ordinance revisions could call for stricter attention to erosion and sedimentation prevention in new subdivisions. Site plan review procedures could stress standards for the extent of impervious surface and drainage.

While steps have been made in recent years to improve septic systems adjacent to the shore, there are still problems with overboard discharges. A comprehensive strategy is needed to address the remaining problem areas. This could be done in coordination with the DEP and the DMR.

Penobscot does not have a clam harvesting ordinance. If a major clam flat restoration project is undertaken, the town may want to consider an ordinance. If an ordinance were enacted, it would have to be enforced. This would normally involve hiring a shellfish officer.

### **9. Regional Marine Resource Issues**

There are several regional marine resource issues affecting Penobscot. On the largest scale, Penobscot is affected by development trends throughout Penobscot Bay. Therefore, the town should continue to participate in regional efforts to protect this resource. On a more local level, Penobscot should be a key participant in any efforts to protect the Bagaduce River Estuary.

Perhaps the most pressing interlocal issue is the restoration of closed shellfish areas. Addressing this problem would be more effectively done in cooperation with the adjoining towns of Castine and Brooksville. These towns may want to work with the DMR in developing strategies to restore these areas that are cost-effective to re-open and remove sources of contamination.

## H. WATER RESOURCES

### 1. Purpose

This section will present an overview of Penobscot's water resources. An understanding of water resources is important since all residents must have a reliable source of drinking water. Specifically, this question will:

- a. describe the characteristics, uses, and quality of Penobscot's significant water resources;
- b. predict whether the quantity or quality of significant water resources will be threatened by the impacts of future growth and development; and
- c. assess the effectiveness of existing measures to protect and preserve significant water resources.

### 2. Key Findings and Issues

Apart from the water quality problems discussed under Marine Resources, the key water resource issue facing Penobscot is protecting its lakes from increased phosphorus loading. Phosphorus, a naturally occurring element, causes algal blooms and can render a lake unsuitable for swimming and other recreational activities. Phosphorus loading increases if development occurs with little attention paid to minimizing erosion and sedimentation. To avoid excessive phosphorus loading, it is important to review development throughout a lake watershed to assure that drainage and other erosion control measures are adequate.

### 3. Public Opinion Survey Results

About 90 percent of the respondents favored strengthening land use regulations to protect and preserve fragile areas, including shorelands, wetlands, and drinking water sources. Many of the survey's comments listed the purity of Penobscot's waters as one of the things that respondents liked about living in town. Others, however, mentioned contamination of water as one of the things that they disliked about living in Penobscot.

### 4. Surface Water Resources

#### a. Fresh Water Bodies and Watersheds

There are five great ponds whose watersheds include at least a portion of Penobscot. These lakes are described in Table H.1. Pierce, Turtle, and Wight Ponds lie entirely within Penobscot, while Toddy Pond is shared with Blue Hill, Orland, and Surry.



## Section H: Water Resources

While none of Alamoosook Lake lies within Penobscot, the town accounts for about eight percent (1,149 acres) of the lake's drainage area.

The Maine Department of Environmental Protection rates lakes in terms of their water quality and degree of phosphorus loading. Phosphorus is one of the key factors affecting water quality. While phosphorus is a naturally occurring phenomenon, man-made operations such as timber harvesting, and road and home construction increase the amount of phosphorus in a watershed. Phosphorus washes into water bodies, causing algae to multiply, oxygen levels to fall, fish to die, and water to turn green. A developed area can send as much as ten times the amount of phosphorus into a lake as a forested area.

The water quality categories shown in Table H.1 are based on the water bodies' vulnerability to phosphorus levels. This rating is derived from many variables such as flushing and growth and development rates. As seen, Alamoosook Lake, Toddy Pond, and Wight Pond are all rated "Moderate/Stable." This rating means that the lake has average water quality, and is not declining under present phosphorus loading.

Turtle Pond is rated "Moderate/Sensitive." This means that while water quality is average, there is high potential for phosphorus recycling from bottom lake sediments. This pond should be monitored for problems in the future. There are a number of measures that could be taken in the watershed to reduce phosphorus loading. These could include more restrictive standards on road construction to minimize erosion and requiring wooded buffers around subdivisions. In the case of Turtle Pond, the problems may also be due to excessive timber harvesting.

The DEP does not have a rating for Pierce Pond, since it usually does not rate ponds with depths of 3 meters or less. Such ponds generally have higher flushing rates than deeper ponds, so phosphorus is less of a potential problem. The DEP, however, is willing to evaluate any pond that is important to a town. Penobscot officials may want to ask that Pierce Pond be studied.

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**Table H.1  
Characteristics of Major Ponds and Lakes  
Penobscot**

	Direct Drainage Area (acres in Penobscot)	% of total DDA	Water Quality Category	F (lbs\ppb \yr)	Other Towns in Watershed
Alamoosook Lake	1,149	8.8	Mod/Stable	12.50	Bucksport Orland
Pierce Pond*	Not known	100	not known	not known	none
Toddy Pond	2,663	24.2	Mod/Stable	40.50	Blue Hill Orland Surry
Turtle Pond	222	100.0	Mod/ Sensitive	1.58	none
Wight Pond	5,831	100.0	Mod/Stable	45.33	none

**\*NOTE:** Water quality data are not available for Pierce Pond due to DEP rating criteria, see text for details.

Source: Maine DEP, Lakes Division

The "F" factor shown in Table H.1 is the DEP phosphorus coefficient for Penobscot's share of a given watershed. For Turtle Pond, for example, DEP estimates that 1.58 pounds generated from the watershed per year would result in a one part per billion (ppb) increase in phosphorus in the pond. By contrast, the less vulnerable Wight Pond can handle 45.33 pounds per year before a comparable increase in phosphorus is achieved. The phosphorus coefficient is not a measure of water quality, but rather an indicator of the pond's capacity to accept phosphorus based on the acreage of the watershed. This coefficient can be used as a planning guide for setting development standards for a given watershed.

**b. Marine Water Quality**

The DEP classifies all surface water in Maine. These classifications set the standards allowed for discharges of pollutants. The tidewaters of the Bagaduce estuary are classified "SA," the highest classification for salt waters in the state. These waters are suitable for all clean water usages including water contact

## **Section H: Water Resources**

recreation and fishing. The standards mandate that these waters be suitable for the harvesting and propagation of shellfish. Discharges that would affect this classification are prohibited. As will be discussed below, not all of these waters presently meet this classification.

Those waters bordering the Penobscot River estuary are presently classified "SB." This is the second highest classification for salt waters. It is applied to waters that are suitable for recreation, fishing, aquaculture, the propagation and harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation, navigation, and as a habitat for fish and other marine and estuarine life. New discharges that would cause the Department of Marine Resources (DMR) to close shellfish areas are not permitted in Class "SB" waters.

Penobscot has three areas that do not meet these water quality standards. The Department of Marine Resources (DMR) has closed the Northern Bay area, Tills Cove, and the area between Castine and West Penobscot to shellfishing due to bacterial pollution. Water quality problems in the Northern Bay area are aggravated by discharges from the school and nursing home.

### **c. Threats to Surface Water Resources**

There are two types of pollution which threaten surface water: point and non-point pollution. Point pollution is attributable to a specific source such as a pipe discharging into a stream. Non-point pollution comes from a less specific source such as stormwater runoff that carries oil spilled on a road into a stream.

Since Penobscot is a rural-residential town, most of the potential threats to water resources come from failing septic systems. The town has been gradually addressing the overboard discharge of untreated domestic waste into marine waters. There are still, however, four known overboard discharges into marine waters. These include the elementary school, nursing home, and two private residences.

As discussed above, the town's ponds and lakes are also vulnerable to contamination. A long-term threat is poorly planned development in the watershed or extensive timber harvesting. Development any place in a watershed could have an adverse impact on lake water quality. A more immediate threat is the condition of septic systems in camps around the ponds.

## **5. Ground Water Resources**

As mentioned in the Housing chapter, the majority of Penobscot

## Penobscot Comprehensive Plan: Inventory and Analysis

residents depend on individual wells for their water supply. Areas that yield large quantities of water to wells are called aquifers. Penobscot has one small aquifer area in the Great Heath, which extends into Orland. According to the Maine Geological Survey, this aquifer may yield between 10 and 50 gallons per minute (gpm).

Normally, a well yielding about 1 gpm is considered sufficient for domestic use. Higher-yielding aquifers are possible sources for a public water supply. Given the low-density population in Penobscot and the aquifer's remote location, it is unlikely that it would be developed as a public water source in the foreseeable future.

Most wells in Penobscot are drilled in bedrock. The 1990 Census reported that 435 residences had individual drilled wells, while 48 had dug wells. According to the 1979 Penobscot Land Use Data Base: A Summary, wells drilled in bedrock usually yield from 10 to 20 gpm. There are no reports of any water shortages in Penobscot.

### **a. Ground Water Quality**

The DEP has rated Penobscot's ground water as GW-A. This is the highest DEP classification for ground water. DEP standards mandate that these waters be of such quality that they can be used for public water supplies. They shall, per DEP standards, be free of radioactive matter or any matter that affects their taste or odor.

### **b. Threats to Ground Water**

Non-point sources are a potential threat to ground water. Since it takes much longer for ground water to cleanse itself than surface water, it is very important to avoid contaminating ground water. While it is very costly to restore a lake or stream, the cost of cleaning up ground water is usually prohibitive if it can be redeemed at all.

One potential threat to ground water is leaking underground storage tanks (or L.U.S.T.). The DEP maintains records of major tanks and former tank sites in town. Their records do **not** include tanks used to store oil for private dwellings. As of December 30, 1994, DEP listed seventeen such tanks or sites in Penobscot.

Most of the tanks in Penobscot are owned either by convenience stores, construction companies, or the nursing home. While fifteen of these tanks were located in what DEP termed a "sensitive area," nine of these had already been removed. Of those that were still in service, two had been replaced in the past ten years.

The replacement tanks should meet all DEP and U.S. EPA standards and pose little threat to water quality. The DEP is monitoring the

## **Section H: Water Resources**

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other tanks and gradually having them replaced. Therefore, L.U.S.T. does not presently appear to be a major problem in Penobscot.

One major ground water quality problem did result from a leaking tank in the past, however. Due to ground water contamination from this site, a community water system had to be installed for some adjacent homes. This case illustrates the risks of storage tank leaks.

Another possible threat to ground water is the old landfill site. As part of the official closing of the landfill, additional monitoring wells will be installed. These wells should allow a more complete monitoring of potential water quality problems.

### **6. Future Adequacy of Penobscot's Water Resources**

Given the slow rate of growth projected for Penobscot, current water supplies should be adequate for the foreseeable future. The only possible problem would be threats to individual wells from contamination.

### **7. Adequacy of Existing Measures to Protect and Preserve Significant Water Resources**

Penobscot's current land use regulations take some initial steps toward protecting water resources. For example, the zoning ordinance prohibits heavy industry. The town's provisions could be strengthened through additional measures to control non-point run-off from commercial and other higher-density uses. Similarly, the town's subdivision ordinance could be amended to allow for a more thorough management of phosphorus impacts. Specific measures could include stricter standards for erosion and sedimentation, tree clearing, and vegetative buffers. These standards could be adjusted to reflect the vulnerability of a given watershed.

### **8. Regional Issues**

One regional water resource issue in Penobscot is the need for regional cooperation in protecting Penobscot Bay and the Bagaduce River. Penobscot officials may want to work with adjoining towns to develop a regional approach to protecting the Bagaduce. This could be part of the current state effort to protect Penobscot Bay.

Another regional issue is the aquifer shared with Orland. The Comprehensive Planning Committee may want to contact their Orland counterparts to discuss any plans that Orland may have for protecting this resource.

## **I. NATURAL RESOURCES**

### **1. Introduction**

A comprehensive plan should provide an overview of a town's natural resources. These resources are important to the town in two ways. First, they provide critical wildlife and fisheries habitats. Second, inappropriate development in environmentally fragile areas could be costly to the entire town. For example, disruption of natural drainage patterns could increase the chances of flooding.

Specifically, this chapter will:

- a. describe Penobscot's critical natural and scenic resources;
- b. predict whether these resources will be threatened by the impacts of future growth and development; and
- c. assess the effectiveness of existing efforts to protect and preserve these resources.

### **2. Key Findings and Issues**

Penobscot's natural resources include one bald eagle nesting site, which is protected by state law. The entire tidal basin of the Bagaduce River in Penobscot is a Class A wildlife area, which means that it has state and national significance due to its many wildlife habitats. More than 25 species of marine wildlife depend on this area.

While there has never been a thorough inventory of Penobscot's natural areas, the town's woods and coastal areas do support a wide variety of plants and wildlife. The public opinion survey revealed that many residents valued the town's natural resources as an important part of its rural character. This fact must be kept in mind as the town plans for future growth and development.

### **3. Public Opinion Survey Results**

The public opinion survey showed strong support for the protection of Penobscot's natural resources. About 82 percent of the respondents favored a land use policy that promoted natural resources, and another 15 percent favored "allowing" natural resources. About 51 percent of the respondents said the main reason that they lived in Penobscot was the town's rural character. Natural resources are clearly an important part of that character.

## Section I: Natural Resources

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Many general survey comments about what people liked about living in Penobscot reflected the importance of natural resources. Many mentioned that they enjoyed the wildlife, natural environment, and scenic qualities. While wildlife diversity was generally supported, black flies received considerably less support than most other creatures.

### **4. A Summary of Critical Natural Resources**

As a relatively undeveloped coastal community, Penobscot has an unusual variety of natural resources. These resources are described below, as is their importance for community planning purposes.

#### **A. Wetlands**

Wetlands are one of the most critical natural resources. They often serve as aquifer recharge areas, allowing underground water supplies to be recharged. They are also critical wildlife and bird habitats. Wetlands are also an important part of nature's drainage system since they hold storm water. Areas that have experienced extensive filling of wetlands often face increased flooding problems. Wetlands are also important as breeding areas for waterfowl and habitat for other wildlife.

Large wetlands are found along Clements Brook, Winslow Stream, McCaslin Stream, and in several other locations in town. The largest wetland in town is the Great Heath, located to the north of Pierce Pond (see Map 3).

#### **B. Wildlife Habitats**

According to Maine Department of Inland Fisheries and Wildlife (MDIFW) records, the only known bald eagle nesting site in Penobscot is on Youngs Island (see Map 3). The MDIFW rates this site as "essential habitat," a term used to define areas that provide physical or biological features essential to the conservation of an endangered or threatened species in Maine. Residents also report that there is an abandoned nest on Wood Island.

State regulations require that any project that is wholly or partly within an essential habitat and is permitted, licensed, funded, or carried out by a state agency or municipal government be approved by the MDIFW. Examples of projects requiring MDIFW review and approval include: subdivision of land, construction or alteration of buildings, mineral extraction, forest management, and installation of docks and aquaculture facilities.

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State records also list several significant wildlife habitats, which are protected by the Natural Resource Protection Act (NRPA, 38 MRSA 480-A-S). Significant wildlife habitats in Penobscot include two deer wintering yards, one near the Leach and Bridges cemeteries and the other near Hutchins Cove (see Map 3). Both yards have an "indeterminate" rating from the MDIFW. Since only "high" and "moderate" value deer wintering areas are subject to state protection, any protection of these deer yards would depend on town action.

Penobscot also has several waterfowl and wading bird habitats and shorebird nesting, feeding, and staging areas (see Table I.1). The NRPA requires that permits be granted for construction, dredging, and related activities in these areas that have "high" and "moderate" ratings. The MDIFW urges towns to contact their regional wildlife biologist for assistance if a development application is proposed in or near these sites.

<b>Table I.1 Waterfowl and Wading Bird Habitat, Including Nesting &amp; Feeding Areas</b>		
Location	MDIFW ID#	Rating
Montgomery Mtn. Marsh	050220	Moderate
McCaslin Stream	050219	High
Winslow Stream	050218	High
Pierce Pond	050216	Moderate
Clements Brook Marsh	050215	Moderate
<b>Shorebird Nesting, Feeding &amp; Staging Areas</b>		
Location	MDIFW ID#	Rating
Hutchins Cove	470	not rated
South Winslow Cove	472	not rated
Northern Bay	471	not rated
Tills Cove	469	not rated
<b>Source:</b> MDIFW: Conservation of Inland Fisheries and Wildlife Habitat		



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MDIFW records also show three Class "A" Coastal Wildlife Concentration Areas (CWCA). Class "A" habitats are those that, while not directly regulated by the state, are important because of the "very high" abundance and diversity of wildlife they support and their state or national importance to rare species. The three areas in Penobscot are the Bagaduce River, Northern Bay, and the area between Youngs Island and Tills Cove.

The two Class "B" CWCA areas are in West Penobscot and southeast of Verona Island. These areas are considered of regional significance for the Maine coast. They are of importance because of their "high" species abundance and diversity. They may serve as habitat for species of special concern, indeterminate status, or those on the state watch list.

MDIFW records list three seal haul-out areas in Penobscot, the Bagaduce River, Northern Bay, and Herrick Bay. Such sites are necessary for survival of both adults and young. Whelping or "pupping" sites are normally used year to year by the same breeding females. Direct access to high-quality feeding areas and lack of human disturbance are important characteristics of seal haul-outs.

Other wildlife in town include beavers, otters, and muskrats. The upland habitat supports big game including white-tailed deer, black bear, and moose. Other species include ruffed grouse, pheasant, hare, coyotes, bobcats, foxes, raccoons, and squirrel. There are also many osprey, cormorants, and other sea birds.

### C. Fishery Resources

The Penobscot River is a major fish run for species such as salmon, alewives, smelts, striped bass, and eels. Lobsters and scallops are found in the open waters of the Bagaduce, while clams and marine worms reside on the tidal flats. As discussed in the Marine and Water Resources chapters, major clamming areas have been closed in recent years due to poor water quality.

Both warm- and cold-water species are found in Penobscot's lakes and ponds. Residents report that there are pickerel and white perch in Pierce and Wight Ponds. Brook trout are found in many streams, especially in McCaslin Stream.

### D. Rare Plants and Natural Areas

Under the Natural Areas Program, the state maintains records of rare plants and other natural features of special concern. Their files show that no such features have been documented in Penobscot. Since there is no record of a systematic inventory having been conducted of the town's natural features, it is

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possible that there are some environmentally valuable areas that have not been identified. Such an inventory could be conducted by interested citizens under the guidance of the Natural Areas Program.

There are anecdotal reports of many interesting plants. Sea lavender is found in Northern and Southern Bays. There are also pitcher plants in the Peat Bog area. A more thorough inventory could reveal many other plants.

**5. Scenic Resources**

Penobscot has many scenic views. The combination of upland farming areas overlooking the open water, many bays, and hills assures a rich variety of views. Such views are an integral part of the town's rural character. Table I.2 lists some of the key views in town.

<b>Number</b>	<b>Description</b>
1	Northern Bay, all along the Head of the Bay in Penobscot, looking southwest
2	looking south to Southern Bay from Rte. 199/175, en route to/from Castine
3	looking south to Littlefield Cove from Rte 175
4	looking south to Grindle's Eddy at Castine town line
5	looking east and south from Back Ridge Road and Dogtown Road, at MDI and Blue Hill
6	looking southwest from Rte. 15 by junction with Rte 199 (to Camden Hills and Cape Rosier)
7	looking northeast to Great Pond Mountain, east to Blue Hill, and west to Camden Hills from blueberry land north of Pierce Pond and from south shoulder of Wallamatogus Mountain
8	looking southeast to MDI and southeast across Penobscot Bay from Wallamatogus

**Section I: Natural Resources**

<b>Number</b>	<b>Description</b>
9	looking across Northern Bay to Wallamatogus from Firehouse Road and Freethy Point
10	looking north from The Bluffs across north end of Wight Pond to North Penobscot
11	looking northeast across Pierce Pond from boat landing
12	looking south across Wight Heath on Rte. 177 at Blue Hill town line
13	views from Wight Pond, and from its shore
14	Route 175 between So. Penobscot and Sedgwick town line, west across Bagaduce toward Camden Hills, east toward Blue Hill
15	views from Johnson Point - in all directions
16	view from Bagaduce Lunch north
17	view from Northern Bay and islands north to Penobscot village, Togus, and Great Pond Mountain
18	views of McCaslin Stream from the Stone Bridge
19	views from Route 15 looking southwest to Camden Hills
20	views of Blue Hill from Route 199 of Blue Hill
21	views from West Penobscot west across Penobscot Bay to Fort Point and Camden Hills
<b>SOURCE:</b> Penobscot Comprehensive Plan Committee	

**6. Assessment of Threats to Penobscot's Natural and Scenic Resources**

While there are no immediate threats to Penobscot's natural and scenic resources, there is the risk of longer-term damage through future development. This is particularly the case in those areas not protected by shoreland zoning or by state essential habitat designation. For example, a subdivision could alter a deer wintering area. A scenic view could be destroyed by poorly planned development.

**7. Assessment of Existing Efforts to Protect and Preserve Penobscot's Natural and Scenic Resources**

Penobscot's shoreland zoning ordinance meets the state minimum requirements. This means that some protection is offered to resources along the shore. Zoning restrictions in the rest of town offer only incidental protection to natural resources. While these restrictions assure that no major industrial or high-density residential development will be built, there are no specific measures to protect scenic views or areas of high natural resource value.

Other efforts to protect natural resources are underway through private initiative. As mentioned in the Marine Resources Chapters, two islands are protected by conservation easements through the Castine Conservation Trust. There are also efforts underway to protect prime farming areas.

The town may want to consider other protection measures as it revises its land use ordinances. These could include incorporating a natural resource protection overlay district into the zoning ordinance to protect specified resources. This district could set more stringent zoning standards, such as a larger minimum lot size and/or greater setbacks than are normally required in the underlying district if a given resource was present. Similar protection would be possible through creative lot layout schemes in a subdivision.

Some towns have incorporated detailed scenic preservation standards into their subdivision ordinances. These standards help preserve existing views by encouraging creative lot layout schemes. Often, it is possible to make minor changes in the location of lots in a subdivision to minimize the disruption of views from a neighboring property.

**8. Regional Issues**

Many of Penobscot's natural resources cross town boundaries. Penobscot should explore joint protection of the Bagaduce watershed with adjoining towns. This could be done with other regional and state efforts that may be underway in the Penobscot Bay.

The town also may want to solicit comments from adjoining towns if there were a major subdivision or other land development activity adjacent to the town line that could affect a rare natural resource. Similarly, the planning board could ask for an opportunity to comment on major development proposals in adjoining towns. This would give both towns an opportunity for a more thorough assessment of potentially adverse environmental impacts on natural resources.

## J. AGRICULTURAL and FOREST RESOURCES

### 1. Purpose

This section presents an overview of Penobscot's Agricultural and Forest Resources. Specifically, this section will:

- a. describe the extent of Penobscot's farms and forest lands;
- b. predict whether the viability of these resources will be threatened by the impacts of growth and development; and
- c. assess the effectiveness of existing measures to protect and preserve important farm and forest resources.

### 2. Key Findings and Issues

About 90 percent of Penobscot is forested. There has been substantial timber harvesting in the more isolated parts of town. Penobscot also has an area of rich farmland, especially along Route 15. Some local observers maintain that this is some of the best farmland in Hancock County. This area may be vulnerable to development since its soils are generally suited for house lots and there are many scenic views. Some farmers are taking measures on their own to protect their land, such as placing conservation easements on certain parcels.

### 3. Public Opinion Survey Results

About 54 percent of the respondents felt that town land use policy should "promote" agricultural land use. Another 42 percent felt that such land uses should be "allowed." Many residents also listed the town's woodlands as one of the features they like about living in Penobscot. Another respondent mentioned the town's "rural and agricultural" beauty. However, one respondent listed "the bull" as a feature he/she disliked about Penobscot, an apparent reference to livestock on an adjacent property.

### 4. Agricultural Resources

The area along Route 15 and the Back Ridge Road has good agricultural soils. In fact, some local observers maintain that Penobscot has some of the best agricultural land in Hancock County. When compared to other parts of Maine, however, Hancock County is an area of relatively poor agricultural soils. According to the 1979 Penobscot Land Use Data Base, there were 1,680 acres in agricultural production. About 78 percent of this acreage was in

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blueberries. Most of the good farmland is located along the ridge adjacent to Route 15.

The United States Natural Resources Conservation Service (NRCS, formerly the Soil Conservation Service) has an estimate of prime agricultural soils. This estimate is based on the suitability of the soils for farmland, rather than their actual use. Some of these parcels may not be farmed. Similarly, some farms in Penobscot may not be on prime agricultural soils.

The NRCS records show that there are 3,747 acres of prime agricultural soils in Penobscot. This represents about 14 percent of Penobscot's approximately 26,500 acres of land areas. As seen in Table J.1, some of these soils are considered prime only if they are drained and others only if they are irrigated.

<b>Table J.1 Prime Agricultural Soils in Penobscot</b>		
Category	Acreage	Percent of Total
Prime Farmland	1,518	40%
Drained Areas Prime	2,121	57%
Irrigated Areas Prime	108	3%
Total	3,747	100%
<b>Source:</b> USDA Natural Resources Conservation Service, April 1995		

Another way that current agricultural land can be estimated is through the acreage of land held under the Farm and Open Space Act. This act allows owners of farmland property tax breaks for parcels over five contiguous acres provided that certain conditions are met such as a minimum farm-derived income. Normally, qualifying farmers with a long-term commitment to farming would participate in this program.

A review of state records indicates that no land in Penobscot has been held under this classification since 1990 (see Table J.2). However, since at least one local farmer has reported holding land through this program, state records may be wrong. Given the rapid

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increase in property taxes in Penobscot over the past ten years, this program would offer a real tax advantage to local farmers.

**Table J.2**  
**Farm and Open Space Parcels in Penobscot, 1989-1994**

	Farmland		Open Space Land	
	Number of Parcels *	Acres	Number of Parcels	Acres
1989	2	237	2	247
1990	2	237	2	237
1991	0	0	3	275
1992	0	0	3	275
1993	0	0	3	275
1994	0	0	3	276

**\*NOTE:** See text regarding likely error in these data.  
**Source:** Municipal Valuation Return Statistical Summary, Maine Bureau of Taxation Property Tax Division, Part IV

**5. Forest Resources**

Forest is the primary land use cover in Penobscot. The 1979 Land Use Data Base indicated that 89 percent of the land in town was forested. Given the slow rate of development in most of the town since 1979, it is unlikely that there has been any significant decrease since that time. It is more likely that some abandoned fields have reverted to forest, thereby increasing the proportion of forested land.

The forests are a mix of temperate deciduous and northern coniferous trees. Broad-leafed deciduous trees - maple, oak, elm, and beech - are found together with northern coniferous trees, spruce, fir, pine, and larch. Abandoned fields, forest fires, and timber harvesting have combined with the process of succession to produce diverse forests of mixed age.

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One source of information on Penobscot's forest resources is data on land held under the Tree Growth Taxation Act. This classification is similar to the Farm and Open Space Act in that owners of forested parcels meeting certain conditions may have their property assessed as forest land rather than for its potential developed value. These conditions became more restrictive in 1989 and were further amended in 1993.

Under the most recent amendments, the definition of forest land no longer includes parcels of less than 100 acres managed solely for personal use. If such properties are to remain in tree growth, the owner must manage the parcel according to a commercial forest management and harvest plan. These changes may reduce the acreage held under tree growth in Penobscot in future years.

Tree growth acreage trends from 1989 to 1994 in Penobscot are shown in Table J.3. The number of parcels held under tree growth increased from nine to twelve during this time period. Total acreage increased from 2,753 to 3,439.

As of 1994, about half of this land (1,807 acres) consisted of softwood. Approximately two-fifths (1,345 acres) was mixed wood, and the remaining 287 acres was hardwood. Unfortunately, there are no data available on the breakdown of timber types for land not held in tree growth.

Year	Number of Parcels	Softwood Acres	Mixedwood Acres	Hardwood Acres	Total	Parcels Withdrawn
1989	9	1,492	1,118	143	2,753	0
1990	9	1,492	1,118	145	2,755	0
1991	12	1,807	1,345	287	3,439	0
1992	12	1,807	1,345	287	3,439	0
1993	12	1,807	1,345	287	3,439	0
1994	12	1,807	1,345	287	3,439	0

**Source:** Municipal Valuation Return Statistical Summary, Maine Bureau of Taxation Property Tax Division, Part III



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### **6. An Analysis of Threats to Farm and Forest Land from Projected Development**

While Penobscot faces a slow projected rate of development, the town's farmlands may be particularly vulnerable. The relatively flat, well-drained areas along the Route 15 corridor are physically well suited for house lots. Furthermore, much of this area offers spectacular views, a prime consideration for residential development in rural Maine.

While the farmland in this area has good soils, farming in Hancock County has limited income potential when compared to a parcel's value as developed land. Therefore, many farmers may be enticed to sell their land for development. It appears likely that several parcels may be placed on the market over the next few years due to the retirement of certain farmers and other changes in personal circumstances. Therefore, Penobscot could lose at least a portion of its farmland to development.

Given the large amount of forest land in Penobscot, it is unlikely that development would pose a serious threat to forest resources. Rather, small areas may be cleared for house lots. It is unlikely that the remote, forested areas that are not served by year-round roads would receive any significant development.

The primary threat facing Penobscot's forest land may be excessive harvesting. While there are no data on the amount of harvesting in town, anecdotal evidence indicates that there are some large parcels where extensive clear cutting has taken place. Some of these parcels may be held under tree growth taxation, but are not managed according to a harvesting plan. Stricter enforcement of timber harvesting procedures may be needed to assure that violations are not occurring.

### **7. Adequacy of Existing Measures to Protect Farm and Forest Land**

Town land use regulations and ordinances presently offer little protection to farm and forest land in Penobscot. The 60,000-square-foot minimum lot size requirement covers all rural portions of town. Overall, regulations make it as easy to develop farm and forest land as any other type of land.

Individual initiative, however, has helped to protect some of Penobscot's farmland. At least one farmer has placed a parcel in a conservation easement. Other farmers may be interested in participating in such a program, particularly if they could be paid for the easement.

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Some towns have revised their land use ordinances to increase protection of agricultural and forest resources. As Penobscot formulates its forest and agricultural policies, it may want to review what other towns have done. Some towns have enacted farm and forestry districts, in which relatively large lot sizes are set (as much as ten acres) and the use of cluster development is encouraged. The clusters can allow houses to be built on those portions of the parcel that are not farmed.

Other communities have worked closely with local land conservation groups in identifying farm parcels from which voluntary easements could be acquired from interested farmers. While a parcel under conservation easement will have a lower tax value, such parcels are usually a long-term tax advantage to a town. First, the value of properties adjoining a conservation parcel normally increases. Second, the tax revenue produced from the parcel if it were developed would probably be less than the cost of the providing services such as schools to new homes built.

## **K. HISTORICAL AND ARCHAEOLOGICAL RESOURCES**

### **1. Purpose**

A comprehensive plan should identify critical historical and archaeological resources. These resources are important not only for their role in Penobscot's history, but also for their present-day value. Historic buildings and sites add to the town's quality of life, and their presence helps maintain property values.

Specifically, this section will:

- a. present a brief history of the town;
- b. describe Penobscot's historical and archaeological resources;
- c. assess threats to these resources; and
- d. assess the effectiveness of existing measures to protect and preserve these resources.

### **2. Key Findings and Issues**

While Penobscot has a rich history, none of its historic buildings or sites have been placed on the National Register of Historic Places. One key site in town is the former brickyard. There is very little information on other historic resources in the town. This makes it difficult to assess threats to Penobscot's historic resources.

### **3. Public Opinion Survey Results**

There were no specific questions on historic and archaeological resources in the public opinion survey. Two respondents identified the historical society as among the things they liked best about living in Penobscot.

### **4. Historical Background (Adapted from the 1979 Comprehensive Plan)**

The earliest archaeological remains found in this area are attributed to the prehistoric Red Paint People, more recently known as the Moorehead People. They are presumed to have migrated down from the Saint Lawrence River Valley, and inhabited the area for 1,300 years between 5,000 and 3,700 years ago. The name, "Red Paint," is derived from the heavy concentrations of red ochre (iron oxide) found in the burial sites, several hundred of which have been excavated, most notably by Dr. Warren K. Moorehead in the early 1900s. From the lack of farming implements and pottery, they are considered to have been a non-agricultural people.

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A second influx occurred 3,700 years ago, this time from southern New England. The Algonquins, as this group was named, were of the Susquehanna tradition. They used different tools and exploited different species than the Mooreheads. From the Algonquin family arose the numerous tribes that inhabited the Maine coast at the time of European discovery.

These tribes, including the Pennacooks, the Sacos, the Androscoggins, the Kennebecs, and the Penobscots are responsible for most of the shell heaps and village sites found along the Maine coast. They wintered on the coast eating shellfish, and then moved inland during the summer, up navigable waterways, to take advantage of fish runs.

The coming of the Europeans drastically changed the old Indian patterns. To accommodate the European fur trade and summer navigation, the Indians appear to have reversed the summer inland/winter coast pattern, instead wintering inland to obtain furs and summering on the coast to trade with the Europeans.

The coming of the white man determined the present character of the area. Sebastian Cabot sailed along the Maine coast in 1498. He was followed by many other early explorers. Samuel de Champlain mapped the Penobscot Bay in 1604. He was in the expedition of Pierre du Guast, to whom King Henry IV of France granted the land known as Acadia, giving du Guast the title, Sieur de Monts. Captain Weymouth followed in 1605, exploring the land and establishing a claim for England. Thus began the conflict between the French and the English that was to preclude major settlement in the area until Wolfe captured Quebec in 1759. In 1763, with the signing of the Treaty of Paris, the land was ceded to England and annexed to the Massachusetts Bay Province.

While the early French settlers in this area may have been trappers and Indian fur traders, the first Englishmen were involved in fishing on the Banks. As this was initially carried out from England, temporary summer fishing stations were established on offshore islands and on several points. The first English trading post was built in 1623 at Pentagoet, now Castine.

Because of its strategic location, Castine was to be garrisoned at various times by the English, the French, and even the Dutch for a brief period. However, Fort Pownal, built by colonial Americans in 1759, was more important than Castine in bringing settlers into the area. In 1761, eight or ten families from Fort Pownal crossed the Bay and settled in Penobscot.

Another major factor in the settlement of the area was the land grant by the Massachusetts General Court in 1762 to David

## Section K: Historical and Archaeological Resources

Marsh and 353 others, for six townships, each six miles square, lying between the Union River to the east and Penobscot Bay to the west. The six townships were: (1) Bucksport, (2) Orland, (3) Penobscot, (4) Sedgwick, (5) Blue Hill, and (6) Surry. In 1785, Plantation #3 was surveyed by John Peters. Also in that year, the General Court resolved to give 100-acre lots to several settlers on the Plantation.

The town of Penobscot was incorporated on February 23, 1787. It was the first town to be incorporated on the eastern banks of Penobscot Bay. The town originally included the entire Castine peninsula, as Castine was not incorporated until 1796, nine years after the incorporation of Penobscot. In 1817 Brooksville was incorporated, taking one-fifth of the taxable land from both Castine and Penobscot. Also in that year, the area of North Castine was taken from Penobscot.

The Embargo Act of 1807, the Non-Intercourse Act of 1809 which replaced it, and the War of 1812 with England severely affected shipping and trade along the Maine coast, creating many hardships for the people on Penobscot Bay. Several families left the area for Camden and the Kennebec river area, but many later returned. With the withdrawal of the British from Castine in 1815, the economy and population both grew.

Many of the early settlers came to the area to find farmland, as the available land in Massachusetts was quickly diminishing. Although most of the land was not suitable for farming, by clearing trees and rocks, families could produce enough to supply their own needs, with occasional surpluses providing a limited income. It appears that before the blight of 1845, potatoes were a cash crop and were shipped to Boston. Just the same, farming in Penobscot rarely rose above the subsistence level.

Farming was not a year-round operation. Except for plowing and planting in the spring and harvesting in the fall, the men were free for other activities, most notably fishing and coasting in the summer, and woodcutting and boatbuilding in the winter. Shipbuilding was a major concern in the 19th century. The ships were used for coasting, trading with Rockland, Bangor, Portland, and Boston. They were also used in world trade, traveling to the West Indies, Europe, and Japan. The ships carried lumber, fish, and later granite and bricks, and returned with sugar, molasses, and rum from the West Indies, salt from Portugal, and manufactured goods from Boston. Not only did the men build the ships, but they also served as officers and in the crews.

Fishing was also a major occupation for which a number of vessels were built. Cod was the primary fishery in the first half

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of the 19th century. It peaked around 1830, and then came to a halt with the repeal of the government bounty in 1866. Mackerel was increasing in importance throughout the 19th century, and replaced cod as the major fishery with the repeal of the government bounty and the advent of purse seining. In the late 1880s, when the mackerel fishery began to decline, lobstering became an important source of income.

Another important, but short-lived, fishery was that of menhaden or porgies. Porgies were caught and pressed for oil from 1860 to 1879, when the fish failed to return to Maine waters. Later, herring were caught in weirs and then packed at the numerous canneries that once existed along the coast. Clearly the fishing industry has been quite varied in response to changes in the demand for and supply of different fish.

Lumber was used for shipbuilding and sold in trade. The straightest and tallest pines were used for masts, while other trees were either taken to local sawmills to be cut for lumber or used for fuel. Wood was burned in local brick kilns and later in the Thomaston lime kilns. By the late 1800s, all but the most inaccessible trees in the forest had been cut, leaving only second-growth trees for future harvesting.

Bricks were produced in Penobscot starting in the late 1800s. Paving blocks were taken from John Settlefield's property and shipped to New York in 1893. Due to a loss of markets for granite paving and building blocks, and competition from inland sources, the granite industry on the coast declined in the early 1900s. In 1876, copper was discovered near Dan Webster Hill, the site of the old Hercules Mine. Rock that was mined brought \$68 a ton.

Another major employer in the late 1800s was Abbey Condon's Knitting Factory. Abbey Condon began in 1864 with hand knitters, purchased machines in 1882, and produced about 15,000 pairs of mittens a year, the majority of which she shipped to Boston.

It can probably be said that the Penobscot Bay area was at its heyday between 1840 and 1860. Economic activity was based on the exploitation of natural resources that were accessible to ocean-going vessels. The rugged coast, with its many small harbors, presented an ideal opportunity for water-based transportation, while the vast interior could only be traversed with difficulty. Products from the forests, the rich fishing grounds, and the granite quarries were traded around the world. By the 1860s, however, economic opportunities in the area were beginning to decline due to new developments in transportation, i.e., railroads which were opening up the interior, and the transition from wooden sailing vessels to more dependable iron-hulled steamboats. The

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development of the steamboat curtailed boatbuilding in the area, as neither coal nor iron needed for their production were readily available. The population statistics reflect this; a general out-migration began to occur after 1860, when the population peaked at 1,263 people.

In the early 1900s, railroads began cutting into the freight and passenger business of the Boston & Maine, and other steamship lines. The Maine Central Railroad began service to Bucksport in 1883 and Ellsworth in 1844. With the increasing reliance on the railroads, local areas began to change their orientation from Rockland-Boston to Ellsworth-Bucksport-Bangor. This reorientation became complete when the steamer service was discontinued in the late 1930's.

Immediately after World War II automobiles and trucks began to cut into the business of the railroads, particularly the passenger business, so that by the 1940s there was no passenger service in the area. More recently, air service from the Hancock County-Bar Harbor Airport in Trenton and the Bangor International Airport have affected the transportation network.

Steamboats curtailed boatbuilding, but made the area more accessible to summer vacationers, sometimes known as rusticators. Although the first rusticators came as early as 1880, they did not appreciably affect the out-migration that was in process. Just the same, first boarding houses, then hotels and summer cottages were built to serve these people. The summer crowd supplied a seasonal, but important source of employment for many people living in towns on the Blue Hill peninsula at a time when the economic base of the area was eroding. The stock market crash of 1929 and the subsequent depression wiped out many of the wealthy rusticators and "cottagers." Not until after World War II was the tourist industry revived.

### **5. Archaeological and Historical Resources**

This section will first describe those sites recognized by the Maine Historic Preservation Commission (MHPC) and then discuss other known sites. Since the exact locations of some sites must be kept confidential, some of the descriptions are very general.

#### **a. MHPC recognized sites**

MHPC records list four prehistoric (those that predate European settlement) archaeological sites in Penobscot. These are all Indian shell middens in the shoreland zone. According to the MHPC, the sites need a more detailed survey. The Commission also recommends that a professional reconnaissance survey be completed

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of the entire shoreland zone as well as the shoreline of Toddy Pond.

The MHPC also lists two historic archaeological sites, the Castine coin hoard, which dates from around 1700, and the brickyard from the late 19th or early 20th century. Here again, further study is needed. According to the MHPC, no professional survey for historic archaeological sites has been conducted to date in Penobscot. Future fieldwork could focus on sites relating to the earliest European settlement of town, beginning in the late 1600s, the time of French settlement, and around 1765, the time of English settlement.

According to MHPC records there are no recognized historic buildings or structures in Penobscot. This does not mean that there are no buildings of historic interest in town. Rather, none of these buildings have been registered with the Maine Historic Preservation Commission or placed on the National Register of Historic Places. The MHPC recommends that a comprehensive survey of the town's buildings be conducted to identify those properties that may eligible for nomination to the National Register.

### **b. Locally recognized sites**

(help from the committee or the historical society is needed here)

## **6. Threats to Penobscot's Historical Resources**

While there are no immediate threats to Penobscot's historical resources, there are several long-term potential threats. The cost of maintaining historic sites is high. Another potential threat is from new development. For example, a new subdivision could unintentionally destroy an unmapped archaeological site. Also, a building could be renovated without respect to its historic character.

## **7. Assessment of Current Protection Measures**

Penobscot presently offers very limited protection to its historical resources. As mentioned above, none are listed on the National Register of Historic Places. National Register listing offers properties limited protection when federal monies are involved. Consideration must be given to alternatives before federal funds can be used in a project that might alter a property on the Register.

There are also certain tax advantages to renovating historical properties. Listing **does not** restrict the decisions of private property owners to do what they wish with their property. Rather,



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if a property is altered by an owner in a way that destroys its historic character, that property is subject to removal from the Register.

There are a number of steps that Penobscot could take to increase protection of its historical resources. The town subdivision ordinance could be amended to require that an in-depth archaeological survey be performed if it is suspected that the site may be of historical value. It may be possible to negotiate with the developer to change the layout of the site to protect the area of archaeological interest.

In the shoreland zone, it may be possible to rezone areas with historical value as Resource Protection. Some sites could be protected through the acquisition of conservation easements. In certain cases, however, the location of sites is best kept confidential to protect them from vandalism.

## **L. LAND USE**

### **1. Purpose**

This section discusses current and likely future land use patterns in Penobscot. An understanding of land use trends is very important in determining Penobscot's ability to absorb future growth. Specifically, this section:

- a. summarizes major categories of land use (residential, commercial, and the like) in terms of estimated acreage and location;
- b. discusses major changes in Penobscot's land use patterns and how these might affect future land use; and
- c. identifies land areas suitable and unsuitable for the growth likely over the next ten years.

### **2. Key Findings and Issues**

Penobscot remains a very rural town. Most development that has occurred has been low-density residential. While a slow rate of growth is projected for the next ten years, the town faces several land-use-related challenges. One is the potential loss of an area of very productive farmland that is physically suited for house lots. Another is continued development immediately along state highways, aggravating safety problems as more driveways are built. A third is potential development around the bay, which still has many undeveloped lots.

### **3. Public Opinion Survey Results**

Many respondents to the public opinion survey said Penobscot's rural character was the feature they liked most about living in the town. There were also many comments about the quiet, peaceful atmosphere, the relatively undeveloped coastline, and vast areas of woods. While some respondents expressed the need for regulations to retain the rural character, others said they were concerned about excessive regulations.

About 54 percent of the respondents said that they favored promoting agricultural uses, while 42 percent said that such uses should be allowed. About 82 percent wanted to promote natural resources, while 15 percent said that natural resource-related uses should be allowed. Thirty-eight percent favored regulations discouraging the removal of topsoil for off-site uses, while 40 percent favored forbidding such removal.

### **4. Major Categories of Land Use**

Penobscot is a predominantly rural town (see Map 4). Of the

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approximately 26,500 acres of total land area, only 900 acres (about 3 percent) are in residential uses. This figure is based on an estimated 600 year-round and seasonal dwellings in 1995 multiplied by an average lot size of 1.5 acres. While many homes in town are built on larger lots, the average is used since there could be further subdivisions of the larger lots.

As seen in Table L.1, the other developed-land-use categories account for even less acreage. Commercial uses account for approximately 25 acres. This is based on a rough count of commercial uses during a land use survey by the comprehensive planning committee. This estimate does **not** include home-based businesses.

Category	Estimated Acreage	Percent of Total Land Area
Residential	900	3.4%
Commercial	25	<1%
Public	0	0.00%
Semi-Public	0	0.00%
Industrial	0	0.00%
Total Developed Land	925	3.4%
Conservation Land	3	0.01%
Undeveloped Land <sup>(1)</sup>	25,521	96.5%
Total Land Area	26,449	100%

<sup>(1)</sup> **NOTE:** Includes 854 acres of ponds and lakes  
**SOURCE:** Analysis by the Comprehensive Planning Committee and the HCPC.

Public uses are based on the actual acreage of public land from the tax assessor's records. Semi-public refers to other tax-exempt uses such as churches and non-profit organizations. These figures are also taken from the tax records.

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Conservation land refers to land protected from development either through easements or outright ownership by groups such as the Castine Conservation Trust. Such land is presently very limited in Penobscot. All other land in town is considered undeveloped, including land held in tree growth, farm, and open space taxation since this land is not permanently restricted from development.

### **5. Land Use Patterns**

This section discusses land use patterns in the various parts of town. Specific problems or needs facing each part of town are identified. It is important that the comprehensive plan reflect the specific conditions and needs in different parts of town.

#### **a. Route 15 Corridor**

This area of town offers good views, many cleared fields, and, according to the Natural Resources Conservation Service, has large areas of soils with a high potential for development. This soil rating is based on a composite of factors such as the suitability of land for septic systems, road construction, and basements.

Route 15 offers good road access to Blue Hill, Ellsworth, and Bucksport. This access will probably improve due to planned state improvements to this road. This means that this area may become a very attractive area for new residential development. Areas of open fields could be made into attractive house lots that are set back from Route 15 but within easy reach of that road.

As mentioned in the Agricultural and Forest Resources chapter, some of the farmers in this part of town may be selling their land. This increases the likelihood of more development in the future. Other farmers, however, are considering placing at least portions of their property under conservation easements. Such measures would help slow the development of this area.

#### **b. Lakes and Ponds**

There is a large concentration of seasonal homes on Toddy Pond. Most of these units are on substandard-sized lots and are at the southern half of the Penobscot side of the pond. While most of the soils along this shore are rated as having a high or medium potential for residential development, there is little vacant land left on the southern end of the pond.

There are, however, vacant lots on the northern portion. There is also one major subdivision adjacent to the pond that is largely undeveloped. Thus, this portion of Toddy Pond has more growth potential. Since no roads to the pond are maintained year-

## **Section L: Existing Land Use**

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round, most development immediately along the pond is likely to be seasonal.

There is considerable vacant land around Pierce Pond. Since the soils are generally poor, this area has limited development potential. Little change is expected in this area.

### **c. Wight Pond**

Wight Pond is treated separately from the other ponds in Penobscot due to its highly unspoiled character. It is valuable for its unspoiled scenic views, its wildlife habitat, and as a low-intensity recreational area. Such areas are an important part of Penobscot's rural atmosphere.

While this pond lacks easy road access, it does have areas of good soils. This means that if a developer were willing to invest in roads, this area could have considerable development potential. It may prove challenging to protect this area from development.

### **d. The Villages**

Penobscot and South Penobscot villages are both on areas of poor soils. Furthermore, most of the lots in these villages are substandard-sized. These factors would make it difficult to attract much new residential development. Therefore, relatively little growth is expected in these two villages.

West Penobscot, the area at the intersection of Routes 175 and 166, is in an area of relatively good soils and road access. There is already considerable development along both sides of Route 175, particularly on the riverfront side. Thus, most future development in this part of town would have to occur off the main road.

### **e. The Coastline**

While the soils along the shore vary, there are some vacant lots with good soils that are either on the shore or nearby. This is particularly the case on the west side of the bay. There are other large, undeveloped lots with good soils elsewhere around the bay.

This means that there could be considerable subdivision activity along the coastline. Water-view properties or those within walking distance to the shore are also likely to be in demand. The high cost of such property means that this area is more likely to attract more expensive homes and "upscale" subdivisions than many parts of town.

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### **f. Major Roads**

There has been considerable house building along Penobscot's major roads, particularly the state highways. As mentioned in the Transportation and Roads chapter, high-speed travel along these narrow and sometimes winding roads has increased the risk of accidents. These problems would worsen if the recent pattern of homes being built with single driveways connecting directly to a heavily traveled road continues. The more turns made from and to such roads, the greater the risk of accidents.

There has, however, been less development immediately off these major roads. The town subdivision ordinance could be written to encourage developers to provide lots with a common access road rather than single driveways on the main road. Since such developments normally offer greater setbacks from a main road, they tend to be preferred by potential buyers.

### **g. Areas With High Forest-Harvesting Potential**

As mentioned in the Agricultural and Forest Resources chapter, over 90 percent of Penobscot is forested. While no specific figures are available, there is considerable forest harvesting taking place in town. Much of this harvesting consists of clear-cutting on larger, undeveloped lots.

Those forested areas that are accessible by road could see some limited residential development. It would be very expensive to extend town services such as snow plowing and school bus routes into these areas. The cost of such services would probably far exceed the amount of tax revenue that would be generated from any new development. The roads serving such areas are generally designed for a low flow of traffic and would require substantial improvements.

### **h. Areas With High Conservation Values**

Penobscot has many parcels of undeveloped land that are remote from most major roads. These areas include Wallamatogus and Montgomery Mountains and the Great Heath. Due to their poor road access, these areas are unlikely to have much development in the future. Their main use is likely to remain low-intensity recreation.

## **6. Recent Land Use Changes**

As discussed in the Population and Housing chapters, Penobscot grew at a very fast rate during the 1970s, but this rate slowed considerably during the 1980s. The first half of the 1990s has also had a slow growth rate. Apart from a few small commercial

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operations, most of this growth has been residential.

### **a. Residential Development**

While many second homes were built around Toddy Pond during the 1970s as a result of one major land sale, most development has occurred in relatively small subdivisions or single lot sales. While no specific data are available, there have been few subdivisions since 1990. Anecdotal reports indicate that there are a large number of approved, yet unbuilt lots.

### **b. Other Uses**

There has been very little change in the other land uses. While some new commercial establishments have opened, others have closed. As discussed in the Economy chapter, most businesses in town are small "mom and pop" type operations. Such small businesses tend to have a high turnover. The other land use categories account for a very small proportion of total land acreage; Penobscot remains a predominantly rural-residential town.

## **7. Areas Suitable for Growth**

While Table L.1 indicates that Penobscot has ample vacant land, not all of this land is readily developable. The Natural Resources Conservation Service has rated the various soils in town in terms of their potential for low-density urban development (see Table L.2 and Map 5). According to this analysis, there are about 9,900 acres (39 percent of the total land area) with a very low potential for development and 3,800 acres with a low potential. There are also about 5,800 acres with a medium potential and 6,000 acres with a high potential.

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<b>Table L.2 Soil Potential Ratings for Low-Density Development, Penobscot</b>		
<b>Category</b>	<b>Estimated Acreage</b>	<b>Percent</b>
Very Low Potential	9,888	39%
Low Potential	3,804	15%
Medium Potential	5,794	23%
High Potential	6,014	24%
Very High Potential	31	<1%
Unclassified	64	<1%
Total Land Area*	25,595	100%
<b>*NOTE:</b> refers to land area only, 854 acres of ponds and lakes are not included in these figures. <b>SOURCE:</b> Natural Resources Conservation Service and the Hancock County Planning Commission		

The map shows that the various types of soils are scattered throughout the town. Thus, each part of town has some poor soils and others that are more suitable for development. As mentioned above, however, there is a concentration of good soils along the Route 15 corridor. From solely a soils viewpoint, this area is particularly suitable for development. Many of these same soils are also productive farmland.

It must be stressed that the soils information shown on Map 5 is very general. It should not be used as the sole criterion in determining if a parcel is suitable for development since generalized soil surveys are considered accurate for parcels greater than five acres. A more detailed soils survey is generally needed to assess site-specific problems on smaller parcels.

#### **8. Projected Land Acreage Needed for Development**

A general estimate of the land needed for development between 1995 and 2005 can be made using the dwelling unit projections from Table C.9 in the Housing chapter and other expected growth trends.



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The dwelling unit projections assume that 37 new year-round homes are expected between 1990 and 2000, or about four units a year. To allow for a faster than expected rate of growth, it will be assumed that ten units a year will be built between 1995 and 2005. This would account for any second homes that may be built. Thus, a total of 100 new homes, each requiring 1.5 acres of land, would be built or a total of 150 acres (see Table L.3).

Only minor changes are expected in the other land use categories. While it is not possible to estimate future commercial land needed, it is assumed that there would be no more than a 50 percent increase (or 12 acres). The town may acquire a new parcel for a fire station, but this would be no more than a few acres. Thus, no significant change is expected in public acreage. There may also be an increase in conservation land if more properties are placed under conservation easements. There is no way to estimate how many acres would be protected by such easements.

Penobscot Comprehensive Plan: Inventory and Analysis

<b>Table L.3 Projected Land Use, Penobscot, 2005</b>			
Description	1995 Acreage	Estimated New Acreage 1995-2005	Projected Acreage 2005
Residential	900	150	1,050
Commercial	25	12	37
Public			0
Semi-Public			0
Industrial	0	0	0
Conservation	3		3
Total Developed	928	162	1,090
Very Low Potential Soils:	9,888	--	9,888
Vacant-Other Soils:	15,633	--	15,471
Ponds & Lakes:	894	--	894
Total Land Area	26,449	--	26,449
<b>SOURCE: Projections by the Hancock County Planning Commission</b>			

The figures in Table L.3 show that there would be no shortage of vacant, developable land by the year 2005. Even if the land use projections were proven too conservative, there would still be ample land. The challenge facing the town is not so much the rate of development, but assuring that the development that does occur respects the town's rural character and does not result in unnecessarily high public service costs.

Perhaps the major threat to rural character is continued development immediately along the major roads. Such development gives a rural town a more developed appearance than is actually the

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case, since the undeveloped parcels away from the roads are less visible. This problem can be addressed through greater setback requirements from the main roads and cluster zoning standards. Clusters (or open space subdivisions) allow homes to be built on relatively small lots while there is a large, commonly owned area of permanently preserved open space.

Clusters can also help slow increases in public service costs, since they have relatively short roads, which reduce road plowing and school bus route costs. Another important way to restrain public service costs is to discourage major subdivisions in remote parts of town where it would be very expensive to extend town services. If such subdivisions do occur, it is important that the developers contribute their fair share of capital costs such as improvements on public roads that serve the site to minimize the impact on other taxpayers. Specific strategies are discussed in the Future Land Use Plan, Policies, and Implementation sections of this plan.

## **M. FISCAL CAPACITY**

### **1. Purpose**

High property tax rates are one of the major problems facing coastal communities such as Penobscot. They are a particular problem for the elderly and others on fixed incomes. Therefore, a comprehensive plan should examine fiscal trends in a town.

Specifically, this section will:

- a. summarize Penobscot's current fiscal conditions;
- b. discuss recent revenue and expenditure patterns;
- c. predict likely future revenue and expenditure trends; and
- d. assess Penobscot's capacity to finance capital expenditures for the next ten years.

### **2. Key Findings and Issues**

Property tax assessments in Penobscot have increased at a much faster rate than the valuation. This has meant higher property tax burdens for most taxpayers, especially those with up-to-date valuations. While the town has seen relatively slow population growth in recent years, tax spending increased at an after-inflation rate of 62 percent between 1988 and 1993.

Most of the local government costs are beyond the immediate control of the town. For example, the reduction in state school aid has meant higher local education expenditures. Similarly, higher disposal costs for solid waste are partly due to higher tipping fees at PERC.

### **3. Public Opinion Survey Results**

While the 1990 survey asked no specific questions on Penobscot's fiscal conditions, there were some related questions. For example, 56 percent of the respondents favored increasing permit application fees for the excavation of non-renewable resources such as sand, topsoil, and gravel. Only 37 percent favored permit fees for wells. There were also several general comments about rising taxes and the "runaway school budget."

### **4. Valuation and Tax Assessment**

Penobscot's ability to raise tax revenue is dependent largely on its tax base or valuation. As seen in Table M.1, Penobscot's

## Section M: Fiscal Capacity

local taxable valuation increased from \$16.1 million in 1984 to \$40.9 million in 1994. This is an increase of about 154 percent in ten years. When these figures are adjusted for inflation, the total increase is from \$23.8 million to \$40.9 million, or 72 percent.

The revaluation in 1985 exaggerates the extent of this increase. Between 1986 and 1994, the total valuation increased by only 34 percent. When adjusted for inflation, the taxable valuation shows an actual decrease between 1986 and 1992. This decrease occurred while the real estate boom of the 1980s was ending, a time when property values across Maine increased at a much slower rate and, in some cases, decreased. More current information on property values will be available after the next valuation is completed.

There has been a corresponding increase in the property tax burden. When adjusted for inflation, the total money raised through property taxes increased from \$410,788 in 1984 to \$777,433 in 1994. This was a real (adjusted for inflation) increase of 89 percent.

Property tax collections increased at a faster rate than the valuation. This is significant since it meant that the average resident faced a greater property tax burden. In other words, the costs of running town government have increased at a faster rate than has the tax base. This is typical of most communities; residential development normally creates more in public service costs than it produces in tax revenue.

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<b>Table M.1 Change in Total Taxable Valuation &amp; Property Tax Assessment 1983-1994</b>				
Year	Total Tax. Val.		Property Taxes	
	Current \$ <sup>1</sup>	1994 \$ <sup>2</sup>	Current \$	1994 \$
1984	\$16,090,365	\$23,813,740	\$277,560	\$410,788
1985	n/a	n/a	\$300,111	\$426,158
1986	\$31,244,950	\$43,118,031	\$348,381	\$480,766
1987	\$32,244,150	\$42,562,278	\$367,583	\$485,210
1988	\$33,420,750	\$41,775,938	\$367,628	\$459,535
1989	\$35,158,750	\$41,487,325	\$386,746	\$456,360
1990	\$36,588,850	\$40,979,512	\$417,113	\$467,167
1991	\$37,819,350	\$40,466,705	\$548,381	\$586,768
1992	\$38,567,550	\$40,110,252	\$636,365	\$661,820
1993	\$39,896,745	\$40,295,712	\$730,110	\$737,411
1994	\$40,917,550	\$40,917,550	\$777,433	\$777,433
Ten-Year Change	154%	72%	180%	89%
n/a = not available				
<sup>1</sup> NOTE: current dollars refer to amounts shown in town reports.				
<sup>2</sup> NOTE: 1994 dollar estimate is derived by adjusting current dollars through the U.S. Dept of Labor Consumer Price Index to reflect inflation.				
<b>SOURCE:</b> Town Reports as analyzed by the HCPC				

It is useful to compare valuation trends in Penobscot to those of surrounding towns. As seen in Table M.2, Penobscot's 1993 state

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equalized valuation per capita was higher than Orland, but was lower than the other adjoining towns. It was also lower than the Hancock County average. When compared to other coastal Hancock County towns, Penobscot has a relatively low valuation.

On a per capita basis, the 1993 property tax assessment in Penobscot was \$628, which was lower than all surrounding towns except Orland. It is just over half of the per capita assessment in Blue Hill. These per capita figures are for year-round residents only, they do not reflect the share of the property tax burden assumed by non-resident land owners.

**Table M.2**  
**Valuation, Tax Rates, and Tax Spending (Assessment)**  
**Penobscot, Orland, Surry, Blue Hill, Castine and Hancock County: 1993**

	1992 Population Estimate	1993 State Equalized Valuation	1993 Valuation Per Capita	1993 Tax Assessment	1993 Tax Assessment Per Capita
Penobscot	1,162	\$60,400,000	\$51,979	\$730,111	\$628
Orland	1,960	\$89,650,000	\$45,740	\$948,716	\$484
Surry	1,114	\$103,150,000	\$92,594	\$1,103,247	\$990
Blue Hill	2,009	\$233,350,000	\$116,152	\$2,407,336	\$1,198
Castine	1,204	\$98,550,000	\$81,852	\$1,264,895	\$1,051
Hancock County	47,963	\$4,247,250,000	\$88,553	\$48,247,255	\$1,006

**SOURCE:** Maine Bureau of Taxation, Municipal Valuation Return Statistical Summary

During the 1988-1993 period, tax spending in Penobscot increased at an after-inflation rate of 62 percent (see Table M.3). This is faster than in the surrounding towns. Furthermore, as mentioned in the Population chapter, Penobscot's median income is below the county average. This, combined with the fact that many taxpayers are retired and on fixed incomes, means that these property tax increases are a burden for most residents.

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**Table M.3  
Tax Spending (Assessment)  
Penobscot, Castine, Orland, Surry, Blue Hill, and Hancock County: 1988-1993**

	1988	1989	1990	1991	1992	1993	% Increase 1988-1993	% Increase Adjusted for Inflation
Penobscot	\$367,628	\$386,746	\$417,113	\$548,381	\$636,350	\$730,111	98.6%	62%
Castine	\$896,850	\$1,079,969	\$1,102,715	\$1,122,295	\$1,138,911	\$1,264,895	41.0%	15%
Orland	\$595,895	\$685,727	\$790,769	\$909,872	\$934,372	\$948,716	59.2%	29%
Surry	\$604,905	\$716,792	\$782,323	\$868,274	\$999,059	\$1,103,247	82.4%	48%
Blue Hill	\$1,473,994	\$1,591,362	\$1,793,984	\$2,094,107	\$2,219,051	\$2,407,336	63.3%	33%
Hancock County	\$30,137,588	\$33,639,797	\$39,627,272	\$43,288,247	\$45,124,533	\$48,247,255	60.1%	30%

**SOURCE:** Maine Bureau of Taxation, Municipal Valuation Return Statistical Summary



**Section M: Fiscal Capacity**

Property tax burdens can also be measured by comparing the various types of property in a town. As seen in Table M.4, Penobscot has negligible amounts of personal property (such as machinery and major pieces of office equipment) and no industrial valuation. This means that most of its property tax burden falls on the individual land owner.

Penobscot has relatively little tax exempt property (about \$2.5 million) when compared to most surrounding towns. The majority of this property (\$2.3 million) is publicly owned. There is also about \$250,000 in veterans' exemptions and \$23,500 belonging to literary and scientific organizations.

Town	Personal Property	Percent	Industrial Valuation	Percent	Exempt Property	Percent
Penobscot	\$215,500	.4%	0	0%	\$2,557,100	4.2%
Castine	\$455,700	.5%	0	0%	\$21,256,700	21.6%
Orland	\$1,010,560	1.1%	0	0%	\$3,799,650	4.2%
Surry	\$708,608	.7%	\$499,300	.5%	\$2,252,800	2.2%
Blue Hill	\$2,158,300	.9%	0	0%	\$14,378,200	6.2%
Hancock County	\$299,969,940	7.1%	\$236,497,911	5.6%	\$587,733,834	13.8%

SOURCE: Maine Bureau of Taxation, Municipal Valuation Return Statistical Summary

**5. Current and Future Revenue Trends**

Major revenue sources for Penobscot are shown in Table M.5. These numbers are taken from the annual Treasurer's Reports and represent the actual monies received in a given year. This means that "property taxes received" differs from the property tax assessment that for that year since it includes late payments from previous years. The large "other" category includes items such as interest, specialized state grants, reimbursement for gas taxes, and other variable items.

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Property taxes are the primary revenue source for most town services apart from schools, which receive a major state subsidy. Property taxes are supplemented by monies from excise taxes, the highway block grant, and state revenue sharing. Federal revenue sharing, once a source of local revenue, was discontinued in the late 1980s.

While property taxes accounted for 34 percent of all sources of revenue apart from the highly variable "other" category in 1990, this proportion had increased to 52 percent by 1994. This is due in part to the decrease in state school subsidies. The total school subsidy in 1990 was about \$635,000. By 1993, this amount had dropped (unadjusted for inflation) to about \$551,000. While there was a slight increase in 1994, it was still below 1990 levels. This decrease is due to a state policy to fund a smaller proportion of educational costs.

Given the slow economic growth projected for the state as a whole, it is unlikely that state aid to municipalities will keep pace with inflation. This means that property taxes may assume an even greater proportion of local costs. Further increases in per capita property tax burden are thus likely.

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**Table M.5  
Major Revenue Sources, Penobscot  
1984-1994**

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Property Taxes Received	\$276,260	\$286,337	\$350,402	\$363,548	\$379,017	\$393,249	\$405,446	\$541,553	\$620,790	\$712,125	\$771,606
(Percent Property Taxes of All Revenue Sources Except "Other")	45%	37%	39%	38%	36%	34%	34%	42%	47%	50%	52%
Excise Taxes	\$96,913	\$51,413	\$67,384	\$75,405	\$85,156	\$90,836	\$89,184	\$86,485	\$86,272	\$94,403	\$103,713
State Revenue Sharing	\$19,454	\$23,858	\$28,468	\$36,147	\$42,306	\$42,307	\$34,401	\$29,360	\$23,110	\$38,504	\$44,586
Highway Block Grant	\$6,710	\$9,312	\$9,447	\$10,577	\$10,948	\$15,563	\$16,697	\$20,140	\$33,814	\$22,667	\$22,541
Education Subsidies	\$236,848	\$237,370	\$286,114	\$330,039	\$414,953	\$610,937	\$635,735	\$600,137	\$553,486	\$551,493	\$568,375
Education Construction	\$30,044	\$143,094	\$137,134	\$131,174	\$125,329						
Federal Revenue Sharing	\$12,800	\$11,242	\$22,098								
Fees and Licenses	\$361	\$2,536	\$1,472	\$1,656	\$4,905	\$2,830	\$2,577	\$3,231	\$4,057	\$3,160	\$2,933
Subtotal	\$619,389	\$765,162	\$902,519	\$948,546	\$1,062,613	\$1,155,722	\$1,184,038	\$1,280,906	\$1,321,529	\$1,422,351	\$1,493,753
Other	\$29,876	\$289,751	\$236,056	\$29,002	\$51,902	\$42,008	\$59,050	\$34,923	\$42,439	\$94,313	\$154,398
<b>TOTAL</b>	<b>\$649,265</b>	<b>\$1,054,913</b>	<b>\$1,138,575</b>	<b>\$977,548</b>	<b>\$1,114,515</b>	<b>\$1,197,730</b>	<b>\$1,243,088</b>	<b>\$1,315,829</b>	<b>\$1,363,968</b>	<b>\$1,516,664</b>	<b>\$1,648,151</b>

**SOURCE:** Annual Treasurer's Reports from Town Reports

## 6. Current and Future Expenditure Trends

It is useful to compare recent expenditures to see where the most dramatic increases have occurred. Table M.6 compares selected appropriations for 1984 and 1994. This table shows that virtually all items have increased at a rate above inflation. The most rapid increase was in solid waste. The closure of the landfill and higher disposal costs help explain this increase. Most Hancock County towns have seen comparable rates of increase.

Education costs increased by 42 percent. This is another item over which the town has had little control. State and federal mandates are major factors for this increase. Recent educational trends are discussed in the Public Services and Facilities chapter.

While the fire equipment fund shows a 56 percent increase, this may not be representative of a consistent trend. Major equipment expenditures in small towns occur intermittently, as a given piece of equipment is needed. In some years, such expenditures may be minimal.

The 50 percent increase in administration is probably due to the greater burden being placed on local officials. More time is needed to deal with the various state agencies and the complexity of running a small town. Since Penobscot has no full-time administrator or town office staff, these costs are far less than in many towns.

Penobscot faces several capital expenditures over the next few years. These include a new fire station and a new tanker for the fire department. Another need is more parking space at the Town Hall. The town will be assuming a portion of the cost of the landfill capping and may also face expenses related to overboard discharges.

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**Table M.6  
Comparison of Selected Appropriations  
1984 & 1994**

Item	1984 Amount	1984 Amount in 1994 \$	1994 Amount	Constant Dollar Percent Change
Administration	\$8,900	\$13,172	\$26,117	50%
General Government	\$12,725	\$18,832	\$23,638	20%
Planning Board/Code Enforcement	\$2,942	\$4,355	\$5,130	15%
Town Hall Maintenance	\$6,000	\$8,880	\$6,240	-42%
Town Roads	\$17,087	\$25,289	\$34,890	28%
Winter Roads	\$25,030	\$37,044	\$38,070	3%
Town Poor	\$3,500	\$5,180	\$3,743	-38%
Recreation	\$494	\$731	\$895	18%
Education*	\$443,839	\$656,882	\$1,124,985	42%
Fire Department	\$8,158	\$12,074	\$23,895	49%
Fire Equipment Fund	\$6,000	\$8,880	\$20,062	56%
Street Lights	\$2,300	\$3,404	\$3,500	3%
Solid Waste	\$5,000	\$7,400	\$81,877	91%
County Tax	\$13,354	\$19,763	\$28,176	30%

\*NOTE: represents total expenditures including those funded through state and federal monies.

**SOURCE:** Town Reports as compiled by the Hancock County Planning Commission

**7. Municipal Debt and Capital Financing**

Penobscot has minimal municipal debt. According to the 1994 Town Report, the only town debt was a five-year debt for a fire

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truck with annual payments of \$17,754. This debt will expire in 1996. All school-related debts were retired as of June 30, 1994.

Under state law, Penobscot could borrow up to 15 percent of its total state valuation. Up to half of this amount is reserved for educational purposes. Since Penobscot had a state equalized valuation of \$60.4 million in 1993, it could borrow up to \$9 million.

Given current and anticipated growth rates, there is no reason for Penobscot to undertake any major borrowing. It is, however, a financing option for some major capital projects such as a new fire station. It could be used in conjunction with state grant monies and capital reserve funds.

## **N. SUMMARY**

This chapter summarizes the major issues raised in each chapter of the Inventory and Analysis. This summary sets the foundation for the Policy and Implementation sections of the plan. The first section discusses the most pressing concerns facing the town and then specific issues for each segment of the Inventory and Analysis are discussed.

### **1. Key Issues and Concerns**

Penobscot faces several issues that must be dealt with over the next few years. Water quality is one of the most pressing. Poor water quality in the bay affects local clamdiggers and others dependent on marine resources for a living. It also affects all residents who enjoy the bay for recreational boating, swimming, and related activities.

Another key issue is property taxes. While the town has been administered with great fiscal restraint, costs have continued to increase. School costs are a major reason for these increases. There is a limit to what local residents can afford to pay in taxes.

The recent increase in taxes has made it harder for residents to pay for needed improvements in public services. For example, the fire station is inadequate and should be replaced. Some improvements are also needed to the elementary school.

While Penobscot is coastal community, there is limited public access to the shore. The current sites are either crowded, offer poor boat-launching opportunities, or have insufficient parking. In the current fiscal climate, it is difficult to spend money on improving access. Opportunities to acquire additional sites for public access are also limited by the character of much of the shore and the reluctance of owners to sell land at prices the town can afford.

### **2. Population**

While Penobscot's year-round population grew rapidly during the 1970s, it increased by only 2.4 percent between 1980 and 1990. The estimated 1992 year-round population is 1,162. While there are many second homes in town, a good portion of these are owned by local residents. Thus, the summer peak population may be somewhat less than normally expected in a town with large numbers of second homes. The nursing home in town means that there is much higher proportion of elderly residents than in Hancock County as a whole.

## Penobscot Comprehensive Plan: Inventory and Analysis

### **3. Economy**

Apart from the nursing home and school system, there are few sources of jobs in Penobscot. Most people who are in the labor force commute to jobs out of town. Blue Hill, Ellsworth, Bucksport, and Castine are common destinations. Penobscot's unemployment rate has been increasing in recent years. Penobscot's future local job potential probably rests with home-based occupations and "telecommuting" (relying on modern technology such as computers, facsimile machines, and modems to "commute" to jobs elsewhere in the state or nation).

### **4. Housing**

Penobscot's year-round and seasonal housing stock increased rapidly (by about 40 percent) during the 1970s. The rate of growth for year-round homes during the 1980s dropped to about 10 percent while that for second homes decreased to 44 percent from 60 percent. Even this lower rate represents a substantial increase in second homes.

Nearly nine-tenths of the homes in Penobscot are single-family houses, and the rest are mostly mobile homes. Housing prices in Penobscot are slightly below the county average. Penobscot also has a greater incidence of substandard housing than the county. A modest (about 5 percent) increase in housing is expected during the 1990s.

### **5. Transportation**

While Penobscot still has a relatively low volume of traffic when compared to much of coastal Maine, traffic has been increasing over the past 20 years as the town and region have grown. The most hazardous intersection is that of Routes 175 and 199. Truck traffic is a major concern to residents.

One potential traffic issue in Penobscot is bicycle-motorist conflicts. The town is popular with bicycle touring groups in the summer. Addressing bicycle safety concerns is important. Recreational bicycle use is a growing factor in the use of highways and must be considered in future highway planning.

### **6. Public Services and Facilities**

As a rural community, Penobscot provides its residents with minimal town services. Overall, these services appear adequate. The major public service issue facing the town is that continued increases in property taxes mean taxpayers are hard pressed to pay for current services, let alone fund new ones. One major public service deficiency is the poor condition of the present fire house.



## Section N: Summary

Health care services, while not a town government responsibility, are another deficiency that has been identified by residents.

### **7. Recreation**

Penobscot has limited recreational facilities. The town's permanently protected open space is similarly limited; there are two islands in the Bagaduce River and another conservation easement on a portion of Toddy Pond. It will be difficult for the town to address these deficiencies given the many other demands on the tax base.

### **8. Marine Resources**

Penobscot's marine resources are very limited when compared to what was in town a generation or two ago. Some residents, however, still depend on marine resources for employment. Clam harvests have fluctuated considerably, and yields are well below the levels of ten years ago. Two major marine resource issues are the closure of shellfish areas due to contamination, and the lack of public access to the shore. These issues must be addressed if Penobscot is to realize maximum economic and recreational use of its marine resources.

### **9. Water Resources**

Apart from the water quality problems discussed under Marine Resources, the key water resource issue facing Penobscot is protecting its lakes from increased phosphorus loading. Phosphorus, a naturally occurring element, causes algal blooms and can render a lake unsuitable for swimming and other recreational activities. Phosphorus loading increases if development occurs with little attention paid to minimizing erosion and sedimentation. To avoid excessive phosphorus loading, it is important to review development throughout a lake watershed to assure that drainage and other erosion control measures are adequate.

### **10. Natural Resources**

Penobscot's natural resources include one bald eagle site, which is protected by state law. The entire tidal basin of the Bagaduce River in Penobscot is a Class A wildlife area, which means that it has state and national significance due to its many wildlife habitats. More than 25 species of marine wildlife depend on this area.

While there has never been a thorough inventory of Penobscot's natural areas, the town's woods and coastal areas do support a wide variety of plants and wildlife. The public opinion survey revealed that many residents valued the town's natural resources as an

## Penobscot Comprehensive Plan: Inventory and Analysis

important part of its rural character. This fact must be kept in mind as the town plans for future growth and development.

### **11. Agricultural and Forest Resources and Issues**

About 90 percent of Penobscot is forested. There has been substantial timber harvesting in the more isolated parts of town. Penobscot also has an area of rich farmland, especially along Route 15. Some local observers maintain that this is some of the best farmland in Hancock County. This area may be vulnerable to development since its soils are generally suited for house lots and there are many scenic views. Some farmers are taking measures on their own to protect their land, such as placing conservation easements on certain parcels.

### **12. Historical Resources**

While Penobscot has a rich history, none of its historic buildings or sites have been placed on the National Register of Historic Places. One key site in town is the former brick yard. There is very little information on other historic resources in the town. This makes it difficult to assess threats to Penobscot's historic resources.

### **13. Existing Land Use**

Penobscot remains a very rural town. Most development that has occurred has been low-density residential. While a slow rate of growth is projected for the next ten years, the town faces several land-use-related challenges. One is the potential loss of an area of very productive farmland that is physically suited for house lots. Another is continued development immediately along state highways, aggravating safety problems as more driveways are built. A third is potential development around the bay, which still has many undeveloped lots.

### **14. Fiscal Capacity**

Property tax assessments in Penobscot have increased at a much faster rate than the valuation. This has meant higher property tax burdens for all taxpayers. While the town has seen relatively slow population growth in recent years, tax spending increased at an after-inflation rate of 62 percent between 1988 and 1993.

Most of the local government costs are beyond the immediate control of the town. For example, the reduction in state school aid has meant higher local education expenditures. Similarly, higher disposal costs for solid waste are partly due to higher tipping fees at PERC.

## Section N: Summary

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### **15. Key Regional Concerns**

While most local issues are affected by what happens in surrounding towns, there are several particularly pressing issues that would be best approached on a regional level. One of these is water quality in the Bagaduce River and Penobscot Bay. Pollution does not respect town boundaries, and it is important that Penobscot work closely with surrounding towns in dealing with this problem.

Another important regional issue is transportation. Most of the recent increase in traffic in Penobscot is due to through traffic. It is important that Penobscot officials work in cooperation with surrounding towns and the Maine Department of Transportation in addressing traffic speed, safety, and related issues. Regional cooperation on bicycle safety is important also.

A third issue is the economy. Most residents who are in the labor force commute to jobs out of town. Efforts to preserve or strengthen the economy should be made cooperatively on a regional effort. This may involve working with existing regional economic development groups.

Finally, it may be possible to save tax dollars through shared services with immediately adjoining towns. One example might be formally hiring a shared code enforcement officer. Other possibilities may include sharing fire equipment or facilities. For example, a branch fire station in an adjoining town might also serve a portion of Penobscot and vice-versa.



**PART II:**

**IMPLEMENTATION**



## II.A. GOALS and OBJECTIVES

### 1. Purpose

This section presents goals and objectives for the town of Penobscot. Goals are general statements for the town's future and are followed by more specific objectives and implementation strategies. As will be seen, these goals and objectives are highly interrelated.

While this plan contains some highly specific recommendations, residents are reminded that planning is an on-going process. To assure flexibility in the event of unforeseen circumstances, periodic updating of these goals is advisable.

### 2. Overall Goal

Penobscot desires to grow in a manner that is in harmony with its natural resources and rural way of life. It desires to avoid costly impacts on municipal services and the rapid property tax increases that could result from unplanned development.

### 3. Goals and Objectives

#### A. POPULATION GOAL

Penobscot desires to promote orderly population growth. Specifically, the town:

1. should periodically review year-round and seasonal population growth rates in Penobscot to assure that the population projections in the Comprehensive Plan reflect current realities.

**Implementation Strategy:** The planning board and Selectmen should review growth trends in town on an annual basis. The plan should be updated within ten years of its adoption. If growth trends are significantly faster than predicted, the update should occur sooner.

**Responsibility/Time Frame:** Planning board and Selectmen working with state-designated technical assistance providers such as, but not limited to, the Hancock County Planning Commission/the update should occur by 2006

#### B. ECONOMY GOAL

Penobscot does not desire to attract major industrial development or large-scale commercial operations. Rather, it desires a diverse local economy that builds on existing natural and

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human resources. Specific economic development policies should include:

1. participating in regional efforts to protect and, if necessary, restore marine resources such as shellfishing and worming areas that create local jobs;

**Implementation Strategy:** The Selectmen should appoint a representative to contact the Department of Marine Resources to determine what specific steps the town can take to restore closed clam flats. A town representative should plan to attend any future conferences dedicated to the protection of the Penobscot Bay and/or the Bagaduce Watershed. Protection measures related to land use ordinances should be included in the ordinance revisions.

**Responsibility/Time Frame:** as indicated above/within two years of adoption of the plan.

2. participating in regional efforts to plan for the "information superhighway" and other technological developments that may allow for increased "telecommuting" job opportunities for Penobscot residents; and

**Implementation Strategy:** If there is sufficient interest on the regional level to create a committee to guide local governments in adjusting to these changes, Penobscot should consider appointing a member.

**Responsibility/Time Frame:** Selectmen/when appropriate.

3. assuring that any revisions to the town-wide zoning ordinance and other land use regulations:
  - a. make adequate provision for home-based businesses. Standards for such uses should include requiring adequate off-street parking and assuring that any large equipment or material storage areas are screened from surrounding properties;
  - b. set reasonable performance standards for small-scale industrial and commercial operations in terms of noise, dust, glare, odors and related nuisances so that such operations have minimal impact on adjoining residential properties; and
  - c. require that industrial operations meet lot set-back standards and be buffered from adjoining uses through



Section A: Goals, Objectives and Implementation Strategies

vegetation or similar means.

**Implementation Strategy:** Upon adoption of the comprehensive plan, Penobscot should seek an implementation grant from the State Planning Office and use this grant to draft these and other revisions to the zoning ordinance and other land use regulations. Other proposed revisions are noted throughout the implementation strategies.

**Responsibility/Time Frame:** Comprehensive planning committee/1996-1998

**C. HOUSING GOAL**

Penobscot desires to assure its residents reasonable opportunities for a safe, decent, and affordable housing stock. It wishes to promote a mixture of housing types while remaining a town consisting primarily of single-family homes. Specific housing policies should include:

1. seeking grant or low interest loan monies through programs such as Community Development Block Grants or Rural Economic and Community Development to improve existing substandard housing occupied by low-income families;

**Implementation Strategy:** The town should contact the HCPC or other CDBG technical assistance providers to prepare for submitting a grant if funds are available and if such a grant is likely to be competitive.

**Responsibility/Time Frame:** Selectmen/1997-1998

2. assuring that revisions to the zoning ordinance and other land use regulations:
  - a. establish standards for accessory (sometimes called in-law) apartments. These units are distinct from duplex units in that the accessory unit has a limited square footage and occupies a small portion of the overall building;
  - b. set reasonable standards for multi-family apartments that require adequate on-site parking and recreational space, buffering from surrounding properties, and reflect the equipment limitations of the Penobscot Fire Department in terms of height and building layout; and

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- c. set specific mobile home park standards for landscaping, buffering, and other measures to assure an attractive living environment and protect the values of adjoining properties while being consistent with state law.

**Implementation Strategy:** This would be accomplished through the land use ordinance revisions as described in B.3 above.

3. enacting a building code for multi-family structures to assure adequate fire prevention measures are in place.

**Implementation Strategy:** A model building code from BOCA or a similar source should be adopted by a town meeting vote.

**Responsibility/Time Frame:** The Selectmen/1997 town meeting.

**D. TRANSPORTATION GOAL**

Penobscot desires to encourage a transportation system that will promote the mobility of local residents and visitors and will provide for the safe, efficient, and cost-effective movement of goods, services, and people within and through town. Specific transportation policies should include:

1. exploring options with the MDOT to manage through truck traffic and speeding by all vehicles in town;

**Implementation Strategy:** The comprehensive planning committee should contact the Region II office of the MDOT to discuss options for managing truck traffic.

**Responsibility/Time Frame:** Comprehensive planning committee/within two years of plan adoption.

2. working with the MDOT to develop measures to promote greater bicycle safety along state highways such as wider bicycle lanes and informational and warning signs. This should be done in cooperation with adjoining towns that also have a high rate of bicycle traffic;

Section A: Goals, Objectives and Implementation Strategies

**Implementation Strategy:** The comprehensive planning committee should contact their counterparts in adjoining towns and organize a meeting with MDOT officials to discuss their concerns. This could be done in conjunction with other MDOT contacts.

**Responsibility/Time Frame:** Comprehensive planning committee/within two years of plan adoption.

3. continuing to monitor the improvements planned by the MDOT to the Route 15 Corridor to assure that local concerns are reflected in the final plan. This also should be done in cooperation with adjoining towns;

**Implementation Strategy:** A town representative should be appointed to attend future meetings on Route 15.

**Responsibility/Time Frame:** The Selectmen/as meetings are called

4. participating in local and regional efforts to develop alternative modes of transportation including public transit, vanpooling and ridesharing, bicycle paths, and pedestrian trails; and

**Implementation Strategy:** The Comprehensive Planning Committee should contact groups such as the Blue Hill Heritage Trust, the Castine Conservation Trust, and others to see if it is interested in pursuing options for the development of pedestrian trails and bicycle paths. The planning board should review any regional proposals for developing other modes of transit that may be sent to the town for comment by the Regional Transportation Advisory Committee.

**Responsibility/Time Frame:** as indicated above/within one year of adoption of the plan.

5. assuring that the subdivision ordinance and other town regulations adequately address off-site traffic impacts. Specific measures should include:
  - a. encouraging new lots to front on new, rather than existing roads so that the number of curb cuts onto current roads is minimized and a rural appearance is maintained;
  - b. requiring that developers pay their proportion of costs of making off-site road improvements which are necessary

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as a result of the traffic their development is likely to generate. To determine specific impacts, the planning board may require that a traffic impact statement be prepared and that this statement be subject to review by another professional at the applicant's expense;

- c. assuring that dead-end road-length and turn-around area standards are consistent with the safety needs of the Fire Department and the limitations of their equipment and those of other emergency vehicles; and
- d. requiring that industrial, commercial, multifamily and other forms of development apart from single-family homes make adequate provision for on-site parking. Whenever possible, parking should be at the side or the rear of the building so that a rural appearance is maintained.

**Implementation Strategy:** This would be accomplished through the land use ordinance revisions as described in B.3 above.

**E. PUBLIC FACILITIES AND SERVICES GOAL**

Penobscot desires to maintain and expand its public facilities in an orderly manner that assures that all residents and businesses are provided with adequate town services while avoiding any undue increases in property taxes. As much as possible, it desires to avoid undertaking new programs and expenditures unless funding is available from growth in the tax base, reallocation of the current budget, or from revenue sources other than the property tax.

Specific policies should include:

- 1. Town Government: Given the currently projected population growth in Penobscot, the Selectmen form of government should be maintained. There is presently no need for a part- or full-time town manager.

**Implementation Strategy:** no further action is needed

**Responsibility/Time Frame:** not applicable

- 2. Solid Waste Disposal: Penobscot desires to manage its solid waste in a cost-effective, environmentally sound manner that minimizes the amount of material that must be buried in a landfill or incinerated. Specific solid waste policies should include:

**Section A: Goals, Objectives and Implementation Strategies**

- a. supporting, and when proven cost-effective, expanding current recycling efforts and participating in regional recycled-products marketing efforts;
- b. promoting citizen interest in developing a home-based composting program for domestic wastes;
- c. assuring that there are adequate means at the transfer station for the staging and separation of construction and demolition debris into various components that can be recycled or processed; and
- d. participating in regional construction and demolition debris management efforts. Particular attention should be paid to cooperative efforts to process and recycle this type of waste if cost savings to the town can be proven.

**Implementation Strategy:** The Selectmen and recycling committee should work with the State Planning Office's Waste Management Division and other technical assistance providers such as the Hancock County Planning Commission and the Eastern Maine Development Corporation in exploring solutions to these issues.

**Responsibility/Time Frame:** As indicated above/ongoing

3. **Fire Protection:** Penobscot desires to assure all residents an adequate level of fire protection at a reasonable cost. Specific policies are divided into three categories: facility and equipment measures; staffing measures; and general safety and prevention measures.

The facility and equipment measures should include:

- a. building a new fire station in a centrally-located part of town. This facility should be designed for an eventual addition to house those town government functions currently conducted in the Town Hall (see also Policy E.6 on page I-9 regarding the potential sharing of such a facility with the school);
- b. purchasing a new tanker within the next five years (1996-2001); and
- c. purchasing new turn-out gear and hoses.

Specific staffing measures should include:

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- a. expanding training opportunities for volunteers so that more can be certified as Fire Fighter 1; and
- b. periodically reviewing the need for a paid day person.

General safety and prevention measures should include:

- a. assuring that the subdivision ordinance and other town regulations make adequate provision for water for fire fighting purposes and reflect other fire and safety concerns. Specifically, the ordinances:
  1. should require that developers provide an adequate source of water as deemed necessary by the Fire Department. Specific measures required of developers could include cisterns, fire ponds, and dry hydrants. If it is not possible to locate such facilities on-site, they could be provided off-site within reasonable distance of the development. Developers should be asked to pay their fair share of the cost through measures such as impact fees for any facilities that may be used by more than one development; and
  2. should assure that private roads and driveways are built to a standard that allows prompt access of emergency vehicles.
- b. working with the Fire Control Division of the Maine Forest Service to determine what forest management practices could reduce the risk of forest fires and sharing this information with local property owners;
- c. undertaking measures to assure adequate disaster planning for events such as petroleum spills, major accidents, severe storms, and multi-structure fires; and
- d. enacting and enforcing adequate building and life safety codes for multi-family buildings and all other non-residential uses.

**Implementation Strategy:** The Selectmen should support and encourage efforts by the fire department to develop a long-range plan to implement these policies. Since some of these policies will require changes to land use ordinances, it is important that there be close coordination with the planning board.

**Section A: Goals, Objectives and Implementation Strategies**

**Responsibility/Time Frame:** Fire Department, and for land use ordinance changes, the planning board/for land use changes: within two years of adoption of the plan, for other changes: on an on-going basis.

4. **Police Protection:** Given Penobscot's small size, there are no plans to expand police protection. Therefore, the town will continue to rely on the Hancock County Sheriff's Department and State Police for protection.

**Implementation Strategy:** no further action is needed

**Responsibility/Time Frame:** not applicable

5. **Ambulance Service:** Penobscot should work with adjoining towns to assure that ambulance service remains adequate. This should be done in coordination with the nursing home management.

**Implementation Strategy:** There should be periodic checks with other towns and the nursing home on the adequacy of the ambulance service.

**Responsibility/Time Frame:** Selectmen or their designee/annually

6. **Education:** Penobscot desires to offer its children a quality education in a manner that respects the limitations of the town budget. Specifically, the town:
- a. supports needed improvements to the facility such as a new library, special education room, and guidance and nursing space; and
  - b. should explore options for any future town office and fire station complex to be built in conjunction with a school facility expansion if such a facility is feasible to construct.

**Implementation Strategy:** This would be accomplished through the annual municipal and school budget process.

**Responsibility/Time Frame:** School committee, finance committee & Selectmen/ongoing

7. **Town Buildings and Equipment:** Since the current Town Hall is

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on a small lot with limited parking, it is recommended that Penobscot plan to find a location for a new municipal building within the next ten years. If possible and proven cost-effective, the facility should be part of the proposed new fire station building and/or the school.

**Implementation Strategy:** These options should be explored by the fire department building committee.

**Responsibility/Time Frame:** Selectmen and fire department building committee/by 2007

8. Health Care. Penobscot supports regional efforts to provide area residents with adequate health care. It is recommended that the town work with Peninsula Primary Care association and other health care planning groups to help anticipate the area's long-term needs.

**Implementation Strategy:** If there is interest and commitment in town, the Selectmen should appoint a representative to work with the Peninsula Primary Care association in expressing the town's needs and concerns.

**Responsibility/Time Frame:** Selectmen appointee/ongoing

### **F. RECREATION GOAL**

Penobscot desires to provide an adequate range of recreational programs and activities for all age groups within the limits set by competing municipal budget priorities. Specific policies should include:

1. building a skating rink and a picnic area that is not on a heavily traveled road if the cost of such facilities is reasonable or if grant funding can be obtained;

**Implementation Strategy:** The town should seek matching sources of funds such as the LAWCON program from the State Bureau of Parks and Recreation.

**Responsibility/Time Frame:** Selectmen when/if such monies become available again.

2. working with the Castine Conservation Trust and similar groups to identify criteria to guide future land protection efforts for recreational purposes;



Section A: Goals, Objectives and Implementation Strategies

**Implementation Strategy:** The comprehensive planning committee should meet with such organizations so that a dialogue may begin.

**Responsibility/Time Frame:** Comprehensive planning committee/within one year of plan adoption

3. creating a recreation committee that will assist in determining recreation priorities in a time of limited funding and coordinate the various recreational programs in town. One of the charges of this committee should be to explore options to develop multi-use trails in rural recreational areas.

**Implementation Strategy:** The Selectmen should request town meeting authorization to create such a committee and appoint members. The Committee should then start the planning process.

**Responsibility/Time Frame:** Selectmen/1997 town meeting

4. determining the feasibility of sharing certain recreational services and facilities with Orland, Blue Hill, Castine, and other nearby towns; and

**Implementation Strategy:** Contacts should be made with the surrounding towns to see if any facilities could be used on a fee or exchange basis.

**Responsibility/Time Frame:** Recreation committee in consultation with the Selectmen/1997

5. taking steps to preserve areas with high recreational value such as Wight Pond so that they can continue to be enjoyed by the public.

**Implementation Strategy:** As part of their meeting described under F.2, the comprehensive planning committee should discuss options for protecting such areas after initial discussion with the land owners.

**Responsibility/Time Frame:** Comprehensive planning committee/within one year of plan adoption

**G. MARINE RESOURCES GOAL**

Penobscot desires to protect and enhance its marine resources. Specific policies should include:

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1. Shellfish Area Restoration: Measures should be taken in cooperation with the Maine Department of Marine Resources to restore closed shellfish areas. These measures should be coordinated with efforts of adjoining towns and steps to remove overboard discharges;

**Implementation Strategy:** Shellfish restoration efforts are addressed under Economy Goal B.1.

2. Marine Water Quality: Penobscot desires to minimize any threats to marine water quality. Specific steps should include:
  - a. working with the DEP to eliminate overboard discharges;
  - b. assuring that town regulations sufficiently protect water quality in marine watersheds through development review standards that consider storm water runoff and other non-point sources of pollution;
  - c. working with major in-town polluters to improve their waste-water treatment and disposal methods;
  - d. contacting adjoining towns with point sources of pollution that may be affecting water quality in Penobscot and seeking ways to manage these sources;
  - e. assuring adequate enforcement of existing and proposed town ordinances and regulations affecting water quality;
  - f. coordinating protection efforts with Castine, Orland, Brooksville, and other adjoining Penobscot Bay towns; and
  - g. supporting efforts of volunteer water quality monitoring groups.

**Implementation Strategy:** The Selectmen should continue to work with the DEP on addressing the overboard discharges from individual homes and major polluters. A meeting should be held with officials from surrounding towns to discuss a coordinated approach to dealing with the DEP. This might be done with technical assistance from a group such as the Rural Community Assistance Program. The land use ordinance revisions would be accomplished through the process described in B.3.

**Responsibility/Time Frame:** The Selectmen or their designee/1996

**Section A: Goals, Objectives and Implementation Strategies**

3. **Public Access:** Penobscot desires to expand public access opportunities to salt water. Specific public access policies should include:
- a. finding and, if financially feasible, acquiring new public access sites that offer adequate parking and relatively easy boat-launching opportunities;
  - b. determining if there are any currently unused public rights of way to salt water that could be improved; and
  - c. Continuing improvements to the boat-launching ramp and assuring that it is adequately maintained in the future.

**Implementation Strategy:** The town should seek a Right of Way Discovery Grant from the State Planning Office's Coastal Program and work with that agency's staff in developing public access sites. If the town cannot presently afford to acquire a site, it should wait to see if such a site comes on the market in the future. Adequate maintenance of the boat ramp should be assured by regular appropriations for this purpose, when needed, at town meeting.

**Responsibility/Time Frame:** Selectmen or their designee/1996-1997

**H. WATER RESOURCES GOAL**

Penobscot desires to maintain, and where needed, restore the quality of its marine and fresh water resources. Specific policies should include:

1. **Non-Point Source Management:** Assuring that all town regulations make adequate provisions to manage non-point pollution. Such provisions could include, but are not limited to, minimizing storm water runoff and setting standards for the handling of deleterious matter and hazardous materials at commercial operations;

**Implementation Strategy:** This would be accomplished through the Implementation Grant as described in B.3 above.

**Responsibility/Time Frame:** see B.3

2. **L.U.S.T. Prevention:** Penobscot should assure that leaking underground storage tanks (L.U.S.T.) continue to be replaced and that new tanks meet current DEP standards. It is also important to locate any abandoned tanks that are not included

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in DEP records;

**Implementation Strategy:** The Selectmen should contact the LUST Coordinator at the Department of Environmental Protection's Bureau of Oil and Hazardous Materials Control to assure that the removal of tanks is proceeding on schedule.

**Responsibility/Time Frame:** Selectmen/yearly

3. Lake Watershed Protection. Penobscot desires to protect its lakes from poorly planned development that would increase phosphorus loading to its ponds and degrade water quality. Specifically, the town should add phosphorus management provisions to its subdivision ordinance and other town regulations; and

**Implementation Strategy:** This would be accomplished through the land use ordinance revisions as described in B.3 above.

4. Ground Water Protection. Since there are no public water systems in Penobscot, it is important to protect ground water resources. Therefore, minimum lot sizes should remain sufficiently large to allow adequate distances between septic systems and wells.

**Implementation Strategy:** This would be accomplished through the land use ordinance revisions as described in B.3 above.

5. Landfill Site. The old landfill closing should continue to be monitored for potential off-site ground water contamination.

**Implementation Strategy:** This would be accomplished by the monitoring wells in place around the landfill site.

**Responsibility/Time Frame:** Selectmen and DEP/ongoing

**I. NATURAL RESOURCES GOAL**

In recognition of their importance to the economy and overall quality of life, Penobscot desires to protect its natural resources from harmful development. Specific natural resource protection policies should include:

1. with the support of the Maine Department of Conservation's Natural Areas Program, undertake an inventory of Penobscot's plant and wildlife features;

Section A: Goals, Objectives and Implementation Strategies

**Implementation Strategy:** The Castine Conservation Trust and similar groups should be contacted to see if they have the interest and time to undertake such an endeavor.

**Responsibility/Time Frame:** As noted above/1997-1998

2. assuring that the subdivision and site plan review ordinances:
  - a. specifically state the planning board's authority to require developers of major subdivisions to prepare a natural resources assessment as part of their application; and
  - b. encourage creative lot-layout schemes that allow the preservation of rare natural resources.

**Implementation Strategy:** This would be accomplished through the land use ordinance revisions as described in B.3 above.

3. encouraging owners of properties where valuable natural resources are located to consider donating or selling conservation easements to local land conservation groups;

**Implementation Strategy:** The Castine Conservation Trust and similar groups should be contacted to see if they could organize such an endeavor

**Responsibility/Time Frame:** Comprehensive planning committee/within two years of adoption of the plan.

4. designating areas with concentrations of wetlands, valuable wildlife habitats and other rare natural features as low-density rural areas in Penobscot's Land Use Plan;

**Implementation Strategy:** This would be accomplished through the land use ordinance revisions as described in B.3 above.

5. undertaking measures to protect Penobscot's scenic resources. Specific measures should include:
  - a. incorporating standards into the town's subdivision and site plan review ordinances that encourage lot layout schemes that preserve identified views; and
  - b. encouraging the voluntary sale or donation of scenic easements to conservation groups.

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Penobscot Comprehensive Plan: Implementation

**Implementation Strategy:** see B.3 and I.3

**J. AGRICULTURAL and FOREST RESOURCES GOAL**

Penobscot desires to preserve its agricultural and forest resources. Specific policies should include:

1. designating major concentrations of forest land as rural areas in Penobscot's Land Use Plan;

**Implementation Strategy:** This would be accomplished through the land use ordinance revisions as described in B.3 above.

2. increasing enforcement of current state and local timber harvesting standards;

**Implementation Strategy:** This would involve increasing the code enforcement officer's hours or soliciting volunteers.

**Responsibility/Time Frame:** The Selectmen/when finances or permit fees allow such an increase. (see L.2)

3. If pending changes in state forestry practices laws and increased local enforcement of current timber harvesting standards fail to address the problems the town is currently facing, Penobscot should then consider adopting a local timber harvesting ordinance.

**Implementation Strategy:** The planning board and CEO should monitor timber harvesting practices yearly. If significant problems remain after five years, they should then recommend that a timber harvesting ordinance be adopted.

**Responsibility/time frame:** planning board and CEO/by 2002

4. working with farmers along the Route 15 corridor and in other parts of town with high-value agricultural land to take measures to preserve these properties for agricultural use. Specific measures would include the following:
  - a. designating this area as rural in Penobscot's future land use plan;
  - b. referring interested farmers to various land conservation groups to whom they could voluntarily sell or donate conservation easements to restrict their land to

Section A: Goals, Objectives and Implementation Strategies

agricultural uses.

**Implementation Strategy:** see B.3 and I.3

**K. HISTORIC and ARCHAEOLOGICAL RESOURCES GOAL**

Penobscot desires to protect its key historical and archaeological resources from incompatible development and undertake measures to assure the long-term enhancement of its historical sites and structures. Specific measures would include the following:

- a. revising the subdivision ordinance to state specifically that the planning board has the right to require a professional archaeological survey of sites with suspected archaeological resources; and

**Implementation Strategy:** This would be accomplished through the land use ordinance revisions as described in B.3 above.

**Responsibility/Time Frame:** see B.3

- b. encouraging the Historical Society to work with the Maine Historic Preservation Commission to:
  1. explore options to conduct a professional reconnaissance survey of the entire coast line as well as the shoreline of Toddy Pond; and
  2. work with interested property owners to place their homes and structures on the National Register of Historic Places. All such designations would be done on a voluntary basis.

**Implementation Strategy:** The comprehensive planning committee should contact the Historical Society to ascertain their interest in such projects.

**Responsibility/Time Frame:** Historical Society/ongoing

**L. LAND USE GOAL**

Penobscot desires to preserve its current rural land use pattern of small villages, scenic areas, relatively undeveloped shoreland, open fields and forests. It also desires to encourage orderly growth that does not result in rapid property tax increases in order to pay for such development. Specific land use policies

Penobscot Comprehensive Plan: Implementation

should include:

1. reviewing this comprehensive plan at least every five years and working continually to implement its recommendations;

<b>Implementation Strategy:</b> The comprehensive planning committee should be reconstituted in five years and meet to determine if an update is needed. If there is no need for an update, they should meet again in another five years.
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<b>Responsibility/Time Frame:</b> The Selectmen/2001
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2. assuring adequate and fair enforcement and administration of all town ordinances and regulations;

<b>Implementation Strategy:</b> As part of the land use ordinance revisions, filing fees should be established to cover the cost of code enforcement and administration.
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<b>Responsibility/Time Frame:</b> As in B.3
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3. undertaking a major rewrite of the town's land use ordinances and regulations so that they reflect current state statutory requirements and are procedurally sound. These revisions should also:
  - a. allow reasonable opportunities for small-scale commercial uses;
  - b. minimizing roadside sprawl by discouraging overdevelopment of road frontage along existing roads while interior portions of lots immediately adjacent to these roads remain largely undeveloped;
  - c. discouraging excessive development of those portions of town that are remote from existing roads or otherwise lack easy road access and/or where the expansion of new public services would be unduly burdensome on all tax payers; and
  - d. discouraging excessive development in areas with poorly drained soils and similar limitations to development. Such land should not be counted as buildable land in calculating minimum lot size requirements in subdivisions and cluster developments.



Section A: Goals, Objectives and Implementation Strategies

**Implementation Strategy:** This would be accomplished through the land use ordinance revisions as described in B.3 above.

**M. FISCAL CAPACITY GOAL**

Given Penobscot's limited tax base and the heavy burden already faced by property owners, the town desires to promote long-range fiscal planning and avoid unnecessary increases in property taxes. Specific fiscal policies should include:

1. discouraging major residential subdivisions that would create excessive demands for town services while generating relatively little tax revenue;

**Implementation Strategy:** This would be accomplished through the land use ordinance revisions as described in B.3 above.

2. encouraging the phased approval of major subdivisions that may place a substantial burden on town services. This may involve approving a portion of the lots in a given year so that the town has time to expand its services in an orderly manner;

**Implementation Strategy:** see B.3

3. encouraging the use of impact fees to pay for appropriate costs specifically attributable to new development;

**Implementation Strategy:** see B.3

4. charging user fees for certain town services if proven equitable for all parties involved;

**Implementation Strategy:** This has to be determined by the Selectmen on a case-by-case basis.

**Responsibility/Time Frame:** Selectmen/ongoing

5. exploring options for shared municipal services with Castine, Orland, and Blue Hill;

**Implementation Strategy:** There should be yearly contact with the Selectmen in surrounding towns to see if any shared services are possible.

**Responsibility/Time Frame:** Selectmen/ongoing

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6. developing a Capital Investment Program (CInP) that would be revised annually. The CInP would be an advisory document, which would summarize planned major capital expenditures in Penobscot over a six year period. The final say on all expenditures would remain with the voters at town meeting.

**Implementation Strategy:** The Selectmen should direct the preparation and annual update of the CInP. A special committee may be created to help in this project.

**Responsibility/Time Frame:** Selectmen/ongoing

**N. REGIONAL COORDINATION GOAL**

Penobscot encourages regional coordination when it is of mutual benefit to all parties involved. Specific regional coordination recommendations were cited elsewhere in this section. Rather than repeat them here, the appropriate policies are identified below.

<b>SUMMARY OF POLICIES REQUIRING REGIONAL COORDINATION</b>	
<b>Topic</b>	<b>Supporting Policies</b>
Economy	B.1, B.2
Transportation	D.2 - D.4
Marine Resources	G.2
Fiscal Capacity	M.5
Public Services and Facilities	E.2

**O. Consistency of Penobscot's Policies with the State Goals and Coastal Policies**

The Maine State Planning Office, per the requirements of the Growth Management Act, evaluates plans for their consistency with the ten growth management goals and the nine coastal policies. The consistency of each state goal and policy with the policies of the Comprehensive Plan is summarized in the matrixes below.

Section A: Goals, Objectives and Implementation Strategies

<b>MAINE'S GROWTH MANAGEMENT GOALS</b>	
1.	To encourage orderly growth and development in appropriate areas of each community, while protecting the State's rural character, making efficient use of public services and preventing development sprawl.
<b>Related Policies:</b>	D.5 (Transportation); L.1-L.3 (Land Use); and M.1-M.6 (Fiscal).
2.	To plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.
<b>Related Policies:</b>	D.1-D.5 (Transportation); E.1-E.11 (Public Services); and L.3 (Land Use).
3.	To promote an economic climate that increases job opportunities and overall economic well-being.
<b>Related Policies:</b>	B.1-B.3 (Economy); and G.1 (Marine Resources).
4.	To encourage and promote affordable, decent housing opportunities for all Maine citizens.
<b>Related Policies:</b>	C.1-C.3 (Housing).
5.	To protect the quality and manage the quantity of the State's water resources, including lakes, aquifers, great ponds, estuaries, rivers and coastal areas.
<b>Related Policies:</b>	G.2 (Marine Resources) and H.1-H.5 (Water Resources).
6.	To protect the State's other critical natural resources, including, without limitation, wetlands, wildlife and fisheries habitat, sand dunes, shorelands, scenic vistas, and unique natural areas.
<b>Related Policies:</b>	I.1-I.5 (Natural Resources).

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7. To protect the State's marine resources industry, ports, and harbors from incompatible development, and to promote access to the shore for commercial fishermen and the public.
<b>Related Policies:</b> G.1-G.3 (Marine Resources)
8. To safeguard the State's agricultural and forest resources from development which threatens those resources.
<b>Related Policies:</b> J.1-J.3 (Agriculture and Forest resources)
9. To preserve the State's historic and archeological resources.
<b>Related Policies:</b> (Historic and Archeological Resources).
10. To promote and protect the availability of outdoor recreation opportunities for all Maine citizens, including access to surface waters.
<b>Related Policies:</b> F.1-F.5 (Recreation) and G.3 (Marine Resource-Public Access)

<b>MAINE'S COASTAL POLICIES</b>
1. <b>Port and harbor development.</b> Promote the maintenance, development and revitalization of the State's ports and harbors for fishing, transportation and recreation.
<b>Related Policies:</b> G.3 (Public Access)
2. <b>Marine resource management.</b> Manage the marine environment and its related resources to preserve and improve the ecological integrity and diversity of marine communities and habitats, to expand our understanding of the productivity of the Gulf of Maine and coastal waters, and to enhance the economic value of the State's renewable marine resources.
<b>Related Policies:</b> G.2 (Marine Water Quality)

Section A: Goals, Objectives and Implementation Strategies

<p>3. <b>Shoreline management and access.</b> Support shoreline management that gives preference to water dependent uses over other uses, that promotes public access to the shoreline, and that considers the cumulative effects of development on coastal resources.</p>
<p><b>Related Policies:</b> G.3 (Public Access)</p>
<p>4. <b>Hazard Area Development.</b> Discourage growth and new development in coastal areas where, because of coastal storms, flooding, landslides or sea level rise, it is hazardous to human health and safety.</p>
<p><b>Related Policies:</b> (as addressed through existing shoreland and floodplain ordinances)</p>
<p>5. <b>State and local cooperative management.</b> Encourage and support cooperative state and municipal management of coastal resources.</p>
<p><b>Related Policies:</b> G.1 ( Shellfish Areas); and G.2 (Marine Water Quality).</p>
<p>6. <b>Scenic and natural areas protection.</b> Protect and manage critical habitat and natural areas of state and national significance and maintain the scenic beauty and character of the coast even in areas where development occurs.</p>
<p><b>Related Policies:</b> I.5 (Scenic Resources); I.1-I.5 (Natural Resources); L.3.d (Land Use); and F.5 (Wight Pond).</p>
<p>7. <b>Recreation and tourism.</b> Expand the opportunities for outdoor recreation and encourage appropriate coastal tourist activities and development.</p>
<p><b>Related Policies:</b> F.1-F.5 (Recreation).</p>

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Section B: Future Land Use Plan

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**A. The Villages**

Since the soils in most village areas have a low potential for septic systems and many existing lots are too small to meet the state plumbing code, they have limited growth potential. It is thus recommended that villages retain their current mixture of single-family homes and small-scale commercial uses such as "mom and pop" stores.

Minimum lot sizes for new residential uses should be sufficiently large to allow for on-site wells and septic systems. To assure that overly large commercial uses do not locate in such areas, revisions to the town-wide zoning ordinance should specify a maximum square-footage for commercial uses. This maximum could be waived if special exception criteria assured that the traffic, parking, and other impacts on surrounding properties would be minimal.

**B. The Shoreline and Islands**

The most fragile shoreland areas are presently protected by Resource Protection zoning. There are no specific zoning protections for the town's islands. Wood and Hermit islands are owned by the Castine Conservation Trust. Other fragile islands should be targeted for similar protection if the landowners are interested in such measures. Otherwise, protection will continue to be provided through shoreland zoning.

While no specific site has been determined or shown on the Future Land Use map, the town should continue to pursue options to improve public access for the mainland portion of the shoreline. Rather than through zoning, this would probably be accomplished by acquiring easements or full ownership to a given parcel. Acquisition efforts would be done on a voluntary basis and would probably involve extensive negotiation with the landowners involved.

**C. Areas of Productive Farmland**

The productive farmland along the Route 15 corridor and elsewhere in town should be protected as much as possible. Rather than employing overly restrictive zoning such as ten-acre minimum lot sizes in this area, efforts should continue to be made to acquire conservation easements from interested farmers. This is already being done by the Blue Hill Heritage Trust. Such efforts can be supplemented by the use of cluster zoning so that development can occur on a portion of a given piece of property, leaving the rest of parcel available for farming.

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Since areas of productive farmland, while concentrated near the Route 15 corridor, are located throughout town, there is no specific farmland area on the future land use map. Rather, these areas are within the Rural-Residential-Forestry area described in Section G. below. These areas would be subject to the same minimum lot size (1.5 acres) as the rest of the district.

### **D. Areas with High Conservation and Recreation Potential**

Penobscot has several areas that should be preserved primarily for conservation, recreation, or very-low-density rural uses. Areas such as the Great Heath and Wallamatogus and Montgomery Mountains are remote from major roads and are generally not suitable for development because of their soils and distance from town services. Such areas are called Rural-Conservation-Recreation on the Future Land Use map.

These areas should be retained in their current state. Due to their remoteness, any development that did occur should be of a relatively low-density. Since soils in these areas are generally poor and there are many steep slopes, the natural limitations of the land will often require a larger lot size than the present 1.5 acre minimum required by the zoning ordinance. No change in this minimum is recommended.

Another area with high conservation and recreation potential is Wight Pond. Unlike the areas discussed above, Wight Pond has good road access and represents some high-value shorefront property. It thus has considerable development potential. A balance should be achieved that allows some development of this area while also preserving this important recreational and scenic asset for the community.

The plan recommends that this area be protected through conservation easements and the use of clusters to preserve open space in those areas where residential development does occur. The acquisition of easements would require the voluntary cooperation of the land owners involved. If easements covering a large portion of this parcel aren't practical, consideration should be given to protecting a small portion of the shorefront.

### **E. Areas for Light-Manufacturing and Commercial Uses**

Light manufacturing refers to uses where items are produced. This would include boat building, small assembly plants, and similar uses. The term "commercial" refers to the retail or wholesale sale of goods and services. This distinction is important since commercial operations require good customer access and visibility. Industrial uses are more likely to cause

## Section B: Future Land Use Plan

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complaints from neighbors due to the type of operations involved.

As discussed in the Goals, Objectives, and Implementation chapter (section B.3), there would be performance standards for industrial uses to regulate possible nuisances such as noise, dust, and glare. Such uses would also be required to be buffered from surrounding lots through vegetation or similar means.

Rather than designate one area for industrial use, there would be a "floating" industrial zone for all of town except the Shoreland and Rural-Conservation areas. A landowner wishing to create an industrial use could petition for a zoning amendment that an industrial zone be created. Such uses would then be allowed, if approved at town meeting, provided that the performance and buffer standards are met. Small-scale home occupations, described below, would not be subject to the floating zone requirements and could occur in all areas of town where they are presently permitted.

The commercial areas would be oriented toward small-scale commercial development such as mini-marts and other convenience-type stores. The purpose of the commercial areas is to allow small commercial operations to locate in areas where they would not cause traffic problems and disrupt adjoining residential properties. The best location for such uses is along major highways where there is good visibility for motorists. Rather than create a commercial strip, a few limited areas of commercial use are proposed. These are portions of Penobscot village, West Penobscot, and South Penobscot.

These small areas seem appropriate in view of the low rate of commercial growth projected for Penobscot. Overly large commercial areas tend to result in sprawl, which depresses property values when businesses close and sit vacant. Adjoining properties are then affected. If the town continues to grow, commercial areas can be expanded.

Home occupations would continue to be allowed in all portions of town except the Resource Protection district of the shoreland. This is consistent with current state shoreland zoning requirements, which prohibit such uses in Resource Protection zones. Home occupation standards would allow up to three employees to work on premises. These employees would not include members of the household where the business was located. In other words, family members and up to three additional people could work on-site.

The standards would allow up to 2,000 square feet of retail or manufacturing activity in a home occupation. This would allow operations such as machine shops or carpentry operations to take



## Penobscot Comprehensive Plan: Implementation

place in a shed behind a residence. All existing uses greater than 2,000 square feet would be grandfathered. There is further discussion on the standards for home occupations in the Goals, Objectives, and Implementation chapter (section B.3).

### **F. Residential Growth Areas**

These areas would include portions of Route 175 in West Penobscot and Route 175 between South Penobscot and the Sedgwick town line. Multi-family units would be allowed in these areas provided that per unit lot requirements are met. This would mean that, given the 1.5 acre minimum lot size, an 8-unit development would require 12 acres (1.5 x 8). As discussed in the Goals, Objectives, and Implementation chapter (Section C.3), standards would require that such units have adequate on-site parking and be buffered from surrounding properties. These standards would also regulate stormwater drainage, which is particularly important since much of this area lies within the Northern Bay watershed.

While the overall density of such developments would be limited by the cost of providing on-site sewage disposal that met all state plumbing code requirements, the plan recommends a limit of ten units per building. The zoning ordinance would also have a building height limitation of 35 to 40 feet. This would help avoid high-density development that would be incompatible with Penobscot's rural character.

### **G. Rural-Residential-Forestry Areas**

The balance of town would be rural-residential-forestry. This area would have a minimum lot size of one and one-half acres. Those areas relatively close to major roads would probably have the majority of low-density residential development. Forestry would be the primary activity in the more remote areas.

## **4. Growth and Rural Areas**

The determination of growth and rural areas is an important part of the comprehensive planning process. Growth areas are those parts of town where most new growth is likely to occur. It is important not to have overly large growth areas since this could encourage sprawl. Conversely, there must be sufficient land to allow for some unanticipated growth.

Since Penobscot is projected to have a very slow growth rate, it does not need large growth areas. Its growth areas will be the primary residential, light-manufacturing and commercial areas. As shown on the Future Land Use map, there are several such areas.

## **Section B: Future Land Use Plan**

Additional residential growth could be accommodated in the rural-residential-forestry areas. While this area is rural, the minimum lot size of one and one-half acres means that some residential development is likely to take place.

The rural areas also would include those areas with high conservation potential and productive farmland. The designation "rural" does not mean that all development is restricted from these areas. Rather, the natural features of these areas and various incentives created by the town would mean that the development that does occur would be of a lower density than in the growth areas.

The village and shorefront areas are neither growth nor rural. While the villages are areas of high-density development, their future growth potential is limited due to poor soils. While the shorefront is an environmentally vulnerable area, the landowners there have been paying high property taxes and it would not be fair to place severe development restrictions on their property. While some minor "fine tuning" might be needed to the shoreland zoning ordinance, no other changes are foreseen in town-based protection measures along the shore.

### **5. Measures to Distinguish Growth and Rural Areas**

The plan makes clear distinctions between growth and rural areas. One incentive is the use of cluster zoning. Clusters would be mandatory for any subdivisions of ten units or more in the rural areas. The cluster standards would require that the open space preserved be visible from the main public road serving the development. This would help maintain a rural appearance. There also would be provisions to waive this requirement, since it may not always be practical.

The subdivision ordinance would be amended to require that very poorly drained soils and slope greater than fifteen percent would not be counted toward the minimum lot size in rural areas. This would assure that developers would not use the cluster option to build at a higher density than they normally would. In many towns, developers have used clusters to locate all building lots on one corner of a parcel while leaving the area with poor soils or steep slopes as open space. They are thus creating more lots than they would have under a conventional subdivision.

The poor soils and remoteness of the rural areas would also discourage growth. The cost of road building and extending other services into rural areas would make it very expensive to build off the main roads. As discussed in the Goals and Objectives (Section D.5), developers would be responsible for off-site road improvements that are required as a result of the traffic their

## Penobscot Comprehensive Plan: Implementation

development is likely to generate. These requirements reduce the likelihood of much development occurring. There is no distinction in individual lot sizes between growth and rural areas.

### 6. Summary

The future land use plan contains sufficient measures to discourage sprawl and strip development, promote efficiency in public services, and protect the character of rural areas. These are basic requirements of Maine's Growth Management Act for a future land use plan. Since only the commercial areas are relatively small, there is no threat of commercial sprawl. The increased use of clusters reduces the risk of residential strip development.

These same measures also promote efficiency in public services. They reduce the likelihood of major development occurring in areas where it would be difficult to extend municipal services such as snow plowing and school buses. Overall, the town will remain rural while assuring that there would be ample land available for development.

## II.C. Penobscot Capital Investment Plan

### 1. Purpose

A capital investment plan (CInP) is a summary of major, planned capital expenditures over a given period of years. It is a statement of Penobscot's **intended** expenditures for major capital items such as a new fire station, school additions, and public access improvements. Penobscot has defined a capital expenditure as any item costing at least \$10,000 and having a useful life expectancy of at least one year. Such expenditures are distinct from operating expenditures such as salaries, heating costs, and regular maintenance.

A CInP is not a binding document. Its primary use is to allow the town to anticipate when major expenditures will occur and schedule those expenditures so that they all don't occur at once. For example, the property tax burden could be lower in a given year if certain expenditures could be postponed to another year. While the CInP can be used by the Penobscot Selectmen and budget committee in planning the annual budget, the final say on all appropriations remains with the voters at town meeting.

### 2. Summary of Proposed Capital Projects

The table on the next page summarizes the major capital projects. The need for each item is discussed in the Inventory and Analysis. Some items, such as the outdoor recreation facility improvements, may be postponed if matching grant funds are not available. The cost figures for all items are general estimates based on the experiences of comparable towns and are expressed in 1995 dollars. Inflation means that costs will probably increase over the next few years.

The table does not have a cost item for the new classrooms and other needed school improvements. This project is still in the discussion phases. When these costs are determined, they can be added to the CInP. It is important that the CInP be updated every year. It is likely that this yearly review will result in some items being postponed and cost estimates being revised.

**PENOBSCOT CAPITAL INVESTMENT PLAN:  
Summary of Proposed Capital Projects, 1996-2001\***

	1996	1997	1998	1999	2000	2001	Method of Financing
Transfer Station Upgrade		?					1
New Fire Station/Municipal Building					\$200,000		2
New Fire Dept. Tanker Truck		\$150,000					3
School Improvements and Parking Expansion	?						4
Outdoor Recreation Facility Reserve Fund		\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	5
Salt-Sand Storage Shed					\$75,000		6
Cemetery							7
Public Access Reserve Fund		\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	8
<b>TOTAL:</b>		\$155,000	\$5,000	\$5,000	\$280,000	\$5,000	

**\*NOTE:** This list of expenditures is non-binding and all items require voter approval at town meeting.

**KEY TO COST ESTIMATES**

1. local revenues
2. local or low-interest loan, matching grant monies, if available
3. equipment reserve and low-interest loan
4. state funds with local match, cost and date not presently known.
5. may be supplemented by state matching grants for specific project, if such monies are available
6. state grant monies should cover this expenditure, the actual date would be contingent upon state funding priorities
7. cost not presently known
8. may be supplemented by state matching grants for specific project, if such monies are available

