TOWN OF BOWDOIN
COMPREHENSIVE PLAN
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Final Plan
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1. INTRODUCTION

1.1 Role of the Comprehensive Plan

The Comprehensive Plan is a guide for managing change within the community for the next ten to twenty years. The Plan is an expression of the community's vision for its future and it provides a framework for future policy decisions. It also contains a great deal of information about the Town and lays out the legal foundation for the Town's land use laws.

The goal of the plan is not to predict the future. The planning process is designed to inventory and analyze the present conditions within the community. This analysis is then reviewed in the context of both state and local planning goals, and finally, specific recommendations in the form of policies and implementation strategies are developed. The specific policies are assigned to a particular group such as the Selectmen, Planning Board or Recreation Committee to carry out, according to a suggested time schedule.

The Comprehensive Plan is not the end of the planning process but just the beginning. The local committees assigned to carry out the Plan will take the policies and further refine them to make them responsive to the ever changing needs of the community. It is important to note that the Plan is not an ordinance, nor a law of any kind. It is an advisory document that will form the basis of the Town's land use laws and future policy decisions. Any revised or new land use ordinances and new Town policies will, as always, be placed on a Town Meeting Warrant for the Voters consideration.

1.2 Past Planning Activities

The original Comprehensive Plan for the town was crafted in 1978, voted on at the Town Meeting in March of 1979 and immediately became the source for amending our ordinances.
This plan outlined three goals for the town:

1. Preserve and enhance the open space, rural character of the town.
2. Maintain a stable, permanent population with modest growth.
3. Insure a desirable, healthful and comfortable natural environment.

The next Comprehensive Plan Committee was formed in 1989. The Committee was charged with completing a new Comprehensive Plan for the Town in compliance with "the Comprehensive Planning and Land Use Regulation Act" (Title 30 M.R.S.A. Sec. 4960) adopted by the Maine Legislature in 1988.

The act required the Town to develop a Comprehensive Plan which promoted the following 10 state goals:

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;

2. To plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development;

3. To promote an economic climate that increases job opportunities and overall economic well-being;

4. To encourage and promote affordable, decent housing opportunities for all Maine citizens;

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;

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;

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;

8. To safeguard the State's agricultural and forestry sources from development which threatens those resources;

9. To preserve the State's historic and archaeological resources;

10. To promote and protect the availability of outdoor recreation opportunities for all Maine citizens, including access to surface waters.

The act also required the town to be divided into at least two geographic areas, growth areas and rural areas. The growth areas were to be suitable for orderly residential, commercial and industrial development for the next ten years. Rural areas were to provide protection for agricultural, forest, open space and scenic lands.

The Comprehensive Plan Committee solicited input from town taxpayers on the ways to meet both the town's goals and the goals required by the state. Public hearings and questionnaires were reviewed by the Committee from May 1989 through October 1991.

A detailed inventory and analysis of the town's population, land uses, transportation system, public facilities, fiscal capacity, local economy, housing, natural resources,

cultural resources and scenic resources was prepared to assist in defining the goals and implementation strategies of the town.

In July 1991 a draft plan entitled "1991 update of the Bowdoin Comprehensive Plan" was completed and made available for review by the town's residents.

On October 26, 1991 this draft was presented for adoption at a special town meeting. There was much discussion regarding provisions for special standards for gift lots which had been included in the town's 1979 Comprehensive Plan but not in the 1991 draft.

While the Town of Bowdoin was in the process of preparing and adopting the 1991 Comprehensive Plan to conform to the State's goals of growth control, the State of Maine and the nation fell into an economic recession which impacted the State's ability to finance the implementation of the Growth Management Act. The recession also brought into question the need for growth controls in general. As a result of this pressure, in December of 1991, the State abolished the Office of Comprehensive Planning and amended the so called Growth Management Law to make adoption of a comprehensive plan discretionary and no longer mandatory.

On March 7, 1992, at the Annual Town Meeting, the Town of Bowdoin voted to repeal the Comprehensive Plan adopted on October 26, 1991, thereby reinstating the Comprehensive Plan adopted by the Town on March 10, 1979. This 1979 Comprehensive Plan still supports the following ordinances:

1. Land Use Plan
2. Road Design Standards
3. Site Plan Review Ordinance
4. Subdivision Regulations

On March 23, 1992 Public Law 722 was enacted retroactive to December 23, 1991. Under this new law, the Town of Bowdoin is required to adopt a Comprehensive Plan consistent with State goals outlined in the law by January 1, 1998.

The voters of the Town of Bowdoin debated whether to complete a draft Comprehensive Plan based on the reinstated State goals at this time or prepare a Comprehensive Plan based solely on local goals. It was the consensus to prepare a draft Comprehensive Plan based on local Town goals.

A Comprehensive Plan Committee was again reconstituted in 1999 to work on a plan but the committee languished due to lack of public support until 2002 when the Planning Board petitioned the town Selectmen to appoint the Planning Board members to the Comprehensive Planning Committee. The Planning Board realized the necessity for an updated plan due to the unprecedented growth they were witnessing and with no solution to controlling that growth.

1.3 Organization of the Plan

The Comprehensive Plan consist of the following parts:

- An inventory and analysis section that contains background data on a variety of subjects and a discussion of some of the issues relating to these areas.
- Policies and Implementation Strategies that include goals, a schedule for implementing the plan recommendations, and identifying a responsible party to carry out the task.
- Various maps and charts that display data and show trends.

The Plan also contains a Land Use Plan that establishes recommendations to guide future land use within the Town. A general land use map is included that shows the proposed future land use districts.

1.4 Citizen Survey Results

There are references throughout the text of this plan to results of a citizens' survey conducted in 2004.

The residents of Bowdoin were surveyed through use of a mail survey for their opinions of how they perceive the town and what they wish to see for the future. Each household in Bowdoin received a questionnaire with their property tax statement in December 2003. Of 1125 surveys sent out only 151 were returned. That represents a rather poor 13% response rate and may not accurately reflect a good cross section of the Town. Highlights of the results are as follows:
92% support home business type commercial development.
66% felt preserving remaining agricultural land a priority
68% favor regulating mineral and topsoil extraction
59% maintain 2 acres as a minimum lot size
59% maintain 300' minimum road frontage per lot
56% favored light industrial/commercial development.
58% favored impact fees for new development
55% support cluster housing principals
78% felt greater than 2 acre lot size in some areas would be appropriate
71% felt the current gift lot provision should be retained
79% favor a "mother-in-law" provision
Finally a resounding 98% of respondents like the rural character of the town and wish to preserve it!

Comprehensive Plan Committee Members:

Jan Boucher
Tom Coolidge
Caroline Eliot
Melissa Hampkins
Eileen Johnson
Lane & Eirwen Soltesz
Doug and Linda Rollins

2. HISTORY, ARCHAEOLOGY AND HISTORIC RESOURCES

2.1 History

It is difficult to place ownership for the area now called Bowdoin during the early 1600's. In 1620 King James I granted to the Council of Plymouth "All land from 40 degrees North latitude to 48 degrees North latitude, and from sea to sea". The patent of 13 January 1630 given to William Bradford as the representative of the Pilgrims provides us with the original written grants. Rights to this claim were put on the market and sold to successive owners until this patent was finally purchased by the Kennebec Company. It gave the proprietors a claim to three million acres along the Kennebec River. The area that was to become Bowdoin was divided into 11 ten mile lots with James Bowdoin claiming lots 1, 2 and part of 3 while his brother William claimed lots 7 and 8. As of 1779, James Bowdoin had legal claim to the area of West Bowdoinham Plantation and was granted deeds on land fronting on the Cathance River, Merrymeeting Bay and extending to the Androscoggin River. Also during this period some of the other early Bowdoin settlers held Indian deeds to portions of the same land. There is also a record of James Bowdoin finding squatters in North Bowdoin as he had a horse path cut through his claimed territory. In addition, several family genealogies claim their forefathers to have been in Bowdoin by this time.

The next significant event in Bowdoin's history occurred on March 21, 1788. After several petitions by the local inhabitants, The Commonwealth of Massachusetts passed "An Act to incorporate the inhabitants of West Bowdoinham in the County of Lincoln into a town by the name of Bowdoin". This authorized the new "town" a minor amount of autonomy in that they could meet, elect officials and enact local ordinances. Immediately the first town meeting was called for April 15, 1788.

In 1788, when the area became incorporated as the town of Bowdoin, it covered nearly 80 square miles and encompassed parts of present day Lisbon and Webster. After incorporation, Bowdoin's town records show a constant move toward civilization. The first church, a Baptist church, was used for town meetings until it burned in 1798. In 1791, the Town voted 40 pounds to maintain three school districts. In 1798 the first meeting house was built and used for church services and town meetings, and by 1808 town meetings were being held in the "Old Meeting House"--an indication of the North Church having been built in 1805.

In 1797 James Rogers and Ebenezer Temple of Bowdoin paid the Selectmen of Bowdoinham $2,000.00 for the privilege of building a road from Bowdoinham's Cathance landing to the Bowdoin town line. This road gave Bowdoin residents access to the Kennebec River and hence to the world, opening up possibilities for trade and travel.

With 88 votes for division and 30 opposed, it was voted in 1798 to "incorporate the westerly part of the town of Bowdoin, in the County of Lincoln, into a separate town by the name of Thompsonborough". On June 22, 1799, this move was approved by the

Legislature of Massachusetts, and in 1840 this area of Lisbon was again divided and Webster was formed.

During the years of 1836-37 the West Bowdoin Brick Meeting House was built by Nathaniel and Albert Purinton. In 1837 a Town House was built on the hill of the Widow Jane Smith, with the low bid of $590.00 going to Mr. Lincoln Maloon. Between 1836 and 1837 the South Meeting House was built on land once owned by Elder James Potter and overlooking his grave across the road in the South Cemetery. At this same time land was also set aside at Bowdoin Center for a Universalist Church.

In 1837, despite the growth of churches, the town voted on the method of supporting the poor. It was voted that the poor be set at auction separately (mothers and children not necessarily kept together) and the town agreed to pay the doctor bills and funeral charges. Whoever bid for one or more of these poor was obligated to return the person the next year with clothes in a condition comparable to when they had assumed care. They were to receive pay for the amount bid at auction. For many years town meetings included the setting up and auctioning off of these unfortunates to the lowest bidder.

Also in 1837, John Ridley was sworn in as Pound keeper for the ensuing year. Three people were licensed as Innkeepers to retail spirituous liquors, and four gentlemen were licensed to maintain retail stores, presumably with spirituous liquors as a sideline. Small wonder that the 1838 town meeting voted that all ardent spirits be removed from the town house -- forcefully, if need be, by Johnson Jacques, Esq.

In general the people who settled in the backcountry of the district of Maine had to have some unique qualities. They were a hardy, independent minded people with a strong desire for self-rule. They stood out in three particular areas: their inclination toward dissident religions, their desire to own the land they settled on, and their desire for separation from the political yoke of Massachusetts. Bowdoin citizens stood out in all three of these areas. With a top ranking evangelist like James Potter in their midst, the dissident Baptist religion was naturally the religion of choice, but the Universalists and even Quakers held services in early Bowdoin. Property ownership disputes were ever present with issues fostered by the Kennebec Proprietors' demands for payment on land that settlers considered they had paid for in "sweat equity". This problem was intensified even more when James Bowdoin, Jr. decided to give one thousand acres of already settled land to Bowdoin College as a grant in memory of his father, Governor James Bowdoin. Because of the resentment that Bowdoin settlers felt about being called squatters on land they considered rightfully theirs, the first Town Record Book of Bowdoin records many incidents of backing the separatist movement. The first town vote for States Rights came in 1792, backing separation by 100%, and from that time until statehood was granted, Bowdoin sent representatives to every meeting backing separation in the district. No other town in the District of Maine was so fervent in the desire for separation from Massachusetts, the home of the hated "Proprietors".

The Civil War had a powerful impact on Bowdoin. One hundred and twenty-eight of its young men, as inscribed on the town monument, initially marched off to fight. This does

not include the many more who were not officially recognized in the original departure. Many of these young men never returned and were buried in southern soil. The strong Baptist leanings of the people fostered a desire to eradicate slavery. Since the 1840's the Baptist clergy had been strongly abolitionist and after years of sermons on the evils of slavery, the call to arms found the young men of Bowdoin eager to answer. These were hard and heart-breaking years for all, and many Bowdoin cemeteries contain stones inscribed with the service records of those who died during this war.

Bowdoin has suffered fluctuations in growth. A population peak must have been reached in 1850 with 1,861 residents. The 1850 census shows large families, usually with a hired man and a hired woman, and the wage earners listed as farmers or laborers. These people were content with the simple life. Along the old country roads and in the wilds of Haig Mountain you still see the abandoned cellar holes, the lilac bushes, and the apple trees row on row.

With the passage of World War I and World War II. , looked easier, richer, and more exciting in the towns and cities with their factories and job opportunities. As the famous World War I song said," How Are You Going to Keep Them Down on the Farm After They've Seen Paree?" By 1870 the population had dropped to 1,345; in 1880 to 1,361; in 1903 to 940; with an all-time low in 1940 of only 466 Bowdoin residents.

Then came cars, phones, electricity and better schools, plus the lure of cheaper property values and lower taxes. The country living, so scorned for fifty years, again became enticing. Bowdoin's population rose again, from 638 in 1950 and 668 in 1960 to 884 in 1970. The biggest increase came between 1970 and 1980 when the population almost doubled to 1,629. The 1990 U. S. Census listed Bowdoin's population at 2,207. Today Bowdoin continues to lose its rural character as it developes into a bedroom community for the surrounding area,s larger cities. The 2000 U. S Census lists Bowdoin's population at 2727 as the growth trend continues.

2.2 Archeology

Bowdoin has no known Prehistoric Archaeological Sites. The only professional survey for historic archaeological sites in Bowdoin was done for a gas pipeline project over a very limited area of the town. A more encompassing town-wide survey should focus on sites of first settlement and should include early industrial sites as well. It would be prudent for the town to establish a requirement for all subdivisions and major commercial projects that undergo site review to contact the Maine Historic Preservation Commission and check if the proposed development would impact any known pre-historic, archeological or historic sites. If development would impact one of these locations, the developer would be required to develop a plan to mitigate any negative impact on that resource.

The Maine Historic Preservation Commission (MHPC) has listed the following properties as Historic Archaeological Sites in Bowdoin:

ME 048-001 M. Doyle, American farmstead, 19th century
ME 048-002 William Tarr Gristmill, American gristmill, 19th century
ME 048-003 William Tarr Homestead, American home, 19th century
ME 048-004 Tarr-Niles Cemetery, American burial ground, 19th century
ME 048-005 Fredrick Niles, American homestead, 19th century
ME 048-006 W. Katon, American farmstead, 19th century
ME 048-007 E. Pattison, American farmstead, 19th century
ME 048-008 C. Campbell, American farmstead, 19th century
ME 048-009 Unidentified cellar hole, American farmstead, 19th century
ME 048-010 R. Campbell, American farmstead, 19th century
ME 048-011 Moses Williams Farmstead, American farmstead, 19th 20th century
ME 048-013 Ackley Homestead, American farmstead, 19th 20th century

2.3 Historic Resources

Bowdoin is lucky to have a very active Historical Society. The Bowdoin Historical Society has worked hard to place one of our properties on the National Register of Historic Places. The First Baptist Church of Bowdoin and Coombs Cemetery located off Highway 201 is on the National Register. There are other structures, homes, workplaces, cemeteries and properties that should be surveyed for nomination. In addition to buildings, the Society has surveyed and created an extensive list of cemeteries in the town. The following list reflects all the known burial places within the Town of Bowdoin. For more detailed information on inscriptions and lists of war veterans refer to the book " Cemetery Inscriptions and Revolutionary War, War of 1812, and Civil War Veterans of Bowdoin, Maine" Charlene Bartlett & Jayne Bickford, Copyright 1993, Heritage Books Inc.

TABLE 2-1 Inventory of Historic Resources

Cemetery	Location
Adams Cemetery	approx. 3 miles north on Rt 201 from Rt 125 intersection on west side of highway
Bickford Burial Ground	.6 miles west of Bowdoin Center on Rt 125 on right
Bradford Haskell Cemetery	unlocated but in Town Records
Buker Cemetery	on Haigh Mountain 2.5 miles west of intersection of Adams Rd and Rt 201
Carr Cemetery	1 mile east on Millay Rd from intersection of Rt 201 on right
Cornish or Gully Woods Cemetery	first road east of Bowdoin Center School on Rt 125 on left up the hill
Elliott Cemetery/Coombs Cemetery	approx. .3 miles west on Coombs Rd from Rt 201 behind the old Church
Emery Purington Farm Cemetery	approx. .3 miles north on Adams Rd from Rt 201 on left 200ft off road

Hix Small Cemetery	1.9 miles north on Lewis Hill Rd. from Rt 125 on left short distance on gravel road
Jack Cemetery	unlocated but in Town Records (north Bowdoin)
Leonard Family Cemetery	.5 miles south on Meadow Rd from Bowdoin Ctr gravel road on left to cemetery
Millay Cemetery	2.3 miles north on Rt 201 from Rt 125 woods on right for approx 1 mile on left
Niles Cemetery	on Haigh Mountain 2.8 miles west of intersection of Adams Rd and Rt 201
North Cemetery	4.8 miles north of Bowdoin Center on Litchfield Rd. on left
South Cemetery	.3 miles east on Burough Rd from Meadow Rd opposite the church
Thompson Cemetery	SE corner of intersection of Doughty Rd and Rt 201
West Bowdoin Cemetery	.3 miles north on West Rd from Store Rd on left next to church
West Bowdoin Cemetery on lot of Horatio Small	see West Bowdoin Cemetery, lot is adjacent
Wheeler Family Cemetery	short distance up Wheeler Hill Rd from West Rd
Woodlawn Cemetery	1.3 miles north on West Rd from Store Rd on left
Brown Cemetery	4.9 miles north on Lewis Hill Rd from Rt 125 200ft off the road on left
Allen Family Cemetery	.3 miles west of Bowdoin Center on Rt 125 on left no easy access
Skelton Family Cemetery	SE corner of intersection of Rt 125 and Rt 201 near shore of Stoddard's Pond
White Cemetery	5.2 miles north on West Rd from Rt 125 stone wall on left leads to cemetery
Temple/Randall Cemetery	4.2 miles north on Rt 201 from Rt 125 on right in woods on hill on town line
Ward Cemetery	on Haigh Mountain off Ward Rd 1/4 mile
Town Grant Cemetery	on Haigh Mountain
Campbell Cemetery	base of Haigh Mountain .2 miles north on Adams Rd on left short woods walk
Gowell Cemetery	.2 miles west on Doughty Rd from Rt 201 on right
Gowell Burial Ground	.2 miles south on Rt 201 from Rt 138 on left up hill
Buker Allen Cemetery	4.1 miles north on Lewis Hill on right behind house
Jones Cemetery	5.7 miles north on Litchfield Rd from Bowdoin Center on left 300ft off road
Grover Cemetery (2 separate ones)	2.6 miles north on Litchfield Rd from Bowdoin Center on right behind house
Lewis Cemetery	.5 miles west on Rt 125 from Rt 201 on right
Foster Burial Lot	.5 miles north on Lewis Hill Rd behind house
Small Cemetery	1.6 miles north on Litchfield Rd from Bowdoin Center overlooking pond

Williams Family Cemetery	.4 miles north on Adams Rd from Rt 201 on right behind house
Humphrey Purington Burial Lot	3.2 miles north on Lewis Hill Rd on left surrounded by stone wall
Bubier-Cripps Cemetery	4.4 miles north on Litchfield Rd left on side road cemetery is on right
Jacques Cemetery	corner of McIver Rd and Rt 201
Ephraim Small Cemetery	1.3 miles north on Rt 201 from Rt 125 gravel road on right 1 mile
Thomas Skelton Family Cemetery	.3 miles south on Rt 201 from Rt 125 on left
Nelson Family Lot	1.9 miles north on Rt 201 from Rt 125 on right behind old Forest Service Bldg
Rogers Family Cemetery	.1 miles north on Rt 201 from Rt 125 on right behind house
Potter Cemetery	in Lisbon Falls
Day Burial Lot	unlocated but in Town Records

With the purchase of the property on State Highway 125 for the Town Office and Recycling Center the Town has created a lot where the Historical Society is working to preserve a few of our town landmark buildings. The old Town Office was moved to a new location on a concrete pad near the parking lot of the new town office. A volunteer group is currently working to renovate the original Bowdoin Center School building, a one room school, at its new location near the town office.

One historical resource that our town is fortunate to have is our Town Records. These records have been preserved by the Town Clerk since the formation of the town. Complete records of Birth and Death date back to the fire of 1872. After the fire the town made an effort to reconstruct the lost record through the use of family bibles and other townspeople records. Rachel Townsend Cox edited the "Vital Records of Bowdoin, Maine to the Year 1892" and had them printed in three volumes in 1945. Her information came from census records, cemetery records, newspapers and old family records and Bibles which are no longer available as well as the original data from the first Bowdoin Vital Records book started in 1788, and not lost in the fire. Records of town meetings are continuous back to 1788 when the town was first incorporated. These records are currently kept in a controlled environment at the Bowdoin Town Office as a record for future generations.

3. THE PEOPLE OF BOWDOIN

Purpose

Collecting demographic information such as population, household size, age distribution and other information is not only interesting but it provides a great deal of information about the community. This data will often confirm our own intuitions about what is happening in the community, and, more importantly, it can reveal new patterns and trends.

The Town of Bowdoin, as most residents realize, is growing in both population and in housing. The trend and manner in which this growth is occurring will provide the raw data for many other portions of this Comprehensive Plan. Other sections of the Plan will rely upon this information to establish the final goals, policies and strategies to direct the town's future course of action.

3.1 Population Trends and Characteristics

As late as February 1993, it is fair to characterize Bowdoin as a small, lightly populated town. However, a recent steady growth in population is changing the character of this community.

Among the factors accounting for this expansion is Bowdoin's location, the availability of land, and its rural character. The town is an easy commute to four employment centers: Lewiston to the west; Bath-Brunswick to the east; Augusta to the north; and Portland to the south. Further, in 1977, I-95 opened with a Bowdoin exit, making the town still more attractive to commuters.

The Town of Bowdoin experienced a decline in population growth between 1890 and 1940 with increases beginning in 1940. The 1970's marked the biggest surge in population when Bowdoin underwent a striking 89.9% increase. This trend moderated from 1980 to 1990, when there was a 35.5% increase and again from 1990 to 2000 when there was a 23.6% increase. In the fifty year span from 1950 to 2000, the Town had a population increase of 327% compared to a Sagadahoc County increase of 68.4% and a State increase of 39.3%. Over the past ten years (1990 to 2000), the population of Bowdoin has grown by 24%, compared to a 5% increase in the county and a 3.7% increase in the state population. It is clear that Bowdoin is currently growing in population much more quickly than other areas of Maine. Table 3-1 displays overall population levels and change for Bowdoin, Sagadahoc County, and the State of Maine. Table 3-2 indicates the percent change in population. Figure 3-1 presents a graphical representation of the Bowdoin Population from 1890 to 2000 based on the US census data.

TABLE 3-1. Overall Population Levels

Year	Bowdoin	Sagadahoc County	State of Maine
1890	940	19,542	661,087
1900	937	20,330	694,466
1910	814	18,574	742,371
1920	749	23,021	758,014
1930	568	16,927	797,423
1940	467	19,123	847,226
1950	638	20,911	914,950
1960	688	22,793	970,689
1970	858	23,452	933,722
1980	1,629	28,795	1,125,043
1990	2,207	33,535	1,227,928
2000	2,727	35,214	1,274,928

FIGURE 3.1 Population of Bowdoin

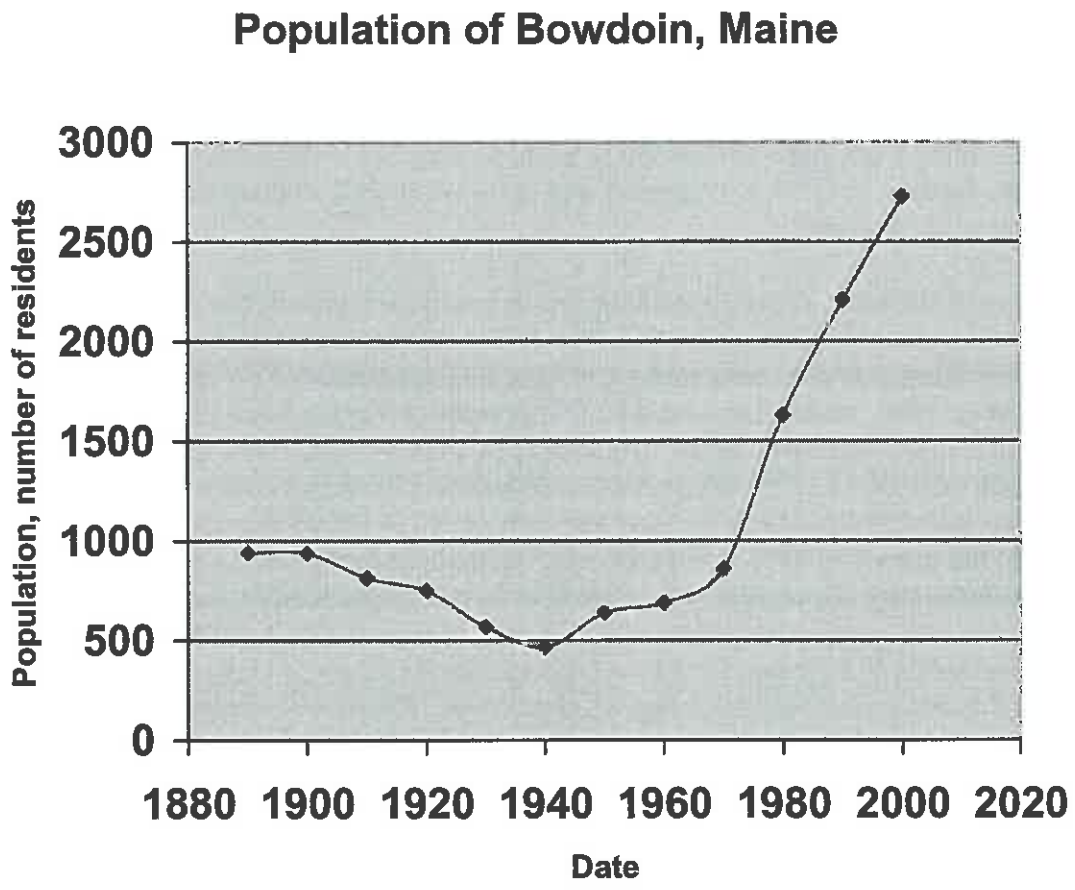

TABLE 3-2. Percent Change in Population

Year Range	Bowdoin	Sagadahoc County	State of Maine
60-70	+24.7%	+2.9%	+2.5%
70-80	+89.9%	+22.8%	+13.2%
80-90	+35.5%	+16.5%	+9.1%
90-00	+24%	+5%	+3.7%
50-00	+327%	+68.4%	+39.3

Source: U. S. Census, 2000

NOTE: 1994 estimates by the Maine State Planning Office predicts Maine's population will remain stable for the next 26 years- easing development pressure experienced in the 1980's. However, Bowdoin's population continues to rise at a rapid rate.

3.2 Age and Age Distribution

The median age of Bowdoin's population in the 2000 Census was 36.3, which is younger than the median age of 38 for the County and 38.6 for the State. Bowdoin's younger than average population is due in part to a relatively large percentage of people in 2000 under 19 years of age (31.4%) compared to the county (28.0%) and State (26.2%), and a smaller percentage of people in the over 65 category (7.2% compared to 12.3% in the County and 14.3% in the State).

The nationwide age distribution trend is towards an older population which is due in large part to the aging of the baby boom generation. This same trend is also apparent in Maine. As this segment of the population ages, the older age categories will grow in size in both Bowdoin and the State.

Table 3-3 shows age distribution comparisons between Bowdoin, Sagadahoc County, and the State of Maine. It is noteworthy that Bowdoin had higher percentages of people in the under 5 category, the 5 to 17 category, and the 18 to 44 category than the County and the State, but lower percentages of people in the 45 to 64 category and the 65 and over category. Over three quarters of Bowdoin's population is under the age of 45, compared to less than two-third for both Sagadahoc County and the State of Maine. This age distribution indicates the large number of families with childern residing in Bowdoin and the difficulties older residence may have in living in such a rural community.

TABLE 3-3. Age Distribution Comparisons
Source: 2000 Census

Age Range (years of age)	Bowdoin %	Sagadahoc County %	State of Maine %
<5	6.3	6.1	5.5
5-9	7.9	7.2	6.5
10-14	9.2	8.0	7.2
15-19	8.0	6.7	7.0
20-24	3.5	4.4	5.5
25-34	12.6	12.7	12.4
35-44	22.5	17.8	16.7
45-54	15.3	15.3	15.1
55-59	4.4	5.5	5.4
60-64	3.2	4.1	4.3
65-74	4.3	6.4	7.5
75-84	2.3	1.2	5.0
85 and over	0.6	1.7	1.8

3.3 Gender Distribution

Table 3-4 exhibits the total percentage of males and females in Bowdoin, Sagadahoc County, and the State of Maine. Overall, there were slightly more males to females (50.2% and 49.8% respectively) in Bowdoin.

TABLE 3-4. Gender Distribution Comparison
Source: 2000 Census

Gender	Bowdoin %	Sagadahoc County %	State of Maine %
Male	50.2	49.1	48.7
Female	49.8	50.9	51.3

3.4 Number of Households and Household Size

There were 987 households in Bowdoin in 2000 with the average household size at the time being 2.76 persons per household. This figure is higher than comparable figures for the County (2.47) and the State (2.39). This indicates that more children are part of the typical Bowdoin household, a consequence that will impact local schools and municipal educational cost. The community is attracting younger families which appears to be common for other rural communities that are experiencing growth similar to Bowdoin. The large rural lot size with lots of open space is popular for many families.

Average household size has been decreasing over time due to the high rates of divorce and single parenting, and the increasing number of older people living alone. Table 3-5 shows the number of households and the average size of households in Bowdoin compared to numbers for Sagadahoc County and the State of Maine. The greater

percentage of family households and married couple households and lower percentage of single person households again reflects Bowdoin's high level of young families with children.

TABLE 3-5 Household Data
Source: 2000 Census

	State of Maine	Sagadahoc County	Bowdoin
Total Persons	1,274,923	35,214	2,727
Total Households	518,200	14,117	987
Total Family Households	340,685 (66%)	9,636 (68%)	766 (78%)
Total Non-Family Households	177,515 (34%)	4,481 (32%)	221 (22%)
Married Couple Households	272,152 (53%)	7,709 (55%)	646 (65%)
Female Head of Household	49,022 (9.5%)	1,355 (9.6%)	87 (8.8%)
Single Person Households	139,969 (27%)	3,560 (25%)	162 (16%)
Persons per Households	2.39	2.47	2.76
Persons per Family	2.90	2.96	3.11

3.5 Population Density

Bowdoin has a significant amount of undeveloped land and open space, particularly in comparison to our neighboring towns. This is reflected in the population density of the town. Bowdoin has the lowest population density of any of its neighbors as indicated by the 2000 Census data summarized in Table 3-6. In 2000, Bowdoin's population density was 63 persons per square mile. Of its neighbors, Litchfield and Bowdoinham have the closest population densities of 83 and 76 persons per square mile respectively. The other neighboring towns have over 100 persons per square mile with Sabbatus and Topsham having 175 and 284 persons per square mile respectively. Bowdoin has a much lower population than Sagadahoc County as a whole. When the 1990 Census data is reviewed, it is clear that the relative density was fairly similar a decade earlier.
This can mean that if neighboring communities are still growing and attracting people to areas with a higher density than Bowdoin, then in a corresponding manner, Bowdoin has the potential to grow even more. The town as compared to its neighbors has experienced one of the higher percentages of growth in the area. Ample rural land combined with a lower regional density for other rural communities certainly points to the conclusion that growth will be a long term concern for the town.

TABLE 3-6 Land Area and Population Density:
Source: 1990, 2000 Census

	Total Persons		Square Miles	Persons per Sq. Mile	
	1990	2000		1990	2000
State of Maine	1,227,928	1,274,923	30,864.6	39.6	41.3
Kennebec County	115,904	117,144	867.5	133.6	135
Androscoggin County	105,259	103,793	470.3	223.8	220.7
Sagadahoc County	33,535	35,214	254	132	138.7
Bowdoin	**2,207**	**2,727**	**43.5**	**50.7**	**62.7**
Bowdoinham		2,612	39.14		75.9
Brunswick		21,172	46.8		452.6
Lisbon		9,077	23.6		384.5
Litchfield	2,650	3,110	37.4	70.9	83.1
Richmond	3,072	3,298	30.4	101.1	108.5
Sabattus	3,696	4,486	25.5	144.9	175.0
Topsham		9,100	32.0		284.2

3.6 Historical Population Growth

Table 3-7 presents the population and percent change each decade for Bowdoin and the surrounding region from 1970 to 2000. Over the last three decades, Bowdoin has consistently had higher growth rates than the State of Maine or Sagadahoc County. This has also been true of the neighboring towns of Litchfield, Sabbatus and Richmond. This is likely because Bowdoin has historically offered lower populations densities (more rural lots) and cheaper land than its neighbors.

TABLE 3-7 Population: Bowdoin and Region
Source: US Census

	1970 census	1980 census	1990 census	2000 census	% change 1970 - 1980	% change 1980 - 1990	% change 1990 - 2000
State	992,048	1,124,660	1,227,928	1,274,923	13 %	9%	4%
Sagadahoc County			33,535	35,214	15%	5%	5%
Bowdoin	**858**	**1,629**	**2,207**	**2,727**	**90%**	**35%**	**24%**
Litchfield	1,222	1,954	2,650	3,110	60%	36%	17%
Sabattus	1,681	3,081	3,690	4,486	83%	20%	22%
Richmond	2,168	2,627	3,072	3,298	21%	17%	7%

3.7 Future Population Growth

Town attitudes toward population growth

In the 2003 Comprehensive Plan Committee survey of the town, forty-three percent of the respondents thought that the population growth rate was too rapid and forty-seven percent thought the growth rate was about right. When asked what they most liked about Bowdoin, nearly seventy-five percent of the comments included a rural, forest, open space type answer. The most consistent responses to what is the most serious problems in Bowdoin was sprawl/growth in the town.

TABLE 3-8. Bowdoin Population: 1940-2000 and Estimates to 2020

Source: U.S. Census

Year	Population	Change	% Change per Decade	Annual Growth Rate
1940	467	-	-	-
1950	638	171	36.6%	3.2%
1960	688	50	7.8%	0.75%
1970	858	170	24.7%	2.2%
1980	1,629	771	89.9%	6.6%
1990	2,207	578	35.5%	3.1%
2000	2,727	520	23.6%	2.1%
2010	3,518	791	29%	2.6%
2020	4,538	1,020	29%	2.6%

Estimate of Future Population Growth

Table 3-8 presents the population of Bowdoin from 1940 to 2000 and makes estimates as to the population of the town in 2010 and 2020. These estimates are based on an expectation that the town will continue to be attractive as a more rural town than its neighbors but with the same good commuting proximity to major economic centers such as Brunswick, Lewiston-Auburn, Augusta and Portland. We have already started to see this significant growth rate continue with increased numbers of new home construction occurring each year.

The population estimates for the years 2010 and 2020 are based upon the following assumptions:

1. The growth rate that began after 1970 will continue.
2. The town will continue to be an attractive place for new families.
3. The robust economy in Southern Maine and its rising housing cost will push new home buyers into Bowdoin.
4. The rural character of the community will provide the prime attraction for new residents.

5. Land cost and building cost are still reasonable in Town but they will rise over time.
6. It will take some time before new home construction will make the towns, reach the same population density as neighboring town, therefore Bowdoin will remain attractive as a "rural" town even though the character of the town will change significantly as the back areas are developed.

Population estimates are at best our view into the future accounting for all the trends and influences that we can identify at the present. As the situation of the economy or housing market changes so will the growth rate for the community. It is important that the community pay close attention to annual changes in housing growth and other local and regional indicators in order to be aware of changes that are on the horizon. This will require that the Town look carefully at the 2010 census data when it becomes available and for the Planning Board and Selectmen to keep tabs on new housing and school population figures.

Keeping track of new demographic data will allow the town to determine if some of the projections made in this Comprehensive Plan are accurate and whether revisions are necessary to change policies and strategies.

4. HOUSING

Purpose and Goals

The housing section of the comprehensive plan deals with a variety of housing related issues such as affordable housing, mobile homes, residential growth patterns, building activity, subdivisions, seasonal housing, rural land development, and future housing needs.

Maine State Goal:
•To encourage and promote affordable, decent housing opportunities for all Maine citizens.

Local Goal(s):
•To recognize that the availability of affordable housing is essential to the health and well-being of Bowdoin.
•To make housing (including rental housing) available to all age groups and income levels in the community.
•To have at least 10% of all housing built during the next decade be "affordable", according to the M.S.H.A.'s definition of affordable.
•To foster public/private partnerships in achieving these goals.

Data Source Notes:
The data represented in this section comes from a variety of sources. Data noted as being derived either wholly or in part from : Claritas by indicated year; Statewide Multiple Listing Service (MREIS); Maine State Housing Authority (MSHA); Housing and Urban Development (HUD); Rural Development and Local Housing Authorities (RDLHA), may represent projections, assumptions or estimates, or combinations of these factors. Data from the above resources represents 2003 values. Data from the Maine 2000 census and Town Records comes directly from those sources, and represent 2000 values unless noted. This data represents the best available information at this time.

4.1 Building Permit Activity
Source: Town Records

During the period between 1990 and 1999 inclusive, a total of 345 new units were constructed, and 33 units were removed or destroyed. The average net increase in the total number of new, additional units per year for this 10 year period is 31 units. From 2000 to 2002 inclusive, the total of new units constructed was 89, with 2 units removed or destroyed, for a net average increase in the total number of new units of 29 units for this three year period. The table below shows the data for this time period.

TABLE 4.1 - Building Permit Activity: 1990 to 2002 Totals for Type of Units
Source: Town Records

Year	Single Family	Multi-Family	Mobile	Seasonal	Removed	Net increase
1990	30	2	10			41
1991	10			5		12
1992	8		4			12
1993	17		13		5	25
1994	31		22		9	44
1995	18	1	19		5	34
1996	18		25		4	39
1997	20		12		8	24
1998	19		23			42
1999	19		19		2	36
2000	18		9			27
2001	16		14			30
2002	25		7		2	30

4.2 Housing Projections

Based upon building permit activity over the period from 1999 to 2002 and considering the attraction Bowdoin has for people, it would not be unreasonable to assume that new housing will continue at a similar rate. A new housing rate of 30 dwellings per year would mean that the town would grow by an additional 300 housing units over the next 10 years. The estimated housing growth projection for Bowdoin made by the State Planning Office places the projected housing growth at 20 units per year over the ten year period from 2005 to 2015 for a total number of 1293 units. Taking into account both estimates, the number of anticipated units would be between 209 to 300 for a total estimate of 1293 to 1452 units over the next 10 years.

This difference in projections, and the fact that many different factors contribute to housing growth, indicates that these predictions could change. The town should monitor its annual building permit figures in order to identify any significant increases or decreases in the number of net new units. It should be noted that Bowdoin is an attractive destination for new families and this could rapidly increase if housing prices continue to increase in the Southern Maine Counties. Access to I95, Route 201 and Route 125, allow people to make a reasonable commute to Lewiston, Augusta, Brunswick, Bath, and Portland.

The town should be ready to modify its land use strategies if an increased level of housing construction is experienced. Likewise the effectiveness of this plan's land use strategies also needs to be evaluated in light of any significant changes in the housing growth rate.

TABLE 4.2 - General Bowdoin Housing Data:
Source: 2000 Census

	Population	Total number Housing Units	Median number of Persons per unit	Median Value	Median gross rent
Sagadahoc County	35,214	16,489	2.1	$110,200	$551
Bowdoin	2,712	1,026	2.6	$130,800	$646
Bowdoinham	2,629	1,116	2.4	$114,200	$606
Topsham	9,100	3,573	2.6	$118,700	$636

TABLE 4.3- Housing unit comparisons, County versus Town
Source: 2000 Census and Building Permit Data

	Sagadahoc County	Bowdoin
Total existing housing units in March 2000	16,489	1,026
Lacking Complete Plumbing	118 units = 0.01%	8 units
Built 1939 or earlier	4,876 units = 30%	89 units
1940 to 1959	2,104 units = 13%	44 units
1960 to 1969	1,465 units = 9%	86 units
Built 1970 to 1979	2,809 units = 17%	230 units
Built 1980 to 1989	2,832 units or 17%	300 units
Built 1990 to 1998	2059	249[2] to 315[1] units
Built 1999 to 2000	344[3] units	28[3] to 63[1] units from varying sources

1 Source = building permit data for years shown inclusive.
2 Source = 2000 Census data (may or may not be for years shown inclusive)
3 Source = 2000 Census data to March 2000

In Bowdoin, a total of 816 housing units were constructed from 1960 to 2000 inclusive (not counting replacement units from 1989 to 2000). The average rate of growth over that 41 year period was 19.9 units per year. The largest percentage of growth prior to 2000 occurred between 1980 and 1989. A total of 300 units were added during this 10 year period which represented 29% of the current total existing number of housing units in Bowdoin.

The table indicates a fairly consistent growth pattern from 1970 to 1999, slightly increasing in the number of units in each ten year period; 230 units in 1970 to 1979; 300 units in 1980 to 1989, and 312 units in 1990 to 1999. The current growth rate for the period between 1990 and 1999 is 30%.

TABLE 4.4 - Type of Housing Unit:
Source: 2000 Census

Type of Unit	Total Number of Housing Units (as of March 2000)	Type of Unit	Total Number of Housing Units
1 unit detached	646	1 unit attached	18
2 unit	20	>2 unit structures	13
Mobile Home	329	Other (seasonal)	Not available

TABLE 4.5 - Heating System Type:
Source: 2000 Census

Type of Heating	Oil	LP Gas	Wood, Coal or Coke	Electric
Total units	763	92	117	8

4.3 Affordable Housing
Source: MSHA 2003 data

The ability of young families and newcomers to the town to locate housing within their price range plays an important part in the overall health and vitality of the community. The economic growth of a community is also effected because potential employers look for areas that can accommodate their workers. Other groups that benefit from the availability of affordable housing include families looking for larger home, and senior citizens wishing to down-size their living space requirements.

The term "affordable housing for owner occupied and rental units" is defined as follows:

> An owner occupied unit is affordable to a household if its price results in monthly housing cost (mortgage, principal and interest, real-estate taxes and basic utility cost) that do not exceed 28% to 33% of the household's gross monthly income. Mortgage payments are to be based on down payment rates and interest rates generally available to low and moderate income households.

A renter occupied unit is affordable to a household if the unit's monthly housing cost (including rent and basic utility cost) does not exceed 30% of the household's gross monthly income.

Affordable housing availability for very low income, low income and moderate income households will be the focus of this plan.
"Very low income households" are defined as having incomes that do not exceed 50% of the median income of the community. In 2003 the Town had 168 very low income households which accounts for 16.1% of the total number of households.

"Low income households" are defined as having incomes between 51% and 80% of the median income of the community. In 2003 the Town had 353 low income households which accounts for 33.9% of the total number of households.

"Moderate income households" are defined as having incomes between 81% and 150% of the median income of the community. In 2003 the Town had 867 moderate income households which accounts for 83.2% of the total households. The affordable housing prices for each of the three income groups are displayed in the following table.

TABLE 4.6 - 2003 Affordable Housing for Designated Income Groups in Bowdoin
Source: MSHA 2003 data

	<50% Very Low Income	<80% Low Income	<150% Moderate Income
All Households by Income	16.1%	353 = 33.9%	867 = 83.2%
Income In Dollars all Households	$23,511	$37,618	$70,533
Owner Households by Income	14.5%	31.3%	81.8%
Renter Households	$30.2%	%56.0%	%95.3%

TABLE 4.7- Median monthly owner costs
Source: 2000 Census

Median monthy owner costs with a mortgage in 2000	$982	$898
Median monthy owner costs w/o a mortgage in 2000	$311	$271

Rental Affordability

The gross median rent for a rental unit in Bowdoin is $646, versus the Sagadahoc County median of $551, which would indicate that affordable rents are somewhat limited for low and moderate income households. The Town has a total of 107 rental units, many located within the fluctuating rental situations of its local trailer parks, which is not unusual considering its rural character. Nearly half of the rental units fall within a gross rent of $500 to $749. A wider choice of rental properties are located in Gardiner, Augusta, Lewiston/Auburn, and the Bath Brunswick area. The following tables provide information regarding the affordability and need for rental units in Bowdoin, in comparison with Sagadahoc County as a whole.

Housing Affordability

Home ownership is the dominant factor in Bowdoin's housing market. The Town has an owner occupied rate of 90.7% which exceeds the 70.9% rate for Sagadahoc County. The median value of a home in Bowdoin is $130,800, which means that half of the homes are valued below this figure. Affordability for the moderate income households would not be as great an issue as for the lower income buyers. The housing choices available for very low, low, and even the median, would be more limited

TABLE 4.8 – Housing Affordability
Source: MSHA2003 data
Note: An index of less than 1 is unaffordable, and index of more than 1 is affordable.

Location	Index	Median Household Income	Median new home cost	Median Income Can Afford	Income Needed	By Hour	% of Homes Sold Above Afford	% of population that Can't Afford
Bowdoin	1.03	$47,022	$127,500	$131,622	$45,549	$21.90	52.4%	47.5%
Sagadahoc	0.96	$46,398	$142,000	$135,766	$48,529	$23.33	55.7%	52.5%

TABLE 4.9 – Bowdoin House Sales

Year	Median Sale Price All Homes	Median Sale Price Sing. Fam.Homes	Total # All Homes Sold	Total # Single Family Homes Sold
1999 to 2000	$124,900 (1999)	$125,000 (1999)	11 (1999)	9 (1999)
2000 to 2001	$104,900 (2000)	$109,000 (2000)	17 (2000)	15 (2000)
2001 to 2002	$118,500 (2001)	$125,000 (2001)	19 (2001)	17(2001)
2002 to 2003	$130,500 (2002)	$140,000 (2002)	22 (2002)	19 (2002)
2003	$127,500	$153,000	19	15

Total percent increase in cost of all homes 1999 to 2003 = 2.1%
Total percent increase in cost of single family homes 1999 to 2003 = 22.4%

TABLE 4.10 – Sagadahoc House Sales

Year	Median Sale Price All Homes	Median Sale Price Sing. Fam.Homes	Total # All Homes Sold	Total # Single Family Homes Sold	% Change in Cost All Homes	% Change in Cost Single Family Homes
1999 to 2000	$101,500 (1999)	$108,250 (1999)	330 (1999)	302 (1999)	8.4%	6.9%
2000 to 2001	$110,000 (2000)	$115,750 (2000)	332 (2000)	302 (2000)	4.1%	3.6%
2001 to 2002	$114,500 (2001)	$119,900 (2001)	335 (2001)	295(2001)	13.4%	12.6%
2002 to 2003	$129,900 (2002)	$135,000 (2002)	338 (2002)	301 (2002)	9.3%	11.13%
2003	$142,000	$149,921	405	361	Total 99 to 2003 39.9%	Total 99 to 2003 38.5%

A total of 88 homes were sold from 1999 to 2003 inclusive, for an average of 17.6 homes per year. The median sale price in 2003 for a home in Bowdoin was $127,500. The total percentage of increase of the cost of all single family homes from 1999 to 2003 inclusive, was 22.4%. Approximately 50% of the homes sold in 2003 were above what the average homeowner and wage-earner in Bowdoin could afford. These tables indicate that housing values are on the rise and it will become more difficult for many moderate and low income households to locate affordable housing. Likewise, choices for very low income households are becoming even more scarce.

Some factors can mitigate this situation, especially considering the popularity of mobile homes. The 154 mobile homes installed from 1990 to 2002 inclusiv, have provided an affordable housing opportunity for many families. With the current lack of mobile home park zoning, opportunities are still available for people to install a singe or double wide mobile home on any vacant building lot within the Town, and thereby bring the overall cost of a new or used home, and land, closer to an affordable price range. Modular homes, also very popular now, represent another option for home buyers to place a modest dwelling on a parcel of land.

Affordable housing will continue to be a concern for very low, and low income households, despite the ability to place new or used mobile homes on available building lots. Another factor that has effected the Town's affordable housing market is the current economic expansion in the southern part of the State. Bowdoin is still a fair distance from Portland; however, as housing prices rise in the southern communities, many families have begun to look to outlying areas for additional housing opportunities. This increased demand for housing within the town and has resulted in a rise in housing prices.

4.4 Mobile Homes

As of March 2000, there were a total of 329 mobile homes within the community. According to building permit data, from 1990 to 2002 inclusive, a total of 168 mobile homes were installed, out of a total of 434 housing units (some as replacements). New mobile home permits during that time period represented 39% of the new homes constructed. Mobile homes offer many families an affordable housing option and for some it provides a home until they can afford to build a conventional stick built structure or purchase a modular home. The popularity of mobile homes is a trend that can be found in many communities throughout the region.

Mobile homes as of March 2000 account for 32% of the Town's housing stock. Mobile homes are now more likely to be placed on an individual lot as opposed to being placed in a mobile home park. Low interest rates on mortgages has encourage the placing of mobile homes on individual lots for which payments eventually lead to ownership to the home and trailer, rather than on rental lots in mobile home parks. This trend has in part, reduced the popularity of mobile home park development over the previous 10 years.

4.5 Seasonal Housing

Since 1990 a total of only 5 seasonal housing units were constructed. Since Bowdoin does not contain a great deal of recreational water frontage, or other features which promote seasonal dwellings, the number of these types of units is statistically insignificant and will likely not be an issue in terms of growth over the next ten years.

4.6 Residential Development Patterns

The Land Use Section of this Comprehensive Plan discusses in more detail the current development trends and their impacts upon the community. It is important to note that new housing has been placed throughout the community without any regard to some of the more traditional development centers such as the Town's village center. The housing development pattern is typical of what is called suburban sprawl. The Rural atmosphere of the town has been a powerful draw to many new residents and this will most likely continue. It should be clear that this trend does have some negative impacts upon the Town the most significant being the potential loss of many of the Town's rural attributes. The impact of development over time will be discussed in many other parts of this Comprehensive Plan and in particular in the Land Use Section.

Subdivision Development Activity

The following table shows the subdivision activity within the community since 1973. The number of approved subdivision lots still available for development, are indicated.

TABLE 4.11 - Subdivision Development
Source: Town and County Records

Subdivision name	Location	Year	# of acres	# of new lots created	# of vacant lots
Fred and Eva Smith	Route 125	1973	7.5	3	
Henry M. Baribeau	Routes 201 and 138	1973	9.5	5	
Dorian and Grant (revised in 1974)	Litchfield Road	1973	111	0	
Dorian and Grant	Litchfield Road	1974	111	4	
Birch Ridge Estates	Litchfield Road	1974	10	10	
Harrington	Burrough Road	1975	16	6	
Weirmont Development	Lewis Hill Road	1975	10	2	
East Cathance Stream Acres	Doughty Road	1975	15	4	
Walter A. Huston Inc.	West Road	1980	8	4	
Forest Acres	Old Litchfield Corner Rd	1980	43	4	
Amor Acres	Millay Road and Route 201	1980	13	4	
Deer Acres	Sandy Knoll, Lewis Hill and Ledge Hill Roads	1982	49	5	
Deer Acres (revision)	Sandy Knoll, Lewis Hill and Ledge Hill Roads	1982	49	0	
Tupper Arboretum	Academy Road	1984	80	2	
Michael and Donna Reed	Sandy Knoll Road	1984	23	2	
Vesta Williams	Route 201	1985	6	3	
Jackins	Millay Road	1985	23	2	
Whitten Hill Farm	West Road	1987	8.5	4	
Stone Ridge	Route 201	1987	28	4	
Jackins (amendment lot 2)	Millay Road	1987	5	1	
George Porter, Jr.	Route 201 & McIver Road	1987	33.5	5	
Lewis Hill Heights	Lewis Hill Road	1987	47.3	7	
William and Yvonne Van Meter	Adams Road	1988	73	3	

Patten Woods	Dead River Road and Litchfield Town Line	1988 5+/- 4			
Richard & Diane Bibber (revision to Weirmont Dev.)	Lewis Hill Road	1988	10	2	
Carl Goodenow	Millay Road	1988	10	5	
Apple Ridge	Route 201 and McIver Road	1989	9	2	
Henkel	Lewis Hill Road	1989	42	3	
Deer Acres (Amendment to lot 4 original plan)	Sandy Knoll Road, Lewis Hill Road, Ledge Hill Road	1989	15	1	
Patrick and Bethany Sirois (multi-family units)	Adams Road and Route 201	1989	14	1	
Bowdoin Pines Trailer Park	Doughty Road	1989	20	9 units	
Deer Acres (Amendment to lot 2 original plan)	Sandy Knoll Road	1989	11	1	
Wood School House	Wood School House Road	1989	12.5	5	
Hill Pasture	Adams Road	1992	11.6	4	
Patrick and Bethany Sirois (Amendment to original plan)	Adams Road and Route 201	1991	15	2	
PDE	Route 201	1994	15.5	3	
Leo T. Purington	Lewis Hill Road	1994	10	5	
George M. Couture	Old Litchfield Corner Road and Booker Road	1995	12.3	2	
Rideout Road Lot	Rideout Road	1995	12	2	
George M. Couture	Litchfield Road	1995	15.8	2	
George M. Couture (Amendment to above plan)	Litchfield Road	1996	15.8	0	
Leo T. Purington	Sandy Knoll Road	1996	17.7	4	
Green Acres	John Tarr Road	1996	45	3	
Green Acres (Amendment to above plan)	John Rarr Road	1997	45	0	
Jerry A. Welch (Amends Leo Purington 1994 Plan)	Lewis Hill Road	1997	75	1	
Coutures Corner	Route 125 and Lewis Hill Road	1998	9	3	
Academy Road West	Academy Road	1999	35	2	
North Church	Wood School House and Litchfield Roads	2001	24.2	7	

North Church Phase II	Wood School House and Litchfield Roads	2002	66	21	
Dead River Estates	Dead River Road	2003	13.6	5	
Pine Ridge	Route 201 and Doughty Road	2003	20.5	5	
Couture Heights	West Road	2004	109	13	
Sampsons Meadow	Dead River and Academy Roads	2004	22	5	
Total				197 lots 9 units 2 multi-family	

From 1980 to 2002, a total of 701 housing units were constructed (excluding removed units). The total number of additional subdivision lots created during that time period was 163. If an assumption is made that one housing unit was placed upon each of the lots created by subdivisions during that time period, then a total of 163 units were placed on subdivision lots and the balance of 538 units were located on individual lots. Subdivision lots would then be assumed to have provided space for 23% of the new housing stock over that time period. On an annual basis this would mean that an average of 7.4 subdivision lots and 24.5 individual lots were used.

It is clear that individual lots are more popular, or readily available, than lots in subdivisions. Many of the non-subdivision lots have existing road frontage which provides for easy and affordable access into the lot. However, as these lots are sold and developed it will be necessary to market rear land, which requires more extensive development such as interior roads that is indicative of a subdivision. Also, recent changes in the number of driveways allowed upon existing State Aid Roads prompts development to occur upon interior subdivision roads. The demand for new housing will drive the need for new subdivision lots which can be more expensive due to road and other infrastructure cost such as utility lines and drainage. If the Town continues to be popular for new housing it would seem to indicate that more subdivision activity could be expected to replace road frontage lots as the supply decreases. On the other hand if less expensive road frontage lots are still plentiful in a neighboring community the housing market could shift to that community.

4.7 Housing for the Elderly

The next ten to twenty years will bring an increasing number of baby boomers into the ranks of senior citizens. This trend is not unique to Bowdoin but is occurring throughout the nation. How will this impact housing is a concern for the town. The rural nature of the community will make it difficult for many people to stay in their own homes as they get older. The lack of a village center and associated services including transportation and shopping can create isolation. Many residents might have to leave the community they spent many years enjoying to find housing closer to a more urban environment. One alternative is for the town to explore whether or not it would be feasible to attract a

housing development designed for senior citizens. Naturally, links will have to be provided to necessary services available in Augusta, Brunswick, and other surrounding communities. Another option would be to allow aging parents to live in an additional dwelling on their children's or care providers' lots (lots on which an additional dwelling would not otherwise be allowed). These would provide other options for Bowdoin residents to remain within the community as they age and still be able to meet life's new demands.

TABLE 4.12 - 2003 Affordable Housing for Seniors in Bowdoin
Source: MSHA 2003 data

	<50% Very Low Income	<80% Low Income	<150% Moderate Income
Total Senior Households (65+)	43.2%	60.9%	89.7%
Owner Households (65+)	40.7%	59.1%	89.2%
Renter Houlseholds (65+)	97.5%	100%	100%

4.8 Housing Issues and Implementation Strategies:

Issues

1. Bowdoin's rural character is transforming into a rural/suburban community. The Town is popular for families looking for a rural place to live that is centrally located to three or more labor market areas.

2. Bowdoin's current population density per square mile is 70.9, which is less than the Sagadahoc County average of 133.6 persons per square mile. Ample land is still available for residential development and based on the number of persons per square mile that rural feeling sought by many families is still available.

3. Mobile and modular homes continue to be a popular type of housing in the community.

4. Affordable land is becoming less available for new housing.

5. The price of the average home is increasing. The median cost of a home in 2003 was $127,500. The median price for a single family home from 1999 to 2003 inclusive rose 22.4%.

6. Housing affordability will continue to be an issue for many Bowdoin families especially for first time home buyers, and as mortgage interest rates begin to rise.

7. Options are not available for senior citizens to find alternative housing within the community.
8. Development trends can create significant negative impacts upon the rural character of the community if some critical land use issues are not addressed by the community.

9. The traditional village center within the community is not the popular location for new housing. Rural areas are the most popular sites selected by new homeowners.

10 Individual lots are more popular or more available, than subdivision lots for the majority of new homes.

Housing Policies & Strategies

Policy 1: Investigate land use restrictions and development costs which may be limiting the development of affordable housing and revise as needed to address goals.

- Strategy 1.A: Review zoning regulations, including use, density, lot size, road construction and other provisions to see if reduction in housing construction cost may be achieved.
- Strategy 1.B: Review zoning regulations to provide provisions/incentives for constructing "affordable" infill development.
- Strategy 1.C: Investigate other land use restrictions which might result in the creation of affordable housing; i.e. limiting the overall dwelling size and/or limiting the number of bedrooms per unit.

Policy 2: Investigate other strategies that would support the creation of affordable housing.

- Strategy 2.A: Consider implementing a standard which requires that a percentage of new residential dwellings be affordable to low and moderate income families- with appropriate covenants to insure that such housing remain affordable.

Policy 3: Ensure there is accurate data on building permits to determine housing needs.

- Strategy 3.A: Map the building permits for that current year on an annual basis.

5. TOWN GOVERNMENT AND PUBLIC SERVICES

Bowdoin has a town meeting system of government. At least once a year the townspeople gather and vote on both broad policy and spending issues. When additional spending or policy issues need to be addressed during the year, Special Town Meetings are convened. The following town officials are elected for various term lengths at the annual Town Meeting, held the first Saturday after the first Monday in March.

- Selectmen
- Planning Board members
- 2 MSAD 75 Board of Directors
- Tax Collector
- Town Treasurer
- Town Clerk
- Road Commissioner

Additionally, the following positions are filled by appointment:

- Board of Appeals members
- Animal Control Officer
- Health Officer
- Fire Chief
- Code Enforcement Officer
- Assessor

A Town Governance Committee was commissioned in 2000 to provide a study of the effectiveness and public satisfaction with our current form of town government. Results of that survey and public hearing indicated that citizens were happy with our current form of government and were unwilling to consider hiring a Town Manager (72% of 205 respondents). Other recommendations that came from the survey and hearing include:

- Additional administrative support to assist current town officials.
- Formation of a Finance Committee to work with the Board of Selectmen and Treasurer to oversee and assist in the town budget process.
- A more formal written candidacy process for all elected town officials.
- Computer automate the town office functions where possible.
- Improve public awareness via newsletters and a Town website.

Since this study was commissioned the town has accomplished and is continuing to improve on all of the above recommendations. The only recommendation yet to be realized is the formation of a Finance Committee and this plan is also addressing that recommendation.

5.1 Municipal Complex

In 1989, Bowdoin completed construction of a new town office, which is located on a 30-acre parcel off Route 125 west of Bowdoin Center. This facility provides office space for the selectmen and a small meeting room where all public board meetings are

conducted. Larger public meetings are conducted at the Bowdoin Center School auditorium. The building also houses the counter service facilities for the town clerk, tax collector and other officials to conduct town business. The climate controlled basement houses the town records and also contains a large walk-in strong room where the town's historically significant records are kept. This building is handicapped accessible except for the basement.

A fire station was completed on this parcel in 1991 and a salt shed was completed in 1999. A collection center for recyclable waste has also been set up at this location. Additionally the old town office building was relocated to this site to preserve the building and its original town safe. Plans are ongoing to move the original Bowdoin one room school to a new foundation on this property and restore the building.

5.2 Public Safety

Bowdoin does not maintain its own police or ambulance services. Public law enforcement is provided by the Sagadahoc County Sheriff's Department and the Maine State Police. Ambulance service is contracted with County Ambulance Service, of Topsham. The Bowdoin Fire Department does have a limited first responder capability in some of its volunteers that can provide emergency first aid on scene.

Fire Department

Bowdoin currently operates a volunteer Fire Department staffed by a Fire Chief, a Deputy Chief for Operations, a Deputy Chief for EMS, 18 volunteer personnel, and 7 junior personnel. The Fire Station is located on the municipal lot adjacent to the Town Office, Salt Shed and Historic Society buildings. The station consists of a 62' x 48' building with 3 deep bays capable of holding all 6 of the town trucks and providing office space for the chiefs and storage for all the equipment. It also has an additional 18' x 30' classroom with cafeteria facilities and shower/changing area. This facility was largely constructed by volunteers over the last 3 years and is of sufficient capacity to meet the needs of the community for many years.

The department just received its newest truck in February 05, a 2004 model Engine/Pumper capable of multi-use functions. The department also has a 1989 Tanker, 1989 Rescue Vehicle, a 1977 Engine/Pumper, a 1975 Engine/Pumper and a 1975 Brush Truck. It is the intention of the department to eliminate the older Engine/Pumper now that it has the 2004 model and the Chief feels the vehicle inventory is sufficient to meet the needs of the community for at least the next 10 years.

Bowdoin's primary concern is the number of volunteers and what the future holds for responding to the current growth pattern. With only 18 Maine State Certified volunteers the town relies upon mutual aid agreements with the other towns in Sagadahoc County and Androscogin County. The junior responders is a program to try and grow young people in the community into the department and the department does all it can to show

itself to the community in an attempt to promote volunteerism. The department feels it can sustain itself currently but may have to rely on full time paid positions in the future. The department operates on an annual $30,000 budget and is proactive in obtaining grant money from the state and federal governments. No increase is anticipated in the immediate future.
Fire call Summary:

Year	Fire	Accident	Medical	Other
2000	28	32	70	11
2001	38	36	64	7
2002	48	24	83	8
2003	35	33	62	14
2004	52	56	73	8

Emergency Planning

The January Ice Storm of 1998 brought out the importance of emergency planning. Municipalities are partners with the county, state and federal governments in developing and implementing emergency planning. Currently the town has a 911 emergency service which connects the caller to the Sagadahoc central dispatcher for all emergencies. All emergency planning is coordinated at the county level.

Health Care

There are no medical facilities currently located in Bowdoin. Residents primarily use the two hospitals in Lewiston, St. Mary's Medical Center and Central Maine Medical Center, or the two hospitals located in Brunswick, Mid Coast Hospital and Parkview Hospital.

5.3 Water and Sewer

Residents and businesses in Bowdoin rely primarily on private septic systems and wells. The Bowdoinham Water District serves approximately 15 customers in the Route 138 area, including the 51-unit mobile home park on Route 201, which is considered one customer. In addition, there are 7 fire hydrants on Route 138 in this area.

The Bowdoinham Water District has constructed a new water tower in Bowdoin, for the purpose of improving pressure and capacity to its current customers. No pipe expansion is currently planned for the town. The fire department maintains 7 water dry hydrants and has access to several streams and farm ponds for firefighting purposes. The department charges its trucks at one of the Bowdoinham Water District Hydrants located in Bowdoin.

5.4 Solid Waste

Bowdoin is a customer of the Mid-Maine Waste Action Cooperative. Solid waste is picked up in Bowdoin by licensed haulers and trucked to the facility. This facility only accepts household trash. Bowdoin operates a recycling facility at its municipal site that is designed to accept paper, cardboard, glass, tin cans and plastic. These items are stored in dumpsters and hauled to the MMWAC facility in Auburn when necessary. An annual "pick-up day" is held for collection of white goods and other large items.

5.5 Communication

Telephone service is provided by Verizon with three telephone exchanges within the boundaries of the town.

The Brunswick Times Record, Portland Press Herald and the Lewiston Sun-Journal provide daily distribution with mail and carrier-delivered home distribution. Sunday newspaper deliveries of the Portland Sunday Telegram/Press Herald are available as a subscription service. All these newspapers can also be purchased at retail businesses in Bowdoin.

The Town of Bowdoin has its own Zip Code of 04287 and shares a Post Office with the Town of Bowdoinham. The Post Office is physically located in the Town of Bowdoinham. Enhanced 911 calling for emergency response was implemented in 2002. This also required the names of some of the roads in Bowdoin to change to eliminate possible problems or confusion which might have caused a delay in essential emergency services reaching a person. All addresses in town now havea number location on a town named road.

Cable television service is provided by Suscom Cable . Each residence which receives the service pays for the service and options they desire by subscription.

Television and radio transmissions are received from a number of stations located in the vicinity of Bowdoin, although there are no radio or television stations in the Town. Some antennae located on high spots in town supplement these transmission capabilities as well as cellular telephone service.

Big steps have been made in the Town Office to produce a town WEB page. Board members, essential phone numbers, meetings and other town information is now available on the WEB page and it may not be in the too distant future that town business may be conducted in this manner.

5.6 Regional Programs

Bowdoin, like most Maine communities, has a strong tradition of local control and government. Despite this heritage the Town currently makes use of a number of regional programs and services. It is important to identify these services because if they are

popular and cost effective they can make it easier to interest citizens in new regional programs. A list of some of the current regional services:

1. Mutual Aid between local fire departments
2. MSAD 75 participation
3. Police protection and emergency dispatch provided by Sagadahoc County Sheriff Department.
4. Participation in MMWAC Mid Maine Waste Action Corporation for waste disposal.
5. Participation in Lincoln/Sagadahoc dual county Jail Proposal.

Bowdoin needs to extend its reach into more regional cooperation and planning endeavors in the future to ease the tax burden and allow for a more cohesive approach to planning.

5.7 Public Service Issues and Implementation

Issues

1. In general, the Town of Bowdoin is meeting its current demand for public facilities and services. A recent town government survey indicated a need for additional help for the largely volunteer town officials.
2. With the implementation of some of the new recommendations of the Comprehensive Plan, such as the formation of new committees, new land use issues etc. additional support and space at the town office may be required.
3. Will the Town be able to supply the number of volunteers necessary for the Fire Department in light of the training demands now placed on volunteer fire fighters? Also considering that most of the people commute to work, will volunteers be available during the day to respond to a fire call?
4. Who will represent the town with increasing need for regional representation?

Policies and Implementation Strategies

Policy 1: The town should review the staffing and committee organization of town government and consider additional staffing and enforcement needs of the town as it conintues grow.

- Strategy 1A: With the levelof growth and development occuring in town, the town should consider increasing the Code Enforcement Officer position to full time.
- Strategy 1B: The town should consider electing or appointing representatives to regional planning groups as needed.

Policy 2: The town should address needs for additional space requirements associated with the formation of new committees

- Strategy 2A: The town should provide a separate and secure file space for each committee in town.

6. SCHOOLS

Bowdoin is part of Maine School Administrative District #75 (MSAD 75) along with Topsham, Bowdoinham, and Harpswell. The District was formed in 1969. Bowdoin Central School serves the elementary school children of Bowdoin (K-5). Grades six through eight attend Mt. Ararat Middle School in Topsham. Grades nine through twelve attend Mt. Ararat High School in Topsham. All three schools serve children with special needs through special education programs.

The MSAD 75 School Board consists of fourteen members with representation weighted by population. Bowdoin has two members on the Board, Bowdoinham has two, Topsham has six, and Harpswell has four.

6.1 Facilities

Bowdoin Central School: The original elementary school, located on Rt. 125 west of Rt. 201, was built in 1959. By the late 1990's, over 60% of the students were housed in portable classrooms and the property had insufficient land to accommodate expansion. During the 1990's, the district repeatedly applied to the state's construction program for funds to build a new school. Because of intense competition for school construction funds, the district's application was not approved until 2000. The new school was completed and occupied in the fall of 2003.

The new Bowdoin Central School is located on Rt. 125, just east of Rt. 201, on a 60-acre parcel of fields and woods. The state approved construction of a school that can theoretically support 300 students. In anticipation of future growth, MSAD 75 used local monies to fund two additional classrooms and additional space in the cafeteria and library. At the time of its construction, the state considered the elementary school's physical capacity to be 350 students based on its potential to hold 25 students in each of the 14 regular classrooms. However, this assessment did not take into account the district's policies regarding class size. Given the district's policies calling for maximum class sizes of 18 students in Kindergarten, 21 students in grades 1 through 3, and 25 students in grades 4 through 5, the actual population the school can support with the two additional classrooms is between 300 and 310.

Bowdoin Central has two classrooms for each grade, a library, gym, music classroom and band practice room, art room, computer center, learning lab, cafeteria, and a stage that opens onto both the gym and cafeteria. It also has several smaller classrooms for literacy and special education staff who work with small groups of students. Outside, the school has a playground, a baseball diamond with backstop, and soccer field.

Mt. Ararat Middle School and Mt. Ararat High School: In the upper levels, MSAD 75 buses students from its four member towns to centralized facilities in Topsham. In 1992, MSAD 75 restructured its overcrowded high school, which housed grades 7-12, into a middle school housing grades 7-8, and a high school serving grades 9-12. For several years, the district leased Brunswick's old high school to house its middle school students

while applying for funds to construct a new middle school in Topsham. In 1995, the district's application to build a new middle school was approved by the state.

The Mt. Ararat Middle School opened in January of 2001, located on a 42-acre property adjacent to the high school in Topsham. The Middle School has a physical capacity of 900 students.

The Mt. Ararat High School in Topsham was built in 1973 to accommodate grades 7- 12. Since grades 7 and 8 were removed from the high school, its enrollment has increased from 897 in 1995 to its current enrollment of around 1,110. Space needs at the high school have increased significantly since it was built. Many regular classrooms have been converted to other uses to accommodate special education classrooms, computer labs, guidance counselors, and more. Some of the remaining classrooms are extremely small, limiting class sizes. In 2002, six portable classrooms were added to the facility to accommodate the need for additional space.

6.2 Staffing

Elementary: In 2004, Bowdoin Central School had two classroom teachers for each of grades 1-5. The extended day Kinderstart program is staffed by a full-time Kindergarten teacher and a full-time Educational Technician. Special needs children are served by 3.5 Special Education teachers, one half-time speech and language teacher, and 7 Educational Technicians. The physical education and music teachers work 2.5 days per week in the school, the art teacher works three days per week, the librarian works four days per week, and a full-time Educational Technician teaches in and staffs the computer lab. An instrumental music teacher works at the school 1 day per week.

The school has a full-time principal and secretary, and 1.75 janitorial positions. Additional staff include a half-time literacy specialist, a half-time Reading Discovery teacher, a part-time occupational therapist, a guidance counselor (half-time) and social worker (half-time). Further support services come from 1.5 teacher's aide positions and two Title I tutor positions. The school receives professional services from a school nurse (one day per week) and a health aide (4 days per week). Food is prepared by 1.5 food services workers.

6.3 Program

Students study a core curriculum of language arts, math, social studies, and science, supplemented by regular instruction in art, physical education, music, and library sciences. At the middle level, they also receive instruction in vocational/technical education and health for part of the 7th and 8th grade years. At the high school, students choose from a wide range of courses and must receive 20 credits (including 4 in English, 3 in Social Studies, 3 in Math, 3 - 4 in Science, 1 in Fine Arts, 1 in Physical Education, 1/2 in health, and 1/2 in Maine Studies) to graduate. High school students can take classes at the regional Vocational School in Brunswick and may have modified graduation requirements.

State law provides that students graduating in 2007 and beyond must meet the standards of the system of Maine Learning Results in the required subjects of English, health and physical education, mathematics, science, and social studies. In order to receive a high school diploma, a student must demonstrate achievement of the Maine Learning Results by successfully completing essential course tasks and associated core assessments within the District's comprehensive assessment system. All students taking required high school courses of study in the required subject areas must take these core assessments. Full implementation of the law, which requires districts to certify, starting in 2007, that each graduating high school student has met the standards of the Learning Results, was delayed by the Maine Department of Education. Full implementation is expected in 2008.

6.4 Community Involvement

There is an active Parent/Teacher Club in Bowdoin which supports the school in many ways. Many parent and community volunteers help out in the school, both in the classroom and with administrative and clerical tasks.

Many sports activities are offered to children of the Town through the Bowdoin Recreation Committee. Some of these activities take place in the school gym outside of school hours.

6.5 Future population changes

District school-age population: For several years, the state has been projecting the number of school-age children to decline state-wide. This decline is now evident with only a few exceptions. State-wide, elementary school enrollments declined between 1998 and 2003 by 6.7% (over 10,000 students) according to the Maine Department of Education. Over the next decade, school enrollments are expected to decline at all levels in almost every district.

SAD 75's student population grew by 3.9% between 1994 and 2004. However, student enrollment in the district has begun to decline in recent years. Elementary and middle school populations have been declining district-wide since 2002. The high school student population continued to increase until 2002, remained flat in 2003, and declined by 80 students in 2004.

In April of 2004, school enrollment projections were prepared for SAD 75 by Planning Decisions, a Portland-based research and planning consultant. Planning Decisions prepared similar projections in 1997-98. Their prior projections came close to projecting K-12 enrollment district-wide, but did not accurately project K-5 enrollment for individual towns in the district. The consultant cautions that its district-wide projections are more accurate than its projections for individual towns. The smaller data sets used as the basis for projections in the individual towns increase the potential for skewing of the data. The larger data set used for the district overall increases the reliability of the

district-wide results.

Planning Decisions' recent work projects K-5 enrollment district-wide to remain fairly stable, declining from current levels by about 100 students over the next ten years. It projects middle school enrollment to decline from current levels to between 618 and 640 students by 2013-14 and high school enrollment to decline by around 300 students by 2013-14.

Bowdoin school-age population: Between 1994 and 2004, the number of Bowdoin children attending district schools increased by 6%. Over that same period, Bowdoinham and Harpswell experienced declines in their student age populations. Topsham grew slower than Bowdoin during this time period until 2004, when an increase of about 140 students made it the fastest growing town in the district. (Topsham's increase may be partly due to Topsham Crossing, a large, new subdivision in Topsham.)

The new elementary school may account for some of Bowdoin's increase, since new schools often attract families to a town. In 2002, the year the school opened, almost all of the increase in Bowdoin's student population occurred at the elementary level. However, Bowdoin's school age population may have peaked with the opening of the new school. Elementary school enrollments declined by 15 to 20 students annually over the following two years, driving a decline in the overall number of Bowdoin students in the district during that time.

In the enrollment report cited above, Planning Decisions concludes that first grade enrollment was fairly stable between 1994 and 2003. First grade enrollment ranged from a low of 32 to a high of 53, averaging 41 students per year. Between 1993 and 2002, the number of births to Bowdoin residents increased, on average, while demonstrating year to year fluctuations. The town also experienced a net in-migration (parents with children moving into town) of preschool-aged children between 1994 and 2003. The rate of in-migration has increased slightly over the ten-year period. Planning Decisions expects resident births to continue at an average level of 35 births annually with fluctuations from year to year. They expect the net immigration of preschool age children to continue at levels similar to those seen over the last eight years. Planning Decisions projects that first grade enrollment will range between 43 and 57 students through 2013, averaging 54 students per year. These projections should be viewed cautiously, given Planning Decision's qualifying statements regarding the reduced reliability of projections based on data from one small town.

Bowdoin Central School: If the town's school age population continues to grow, it is likely that the school would require additional classrooms before reaching its physical capacity. Specific needs will depend upon the distribution of students throughout the grades and the needs of other programs. For example, as of the 2004-2005 school year, one of the extra classrooms is occupied by a special education program in Functional Skills for a small group of students. The Functional Skills Program will continue indefinitely as this group of students progress through the grades. As noted above, the school's capacity is between 300 and 310 because of the district's policy limiting class

sizes.

The population of Bowdoin Central as of October, 2004 was 237, so the school has some excess capacity. In the 2004-2005 school year, class sizes averaged 20 students. Each grade can accommodate several additional children (depending on the grade) before reaching the district's maximum class size. When a class reaches the maximum, the district evaluates the situation and decides whether to create another class. If Bowdoin's elementary population continues to grow such that more than one grade requires three classes, the school will have to re-evaluate its physical space to accommodate the extra classes.

During the ten years between 1994 and 2004, the elementary school population fluctuated (up and down) by as much as 40 students in a year. At present, Bowdoin's elementary class sizes do not exceed the district's recommended maximums, but they tend to be fairly close to the district's maximum class sizes and are high relative to most other elementary schools in the district.

Middle School: Mt. Ararat Middle School was built for 900 students. Its current population is in the low 800's. Since 1997, its student population has been flat or has declined. Its student population in October, 2004 was 725.

High school: The high school student population has grown by over 200 students over the past ten years, although this growth appears to have ended. The larger student population currently occupying the building, along with the creation of special education, technology, guidance and other programs since the building was constructed, has resulted in a shortage of space. The high school added six portable classrooms last year to deal with the space crunch. The district has applied for state funds to renovate the high school to address space needs and other facility problems several times. In the last application phase, the state ranked Mt. Ararat High School's renovation needs in the top one-fourth of all applications, but the state funded only the top 11 projects. The high school had an enrollment of 1,081 in October of 2004.

6.6 Impacts of increases in Bowdoin's population of school-age children

The new elementary and middle schools have addressed many of the crowding issues associated with prior facilities. However, Bowdoin Central School could have additional space needs if the town's school age population increases much beyond current levels. The high school's current facility needs are a product of the large student population and the age and design of the building, and will not be altered significantly by changes in Bowdoin's school age population.

The primary impact of the growth of Bowdoin's school age population is fiscal. This impact is related both to the increase in Bowdoin's student population and the increase in Bowdoin's valuation, because both are factors in determining Bowdoin's share of the school budget. Over the past ten years, Bowdoin's student population increased (as a percentage) more than the other three towns. Bowdoin's valuation increased (as a

percentage) more than two of the three other towns (see table). The district's cost sharing formula – which allocates costs among the four member towns – is based on two factors: student population (50%), and valuation (50%). Since Bowdoin is growing faster than the other towns in both these areas (excepting the increase in Harpswell's valuation), its proportion of the school budget is increasing as well. Over the past ten years, Bowdoin's proportion of the local share has increased by about 1%, from 11.68% in 1995 to 12.65% in 2005. In dollar terms, this means that Bowdoin is now paying around $160,000 more annually (1% of the local share in FY 2004) for schools than if populations and valuations had grown at the same rate in all four towns.

It is important to note that, while Bowdoin's population and valuation have increased over the past ten years, these changes are small relative to valuation changes in Harpswell and Topsham. The steady growth of Topsham's valuation and the huge increase in Harpswell's valuation have muted the fiscal impacts of Bowdoin's growth. Harpswell's valuation has almost doubled in the last ten years. As a result, Harpswell is shouldering a very large share of the district's budget. While Bowdoin, Bowdoinham, and Topsham pay between $3,500 and $3,700 per student (based on the town's total dollar contribution to the district divided by the number of students attending district schools), Harpswell pays over $9,000 per student. If Harpswell were not in the district, Bowdoin and the other towns could pay considerably more per student.

Harpswell is exploring alternatives to continuing to shoulder a large proportion of the district's budget. The alternatives include changing the cost sharing formula and withdrawing from the district.

7. RECREATION

Introduction

Recreational activities in the town of Bowdoin are influenced by several factors. One is that the town is still relatively rural and underdeveloped (by comparison with neighboring communities) with a sparse population. The town retains much of its rural identity with rolling fields and a large amount of heavily forested acreage. A second factor influencing town recreation is that recreational activities remain mainly- though not entirely - informal. Relatively few institutional programs exist in town. A final factor influencing town recreation has been the on going and long standing good will of private property owners in town who willingly allow a wide variety of recreation on their land. Such good will is, unfortunately, becoming a rarity in some parts of the state as development forces ownership of land to change hands and often bringing with that change new and different attitudes about what makes for the common good.

7.1 Recreational Facilities and Activities

Public and Private Facilities

Public recreational facilities in Bowdoin revolve around two areas: Caeser's Pond and the Town Forest. Caeser's Pond is a state owned, Wildlife Management Area (WMF) of approximately 500 acres. (The site is located on the west side of the Litchfield Road several miles north of the center of town.) In addition to the pond proper, the site includes wetlands and upland forest. No camping or fires are allowed on the site. Access is from a small parking lot located at the northern end of the pond on the Litchfield Road. Approximately a half dozen vehicles can use the parking lot at any one time. A small area on the southeast corner of the pond between Litchfield Road and Caeser Pond is privately owned and not available to the general public. A variety of activities are allowed at the pond to include boating and canoeing, fishing and ice fishing, fur trapping, hunting and wildlife watching. In the winter, the pond is a favorite location for skating and vigorous games of pond hockey. Wildlife that may be seen in the area includes deer, eagles and osprey, water birds and a variety of smaller birds. No formal hiking, snowshoeing or cross-country skiing trails are known to exist or be maintained on the upland forest acreage.

The Town of Bowdoin owns 1100 acres of town forest lots. Though the potential exists for future expanded usage - such as developing hiking, skiing and snowshoeing trails- at present no such formal trails exist. There does not seem to be any formal plans for pursuing the development of recreational activities in the town forest in the near future. Any recreational usage at present (such as walking, bird watching, hunting, snowmobiling, hiking) is informal and unorganized. A survey submitted to the town did record that 60% of respondents favored maintaining the town forest for future recreational usage.

It is also worth mentioning that the town has abutting it - at its southeast border- the northern end of Bradley Pond. Access to the Pond from Bowdoin is difficult, especially if one wished to canoe / boat / fish. (Access is better obtained from the Topsham side of the Pond.)

There also exists in town Stoddard Pond, a privately owned facility located across from the new Bowdoin Central School. At one time, the Pond hosted a private campground and offered swimming lessons in the summer to local youth. It no longer offers any public recreational access nor are there any plans known future plans to reactivate the pond as a recreational area.

A great deal of the recreation in the town of Bowdoin relies on the co-operation of private landowners who allow access to a wide variety of activities. Along with a forest cover of 70%, there are still large tracts of open space in town accessible to snow mobilers, skiers, hunters, etc. The positive relationship between private landowners and those seeking to use their land for such activities remains one of the great attractions for people living in Bowdoin. The question needs to be raised as to what would happen if residents / landowners were to place restrictions on access as well as an overall reduction of acreage available for recreation due to house lot development.

7.2 Snowmobile, ATV and Related Activities

There exists in Bowdoin a small but active group of citizens engaged in snowmobiling. The club - the Bowdoin Flurry Flyers that was founded in 1976 - fluctuates in numbers from 40 to 60 active members per year including some participants from the town of Lisbon. The club maintains about 40 miles of trails throughout the town. (Each year, the club does its best to obtain permission for usage from private landowners.) The vast majority of those trails are located on private property with additional trails found in the Caeser's Pond Wildlife Preserve. Work on the trails and bridges on the trail is a year round process with the bulk of the grooming being done in the fall by club members. Funding for these activities comes from two sources. State grants amounting to $3000 yearly help with labor costs. At annual town meetings, a portion of the club's registration fees are voted back to the club by warrant. Generally, relations between the snowmobilers and the property owners have been amicable.

In addition to their use by snowmobilers, the maintained trails are used by an ATV club (started in 2000) based in town. (Some of the trails used by snowmobilers, however, are closed to ATV usage by private landowners who fear damage to their land or who oppose ATV's for other reasons.) Trails that cross wetlands are avoided and other trails - mostly old town roads that are discontinued - are used. ATV trail usage does more damage and therefore more trail maintenance is needed. Holes and ruts in particular need to be filled so maintenance is labor intensive. No funds for either labor or materials are received from the town.

In addition to snowmobiles and ATV 's, the trails maintained by these two clubs get a variety of other usage. Several townspeople who own and ride horses have become

affiliated with this group. Approximately 20 townspeople use the trails for horseback riding. In addition hikers, trail bikers, hunters and cross country skiers and snowshoers are known to make seasonal use of the trail system. It is obvious that this informal recreation system is extensively used and is an important part of the quality of life for Bowdoin residents. What is even more noteworthy is that this system depends entirely on the good will of private landowners who are willing to share their property with their fellow towns people.

7.3 Traditional Outdoor Sports

Bowdoin is also the home of more traditional outdoor sports to include hunting and fishing. With the town's forest cover, a large number of residents engage in big game (deer) and smaller game (birds, rabbits, turkey, etc) hunting. The town also hosts a large number of out of town guests who hunt our fields and woodlands.

Though the town is not blessed with a large number of waterways, fishing does occur at Bradley and Caeser's Ponds. Pickerel, white perch and a variety of bass are present for anglers to tempt to their lures. .

7.4 Organized Recreational Activities

MSAD # 75 Sponsored Activities

Over the years, MSAD # 75 has sponsored and supported a variety of activities for the town's school aged children. All children in K-5 participate in weekly physical education classes. In grades K-2, the focus is on basic skills and educational gymnastics. Older students (grades 3-5) focus on skills geared toward specific sports. The PE program also incorporates classes in softball, soccer and outdoor basketball. In building the new Bowdoin Central School, provisions were made for fully developed athletic fields. (At present, plans are in the works for expanding those fields and adding a full sized Little League baseball field.) The school currently has both a soccer and softball field complex. The school sits on 60 acres of land, but the expansion of those lands into more athletic facilities is limited as much of the acreage is wetlands. At present, no known adult programs in town make use of the school's athletic facilities. In earlier years - at the Old Bowdoin Central School - a men's basketball league practiced and played games in the gym. That program is no longer in existence. It must be pointed out that the use of the new school's gym for adult athletics such as basketball and volleyball would be difficult as that facility is heavily scheduled for practices for school teams and activities. There is available, however, the gym at the old Bowdoin Central School which is now the FHC Facility (see below.)

Seasonal sports programs are also offered by the school district. Basketball for both boys and girls goes back to the early 1970's and coincides with the opening of Mt. Ararat High School. District funds paid for coaching stipends to run this early program. Practices began in December with emphasis on skills training; after Christmas break, teams were organized incorporating children from Bowdoin and Bowdoinham on the same teams.

The game schedule went until late March. Approximately 80 to 90 athletes combined from both towns participated each season. Adults both coached and refereed the games. Games alternated between Bowdoin / Bowdoinham with the school district providing bus transportation to and from the playing sites. A town recreation program was eventually started which has resulted in significant changes for the basketball program. All-star teams were created from all four district towns, and coaching and refereeing stipends were done away with and the running of the program was (and still is) done by volunteers. At present, approximately 140 youngsters play annually in this league. All-star teams continue to be created from the core group and they play a travel schedule with other all-star teams.

Before the creation of Mt Ararat High School, Bowdoin had a baseball and softball team (K-8). When the 7-12 school opened, the rec program took over the running of these programs. These teams played in a minor league with Bowdoinham. Eventually, other towns joined this league to include Richmond. T-ball teams were also added to the schedule. Today, there exists the Ararat Youth League with other schools in the District. Recently, a softball skills program has been added.

Recreation Committee Sponsored Activities

In 1993, the town of Bowdoin Recreation Committee was created. From that date to the present, that Committee has been run by unpaid volunteers who have continued to expand recreational offerings / opportunities for both the children and adults of the town. Many of the Committee's activities compliment, supplement and are incorporated with activities with MSAD # 75. A good partnership seems to exist between the committee and the school. As the chairman of the Recreation Committee stated, "support from the town and the school district have been excellent".

Funding of the Committee's activities comes generally from two sources. At the town meeting, a warrant (on average of $2500) per anum is voted by the citizens. Also, registration fees are used to subsidize activities. (If someone cannot afford such fees, they are waived or subsidized by other sources. Young people are not excluded from participating due to financial need.)

The recreation committee sponsors downhill skiing / snowboarding at Lost Valley Ski resort. Transportation is provided by the School District with cost for the bus paid for with town warrant funds. Approximately 25 youngsters (and adult chaperones) participate on average per trip. No formal cross-country skiing / snowshoe program or trails exist in town under the supervision of the committee. Equipment for those activities is available and can be signed out from the Bowdoin Central School by the town's people.

It is interesting to note what recreational programs do not exist in Bowdoin. No formal soccer program exists in town. The MSAD 75 area is a hot bed in Maine for this sport and Bowdoin athletes - both male and female - have contributed in significant numbers to the High School's success at the state level. (Six women's state titles and two men's state

titles). Children from Bowdoin are welcome and have participated in large numbers in the Topsham Youth Soccer league where they participate in a fall program for youngsters from all over the District. Many youngsters in Bowdoin have also participated in youth soccer travel team programs that range all over - and, in some cases, outside of - the state of Maine. Such teams do use the Bowdoin Central School's field for practice sessions. No field hockey, track and field or tennis program exist in Bowdoin. Such programs are available at the middle and high school for youngsters. Such programs could - in the future - be a possibility in Bowdoin. But, as much of Bowdoin's program is based on volunteer labor, it would take adult / youngsters' interest to start, support and run any such program. It is obvious that the formal recreation program both runs on, is limited by and exists primarily due to those volunteers.

Though not often considered under the traditional guise of recreation, it is noted that Bowdoin has no library available to its citizens. Citizens do have access to MSAD # 75 libraries as well as the Maine State library and, for an individually paid user fee, several libraries in the area. (For example, Brunswick, Bath and Topsham.)
Two large concerns need to be noted in this section. First, recreation opportunities in town through the town Recreation committee are limited only by the actions of the town's people themselves. If a group of citizens wishes to create a specific program that does not exist, then they "need to make it happen". A second concern is the difficulty of getting youngsters to participate or increase their participation in recreation activities in town. It is estimated that about 50% of the children at Bowdoin Central participate in some activity or other during the year. The Recreation Committee would like to see that number grow.

7.5 The FHC Facility

The sale of the Old Bowdoin School to the FHC Corporation has recently added a new dimension to recreation for the people of Bowdoin. FHC (Fredrick Haer and Company) have established the Cathance Fitness Center in a portion of the old school. A nominal monthly fee is charged to members and the proceeds of that fee go to the United Way of Mid Coast Maine. The Center at present has free weights, a cardio room and a variety of exercise machines. All equipment is brand new and top of the line. The gym is available for volleyball and basketball every Wednesday evening. (The activity is co-ed.) The gym could - with interest and an instructor - be utilized for other activities such as aerobics classes. Shower facilities are currently under construction for future use by members. A unique feature of the Cathance center is that every member has his or her own key to the facility and access is available 24 hours a day, 7 days a week. In addition to fitness, the Center is also available for club / group meetings. On the grounds of the FHC complex is a ball field, day care facility and - at present - a half-mile walking trail. All of these facilities are available for public access / usage.

The Cathance Center is eager for residents to suggest, organize and implement any new recreation program that fits with the construct of the building and or grounds.
(For example, a yoga class.) The goal of the Center is to both benefit Mid Coast Maine United Way and provide low coast exercise / recreation to the citizens of Bowdoin.

Summary

Recreation in Bowdoin remains largely informal and reflects the values of a small, rural Maine community. The support and co-operation of private landowners has been and, under current usage, will continue to play a crucial role in providing citizens with access to the variety of activities discussed in this report. It is a low cost, high volunteer system that can - with current funding levels - be maintained only with that volunteer labor. Historically, the people in general and the youth of Bowdoin in particular have been well served by their informal recreation system.

The future holds potentially immense changes for the town. There has been a steady and high growth rate since the early 1970's bringing new - and many young - families to Bowdoin. With land going into the hands of new residents, the town's people will have to work at maintaining the good will of landowners to provide open access to recreation. It will also have to continue to encourage volunteers as the mainstay of their programs, especially in assisting the town's Recreation Committee. Patterns of past usage cannot and should not be taken for granted. Of potential concern is how will the mix of older, established families and their values coincide with the values and outlook of newer members of the community. It is incumbent upon the community to maintain cordial relations amongst themselves and to continue to foster a philosophy of accessibility if citizens wish to continue to enjoy - recreationally speaking - what is unique about the town of Bowdoin.

8. NATURAL RESOURCES

Introduction

The natural resources section of the plan inventories all of the significant natural resources of the Town and identifies measures to protect these resources for both present and future generations. The Town of Bowdoin owes a great deal of its rural character to its topography and large undeveloped blocks of land, with a series of recreational trails that traverses these areas. Surveys and meetings with town residents have identified several aspects of Bowdoin that are considered special:

1. The town is lightly developed and as a result has retained its rural character
2. Large undeveloped blocks located between town roads provide residents with a multitude of recreational opportunities including snowmobiling, accessing trails by ATVs, mountain biking, hiking, horseback riding and cross-country skiing.
3. These large tracts of land in combination with natural features such as streams, ponds and wetlands, mixed forest and field habitats provide important habitats for wildlife that are unique in mid-coast Maine. These large undeveloped blocks also serve as wildlife corridors.
4. As development pressures continue to increase in mid-coast Maine, the town of Bowdoin finds itself in a somewhat unique place in that it represents the largest percentage of undeveloped land in comparison with all other towns in Sagadahoc County, as well has having the greatest number of undeveloped tracts of land. The largest undeveloped block (7000 acres) is one of the largest undeveloped blocks of land in the region.

8.1 Topography

The Town of Bowdoin consists of approximately 27,800 acres and is generally characterized by gently rolling hills interspersed with various types of wetland areas. Whitten Hill at an elevation of 660 feet, just east of West Road in northeastern part of town, is the highest point in town. The lowest point in town is in the southeastern section of town, between Meadow Road and Augusta road and south of Doughty Road.

Current town regulations prohibit development in areas of steep slopes (greater than 15%). These areas are principally along the sides of Lewis Hill Road, between Lewis Hill road and Route 201, and north of the Doughty Road.

The topography of the Town is a result of events that occurred during the last ice age at a time when ancient oceans extended over parts of the state and glaciers scraped, scoured, and coated areas with glacial tills, sand, and clay. Bowdoin's surficial geology consists of till, deposited directly by glacial ice, which is a heterogeneous mixture of sand, silt, clay, and gravel and boulders. Generally there is a blanket deposit, which includes drumlins [glacial deposits] and other glacially streamlined hills and conforms to the underlying bedrock topography.

8.2 Soils

The Soil Survey of Sagadahoc County Maine, published by the U. S. Natural Resources Conservation Service, describes the different soil types that exist in Sagadahoc County and provides information on their limitations. The survey soils maps display the predominate soil types for an area, although there may be pockets of other soils not identified. They also are known as "medium intensity" maps and were only used for general, broad-scale planning purposes by the Comprehensive Planning Committee.

Based upon the soil information, the Comprehensive Planning Committee identified areas of town where soils may restrict development. One characteristic would be soils that are classified as "poor drainage" not suitable for septic systems. A second factor is the identification of soils that are classified as "prime farmland" or soils classified for being suitable for "farmland of statewide significance." Although these areas may support development, the preservation of agricultural resources relies on the availability of soils that are best suited to agricultural resources. Therefore the Town's land use plan may need to identify areas of future growth that would not include either areas with poor soils or soils that are best suited for agriculture. The attached map (Soils – Town of Bowdoin) indicates the location of soils that are classified as "poor drainage" and therefore, not likely to be areas that are suitable for septic systems. The map also indicates those areas with soil classified for "prime farmland"

There are approximately 1983 acres of soil classified as "prime farmland" and 7859 acres of soil classified as "farmland of statewide importance".

8.3 Water Resources

This section includes information on surface water bodies such as streams and wetlands, and aquifers.

Surface Water and Watersheds

The Town's surface water resources include river, ponds, and streams. Little River borders the Town in the southwest, Dead River runs through the northern part of the Town, Meacham Pond is in the northeast, and Caesar's Pond is toward the center of Town. Little Gillespie Brook runs into Caesar's Pond from the west, and continues downward to Little River. In the southeastern portion of Town are the West Cathance Stream and East Cathance Stream.

The State Water Quality Classifications rate Dead River and all the streams in Bowdoin as Class B waters. Stoddard Pond, although privately owned, in the past was a local swimming area. Its location adjacent to the school might raise some concerns about the integrity of the impoundment wall. The Planning Board and Board of Selectmen might want to look at this issue at a later time. Caesar Pond and the surrounding 500 acres of land that were preserved through the Land for Maine's Future provides an important resource for the community not only for wildlife and plant life, but also for its

recreational value such as fishing, hunting, boating, and winter time skating. Any updates to land use ordinances should be evaluated in terms of ensuring continued protection of this waterbody. Public access to the pond is from the Litchfield Road near the brown Wildlife Management Area Sign on the northeast side of the pond. No camping or fires are allowed at the site. A small area on the southeast corner of the pond between the Litchfield Road and Caesar Pond is privately owned and not available to the general public.

The attached Constraints map (Appendix B) identifies all surface water bodies including streams, ponds, and wetlands. The map also provides information on the boundaries of each of the five watersheds in Bowdoin. Understanding the location of these watersheds is important in terms of identifying activities that could ultimately have an impact on any water bodies that are downstream of the activity. There are no permitted dischargers into the upstream sections of any of the streams in Bowdoin. In fact, many of these streams start at wetlands located in Bowdoin. The greatest threat to water quality in Bowdoin, therefore, is non-point pollution. Non-point pollution threats to these waterbodies include:

- Failing septic systems
- Waste disposal, such as illegal dumping of waste
- Certain agricultural practices or the use of chemicals on lawns, including the application of fertilizers, herbicides and pesticides
- Salting of roads
- Erosion from construction

Other threats to wetlands include draining, filling and other activities which alter them. Wetlands provide a significant resource to the community:

- Aquifer recharge,
- Flood mitigation,
- Habitat for fish, waterfowl, and wildlife
- Staging areas for migratory waterfowl
- Protecting water quality by filtering contaminants, and
- Open space, recreation and aesthetic value.

Wetlands

Wetlands provide important habitat for a number of wildlife species including most species of waterfowl (wood duck, black duck, etc.), reptiles and amphibians, aquatic furbearers (muskrat, beaver, mink, etc.) and big game (deer and moose). Some wetlands are of higher value than others, but all wetlands add diversity to the habitat and, consequently, diversity to the wildlife population.

Areas adjacent to wetlands and surface water bodies are called riparian zones. Riparian or shoreland areas usually possess the richest soils and plant communities, and are usually found to support the largest wildlife populations. Riparian areas are often transitional zones between one habitat and another, and often serve as travel corridors for wildlife.

In addition, wetlands provide flood control and area point of recharge for ground water aquifers.

Aquifers

Aquifers are areas where surface water and rain water enter the ground to re-charge the ground water system, and are often primary sources of drinking water. Groundwater is available in higher yields from sand and gravel deposits that lie below the ground surface, but above the bedrock. These deposits, known as sand and gravel aquifers are highly porous and allow for both storage and release of greater volumes of water through shallow wells that do not need to penetrate bedrock. The town is fortunate in having plentiful sand and gravel aquifers. All of Bowdoin's residents rely on ground water for drinking water. Although these wells are dispersed throughout town, any activity that could result in contamination of an aquifer could have an impact on numerous residents in town that rely on private wells.

In addition, the Bowdoinham Water District's well is located within Bowdoin. The wellhead is located just south of Stoddard Pond. The District has provided the town with information on the location of the recharge area and the travel times within this recharge area. Any activities that could result in contamination of groundwater within the aquifer recharge zone could have an impact on their entire Bowdoinham Water Disrict's water supply. Although very few Bowdoin residents receive water from Bowdoinham, the possibility exists that this infrastructure could at some point in the future provide water for residents or future development in the southeast corner of town. The water resources map that is attached indicates the location of the aquifer recharge zone.

Five aquifers were identified by the Maine Geological Survey in Bowdoin. One is located in the eastern part of Town, one in Bowdoin Center, one in the southeast, where the Bowdoinham Water District well is located, and the largest sand and gravel aquifer, almost 1000 acres, lies in the west in the area known as the Kettlebottom, and has a yield of 10-50 gallons per minute. See attached Water Resources map for the location of the sand and gravel aquifer recharge areas.

Unfortunately, pollutants such as gasoline, paints, oil and salts also enter the ground water through aquifers. Any well can become contaminated by pollutants. In bedrock, contaminants can flow into cracks in the rock. In gravel or sandy soils, contaminants will flow evenly through rock and sand particles.

Existing sources of pollution in Bowdoin are not identified by the State. Certainly the underground storage tanks of petroleum products pose some risk and above ground tanks related to agricultural and forestry activities as well as home heating fuel and passenger motor fuels pose some risk. Consideration should be given to replacing home heating fuel tanks that are 25 years old or older. All residents have a responsibility to safely and carefully conduct fueling activities, fertilizer and pesticide applications and other activities with substances that could adversely affect groundwater. Because contaminants

can travel though sand and gravel aquifers quickly, any activities that could result in spilling or contaminants should be restricted

Gravel pit operations, which involve the removal of gravel, potentially from these sand and gravel recharge areas, also pose a threat to ground water. Removal of surface gravel reduces the buffer that these soil types provide for underground water supplies, as surface contamination can travel faster through the ground. In addition, these activities can also result in the spillage of gasoline or oil, which can travel quickly through the soil into underlying groundwater.

8.4 State Laws and Regulations

Mandatory Shoreland Zoning Act (MRSA Title 38 Sections 435-449). The state's shoreland zoning act requires that towns regulate land use within 250 feet of the normal high water mark of rivers and freshwater and coastal wetlands, and with 75 feet of certain streams. The law prohibits certain uses in an identified "Resource Protection Zone" and requires specific performance standards for many activities within the zones. Wetlands regulated under the law are those that are 10 contiguous acres. Any areas within 250 feet upland of regulated wetlands that contain habitats identified by Inland Fish and Wildlife as "Moderate or High Value" shall be designated within the Resource Protection Zone.

Stormwater Management Law applies two different sets of standards depending upon whether a particular activity is located within a watershed of a water body "most at risk". Richmond's Pleasant Pond is one of the waterbodies that are most at risk, according to the statute. There are close to1000 acres of the watershed located in Bowdoin.

Erosion and Sedimentation Control Law requires a person who conducts an activity involving filling, displacing or exposing earthen materials to take measures to prevent unreasonable erosion of soil or sediment beyond the project site or into protected natural resource. The law emphasizes the importance of erosion control in watersheds and immediate shoreland areas, and the use of best management practices.

The Natural Resource Protection Act (MRSA 38, Section 480, A through S) requires a permit from the State DEP for any activity upon or immediately adjacent to wetlands greater than 10 acres. All septic tanks are required to be at least 100 feet from wells. The state requires a minimum 300 foot buffer around a well that serves 25 or more people.

8.5 Flora and Fauna

Bowdoin's fields, forest, streams and wetlands provide ideal habitat for big game, furbearers, upland game, waterfowl and numerous "non-game" species. In addition, numerous streams provide fish habitat.

The coniferous and mixed hardwood forest areas, overgrown fields and abandoned orchards, and sizable ponds and wetland areas that comprise most of the area of Bowdoin provide excellent habitat for the community's fisheries and wildlife resources. The

habitats most critical to maintaining wildlife populations are wetlands, riparian areas (shorelands), and deer wintering areas.

The Town has maintained its popularity over the past years as a favorite place to live and build a new home. All types of development have an impact upon natural resources and Bowdoin is no exception. What type of impact is of course the critical question and it is one that the Town can influence in a positive manner. The Land Use Section of this plan will attempt to address this issue in a more concise and thorough manner but it is important nevertheless in our discussion of natural resources to highlight a few of the most important impacts development can have on the natural environment in our community. Some of the important issues are as follows:

1. Housing in close proximity to agriculture, forestry, gravel operations and other rural enterprises.
2. Development within natural corridors used by animals and loss of habitat.
3. Erosion and stormwater control issues caused by improper construction methods.
4. Loss of passive recreation areas such as hunting, and walking trails.
5. Potential harm to the aquifer from improper development.

The most effective means of protecting Bowdoin's flora and fauna is to protect habitat. The State's *Beginning with Habitat* program provides initial mapping information on the location of deer wintering areas, habitats of threatened and rare species, and the location of ecologically valuable areas such as wetlands and riparian buffers. One of the most important protection mechanisms is to use this information during the review of subdivision plans and site plans reviews, to redraft land use ordinances to reflect the importance and locations of these sites, and finally to refine this information be refined by the mapping of additional resources. A discussion of this spatial information is included in each of the sections listed below.

Deer Wintering Areas

Deer wintering areas are sheltered areas with food sources where deer yard up when the snow is deep. They usually consist of predominately older to mature softwood stands (at least 35 feet in height with tree crown closure of at least 50 percent) to provide cover and protection from the weather, with nearby deciduous stands and wetlands. They are crucial to winter survival of deer. Some activities, such as those that involve total removal of timber, are not compatible with deer wintering areas. The MDIFW uses infrared photography and winter site visits to determine deeryard locations. The boundaries of deeryards shift and use varies. Deer yards rated as of moderate or high value are considered "significant wildlife habitat" for purposes of regulation through the Maine Natural Resource Protection Act. In Bowdoin approximately 1890 acres of Deer Wintering Area have been identified. In addition, important contributors to wildlife habitat have been , such as the location of town forests, and areas set aside through the Land for Maine's Future (Caesar Pond Wildlife Management Area).

Big Game

White tail deer, moose and bear have been found in Bowdoin; however, moose appear infrequently and black bear are seldom seen. Deer are plentiful and provide game for hunting in the fall. Two hundred deer were tagged in Bowdoin in 2003 and the numbers are increasing by approximately 10% per year.

Deer are also subject to predation from coyotes and uncontrolled dogs, although the Maine leash laws have minimized the latter.

Furbearers

Aquatic furbearers, such as beaver, muskrat, otter and mink, inhabit a variety of wetland types in Town, including ponds, lakes, streams, marshes and swamps. Populations and densities vary widely. Upland furbearers include: coyotes, red fox, fisher, skunk, raccoon and bobcat. Beaver and muskrat are trapped in Bowdoin.

Upland Game

Grouse, snowshoe hares, turkeys and woodcock are hunted, but no annual harvest figures are available. These species seek out cut-over areas, old fields and alders as habitats.

Non-game Wildlife

Little is known about the frequency of occurrence and number of species of non-game wildlife in Bowdoin. The town's diverse, rural character, however, provides a broad range of habitats for many of Maine's over 400 non-game species.

Waterfowl and other bird species

Because Bowdoin sits on the boundary of two distinct biological regions; (the boreal or Canadian zone to the north and northern temperate zone of the south,) it supports many waterfowl.

An important habitat for waterfowl is the town's wetlands and waterbodies, including Caesar Pond. Not only do they provide nesting and feeding sites, but they are also used by fish, beaver, muskrat, mink, otter, raccoon, great blue herons, osprey, deer and, occasionally, moose.

Bowdoin's wetland areas and ponds that have value for waterfowl for nesting, migratory stopovers and for feeding have been mapped and recorded by IF&W. A map is on file with the Town Office which shows the significant wetland areas

Rare and Exemplary Botanical Features

The Maine Natural Areas Program identifies rare or endangered plant species throughout the State. Species that are considered rare, endangered, threatened, or of State wide importance are mapped and provided to local officials. It is up to each town to take the appropriate steps to protect these resources from any negative impacts from development. Currently the Subdivision Review criteria in State Law requires that the location of any unique plant areas be addressed. It would likewise be prudent for the Town to extend this

requirement in its current Site Review Ordinance. Although there are no sites identified for rare plant species, this may be more of a result of needing a more intensive survey of undeveloped areas.

In addition, threats such as encroaching development could be identified and characterized by a Conservation Committee

8.6 Scenic Resources

The town's rural heritage has provided many scenic vistas throughout the community. Many of these views are provided by existing agricultural operations. From a planning perspective, scenic vistas are those that can be readily seen by the public (usually from a public road, such as the view of the White Mountains from the West Road, or other public property). Most of the roadways in town have ample scenic areas of both forest and open fields. Other scenic areas can be viewed from one of the many ponds such as Caeser Pond or other waterways in town. The town does need to undertake a comprehensive scenic survey to identify all of the significant scenic resources and to further identify areas worthy of public protection. The Historic Committee has been given the task of performing this survey for the Town.

8.7 Gravel Operations

The town has a significant amount of glacial gravel deposits. Some of these are being exploited through the several gravel pit operations which are busy meeting the development demands not only in the Town but for the surrounding region. Activities occurring in the vicinity of these sand and gravel deposits can pose a threat to ground water resources. Because of the high permeability of materials found in sand and gravel deposits, activities that occur in these areas can lead to contamination of underlying water resources. Examples of these activities including the refueling or maintenance of equipment, the storage of wastes, or the uncontrolled access which could result in illegal dumping of wastes.

Currently the town regulates gravel pits if they occur in a Shoreland Zoning District and the State regulates some operations, if they are a certain size. Some of the common regulations employed for gravel operations include requirements for their closure and operations such as noise, traffic and dust. Recently, the town restricted access to a sand and gravel site that is owned by the town. This type of action is an important step toward protecting the town's ground water resources and the town should continue to restrict access and activities in those sand and gravel sites that are currently owned by the town. In addition, it would be prudent for the town to develop basic regulations for the operation of gravel pits. These regulations could be modeled after the standards in the Shoreland Zoning Ordinance and also include rules for closure of the pit, and some nuisance controls to mitigate noise and traffic on surrounding neighborhoods.

8.8 Policies and Implementation Strategies

Policy 1: The Town needs to ensure that current ordinances are adequate and in line with state requirements.

- Strategy 1.A The Planning Board and Code Enforcement Officer shall review the Shoreland Zoning Ordinance to ensure compliance with the State as well as ensure that accurate shoreland districts are designated.
- Strategy 1.B The town should consider enforcing floodplain management through a Floodplain Management ordinance. The Planning Board, code enforcement officer and selectmen shall work with the State and incorporate a Floodplain Management ordinance into the Land Use ordinance.

Policy 2: The town needs to ensure that there are adequate protection mechanisms in place for protecting surface water quality and ground water quality.

- Strategy 2.A: The town needs to protect aquifer recharge areas as a source of drinking water in the town. The first step is to conduct a comprehensive mapping of these recharge areas and then to review ordinances to ensure that protection mechanisms are in place.
- Strategy 2.B: The town should protect high yield aquifers by creating an aquifer overlay district for high yield aquifers. Standards in the zoning district shall specify certain uses that are not appropriate to be located over aquifers and also contain development standards for other allowed uses.
- Strategy 2.C: The Planning Board shall develop ordinance performance standards for all gravel pits located in the community. The standards shall require all operations to adhere to State regulations where appropriate and specify local requirements for future reclamation of the site, protection of water supply and good neighbor standards for the ongoing operation of the pit. In a survey conducted by the comprehensive planning committee, 68% of the respondents favored regulating gravel and mineral extraction and topsoil removal.

Policy 3: The focus of land use ordinances should be to encourage growth in areas that will preserve our important natural resource base and at the same time better utilize resources such as soils that are best suited for development.

- Strategy 3.A: The Town should amend land use, site plan and subdivision ordinances to incorporate performance standards to address protection of natural resources, including significant wildlife and plant habitat as described on the Beginning with Habitat information.
- Strategy 3.B: The Planning Board should amend standards in the subdivision and site plan ordinance that excludes development on 15% slopes.
- Strategy 3.C: The Planning Board should review standards in the subdivision and site plan regulations that address storm water control and determine if revisions are necessary to protect sites from erosion and loss of soil.
- Strategy 3.D: The town should conduct a more extensive inventory of the location of soils that are of high agricultural value.

- Strategy 3.E: The Planning Board should create open space standards to be incorporated into land use ordinances, specifically as they apply to the subdivision ordinance.

Policy 4: The town needs to take steps to ensure that open spaces and wetlands that are critical for wildlife habitat and which have a significant recreational value as well as forest and farm resources are being adequately protected.

- Strategy 4.A: The selectmen should appoint a Conservation Committee that will be charged with developing a plan for the protection of these spaces. Tasks that the committee might be charged with include:
    - Developing an open space plan.
    - Working with neighboring communities and organizations such as land trusts to ensure that regional open space issues are being addressed.
    - Conduct resource inventories of Bowdoin in order to expand upon the information included in the Beginning with Habitat maps and rate the deer wintering areas.
- Strategy 4.B: The town should maintain and expand its current mapping of town resources and make this information widely available to each of the governing bodies in town – Planning Board, Zoning Board of Appeals, and Code Enforcement Officer.

Policy 5: Bowdoin is unique in the mid-coast area for the large areas of undeveloped lands compared to adjacent communities. Local recreational organizations have worked hard to develop landowner relations in order to support and allow for the use of trails throughout these areas. Encroaching development may make protection of these areas as well as their recreational and ecological value more and more difficult. Back lot development will have a significant impact on this resource. In a recent survey conducted by the comprehensive planning committee, fifty-six percent of the respondents favored spending town funds to acquire and protect undeveloped lands, either through the purchase of land and/or conservation easements. Therefore, they should make protection of a portion of these large back lot areas a priority.

- Strategy 5.A: The town should work closely with local land trusts to identify areas for protection for the purposes of continuing to maintain recreational opportunities and to protect important habitats.

9. AGRICULTURAL AND FORESTRY RESOURCES

9.1 Agriculture

Existing agricultural operations account for a fraction of what was a dominant activity in the community in former years. This situation is not unusual for many towns in Central Maine as farms have been abandoned due to changes in the market, land development demands, high operation cost, and an aging farming population. While our markets for the food we eat are now measured by continents, it is still important for the health of the local economy to preserve locally grown food products. Agricultural land not only supports the local economy but preserves some of the most attractive land within the community. This is one of the reasons why Bowdoin seeks to promote and preserve its existing agricultural resources.

Preservation of agriculture has many benefits for the town:

- Aesthetics – Open rolling fields define the character of Bowdoin and afford a vista for people driving along the road.
- Recreation opportunities – Farm fields offer space for cross country skiing, snow-mobiling, horseback riding, and all terrain vehicles, with the permission of the landowner or farmer.
- Avoided cost – It is important to bear in mind that there are no real costs to the town for farmland. There are no education, busing, road maintenance, fire, and police costs per acre as there are for residential development.
- Locally grown products – not only fo our local farms provide local produce, but they are an important business base for the Town. Whether it be picking apples at Rocky Ridge Orchard or strawberries at Fenimore's Farm, these businesses have a value not only for Bowdoin residents, but for the region as well.

Despite this desire to promote agricultural practices it must be recognized that municipal resources are limited in their ability to preserve the continued health of agriculture. One of the few tools a municipality can use to affect farming is through land use controls. Land use regulation can help to preserve agricultural operations; however, it cannot make a significant difference unless other tools are used at state and federal levels.

One of the most problematic changes that can occur in a rural area with an agricultural base is the influx of new housing. The demands of new homeowners for a pristine residential environment do not leave room for the sights, sounds and smells usually associated with an agricultural operation. The conflicts arising from mixing housing too close to agricultural operations is the eventual demise of the farm in favor of new housing. Another issue is that over time the infrastructure necessary to support agricultural erodes, which makes it difficult for remaining operations to obtain the supplies needed to carry out their operations.

While it is important for the town to identify what it can do locally to promote farming, it is even more critical for the Town to work with state and federal officials to employ strategies at those levels of government that will aid agriculture. Items of particular

interest to the continued health of farming that need to be addressed at a higher level of government include: taxation issues, especially the current use tax of agriculture; mitigating market pressures from development; providing for the retirement and health care needs of farmers; and allowing younger people to enter the occupation at an affordable level.

There are approximately 1983 acres of soil classified as "prime farmland" and 7859 acres of soil classified as "farmland of statewide importance". Land currently devoted to agriculture is more prevalent in the rolling topography found in the southeastern regions of town. Those farms that have survived are involved with dairy, beef, orchard and market produce.

In the survey conducted by the Comprehensive Planning Committee, respondents indicated that they would like to have approximately 40% of the town remain as farm or forest land. Currently 14% is open field. Eighty percent of the respondents favored the town prioritizing the preservation of remaining agricultural lands.

In Sagadahoc County, there are 94 farms with a total of 14,381 acres in production. As of 1997, there were 118 farms with a total production of 17,853 acres.

Below is an initial survey of active working farms in Bowdoin. In order to develop a comprehensive strategy, the town should complete a more extensive inventory including related businesses that rely on or supply local farms:

TABLE 9.1 – Bowdoin Farms

	Business Name/Type	Owner	Address
1	Card's Dairy and Beef	Robert Card	941 Meadow Rd.
2	Small's Dairy Farm		107 John Small Road
3	Card's Farm	John Card	195 John Small Road
4	Rocky Ridge Orchard Orchard	Brad and Marilyn Sprague	38 Rocky Ridge Lane
5	Maine Mud Mix	Jennifer Howell	205 Starbird Corner Road
6	Mitchell Farm Maple Syrup	Penny Savage Earl Mitchell	205 W. Burrough Road
7	Oveja Farm Sheep Farm	Thomas Coolidge	
8	Chase Tavern Farm Alpaca farm	Tim and Cindy Lavan	
	Farmland Classified		

Existing Laws

Farm and Open Space Tax Law (36 MRSA 1101)

This act was revised in 1996 to lower eligibility requirements and to restructure the penalties of the Farm and Open Space Tax Law.

A landowner who has five or more contiguous acres on which farming, agriculture or horticultural activities have produced a gross income of at least $2,000 (including food consumed) may apply to the Town to have his/her land classified as farmland. Once so classified, it is taxed as farmland instead of at market value. The State issues guidelines for values, but in this part of the state it is sure to be less than the market value.

The penalty for withdrawing from the program is most severe initially and decreases to the constitutional minimum after 10 years. The penalty is necessary because otherwise the town would potentially lose revenue as a result of land speculation. If withdrawn in the first five years, the penalty is 20% of the assessed market value. If withdrawn in the next five years, the farmer pays the difference of taxes he would have paid if not assessed as farmland, with interest. If withdrawn after ten years in the program, the withdrawal penalty is the difference in taxes in the most recent five years plus interest.

9.2 Forestry

Historically, forestland has played an integral role in the economy of Bowdoin. Until recently, International Paper owned nearly 5,000 acres in Bowdoin that was managed and logged for use in the nearby mill in Lisbon Falls. More recently, local loggers rely on the steady supply of lumber from these same forests. Over 70% of the town is forested. These forestlands provide a range of resources in addition to lumber. Miles of trails are located in these forests. These same forestlands provide habitat for a variety of plant and animal species.

Active forest production is a normal land use activity for a rural community. Unlike farming, which tends to upset most residential uses in proximity to their boundaries, forestry tends to be a better neighbor to residential neighbors. This will not completely excuse forestry operations from receiving complaints from nearby homes as forested views enjoyed by property abutters disappear or the noise of saws and other machinery is viewed as bothersome. Some of these issues become prevalent as more new housing locates in rural portions of the community once mostly occupied by farms, forest and open space.

Nearly all of the forestland is privately owned. Approximately 500 acres is owned by the State as part of the Caesar Pond Wildlife Management Area. The Town of Bowdoin owns 1100 acres of Town Forest.

Tree Growth Program

The tree growth tax program allows land-owners a lower tax valuation if they in turn agree to develop a forest management plan for their holdings. A penalty is also imposed if land is taken out of the program and developed. This State program has undergone a great deal of changes over the past years; however, it has helped to preserve or maintain land in active forest production. The Town is also reimbursed by the State for a portion of the lost tax valuation it incurs by placing land in the tree growth program. The amount of funds returned to towns from the State have not fully funded the complete difference in the valuations; however, the disparity has decreased over the past years.

Forestry operations and continued participation in the tree growth program should be encouraged by the town. Likewise property owners and applicable contractors need to follow the State Laws and regulations regarding forest practices especially those that apply to Shoreland Areas and other locations near waterbodies. These issues are important considering the Town's many water resources. The Town through its Code Enforcement Officer can direct any problems to the State for enforcement whenever necessary to ensure that State Laws are being followed.

Town Forests

In the 1960's in response to a growing awareness of development patterns, the Town set aside nearly 1100 acres as Town Forest. These town forests are managed by the town and are logged regularly for revenue by the town. In addition, the town forests provide recreational opportunities for snowmobilers, ATV enthusiasts, hikers and skiers. In a survey conducted by the comprehensive planning committee, sixty percent of the respondents were in favor of preserving and managing town owned forest lands for public recreation, regardless of economic productivity.

9.3 Tax Classification

One means of tracking existing agriculture, preserved open space and active woodlots is to identify and track the acres currently in farmland, openspace and treegrowth tax classifications. Below is a table that details the breakout by farmland, tree growth and a those parcels that have a combination of farmland, open space and/or treegrowth:

TABLE 9.2 – Tax Classification

Tax Classification	Acres (2004)
Farmland	451
Tree Growth	4608
Combination	1900
Total	6959

Forest land currently in tree growth:

Softwood (acres)	Hardwood (acres)	Mixed Wood (acre)	Total
964	2168	1966.5	5098

9.4 Issues and Implementation

Policy 1: The Town should make protection of existing farmlands a priority.

- Policy 1.A: The Conservation Committee can play an important role in supporting local agriculture through the following:
    - The committee could inventory existing farms and interview farmers as to their concerns about long term preservation of agriculture in Bowdoin and the mid-coast region. This inventory should include any businesses that support local agriculture.
    - The committee could also develop an Open Space Plan to identify significant open spaces and tie them to trails and other recreational areas.
- Policy 1.B: The town should consider encouraging land to be placed in the State Farmland Program to reduce the property tax burden to the farmer.
- Policy 1.C: The town should assist in generation transfers of farms in a number of different ways, all of which reduce the purchase price or debtt payment for an entering farmer. Selling or donating development rights can make the transfer possible. There are funds available through the Land for Maine's Future for the purchase of development rights. The Ttown's role would be to work actively with the program and with interested farmers who would want to take advantage of these available funds.
- Policy 1.D: In the review of proposed developments on agricultural lands, the Planning Board should work to encourage development along the edge of farmlands, particularly in cases where the soil has high agricultural value.
- Policy 1.E: The town should amend the subdivision ordinance to allow open space subdivisions, which allow clustering of houses in order to preserve undeveloped areas.

Policy 2: The town should actively work to protect our forest resources, both those owned privately and those owned by the town as Town Forest.

- Strategy 2.A: The town should work actively with residents who have forested land to encourage them to put the land into Tree Growth.
- Strategy 2.B: The Selectmen should appoint a Town Forestry Committee. This committee could work in conjunction, (or potentially initially as a subcommittee of the Conservation Committee).This committee can be charged with the following:
    - Inventory of existing Town Forest.
    - Application to the State under the Project Canopy program for assistance in developing a long term management plan for these lands.
    - Develop a long term management plan that will incorporate the need for habitat protection as well as providing recreational opportunities (hunting and hiking) in addition to the current use of the land for timber management.
    - Inventory the lands for any special habitats that require additional protection.

10. ROADS AND TRANSPORTATION

Purpose

The purpose of this section is to inventory and assess the Town's existing transportation system including roads, bridges, rail, airport and pedestrian ways.

10.1 Roads

Refer to the map enclosed at rear of this plan for reference.
Bowdoin has 70.40 miles of roads, of which 56.54 miles are town maintained and 13.86 miles are considered private roads. Bowdoin has two arterial roads that effectively form the backbone for our road network. State Highway 201 acts as our main north/south artery and State Highway 125 is our major east/west artery. The town has 23.43 miles of state aid roads and 33.11 miles of locally maintained roads. State Aid roads are plowed by the Town but are otherwise maintained by the Maine Department of Transportation. Altogether, the town plows and sands 47.00 miles of road during the winter months. Bowdoin has a signed exit/entrance ramp on Interstate 95 but no part of the highway actually enters the town boundary. The town completed an E911 map and issued road signs for 104 roads in 2002. All residences in town are now located by an E911 address number system.

The following charts provide details about Bowdoin's roads:

TABLE 10 – Town Maintained Road Inventory

Road Names	Type of Road	Feet	Miles	Surface	Responsibility	Condition
Academy Road	Collector	6700	1.27	Paved	Town	New
Adams Road	Local	7650	1.45	Paved	Town	New
Augusta Road (Rt 201)	Arterial	37575	7.11	Paved	State Aid	Good
Bing Moore Road	Local	2150	0.41	Gravel	Discontinued	Fair
Blanchard Cross Road	Local	2100	0.40	Reclaim	Town	Good
Cornish Drive	Local	750	0.14	Paved	Town	Good
County Road (Rt 197)	Collector	1700	0.32	Paved	State Aid	Good
Dead River Road	Collector	17800	3.37	Paved	Town	New
Deer Run Road	Local	3700	0.70	Paved	Town	Good
Doughty Road	Local	7300	1.38	Paved	Town	Good
East Burrough Road	Local	5500	1.04	Paved	Town	Good
East Jim Rideout Road	Local	550	0.10	Gravel	Discontinued	Fair
East McIver Road	Local	1000	0.19	Gravel	Discontinued	Fair
Fisher Road	Local	500	0.09	Paved	Town	Good
Hix Small Cemetery Road	Local	2600	0.49	Gravel	Discontinued	Fair
Huffs Mill Road	Local	2900	0.55	Gravel	Discontinued	Fair
Hyde Road	Local	1550	0.29	Gravel	Town	New

John Small Road	Local	4950	0.94	Paved	Town	Good
John Tarr Road	Local	9300	1.76	Paved	Town	New
Keay Road	Local	3850	0.73	Paved	Town	Good
Lewis Hill Road	Collector	27400	5.19	Paved	Town	Good
Litchfield Road	Collector	32400	6.14	Paved	State Aid	Good
Main Street (Rt 125)	Arterial	27350	5.18	Paved	State Aid	Good
Meadow Road	Collector	14600	2.77	Paved	State Aid	New
Millay Road	Local	3800	0.72	Paved	Town	Good
Pinewood Acres Road	Local	3700	0.70	Paved	Town	Good
Post Road (Rt 138)	Collector	5850	1.11	Paved	State Aid	Good
Roberts Road	Local	6150	1.16	Paved	Town	Good
Starbird Corner Road	Local	5750	1.09	Paved	Town	New
Stoddard Pond Road	Local	2100	0.40	Reclaim	Town	Good
Store Road	Collector	4250	0.80	Paved	State Aid	Good
Wagg Road	Local	2500	0.47	Gravel	Town	Fair
West Burrough Road	Local	12300	2.33	Paved	Town	New
West Jim Rideout Road	Local	1700	0.32	Gravel	Discontinued	Fair
West McIver Road	Local	1900	0.36	Reclaim	Town	Good
West Road	Collector	30450	5.77	Paved	Town	Good
Wood School House Road	Local	4500	0.85	Paved	Town	Fair
	TOTALS	298505	56.50			

TABLE 10.2 – Private Roads in Town

Road Names	Type of Road	Feet	Miles
Apple Drive	Private Rd	300	0.06
Bar-B-Circle	Private Rd	1450	0.27
Beechnut Hill	Private Rd	550	0.10
Bernier Road	Private Rd	250	0.05
Birchridge Ln	Private Rd	500	0.09
Bing Moore Rd	Private Rd	2150	0.41
Bishop's Way	Private Rd	1200	0.23
Booker Road	Private Rd	600	0.11
Bouchard Drive	Private Rd	750	0.14
Bowdoin Pines Road	Private Rd	1850	0.35
Bowdoin Road	Private Rd	2650	0.50
Brookwood Lane	Private Rd	450	0.09
Burr Ln	Private Rd	1750	0.33
Carters Drive	Private Rd	500	0.09

Cathance Farm Rd	Private Rd	950	0.18
Cesear Pond Ln	Private Rd	1000	0.19
Coombs Road	Private Rd	1250	0.24
Cornerstone Drive	Private Rd	700	0.13
Cote Woods Lane	Private Rd	1000	0.19
Dall Drive	Private Rd	950	0.18
Dandelion Road	Private Rd	1650	0.31
Deans Lane	Private Rd	650	0.12
Denham Lane	Private Rd	900	0.17
Dickey Lane	Private Rd	500	0.09
East Jim Rideout Rd	Private Rd	550	0.10
East McIver Rd	Private Rd	1000	0.19
Erics Lane	Private Rd	300	0.06
Farm Road	Private Rd	550	0.10
Firczak Lane	Private Rd	850	0.16
Forest Pass	Private Rd	2100	0.40
Forgotten Lane	Private Rd	400	0.08
Forty Acre Lane	Private Rd	1050	0.20
Goodenow Lane	Private Rd	2300	0.44
Gowells Drive	Private Rd	850	0.16
Haines Drive	Private Rd	450	0.09
Hilltop Drive	Private Rd	650	0.12
Hix Small Cemetery Rd	Private Rd	2600	0.49
Howards End	Private Rd	500	0.09
Huffs Mill Rd	Private Rd	2900	0.55
Kinfolk Lane	Private Rd	550	0.10
Ledge Hill Road	Private Rd	3550	0.67
Letourneau Drive	Private Rd	450	0.09
Lilac Drive	Private Rd	650	0.12
Lorenz Drive	Private Rd	50	0.01
Lucky L Lane	Private Rd	700	0.13
Magee Road	Private Rd	2200	0.42
Memory Lane	Private Rd	400	0.08
Mountain View Circle	Private Rd	1550	0.29
Mountain View Circle Extension	Private Rd	300	0.06
Nathan Drive	Private Rd	250	0.05
Overlook Drive	Private Rd	300	0.06
Parkway	Private Rd	600	0.11
Penny Lane	Private Rd	1650	0.31
Rocky Ridge Lane	Private Rd	700	0.13
Rousseau Drive	Private Rd	450	0.09
Samson's Way	Private Rd	800	0.15
Schwanger Drive	Private Rd	600	0.11

Sheen Road	Private Rd	2150	0.41
Shingle House Road	Private Rd	1250	0.24
Short Street	Private Rd	150	0.03
Skelton Rd	Private Rd	500	0.09
Spring Dr	Private Rd	4000	0.76
Spruce Drive	Private Rd	300	0.06
Stone Ridge Lane	Private Rd	600	0.11
Thurman Drive	Private Rd	1500	0.28
Turkey Trot Lane	Private Rd	250	0.05
Valley Drive	Private Rd	500	0.09
West Jim Rideout Rd.	Private Rd	1700	0.32
Wheeler Road	Private Rd	2000	0.38
Wilder Way	Private Rd	900	0.17
Woodland Road	Private Rd	600	0.11
	TOTAL	73220	13.86

10.2 Capitalization

In 2004 the town appropriated $30,000 for road maintenance, $40,000 for road improvement, $125,000 for paving and $150,000 for plowing and sanding. The overall excellent quality of the roads are evidence that this ongoing investment has been effective. Nevertheless it could still benefit the Town to develop a formal road management system to rate the condition of the roads and develop a plan for maintenance. A system like the one developed by the Local Roads Center might be a good starting point for the Town.

10.3 Road Design Standards and Access Management

Bowdoin currently has a Road Design Ordinance in place. It details only one type of road that can be built to town standards. A 24 foot wide paved surface with 8 foot wide shoulders is the only road standard recognized for subdivisions, or road frontage in town. Most of the town maintained roads are currently 18 to 22 foot wide roads with limited shoulders and culverts. A multi-tiered road design standard based upon vehicle type and amount of use anticipated should be considered in a future road design ordinance. Bowdoin currently relies upon state laws for access management to all of its roads except roads created by subdivision. Access management is not addressed in our current Land Use Ordinance. That ordinance strictly defines a developable lot as a minimum of 2 acres and having 300 feet of road frontage. Road frontage is acquired by fronting on an existing town road or creating a road to the specifications called out in the existing Road Design Ordinance. A road built to current town standards can only be accepted as a town road by an approving majority vote at a Town Meeting.

The continuing pace of growth will make it critical for the Town to develop some traffic access management guidelines to ensure that development occurs in a safe and constructive manner. At a minimum the regulations should address sight distances, maximum number of driveway openings and clearance to other roads and driveways. The town will have to determine over time if additional traffic control features will be necessary depending upon the pace and type of development that occurs over the next decade.

10.4 Traffic Data

Data regarding average daily traffic counts is collected periodically by the Maine Department of Transportation. The following data is the latest available for the years 2000 and 2002. It is collected for an average week and then averaged down to reflect an average day. Blank entries represent no data available.

TABLE 10.3 - Average Daily Traffic Counts Source: Maine Dept of Transportation

ROAD LOCATION	Vehicle/Day 2000	Vehicle/Day 2002
Millay Rd. at 201	320	
Dead River Rd. west of Lewis Hill Rd.	200	
Litchfield Rd. north of Wood Schoolhouse Rd.	910	950
Litchfield Rd. north of 125		1630
Meadow Rd. south of 125	1210	1260
Meadow Rd. south of Burrough Rd.	1330	
West Rd. north of Wood Schoolhouse Rd.	180	280
West Rd. northeast of Store Rd.	720	740
Lewis Hill Rd. south of Dead River Rd.	230	
Lewis Hill Rd. north of 125	570	600
Store Rd. northwest of 125		1200
Doughty Rd. east of Meadow Rd.	200	
Burrough Rd. west of Meadow Rd.	260	
Wood Schoolhouse Rd. west of Litchfield Rd.	190	
Rt 125 east of Rt 201	1320	1630
Rt 125 west of Rt 201	3090	3260
Rt 125 west of Lewis Hill Rd.	2850	
Rt 125 west of Meadow Rd.	2460	2710
Rt 138 northeast of Rt 201	900	940
Rt 201 southwest of Millay Rd.	2100	
Rt 201 north of Rt 125	2390	2380
Rt 201 south of Rt 125	2910	3040
Rt 201 north of Rt 138	3200	
Rt 201 south of Rt 138		3780

10.5 Accident Data

Accident data from the Maine Department of Transportation for a three year study done 2001-2003 reveals some very interesting statistics. This data is held on file at the Town Office for study and only the pertinent information is presented here. The three state highways (Rts. 201, 125, 138) were studied separately and then all other town roads were grouped together in another study.

Statistics for Rt201:
28 total accidents, 7 injury accidents, 21 property damage accidents
13 involving deer, 1 OUI, 1 asleep, 15 daylight, 13 dark, 2 daylight snow, 2 dark snow

Statistics for Rt125:
31 total accidents, 1 major injury, 8 minor injury, 22 property damage
14 ran off road, 11 unsafe speed, 6 involve deer, 4 at driveways, 4 at intersections
20 daylight, 11 dark, 13 snow, 18 dry

Statistics for Rt138:
7 total accidents, 2 injury, 5 property damage
3 ran off road, 2 involve deer, 2 driveways
4 daylight, 3 dark, 7 dry, 0 snow

Statistics for all other town roads:
64 total accidents, 1 fatality, 5 major injury, 27 minor injury, 31 property damage
34 ran off road, 17 unsafe speed, 17 driver inattention, 12 deer, 6 fail to yield, 5 OUI
6 at intersections, 40 daylight, 24 dark, 10 snow, 10 treated road, 44 dry

Conclusions from accident data analysis:
Rt125/201 intersection has been redesigned by the state since this study but statistically was our worst accident site. The Rt125/Meadow Rd/Litchfield Rd intersection is now our worst accident potential site. Recommendations should be made to improve the sight distance available at that intersection. The Litchfield/Meadow Rd is our most dangerous road where most accidents have been directly or indirectly related to speed. Weather related road conditions do not seem to contribute significantly to our accidents. Prompt response to ice and snow conditions by our in town contracted plowing and sanding crews has paid dividends. Roughly 40% of all town accidents are deer related. A more detailed analysis of deer related accident locations may be warranted and result in deer warning signs being located in high traffic areas. The next highest cause of accidents in Bowdoin is unsafe speed, driver inattention and OUI. This could indicate a possible lack of law enforcement presence in our town.

10.6 Parking and Pedestrian Ways

Bowdoin is a rural community with no defined business district. These two factors contribute to the fact that there are no public parking facilities, nor are there any pedestrian ways. Event parking is available at the schools and the town office to

supplement private property parking. All businesses in town have adequate parking facilities to support their individual needs. Bowdoin citizens do make use of the commuter parking lot at the intersections of Rt 125, Rt 138 and the I-95 exit ramp. This lot is located in the Town of Bowdoinham and will handle approximately 30 vehicles, which appears to be adequate to support our needs into the future.

Parking standards will need to be developed for any large scale proposed commercial development planned for the future. Currently with small businesses in town our Site Plan ordinance has language sufficient to meet our present needs.

Currently the town has no sidewalks or recognized pedestrian paths. School Administration District 75 actually prohibits our children from walking or riding bicycles to/from our local school. Efforts in the future should be made to develop pedestrian ways and bicycle paths for our community.

10.7 Bridges

There are 11 roadway bridges in Bowdoin as determined by municipal officials, and Maine Department of Transportation (MDOT). The State defines local bridges as either a "Bridge" or a "Minor Span". A "Bridge" is anything greater than 20 feet, a "Minor Span" is greater than 10 feet but less than 20 feet. These two categories are broken down into 4 types of structures that determine maintenance responsibilities. They are:
Type 1 – Bridge on Town Ways and State Aid Highways- MDOT responsibility
Type 2 – Minor Span on State Aid Road- MDOT responsibility
Type 3 – Minor Span on Town Ways- Town maintained, State inspected
Type 4 – Low Use or Redundant Bridge- Town maintained, Town inspected
Low Use is defined as less than a 100 traffic count and a Redundant Bridge is a short detour route for local traffic only. Use the following chart for details on bridges in Bowdoin.

TABLE 10.4 Bridge Inventory

NAME	TYPE	ROAD	WATER BODY	SPAN	CONSTRUCTION	FSR*
Brown Bridge	1	Lewis Hill Rd.	Dead River	21ft	Steel Culvert	86.6
Cobbs Bridge	1	Burrough Rd.	Little River	61ft	Steel Girder	69.9
Dead River Bridge	1	Dead River Rd.	Dead River	26ft	Steel Girder	29.5**
Blacksmith Shop Bridge	2	Litchfield Rd.	Blacksmith Shop Br.	14ft	Concrete Slab	85.5
Doughty Bridge	3	Doughty Rd.	E. Cathance	16ft	Steel Culvert	86.8
Wentworth Bridge	3	Doughty Rd.	W. Cathance	14ft	Steel Culvert	75.8
Cox Bridge	2	RT 125	Little River	15ft	Steel Culvert	88.8
Gillespie Bridge	2	RT 125	Gillespie Brook	18ft	Steel Culvert	2003
Plank Bridge	2	RT 125	E. Cathance	19ft	Steel Culvert	69.5
Lewis Bridge	2	RT 125	W. Cathance	12ft	Concrete Culvert	2004
Combs Bridge	2	RT 125	Combs Brook	12ft	Concrete Culvert	2004

FSR* Federal Sufficiency Rating means percent of bridge life remaining.
** State identified for replacement by 2006

The State and Town continue to maintain numerous smaller diameter culverts on all of our main and local roads.

10.8 Other Modes of Transportation

Rail

Bowdoin has no railways or station facilities in town. The nearest active tracks are in Monmouth and Brunswick. Brunswick may begin active passenger service as a spur to Portland and a connection to the Downeaster Amtrac service to Boston. Tracks through Richmond, Gardiner and Augusta are used for limited excursion trips only during the tourist season. The effect of rail service in Brunswick my increase the attractiveness of owning a home in Bowdoin but cannot be calculated at this time.

Airports

There are no airports serving commercial airlines in Bowdoin. The closest recognized flying facility to Bowdoin would be Bowdoinham Airport which has limited facilities to handle single engine aircraft. The Augusta Airport, about 25 miles northeast of Bowdoin, is the nearest airport that accommodates commercial and private aircraft. The Lewiston/Auburn Airport, about 15 miles to the west of Bowdoin, has limited commercial service and private facilities. Most residents of the town travel approximately 36 miles to Portland for full commercial airline services.

Public Transportation

Public transportation is not currently available and considering the rural character of the town it will not be likely in the future. Some segments of the population are dependent upon public transportation, especially the disabled and the elderly. Currently some service providers do transport people between their homes and their facilities. The town contributes to several non profit transportation services in an attempt to provide transportation to our elderly and physically disabled citizens. The demand for greater public transport will increase as more of the local population ages. The demand for this service will also increase during inclement weather. The town needs to get involved with the regional transportation authorities to explore potential solutions to our transportation needs now and for the future.

Alternative Transportation

While not considered traditional forms of transportation many projects, such as the construction of bike paths and walking trails, can be funded with a variety of state and federal grants. The Town should explore any means possible to foster such projects. The benefits of bringing the community closer together through the completion of pedestrian ways and bike paths cannot be calculated. This would also require working with surrounding communities in order to identify common corridors and possibly links to existing projects.

10.9 Transportation Planning

Over the past few years much of the transportation planning has been shifting out of the hands of the Department of Transportation and into the hands of regional transportation advisory committees. These committees have been responsible for creating construction and maintenance timetables for most major arterial and collector projects throughout the State. The Ttown through a representative on the local committee and by participation in public hearings needs to take an active role in bringing the town's local and regional transportation needs to the attention of the advisory committee. This comprehensive plan will dictate through changes in our Land Use Policies that road design standards will change to match the updated policies. We have to shift some of our focus from the purely local perspective to a more regional perspective if the town wants to stay ahead of future transportation issues.

10.10 Issues and Implementation Strategies

Issues

Are our roads as safe as they can be? Can we make some improvements?

Does our current rate of expenditure for maintenance and road improvement satisfactorily meet our current and future needs?

Can the town better control access to our roads to improve safety and traffic flow?

Are the town road design standards appropriate for the environment they are meant to serve?

Could the town benefit from staying informed on what the regional transportation issues are and how they may affect Bowdoin?

Is the town supporting its elderly, invalid or non-driving population by insuring adequate transportation opportunities?

Can the town foster a greater sense of neighborhood/community by establishing pedestrian ways, bicycle paths and trails?

Implementation Strategies

Policy 1: The Town should take steps to improve the safety along roads in town

- Strategy 1.A: The Town should approach the Department of Transportation to see what improvements can be made to the intersection of Rt 125, Meadow Rd and Litchfield Road, which is our most dangerous intersection. (all State Aid roads) Timeline: As soon as possible

- Strategy 1.B: : The Town should contact the Sagadahoc County Sheriff 's Office and indicate the number of speed related accidents occurring in town. The town should request a greater law enforcement presence to control speeds.
  Timeline: As soon as possible

Policy 2: The town needs to take steps to ensure that our current rate of expenditure for maintenance and road improvement satisfactorily meet our current and future needs.

- Strategy 2.A: The town should adopt a Road Management Plan based on plans developed by the Local Roads Center to supplement its current program. We currently have an aggressive plan to bring all town roads up to standards but no long term planning to anticipate growth and traffic conditions.Selectmen shall develop a plan for Town Meeting approval that considers future requirements for at least the next 3 years.
  Timeline: develop plan during 2006 and seek town approval 2007.
- Strategy 2.B: The Town should adequately fund the Road Management Plan to make the recommended road improvements as stated in the plan.The Selectmen shall budget for the adequate funding of the plan.
  Timeline: As soon as the plan is approved by the Town.

Policy 3: The town's road design standards must be appropriate for the environment they are meant to serve.

- Strategy 3.A: The Town should adopt traffic access standards for all major thoroughfares in town. The access standards shall include, at a minimum, provisions for: site distance, corner clearance and driveway openings. Access standards developed by DOT should be used as a guide. The Planning Board shall develop these access standards.
  Timeline: 2005-2006
- Strategy 3.B: The Town shall amend its road design standards for the construction of all roads to better serve the type of development the road services. The standards may be based on vehicle count or whatever standard is developed in the new Land Use Plan. The Planning Board and Road Commissioner shall amend its current ordinance as required.
  Timeline: 2006-2007

Policy 4: The town would benefit from staying informed on what the regional transportation issues are and how they may affect Bowdoin?

- Strategy 4.A: The Selectmen should appoint a Transportation Advisory Committee to attend all regional transportation meetings, make recommendations on improving transportation opportunities for the elderly, and to represent the town at any other transportation related developments such as alternative transportation, public transit and pedestrian related developments.
  Timeline: 2006

Policy 5: The Town can foster a greater sense of neighborhood/community by establishing pedestrian ways, bicycle paths and trails. As Bowdoin continues to grow

every opportunity to improve pedestrian facilities should be evaluated and acted upon. All elected and appointed Town Officials should be involved.

- Strategy 5.A: Road shoulders should be widened at every opportunity.
- Strategy 5.B: Discontinued roads, snowmobile/ATV trails, new subdivision public access walkways and bicycle/hiking trails should all be considered as assets to pedestrian traffic.
- Strategy 5.C: A network of alternate transportation means should continuously be developing for the use and enjoyment of the citizens of Bowdoin.
  Timeline: ongoing

Policy 6: With the increased number of roads being proposed in towns by developers, the town should develop submittal and inspection systems to ensure that roads are built as approved.

11. ECONOMY

Purpose

The economy section of the comprehensive plan seeks to describe trends in the local economy and identify opportunities in public policy to enhance the attractiveness of Bowdoin for economic growth and development.

The town is located within the Bath-Brunswick Labor Market Area and is adjacent to the Lewiston-Auburn and Augusta Labor Market Areas. Located on the northern edge of Sagadahoc County, the town enjoys the benefits of a close proximity to coastal communities and to Lewiston. Residents can enjoy Bowdoin's rural character and be in a good position to commute into three labor market areas. This is an attractive feature especially considering that dual income households are more common. For example, one spouse can commute to Augusta while the other travels to a job in Brunswick.

Bowdoin is a suburban community since the vast majority of its labor force travels out of town for employment. According to the 2000 Census, a total of 239 jobs are located in the town and 158 of these jobs are held by Bowdoin residents. The overall health of the regional economy is of prime importance for Bowdoin's workforce since most work in the surrounding communities. The town can promote economic development by promoting itself for new commercial growth, but its ability to play a role in encouraging growth in surrounding communities is limited. Regardless of how the town decides to pursue economic growth there are a number of related issues that are of critical importance to economic development that should be addressed by the community. The item of special importance is the educational attainment of its residents. Bowdoin residents will be competing for jobs with people spread over three labor Market Areas and in today's job market the more highly skilled and educated worker is more competitive in that market.

The following is a list of some of the community's economic strengths:

1. The town is located in close proximity to Three Major labor Market Areas.
2. The town is in close proximity to Interstate 95 and the Maine Turnpike.
3. As part of the Bath-Brunswick Labor Market Area stable, employment opportunities are available.
4. The town has a reasonable tax rate.
5. The rural character of the town makes it attractive for some families.
6. Reasonable land prices can still be found throughout the community.

11.1 Education

The job market is competitive and demands a high skill level from each worker. The loss of unskilled manufacturing jobs and rapid advances in technology have made continuing education a necessity for today's workforce. The level of educational attainment of a community's workforce is, now more than ever, an essential component of future economic growth.

Table 11-1, Table 11-2 and Table 11-3 summarize the highest educational attainment of persons 25 year and older, persons 18 to 24 years, and persons between 16 and 19 years for Bowdoin and Sagadahoc, Kennebec and Androscoggin Counties.

The educational attainment level for persons over the age of 25 in Bowdoin is slightly lower than the same age group in with Kennebec, Androscoggin and Sagadahoc Counties. Bowdoin has a higher percentage of non-high school graduates than Sagadahoc or Kennebec Counties. It also has a lower percentage of people with bachelor or graduate degrees.

The attainment level for persons between the ages of 18 to 24 years also shows some areas for concern. The percentage of persons 18 to 24 year old without a high school diploma in Bowdoin (35%) is nearly 9% greater than in Sagadahoc County as a whole and 15% higher than Kennebec and Androscoggin Counties. Additionally, this number is significantly higher among females in this age range than males. Bowdoin has a similar percentage of 18 to 24-year olds with a Bachelor Degree or higher but a lower percentage of persons with some college or an Associates Degree. It should be noted that many young people are attending college outside of the community, which can impact some of these figures; however, the high number of non-high school graduates may deserve some attention.

A similar area of concern is that 11% of Bowdoin residents between the ages of 16 to 19 years are not in high school or graduated. This is compared to 8% in Sagadahoc and Androscoggin Counties and 5% in Kennebec County.

Table 11-4 summarizes the number of Bowdoin residents enrolled in school. Approximately 25% of Bowdoin's population is enrolled in some sort of school, primary, secondary or post-secondary programs.

TABLE 11.1 - Educational Attainment: Persons 25 Years and Over
Source: 2000 Census

	Bowdoin	**Sagadahoc County**	**Kennebec County**	**Androscoggin County**
	2000	**2000**		
Total Persons over 25 years	1,785 persons	23,862 persons	79,362 persons	69,560 persons
Less than 5th grade	0 persons 0%	146 persons 0.6%	513 persons 0.6%	753 persons 1.1%
5th to 8th grade	64 persons 3.6%	736 persons 3.1%	4,015 persons 5.1%	5,495 persons 7.9%
9th to 12th grade no diploma	252 persons 14.2%	1,988 persons 8.3%	7,183 persons 9.1%	7,775 persons 11.2%
High School Graduate	754 persons 42.2%	8,533 persons 35.8%	29,882 persons 38%	27,944 persons 40.2%
Some College No Degree	333 persons 18.6%	4,612 persons 19.3%	15,143 persons 19%	12,962 persons 18.6%
Associate Degree	163 persons 9.1%	1,884 persons 7.9%	6,224 persons 7.8%	4,638 persons 6.7%
Bachelor Degree	146 persons 8.2%	3,914 persons 16.4%	10,397 persons 13.1%	6,858 persons 9.9%
Graduate Degree	73 persons 4.0%	2,049 persons 8.5%	6,005 persons 7.6%	3,136 persons 4.4%

TABLE 11.2 - Educational Attainment: Persons 18 to 24 Years
Source: 2000 Census

	Bowdoin	Sagadahoc County	Kennebec County	Androscoggin County
Total Persons between 18 to 24 years	184 persons 83 males 101 females	2,294 persons 1,144 males 1,150 females	9,808 persons 4,925 males 4,883 females	9,492 persons 4,693 males 4,799 females
High School Graduate	69 persons 37.5% 35 males 34 females	1,015 persons 44.2% 503 males 512 females	3,424 persons 35% 1,767 males 1,657 females	3,516 persons 37% 1,814 males 1,702 females
Some College or Associate Degree	42 22.8% 17 males 25 females	565 persons 24.6% 263 males 302 females	3,812 persons 39% 1,780 males 2,032 females	3,642 persons 38% 1,648 males 1,994 females
Bachelor Degree or Higher	9 persons 4.9% 4 males 5 females	116 persons 5.1% 51 males 65 females	526 persons 5% 164 males 362 females	476 persons 5% 186 males 290 females
Not High School Graduate	64 persons 34.8% 27 males 37 females	598 persons 26.1% 327 males 274 females	2,046 persons 21% 1,214 males 832 females	1,858 persons 20% 1,045 males 813 females

TABLE 11.3 - Educational Attainment: Persons between 16 and 19 Years
NOT IN HIGH SCHOOL OR GRADUATES **Source: 2000 Census**

	Bowdoin	Sagadahoc County	Kennebec County	Androscoggin County
Total person 16 to 19 years	158 persons	1,848 persons	6,528 persons	
Not in High School or graduates	17 persons 11%	150 persons 8%	323 persons 4.9%	7.8%

TABLE 11.4 - Enrollment: Persons 3 Years & over enrolled in school
Source: 2000 Census

Persons Between 3 and 4 years in School	18 persons
Persons Between 5 and 14 years in School	420 persons
Persons Between 15 and 17 years in School	131 persons
Persons Between 18 and 19 years in School	46 persons
Persons between 20 and 24 years in School	17 persons
Persons Between 25 and 34 years in School	12 persons
Persons over 35 years in School	42 persons
Total Number of Persons in Bowdoin Enrolled in School	686 persons 25% of the Total Population

11.2 Employment by Class and Occupation

Table 10-5 and Table 10-6 summarize employment by class and occupation for Bowdoin and Sagadahoc County. Bowdoin residents have approximately the same spread of employment class as Sagadahoc County as a whole. Two-thirds of the employed persons in Town work for wage and salary at a for-profit company. Twelve percent are self-employed. Approximately ten percent of the employed population works for local, state or federal government. Only 1.5% of the town are employed in agriculture, forestry, fishing and hunting as an occupation (as opposed to the numerous persons involved in these activities not as a primary occupation or as a recreational pursuit). This is the portrait not of an active farming community but of a rural suburb.

The occupations of Bowdoin residents are spread fairly evenly across managerial/professional/specialty occupation, technical sales/administrative support, service occupations, construction/extraction/maintenance occupations, and production/transportation/material moving occupations. However, Bowdoin resident's occupations are 23% managerial/professional/specialty occupations compared to 33% for Sagadahoc County and 26% technical sales/administrative support occupations compared to 8% for Sagadahoc County. This may reflect differences between the percent of

bachelors and graduate degrees held by Bowdoin residents and Sagadahoc County residents.

TABLE 11.5 - Employment by Class
Source: 2000 Census

General Class of Employment	Bowdoin	Sagadahoc County
Total Employed persons over 16 years	1,433 persons	17,745 persons
For-Profit Wage and Salary	1,019 persons 71.1%	11,886 persons 67%
Not-For-Profit Wage and Salary	86 persons 6.0%	1,605 persons 9%
Local Government	102 persons 7.1%	1,305 persons 7.4%
State Government	35 persons 2.4%	527 persons 3.0%
Federal Government	12 persons 0.8%	581 persons 3.3%
Self-Employed	179 persons 12.5%	1,780 persons 10%
In Agricult., forestry, fishing & hunting	21 persons 1.5%	195 persons 1.1%
Unpaid Family Workers	0 persons 0%	61 persons <0.3%

TABLE 11.6 - Employment by Occupation
Source: 2000 Census

Occupation	Bowdoin	Sagadahoc County
Total Employed Persons over 16 years of age	1,319 persons	17,745 persons
Manager, Professional and Specialty Occupation	307 persons 23%	5,876 persons 33%
Technical Sales and Administrative Support	350 persons 26%	14,238 persons 8%
Service Occupations	270 persons 20%	2,738 persons 15%
Farming, Forestry, Fishing	4 persons 0.3%	233 persons 1%
Construction, extraction, and maintenance occupations	231 persons 18%	2,173 persons 12%
Production, transportation and material moving occupations	248 persons 19%	2,487 persons 14%

11.3 Mobility and Commuting patterns

The rate at which people relocate and the distance they commute are a reflection of the stability of the community. Table 10-7 tabulates the number of people living in the same or different locations between 1995 and 2000. Although Bowdoin has grown significantly over the last five years, nearly 70% of its population in 2000 was living in the same house as in 1985. This percentage is much higher than was found in the surrounding counties of Sagadahoc, Kennebec, Androscoggin and Cumberland. During this same timeframe 28% of the Bowdoin population had moved to Bowdoin from another geographic area. This reflects the high rate of growth and indicates a relatively small percentage moving from Bowdoin to other locations.

TABLE 11.7 - Mobility – Where we lived. Source: 2000 Census

Where We Lived	In the Same House Since 1995	Different House since 1995		From Abroad
		Same Geographic Area	Different Geographic Area	
Bowdoin	1,726 persons 68.5%	89 persons 3.5%	705 persons 28.0%	0 persons 0%
Sagadahoc County	18,972 persons 57.5%	5,308 persons 16.1%	8,350 persons 25.3%	379 persons 1.1%
Kennebec County	67,318 persons 60.8%	25,841persons 23.3%	17,014 persons 15.4%	533 persons 0.5%
Androscoggin County	55,347persons 56.7%	27,148 persons 27.8%	15,148 persons 15.5%	670 persons 0.7%
Cumberland County	135,739 persons 54.2%	64,581persons 25.8%	46,598 persons 18.6%	3,319 persons 1.3%

The means of commuting for Bowdoin residents and residents of Sagadahoc, Kennebec and Androscoggin Counties is presented in Table 10-8. As this is a rural area of Maine, most workers drive to their place of employment. Small fractions carpool, use public transportation or other means to get to work. The mean commuting time for Bowdoin residents is 28.8 minutes.

TABLE 11.8 - Means of Commuting
Source: 2000 Census

	Bowdoin	Kennebec County	Androscoggin County	Sagadahoc County
Total Workers	1,428 persons	56,351 persons	50,869 persons	17,864 persons
Drove alone	1,094 persons 77%	44,606 persons 79.2 %	39,688 persons 78%	13,943 persons 78%
Car pooled	197 persons 14%	6,435 persons 11.4%	6,809 persons 13.4%	2,065 persons 12%
Public Transportation	8 persons 0.6%	424 persons 0.8%	482 persons 0.9%	89 persons 0.5%
Other means	41 persons 3%	2,518 persons 4.4%	2,561 persons 5.0%	965 persons 5%
Work at Home	88 persons 6%	2,368 persons 4.2%	1,329 persons 2.6%	802 persons 4.5%
Mean Travel Time to Work	28.8 minutes	22.6 minutes	23.3 minutes	22.5 minutes

A total of 239 persons are employed in the town and Bowdoin residents account for 66% of this total or 158 persons. The remaining persons employed in the town are primarily from towns immediately surrounding Bowdoin or within two towns from Bowdoin.

The majority of the town's working population is employed outside of Bowdoin in towns in the surrounding region. Only 11% of the Town's working population works in Bowdoin and only an additional 11% work in the towns immediately surrounding Bowdoin. The largest number of Bowdoin workers commute into Brunswick, Bath, Topsham, Lewiston, and Freeport. These communities account for 64% or 917 members of Bowdoin's workforce. The balance of the workforce is spread out throughout the region and includes 15 workers employed overseas. This appears to be one of the reasons for the higher mean travel time to work for the community.

Bowdoin has historically been a rural farm community and still has a greater number of individuals who work at home and/or are self-employed than Sagadahoc County as a whole or than our neighboring counties. The 2000 Census data indicate that the town also serves our nearby towns/cities.

TABLE 11.9 - Commuting Patterns for Persons Working in Bowdoin

Source: 2000 Census

Place of Residence	Number of Workers	Place of Residence	Number of Workers
Bowdoin	158 persons	Auburn	6 persons
Sabbatus	22 persons	Bowdoinham	6 persons
Topsham	12 persons	Bath	5 persons
Brunswick	8 persons	West Bath	2 persons
Lisbon	7 persons	Palmyra	2 persons
Lewiston	7 persons	Leeds	2 persons
		Whitefield, NH	2 persons

TABLE 11.10 - Commuting Patterns for Bowdoin Workers

Total Number of Bowdoin Workers: 1,428 persons **Source: 2000 Census**

Place of Work	Number of Persons	Place of Work	Number of Persons
Brunswick	359 persons	Greene	7 persons
Bath	174 persons	Gardiner	6 persons
Bowdoin	158 persons	Georgetown	6 persons
Portland	119 persons	Japan (country)	5 persons
Topsham	104 persons	Cape Elizabeth	5 persons
Lewiston	81 persons	Falmouth	5 persons
Freeport	80 persons	Sabattus	5 persons
Auburn	52 persons	Litchfield	5 persons
South Portland	28 persons	Durham	4 persons
Augusta	25 persons	Phippsburg	4 persons
Bowdoinham	24 persons	Livermore Falls	4 persons
Westbrook	23 persons	Farmingdale	4 persons
Yarmouth	22 persons	Manchester	4 persons
West Bath	20 persons	Readfield	4 persons
Lisbon	19 persons	Rumford	4 persons
Turner	10 persons	Bangor	3 persons
Bristol	10 persons	Gray	3 persons
Italy (country)	10 persons	Newfield	3 persons

Richmond	8 persons	Winthrop	3 persons
Wiscasset	8 persons	Leeds	3 persons
Windham	7 persons		

11.4 Income

Tables 10-11 and 10-12 present data on the income rates of Bowdoin residents in comparison to Sagadahoc County as a whole and to the State of Maine overall. Bowdoin has a slightly higher median household income but a higher percentage of families in poverty.

TABLE 11.11 - Income

Source: 2000 Census

	State of Maine	Sagadahoc County	Bowdoin
Per Capita Income	$19,533	$20,378	
Median Household Income	$37,240	$41,908	$42,688
Median Family Income	$45,179	$49,714	$46,094
Median Income Non-Family Households		$31,635	$25,788
Persons in Poverty Status	10.9%	8.6%	
Persons under 18 in Poverty Status	13.0%	12.2%	
Persons 65 years & older in Poverty	10.2%	6.4%	3 Families 4.5%
Families below Poverty Level	7.8%	6.9%	61 families 7.9%

Table 11.12 - Household Income:

Source: 2000 Census

	Sagadahoc County	Bowdoin
Less than $10,000	971 6.9%	54 5.5%
$10,000 to $14,999	1,060 7.5%	67 6.8%
$15,000 to $24,999	1,601 11.3%	56 8.7%
$25,000 to $34,999	2,023 14.3%	162 16.5%
$35,000 to $49,999	2,733 19.3%	252 25.7%
$50,000 to $74,999	3,298 23.3%	289 29.4%
$75,000 to $99,999	1,402 9.9%	51 5.2%

Over $100,000	1,062 7.6%	51 5.2%

11.5 Business and Industry

There were an estimated 24 commercial businesses in Bowdoin in 2002. There's no single commercial or industrial area in Town. Three phase power, which is often necessary for industrial operations, is available on Route 201; it extends from Topsham north up 201 to the WIGY transmission tower on the Adams Road.

All of these are relatively small businesses occupying little land and rely on local market area to survive. Little change in the nature of commercial land use can be anticipated based on these trends. Small commercial business has been widely supported by the residents of Bowdoin.

Home Occupations

Currently the Town does not track home occupations despite the fact that a significant number of home business uses are evident throughout the community. Most of the existing home occupations appear to coexist well with their neighbors, especially those in a very rural setting. Over time as the housing density increases it will become necessary to establish a permit system for some types of home occupations based upon impacts. At the same time the Town must recognize that the use of home occupations will become an ever increasing land use, especially for people who can develop businesses over the internet. Some home occupations can be considered low impact especially if they involve a home office, no outside employees and minimum or no changes in the exterior of the dwelling. These uses should be encouraged because they can provide a viable second income source for families and also permit one or more of the residents to remain in the community during the day. Other more intense home occupations should also be viewed as an important part of the town's overall economic development strategy and should be encouraged if they meet some basic requirements that preserve the residential neighborhood in which they are located.

11.6 Issues:

1. Secondary education and post secondary educational attainment levels for persons between the ages of 18 to 24 years old are at a lower percentage than in the surrounding counties.
2. Bowdoin workers have a high mean commute time.
3. Without a strong base of local employment the town is dependent upon the economic health of the surrounding region.
4. Due to its location, workers have access to jobs in three Labor Market Areas.
5. Most goods and services are obtained in surrounding communities.

12. FISCAL CAPACITY

Purpose

The purpose of this section is to describe the Town's fiscal situation and to determine whether or not the Town is capable of meeting future growth and development needs. A key component of this analysis will be the development of a capital investment plan for financing the replacement and expansion of public facilities and services required to meet projected growth and development.

12.1 Operation

The Town of Bowdoin operates on a fiscal year from January 1 to December 31. It collects property taxes on a semi-annual basis in July and December to support its fiscal requirements. All appropriations are voted on at the annual town meeting in March which requires that the town operate on an anticipatory footing from January 1st to the next town meeting date in March. Operating costs for the January to March period are actually "borrowed" from anticipation accounts voted on from the previous years town meeting. Bowdoin solicits bids for services and elects a Tax Collector and Town Treasurer at its annual town meeting for the ensuing year.

The following chart gives a fiscal snapshot of Bowdoin with respect to the other towns in Sagadohoc county. It is interesting to note that Bowdoin has the smallest commitment yet has a higher mil rate than Bowdoinham. This is a result of the bedroom community effect where the tax basis is derived entirely from private property with no business base to share the burden.

TABLE 12.1 – Valuation of regional muncipalities

YEAR	TOWN	VALUATION	MIL RATE	COMMITMENT
1999	BATH	484,707,900	21	10,178,866
	BOWDOIN	87,093,533	18.7	1,628,649
	BOWDOINHAM	102,156,400	17	1,736,659
	TOPSHAM	392,077,200	17.64	6,916,242
2000	BATH	587,526,700	21	12,338,061
	BOWDOIN	97,231,212	17.5	1,701,546
	BOWDOINHAM	108,258,300	17	1,840,391
	TOPSHAM	402,611,400	17.84	7,182,588
2001	BATH	731,293,700	22	16,088,461
	BOWDOIN	99,113,003	18.9	1,873,236
	BOWDOINHAM	109,811,100	17	2,075,429
	TOPSHAM	421,910,181	19.54	8,244,125
2002	BATH	742,610,400	24	17,822,649
	BOWDOIN	104,029,288	20.4	2,122,197
	BOWDOINHAM	125,548,600	18.8	2,360,313
	TOPSHAM	438,178,500	22.46	9,841,489
2003	BATH	750,882,100	25.2	18,670,228
	BOWDOIN	106,848,045	20.4	2,179,700
	BOWDOINHAM	131,600,900	19.3	2,539,897
	TOPSHAM	455,051,900	21.7	9,874,626

This trend will continue if some business tax base is not encouraged in Bowdoin. Bowdoin has a large number of in home businesses but does not derive a tax advantage from these businesses.

12.2 Tax History

The following table gives a perspective of the overall growth in Valuation and Commitment incurred by the town for the last ten years. As the table indicates the Mmil rate has consistently increased due to lack of revaluation. The town is planning to do a town wide property reassessment beginning in 2005.

TABLE 12.2 – Change in Valuation1993 - 2004

YEAR	VALUATION	APPROPRIATIONS	MIL RATE	TAX COMMITMENT	% CHANGE OF COMMITMENT
1993	75,698,549	1,306,843	15.85	1,119,822	
1994	78,149,733	1,305,570	15.00	1,172,245	4.68%
1995	80,531,397	1,503,375	16.75	1,348,900	15.09%
1996	86,540,783	1,636,367	17.75	1,482,848	9.93%
1997	86,566,464	1,711,596	18.00	1,558,196	5.08%
1998	84,215,567	1,785,076	18.00	1,515,880	-2.79%
1999	87,093,533	1,926,742	18.70	1,628,649	7.43%
2000	97,231,212	2,001,580	17.50	1,701,546	4.47%
2001	99,113,007	2,200,599	18.90	1,873,236	10.09%
2002	104,029,288	2,447,563	20.40	2,122,197	13.29%
2003	106,848,045	2,470,407	20.40	2,179,700	2.70%
2004	110,564,311	2,549,944	20.45	2,261,040	3.73%

12.3 Expenditures

The following charts should detail the towns largest expenses and establish a basis for trend analysis to predict future requirements. The absence of a Capital Improvement Plan in the past has been overcome by a conservative approach to maintaining surplus accounts for future needs. This policy has been successful but does not allow for future emergencies.

As can be seen, School Appropriation accounts for a large percentage of all tax dollars collected in the town. This percentage does not seem to vary much and will continue into the foreseeable future. As more services are required to operate the town the trend for an 8-10% annual increase in municipal expenses can be expected to continue. County taxes are anticipated to continue their annual increase and may actually increase a little more dramatically with the new dual county jail agreement. Bowdoin's current growth trend can only fuel these average expected increases.

TABLE 12.3 – Municipal Appropriations

Year	County Tax	Muncipal Appropriates	School Appropriations	Total Appropriations
1993	74,905	165,099	1,009,961	1,306,843
1994	77,382	126,765	1,082,317	1,305,570
1995	81,578	172,244	1,214,046	1,503,375
1996	92,875	186,368	1,349,120	1,636,367
1997	104,573	177,029	1,414,988	1,711,896
1998	109,230	163,066	1,493,445	1,785,076
1999	113,215	188,797	1,598,234	1,826,742
2000	117,787	156,450	1,701,391	2,001,380
2001	184,352	205,126	1,782,582	2,200,599
2002	204,179	210,853	1,884,470	2,447,563
2003	212,401	236,935	2,003,509	2,470.407

A more comprehensive breakdown of annual town expenses is as follows:

TABLE 12.4 – Annual Town Expenses

EXPENSE SUMMARY	1999	2000	2001	2002	2003	2004
PUBLIC SAFETY	47,700	49,995	43,547	79,323	84,920	93,780
SALARIES	61,885	66,689	68,655	76,863	80,488	103,346
CULTURAL/REC	9,728	9,438	7,796	7,999	18,564	13,246
ROADS	249,792	250,715	327,204	378,517	365,580	354,505
SOCIAL SERVICES	8,854	9,438	6,389	9,693	7,776	15,933
DEBT SERVICE	56,307	56,252	56,192	56,128	56,128	55,984
CAPITAL IMPROVEMENT	43,000	44,500	39,500	44,500	40,500	43,500

12.4 Revenue

The Town of Bowdoin receives revenue from the State of Maine and from local revenue sources, such as property and excise taxes and various fees. The largest source of revenue has been and will continue to be property taxes. Other significant revenue sources are excise tax and State Revenue Sharing. Any interruption in these revenue streams would create an immediate financial crisis to the town. Tracking the various revenue streams can be done on the following chart.

TABLE 12.5 – State Revenue Sharing

REVENUE SUMMARY	1999	2000	2001	2002	2003	2004
PROPERTY TAXES	1,518,810	1,587,531	1,748,749	1,991,867	2,097,545	2,161,666
EXCISE TAXES	285,567	301,763	324,765	348,393	378,576	414,321
INTEREST/LIENS	111,775	114,535	141,027	205,554	266,072	124,300
STATE REVENUE	219,265	245,990	291,055	221,822	286,066	321,795
HIGHWAY GRANTS	47,045	49,076	49,036	48,534	47,902	48,138
HOMESTEAD EXEMPTION AND TREE GROWTH	84,059	98.652	100,044	89,881	72,498	93,986

12.5 Capital Improvements

A key ingredient of any plan for the future of Bowdoin is the balancing of our needs and desires with our ability to pay for them. A Capitol Improvement Plan develops projected expenditures for improvements to roads, buildings, equipment and other infrastructure needed to support town services in the future and indicates the timing and funding sources which can be used to finance them. As well as providing a result, it provides a "process" for the officials and citizens of the town to discuss major issues including priorities of needs, timing of projects and our ability and willingness to pay for them.

12.6 Summary

The Town of Bowdoin's fiscal condition is sound. Because it planned to purchase major items before it actually paid for these items (Salt Shed, Fire Truck, etc) it has in effect worked along the lines of having a Capital Improvement Plan. The town has established a surplus account which it funds each year at Town Meeting and contribute to in several other ways. This fund serves two purposes: it carries the town between Town Meeting generated expenses in March to the actual collection of taxes in July each year, and acts as a contingency fund for unforeseen expenses. The Town has not had to borrow in anticipation of collection since 1991.

12.7 Fiscal Issues

1. The town needs to officially adopt a Capital Improvement Plan and establish guidelines identifying long term requirements, funding for these items and publish this document for the citizens.
2. The town needs to establish a budget or finance committee that works with the Selectmen, Tax Collector and town Treasurer to oversee and assist in the budget process. This is annually recommended by the independent auditors and would assist our already overtaxed elected officials.
3. The town needs to balance its desire to remain rural with encouraging some business development in its growth area to offset the tax consequences of deriving the majority of its revenue from personal property tax.

13. LAND USE

13.1 Land Use Trends

Bowdoin is a rural town situated in the northwest corner of Sagadahoc County and incorporated on March 21, 1788 from the early plantation of West Bowdoinham.

Bowdoin consisting of 25,117 acres of land, approximately 43 square miles, the majority of which is undeveloped forest mixed with farmland and residential development. There is a small village center at the intersection of the Litchfield Road and Route 125, which consists of one commercial store and the former Sagadahoc Grange Hall. A short distance from the intersection are the locations of the Town Office/Fire Station complex and the former Bowdoin Center School. West Bowdoin can also be considered a small village center. Historically there was a store located there, along with a Post Office, sawmill, school, and church. Also of note is the location of the new Bowdoin Center School and Bowdoinham Water District near the intersection of Route 125 and 201 in the area around Stoddard Pond.

Development is scattered primarily along the existing road networks although recent trends are toward larger subdivisions invading the unbroken backland tracts. Agricultural land is located primarily in the southern portion of the town; however, most of the land in Bowdoin is wooded.

According to a recent tax parcel study, one third of the parcels in Bowdoin are divided into 2-5 acre lots, one third of the parcels are over 10 acres per parcel and one quarter of all parcels are over 20 acres.

TABLE 13.1 Parcels by size

Acreage	Number of Parcels	Percent of total parcels
Less than an acre	62	4
1-2 acres	150	10
2-4 acres	436	30
5-10 acres	206	14
10-20 acres	173	12
Greater than 20 acres	388	27
No Information	9	Less than 1

Residential Development

The majority of housing is scattered along the existing road network, with an estimated 1026 housing units. There are a total of 646 single family houses and 329 mobile homes on private lots, including two mobile home parks; a total of 20 multi-family units are located in 13 buildings.

Bowdoin is in essence a rural suburb of the surrounding larger towns and cities, within commuting distance of Brunswick/Topsham, Lewiston/Auburn, Bath, Portland and

Augusta. According to the current tax rolls, the majority of land parcels containing residential dwellings are below 5 acres in size while the majority of undeveloped parcels are over 50 acres. Almost all development lines the town roads with few back lots being developed. There are two large mobile home parks, one consisting of 53 homes on Route 201 and another containing 38 homes on the Keay Road. Over the last 3-4 years a trend is beginning to emerge which indicates developers are opening up the interior land by building roads to town standards for the purpose of creating road frontage for subdivision lots. These developments will likely continue to increase due to the scarcity of lots on existing town roads. These lots are primarily in the 2-5 acre size range. The availability of undeveloped, affordable land and the attractive rural landscape continue to make Bowdoin a desirable place for future residential development.

Industrial/Commercial Development

Bowdoin has very few commercial enterprises(besides forestry and agriculture), and no industrial base. Most commercial activities are home based businesses and small retail or service businesses. There is a minor concentration of commercial activity at the historic village center along Route 125 and the southern end of Route 201. The potential to attract commercial activity exists in these areas due to the availability of 3 phase power, water and the proximity to adjacent towns' commercial zones. This area is also supported by excellent highways and easy access to Interstate 95.

Farmland, Forests and Open Spaces

Housing occurs mainly along the existing roads, leaving large swaths of undeveloped land behind the roadside development. According to a recent Beginning with Habitat study, Bowdoin has the largest amount of uninterrupted open space in Sagadahoc County. Privately owned fields and forest land support farming and forestry, while at the same time providing a valuable public resource. Agricultural uses are scattered throughout the town, with agricultural soils concentrated in the southwest corner by the West Burroughs Road, the northwest, north of the Wheeler Road and along Route 201, and to the east by the Coombs Road. Other pockets of agricultural soils scattered throughout the town support horse and dairy farms, various crops, orchards and haying.

It is estimated 70% of the Town of Bowdoin is forested. The town owns approximately 1100 acres of Town Forest, managed for tree harvesting and available for town recreation assets. The state has identified 1890 acres of land classified as Deer Wintering Areas, there are 5098 acres of forest in the Tree Growth Tax Plan and 1018 acres in the Open Space Tax Program. Caesar Pond and the surrounding 500 acres of land are preserved through the Land For Maine's Future program. It is part of the Ceasar Pond Wildlife Management Area and provides a unique opportunity for the community for recreation.

Current Bowdoin Land Use Ordinaces

Bowdoin, currently has a Shoreland Zoning Ordinance, a Land Use Ordinance, a Site Plan Ordinance, a Subdivision Ordinance, and a Road Design Ordinance. There is no town-wide zoning.

1. *Shoreland Zoning Ordinance*: The Shoreland Zoning Ordinance specifies land use controls and regulates activities for areas surrounding water bodies and wetlands. Bowdoin passed its current Shoreland Zoning Ordinance August 21, 2000 after approval by the Maine State Department of Environmental Protection. Bowdoin's Shoreland Zoning Map shows the areas regulated by the Shoreland Zoning Ordinance. Its purpose and applicability are as set forth within that ordinance. Bowdoin's shoreland zones include areas 250 feet from the wetlands identified by the Maine Geological Survey, and Caesar Pond; and 75 feet from Gillespie Brook, Little Gillespie Brook, the Little River, East and West Cathance Streams, the Dead River, and several unnamed tributaries.

2. *Land Use Ordinance*: The purpose of the Land Use Ordinance is to promote the health, safety, and general welfare of the residents of the town; to promote safety on the roads and safety from fire and other elements; to provide adequate light and air and prevent crowding of dwelling units; to control traffic congestion; to preserve open space and visual characteristics of the town; and to conserve and protect natural resources such as clean air, water and wildlife. The ordinance applies to all dwelling units including mobile homes and all multiple family dwellings. There are currently no local land use regulations for activities such as timber harvesting or commercial gravel extraction.

   In general, the current minimum lot size requirement is two acres per dwelling unit and the minimum road frontage must be at least 300 continuous feet per dwelling unit. Written building permits must be obtained from the Building Inspector, and plumbing permits from the Plumbing Inspector. One additional dwelling is allowed for each lot of record meeting the standards, and exemptions are currently allowed for certain gift lots.

3. *Site Plan Review Ordinance*. The purpose of the Site Plan Review Ordinance is to control the effects of development including commercial, retail, industrial and institutional buildings and structures and multiple family dwellings consisting of three or more attached dwelling units. The Ordinance applies to all proposed changes in use, construction or alterations to new or existing commercial, retail, industrial, institutional buildings, structures, multiple family dwellings, land and their accessory uses and structures. This Ordinance does not apply to detached single or two family dwelling units, agricultural land management practices, forest management practices, or buildings (of no more that 5000 square feet) used for agricultural or farming purposes. A site plan application should include such things as maps, description of uses, total floor area and ground coverage of each

proposed building, method of sold waste disposal, evaluation of the availability and suitability of off-site public facilities, etc.

4. *Subdivision Ordinance*. The purpose of the Subdivision Ordinance is to establish an administrative review process which will provide the Bowdoin Planning Board with sufficient evidence, data, and material to carry out its responsibilities as required by M.R.S.A. Title 30a subsection 4401 (the State Subdivision Law), in conjunction with the Shoreland Zoning Ordinance, and other ordinances adopted by the Town. All proposed parcel divisions within the town meeting the State definition of a subdivision must be reviewed and approved by the Bowdoin Planning Board. An application must consist of a number of documents insuring the submission meets the minimum requirements of the performance standards and review criteria set forth in the ordinances and under State Law. The Planning Board may request additional information such as the potential impact on community services, and sensitive natural and cultural resources.

13.2 Land Use Plan

FUTURE LAND USE PLAN

The Future Land Use Plan sets out a blue-print for how the Town of Bowdoin will manage its predicted continued growth. This narrative, and the Future Land Use Map, should be used together. They are meant to portray a conceptual plan only, with the understanding that the precise boundaries of the areas shown on the map may be subject to some change during plan implementation. The exact delineation of district boundaries will be subject to a rigorous review by the ordinance developers and the public, and will be put to a vote at a future Town Meeting.

The Bowdoin Comprehensive Planning Committee has worked hard over the last year to understand the critical issues and concerns of the Town's future and it's land use plans. Several primary issues have been identified:

- A large portion of people who are born and raised in Bowdoin cannot afford to buy a house in Bowdoin. Land and housing prices have increased significantly in recent years.
- There is a strong desire in the town for those raised in Bowdoin to be able to live in Bowdoin and to maintain the Town's community, history, and rural character.
- Bowdoin is located within easy commuting distance to several large economic centers (Lewiston/Auburn, Augusta, Brunswick, Bath etc) and is feeling the pressures of increasing demand for housing in Central Maine. The population of Bowdoin is increasing by 30% every decade and is now more than three times what it was in 1970.
- In the past, Bowdoin's road standard has been expensive enough to discourage subdivisions or building in the "back areas" of town. This is no longer true. Developers do not bat an eye at the road standard and are actively seeking land to develop in Bowdoin.
- **Uncontrolled growth will result in uncontrolled taxes** to the point that families which have lived in Bowdoin for a long time may not be able to stay in Bowdoin or afford to keep large tracts of land.

If we do not plan our growth and direct it, the Town will be influenced more by outside forces looking for housing and industrial or large retail space than by what the residents want to happen in town. This Land Use Plan outlines some ways that the Town can direct our growth. The ideas presented reflect the information gathered in the town survey and generated at the visioning session which occurred in the fall of 2004.

In developing this plan we were guided by the goals and strategies laid out in the previous chapters and specifically the strategy of protecting our large blocks of rural open spaces for hunting, fishing, outdoor recreation and traditional ways of life while also allowing growth to accommodate the inevitable commercial and residential growth.

We are proposing 3 rural districts and 3 growth districts. These are not official until the Comprehensive Plan Implementations Committee prepares an ordinance and townspeople have ample opportunity to discuss the details and then vote to adopt new ordinances at Town Meeting. This plan is intended to be specific enough to let the Committee who writes the ordinance, know the intentions of the residents of the Town.

PROPOSED RURAL AREAS

The residents of Bowdoin clearly agree on the value of rural, open spaces. The following land use designations establish the areas of the community that are designated as "Rural Areas" or areas in which large amounts of commercial or residential development would be discouraged.

Natural areas identified at the visioning session as highly valued include:

- Marshall Farm and Fields on Meadow Road- Wild Turkeys
- Area bounded by Rt. 125/ Doughty Road, Rocky Ridge Orchard - has trails, recreation, woods for hiking, snowmobiling and sledding
- Orchard Rocky Hill goodies! Excellent views, thriving business, field trip site.
- Cathance Stream-kayaking
- Wetland habitat
- Caesar's Pond- largest body of water in Bowdoin, public access for boating, skating, fishing
- West Bowdoin, historic value, farm, rural character, view
- 1st Baptist Church of the West Bowdoin contributing to the rural character
- Hague Mountain
- Grover's Grist Mill-Cemetery historical, secluded, and good for walking
- Town Forests
- Adam's Farm

It is recommended that the Selectmen appoint a Conservation Committee, whose first task should be to sponsor a Natural Resource Inventory. Then the Committee, with input from the townspeople, should prioritize open space they wish to protect.

One way of protecting valuable open space is to work with a Land Trust who could accept donated or purchased conservation easement. These transactions are entirely between a property owner and an organization or entity that can hold and take care of conservation easements.

The land would still belong to the landowners, but building on it would be limited through negotiation between the land owner and the Land Trust. The Brunswick-Topsham Land Trust already holds the conservation easement on land around Bradley Pond. The Friends of Merrymeeting Bay is another nearby land trust.

It is recommended that the Land Use Ordinance be amended by adding the following areas:

Rural Residential District

Location

The majority of town, as now along existing roads.

Purpose

To accommodate the traditional rural residential pattern with home businesses and traditional small lot subdivisions. Most of the Town will fall in this area and as the existing could continue to apply in this area.

Uses

Subdivisions less than 5 lots; 2 family elderly housing, mother-in-law apartments; Subdivisions larger than 5 lots would be subject to Open Space Subdivisions rules discussed in the high rural value areas below.

Tools/ Development Standards

The base density could be one dwelling unit per two acres and 300 feet road frontage, as is now. The ordinance developed by the Comprehensive Plan Implementation Committee could allow for negotiating a subdivision where in exchange for higher density and perhaps more lots, the developer preserves a significant amount of open space which is ideally contiguous with other already preserved lands.

High Rural Value District

Location:

This District is essentially the "backlands", the large amount of undeveloped land, behind the developed roads. It could include open spaces such as Town Forests, farmland, forestland and open spaces eligible for the Farm and Open Space Tax Law.

These open spaces could be identified by meeting certain characteristics such as having 2 or more of the following natural features: large wetlands, high grade agricultural soils or active working farm, original lot not on a town maintained road, a lot of 20 acres or more, bordering lots of more than 20 acres, bordering town-owned land, wildlife area, scenic vistas seen from public roads, historic area of town etc. The number and kind of characteristics that qualify an area as a High Rural Value District should be extensively discussed by the Comprehensive Plan Implementation Committee. (CPIC) This committee should then designate which areas of town meet these criteria and develop a map of the High Rural Value Areas.

Purpose

To create a spacious, residential/open space feel in areas that are still predominantly rural. This designation is intended to allow low-density residential development that preserve the rural character while setting aside contiguous open space or working landscapes for permanent conservation.

Uses

Single family homes, mobile homes, non-motorized recreational trails, parks, picnic areas, and informal boat launch. Non-residential uses will be limited to home businesses, which do not require more than 2-space parking lot. Subdivisions will only be allowed as Open Space Subdivisions.

Tools/Development Standards

First the Conservation Commission will prepare an Open Space Plan. The plan will identify and prioritize open space areas to be protected.

The density of individual homes in these areas will have to be discussed by the CPIC and residents. We recommend 1 dwelling unit per 5 acres and 300 ft frontage to provide an incentive for developing as a subdivision. All subdivisions will be "***open space subdivisions***" in which 50% or more of the developable land is set-aside in permanent open space. Portions of the land unsuitable for development (i.e. wetlands, steep grades etc) will not be counted in the total developable land calculation. (Note this is the only district where there is a mandatory set aside for open space in a subdivision.) The open space thus set aside is to be managed by land owner's association or may be deeded over for management purposes to a Land Trust.

Another tool for protecting open space is the purchase of easements by private Land Trust, the Town or the State.

A growth cap could be considered for the High Rural Value District. This growth cap limit could be for the number of individual houses and/or the number of subdivision lots. By placing a limit on the number of individual houses and not subdivision lots, more land will be conserved due to the 50% land conservation requirement on open space subdivisions.

Agricultural Overlay District- Land that is or could be classified as Farm and Open Space Tax Law shall qualify for an Agricultural Overlay District, where any new development would have to set up a buffer of 150 feet on the land being developed.

Resource Protection District

This type of area could be either in the Rural area or the Growth Area. These are areas which either currently are or are eligible to be designated Resource Protection District in under the State Shoreland Zoning Law. These requirements are already part of State Law under State Shoreland Zoning Law, however, other areas can be included by the town. The following areas SHALL be designated Resource Protection:

1. Areas within 250 feet from the upland edge of freshwater wetlands, and wetlands associated with great ponds and rivers which are rated "moderate" or high value by Maine Department of Inland Fisheries and Wildlife- or rated significant by the Beginning with Habitat program
2. The Town has already designated 100 feet of Caesar's Pond and Stoddard Pond, and their associated wetlands, Resource Protection District
3. 100 year flood plains as shown on FEMA maps

4. Areas of two or more contiguous acres with sustained slopes of 20% or greater
5. Areas of two or more contiguous acres supporting wetland vegetation , and which are not surficially connected to water body during normal spring high water

The town MAY designate the following areas, Resource Protection

a. Other important wildlife habitat
b. Natural sites of significant scenic or esthetic value
c. Areas designated by federal, state or municipal governments as natural areas of significant to be protected from development- again the Beginning With Habitat maps will be helpful
d. Other areas such as significant archeology and historic sites identified by the Maine Historic Preservation Commission.

Purpose

The purpose of this district is to protect those special natural resources which have been identified and mapped by a State agency or are not now in Shoreland Zone Resource Protection District. In these areas - residential development will be carefully reviewed to minimize impact on valuable natural resource, for example the aquifer that supplies water to the MacIver well.

Uses

Uses will be limited to low impact similar to the current Resource Protection District under Shoreland Zoning. New housing should be assumed to be not allowed, although the law allows for special exceptions if the owner can demonstrate that there is absolutely no other place on the property that s/he could build. Agriculture and Forestry practices will be allowed subject to best management practices, which will be spelled out in the Performance Standards Article of the New Land Use Ordinance.

Tools/Development Standards

The development standards will be similar to the current Resource Protection standards. Expansion of existing homes will be considered provided that they protect identified natural resources. New single-family residential uses will be required to meet the standards based on analysis and published research on impact of development on special resource.

Groundwater Protection Overlay District- The Bowdoinham Water District's well is located in the southeastern area of the Town of Bowdoin. The boundaries of this recharge area of the MacIver well should be delineated by hydrogeologist. Land uses taking place within this recharge area (wellhead protection area) should be regulated to prevent contaminating the groundwater. The groundwater standards will be spelled out in the new Land Use Ordinance. The Bowdoinham Water District has approached the Town of Bowdoin about developing well head protection ordinances to protect this water resource. The Town should work with the Bowdoinham Water District in this effort. In addition, other potential water sources in Town should be identified and protected so that if the town needs/wants to provide town water as a town service this resource will have been protected.

PROPOSED GROWTH AREAS

The following land use districts are designated to accommodate a significant share of the Town's anticipated residential and small scale commercial development. They are an attempt to deflect and channel some of the future growth away from the town's more rural areas and into areas more suitable for development. We feel that Topsham's extensive retail businesses at the Topsham Fair Mall and its surroundings meets the needs of Bowdoin residences. Consequently, we do not want, nor need "Big Box" retail space. We do want to allow smaller commercial development to take place along our roads that can handle the increase in traffic.

The following criteria were considered in designating our future growth areas:

1) Overall location relative to existing development;
2) Access to infrastructure and services, such as adequate roads, fire protection, etc.
3) Regional considerations (Bowdoinham's Development District is adjacent to ours).
4) Absence of important forest and agricultural land.

It should be pointed out that one of Bowdoin's aquifers is located in the area of a future growth district. In anticipation of this concern the Bowdoinham Water District is in the process of developing an Aquifer Protection Plan that will guide exactly what development can occur in this area. It is not envisioned that future growth will impact this resource if it is managed with the practices set forth in the Aquifer Protection Plan.

Neighborhood District

Location

The area behind and around the new Community School and along Route 125 up to the proposed Village area would be designated as a Neighborhood District.

Purpose

To accommodate the traditional rural residential pattern, including mobile home parks, and traditional small lot subdivisions, allow for denser development in southern part of town, where the impact of traffic would not be as detrimental as it would be in the Northwest.– Would allow kids to walk to school.

Uses

Subdivisions less than 5 lots, mother-in-law apartments, multifamily dwelling units, affordable housing; Subdivisions larger than 5 lots would be subject to Open Space Subdivision regulation. Discourage commercial development and limit home occupations to low intensity, discourage non-household animal keeping and other neighborhood annoyances. Encourage sidewalks, playgrounds and walking paths.

Tools/ Development Standards

The development standards for residential uses will provide for a basic density of one dwelling unit per acre and 200 ft frontage on the road. For mobile homes parks where common water and sewer is provided, the minimum lot size could be ½ acre and frontage for whole park or individual residences would be 200'.

Density could be further decreased if public/community water and septic system is available. (Note that community septic systems can be contained, they do not have to include areas which you want to keep open and rural.) Subdivisions standards would be unchanged in this district except for lot size and frontage requirements.

Village Mixed Use

Location

The area around what is considered the current village center on Route 125 extending west to the intersection of Route 201 and extending east to include the area of the town municipal buildings.

Purpose

The intent is to create an area with village atmosphere and the opportunity for mixed residential and small-scale commercial uses.

Uses

Allow a range of non-residential uses, at greater density including small scale retail, office and service uses, but not allow more intense uses that would impact the surrounding residential area or generate significant volumes of traffic. The residential uses allowed would be similar to those allowed in the Neighborhood district and would include provisions for housing for the elderly or eldercare facilities.

Tools/Development Standards

Scale and density should be consistent with present businesses in the vicinity.

Commercial lot size could be as small as ½ acre or less dependant on availability of community /shared sewer system. Structures for business would be limited to less than 7,500 sq ft. Residential lot size would remain the same as the Neighborhood District.

Highway Commercial

Location

North along Route 201 from the Bowdoin/Topsham town line to the Route138 intersection and east along Route 138 to the Bowdoin/Bowdoinham town line.

Purpose

This designation is intended to allow for a range of commercial and nonresidential uses which serve the residents and benefit from easy access to highway and Interstate transportation and commercial power.

Uses

This designation will allow a range of nonresidential uses including small-scale retail, office, small scale manufacturing and service uses. Residential development, while not encouraged, will be subject to stricter setback and screening/buffering requirements.

Tools/Development Standards

Lot sizes should be at least 2 acres and road frontage would be governed by the type of access required. Development would be subject to MDOT's access management rules. Single entrances for multiple businesses will be encouraged. Setbacks and buffering between highway and parking lots and businesses would have to be established. Lighting, signage and off-street parking standards compatible with neighboring rural character would also have to be addressed.

There should be a maximum building foot-print of 40,000 sq. ft. and number of floors not to exceed 3.

Existing homes and subdivisions will of course be grandfathered, and consideration will be given to buffer these existing areas from commercial development.

14. POLICIES AND IMPLEMENTATION STRATEGIES

Overall

Policy 1: The town needs to develop land use ordinances that follow the recommendations of theland use plan.

- Strategy 1A: The Selectmen should appoint a comprehensive plan implementation committee for the purposes of drafting ordinances.

Housing

Policy 1: Investigate land use restrictions and development costs which may be limiting the development of affordable housing and revise as needed to address goals.

- Strategy 1.A: Review zoning regulations, including use, density, lot size, road construction and other provisions to see if reduction in housing construction cost may be achieved.
- Strategy 1.B: Review zoning regulations to provide provisions/incentives for constructing "affordable" infill development.
- Strategy 1.C: Investigate other land use restrictions which might result in the creation of affordable housing; i.e. limiting the overall dwelling size and/or limiting the number of bedrooms per unit.

Policy 2: Investigate other strategies that would support the creation of affordable housing.

- Strategy 2.A: Consider implementing a standard which requires that a percentage of new residential dwellings be affordable to low and moderate income families- with appropriate covenants to insure that such housing remain affordable.

Policy 3: Ensure there is accurate data on building permits to determine housing needs.

- Strategy 3.A: Map the building permits for that current year on an annual basis.

Town Government and Public Services

Policy 1: The town should review the staffing and committee organization of town government and consider additional staffing and enforcement needs of the town as it conintues grow.

- Strategy 1A: With the levelof growth and development occuring in town, the town should consider increasing the Code Enforcement Officer position to full time.
- Strategy 1B: The town should consider electing or appointing representatives to regional planning groups as needed.

Policy 2: The town should address needs for additional space requirements associated with the formation of new committees
Strategy 2A: The town should provide a separate and secure file space for each committee in town.

Natural Resources

Policy 1: The Town needs to ensure that current ordinances are adequate and in line with state requirements.

- Strategy 1.A The Planning Board and Code Enforcement Officer shall review the Shoreland Zoning Ordinance to ensure compliance with the State as well as ensure that accurate shoreland districts are designated.
- Strategy 1.B The town should consider enforcing floodplain management through a Floodplain Management ordinance. The Planning Board, code enforcement officer and selectmen shall work with the State and incorporate a Floodplain Management ordinance into the Land Use ordinance.

Policy 2: The town needs to ensure that there are adequate protection mechanisms in place for protecting surface water quality and ground water quality.

- Strategy 2.A: The town needs to protect aquifer recharge areas as a source of drinking water in the town. The first step is to conduct a comprehensive mapping of these recharge areas and then to review ordinances to ensure that protection mechanisms are in place.
- Strategy 2.B: The town should protect high yield aquifers by creating an aquifer overlay district for high yield aquifers. Standards in the zoning district shall specify certain uses that are not appropriate to be located over aquifers and also contain development standards for other allowed uses.
- Strategy 2.C: The Planning Board shall develop ordinance performance standards for all gravel pits located in the community. The standards shall require all operations to adhere to State regulations where appropriate and specify local requirements for future reclamation of the site, protection of water supply and good neighbor standards for the ongoing operation of the pit. In a survey conducted by the comprehensive planning committee, 68% of the respondents favored regulating gravel and mineral extraction and topsoil removal.

Policy 3: The focus of land use ordinances should be to encourage growth in areas that will preserve our important natural resource base and at the same time better utilize resources such as soils that are best suited for development.

- Strategy 3.A: The Town should amend land use, site plan and subdivision ordinances to incorporate performance standards to address protection of natural resources, including significant wildlife and plant habitat as described on the Beginning with Habitat information.
- Strategy 3.B: The Planning Board should amend standards in the subdivision and site plan ordinance that excludes development on 15% slopes.
- Strategy 3.C: The Planning Board should review standards in the subdivision and site plan regulations that address storm water control and determine if revisions are necessary to protect sites from erosion and loss of soil.
- Strategy 3.D: The town should conduct a more extensive inventory of the location of soils that are of high agricultural value.

- Strategy 3.E: The Planning Board should create open space standards to be incorporated into land use ordinances, specifically as they apply to the subdivision ordinance.

Policy 4: The town needs to take steps to ensure that open spaces and wetlands that are critical for wildlife habitat and which have a significant recreational value as well as forest and farm resources are being adequately protected.

- Strategy 4.A: The selectmen should appoint a Conservation Committee that will be charged with developing a plan for the protection of these spaces. Tasks that the committee might be charged with include:
    - Developing an open space plan.
    - Working with neighboring communities and organizations such as land trusts to ensure that regional open space issues are being addressed.
    - Conduct resource inventories of Bowdoin in order to expand upon the information included in the Beginning with Habitat maps and rate the deer wintering areas.
- Strategy 4.B: The town should maintain and expand its current mapping of town resources and make this information widely available to each of the governing bodies in town – Planning Board, Zoning Board of Appeals, and Code Enforcement Officer.

Policy 5: Bowdoin is unique in the mid-coast area for the large areas of undeveloped lands compared to adjacent communities. Local recreational organizations have worked hard to develop landowner relations in order to support and allow for the use of trails throughout these areas. Encroaching development may make protection of these areas as well as their recreational and ecological value more and more difficult. Back lot development will have a significant impact on this resource. In a recent survey conducted by the comprehensive planning committee, fifty-six percent of the respondents favored spending town funds to acquire and protect undeveloped lands, either through the purchase of land and/or conservation easements. Therefore, they should make protection of a portion of these large back lot areas a priority.

- Strategy 5.A: The town should work closely with local land trusts to identify areas for protection for the purposes of continuing to maintain recreational opportunities and to protect important habitats.

Agriculture and Forestry

Policy 1: The Town should make protection of existing farmlands a priority.

- Policy 1.A: The Conservation Committee can play an important role in supporting local agriculture through the following:
    - The committee could inventory existing farms and interview farmers as to their concerns about long term preservation of agriculture in Bowdoin and the mid-coast region. This inventory should include any businesses that support local agriculture.

    - The committee could also develop an Open Space Plan to identify significant open spaces and tie them to trails and other recreational areas.
- Policy 1.B: The town should consider encouraging land to be placed in the State Farmland Program to reduce the property tax burden to the farmer.
- Policy 1.C: The town should assist in generation transfers of farms in a number of different ways, all of which reduce the purchase price or debtt payment for an entering farmer. Selling or donating development rights can make the transfer possible. There are funds available through the Land for Maine's Future for the purchase of development rights. The Ttown's role would be to work actively with the program and with interested farmers who would want to take advantage of these available funds.
- Policy 1.D: In the review of proposed developments on agricultural lands, the Planning Board should work to encourage development along the edge of farmlands, particularly in cases where the soil has high agricultural value.
- Policy 1.E: The town should amend the subdivision ordinance to allow open space subdivisions, which allow clustering of houses in order to preserve undeveloped areas.

Policy 2: The town should actively work to protect our forest resources, both those owned privately and those owned by the town as Town Forest.

- Strategy 2.A: The town should work actively with residents who have forested land to encourage them to put the land into Tree Growth.
- Strategy 2.B: The Selectmen should appoint a Town Forestry Committee. This committee could work in conjunction, (or potentially initially as a subcommittee of the Conservation Committee).This committee can be charged with the following:
    - Inventory of existing Town Forest.
    - Application to the State under the Project Canopy program for assistance in developing a long term management plan for these lands.
    - Develop a long term management plan that will incorporate the need for habitat protection as well as providing recreational opportunities (hunting and hiking) in addition to the current use of the land for timber management.
    - Inventory the lands for any special habitats that require additional protection.

Roads and Transportation

Policy 1: The Town should take steps to improve the safety along roads in town

- Strategy 1.A: The Town should approach the Department of Transportation to see what improvements can be made to the intersection of Rt 125, Meadow Rd and Litchfield Road, which is our most dangerous intersection. (all State Aid roads) Timeline: As soon as possible

- Strategy 1.B: : The Town should contact the Sagadahoc County Sheriff 's Office and indicate the number of speed related accidents occurring in town. The town should request a greater law enforcement presence to control speeds.
  Timeline: As soon as possible

Policy 2: The town needs to take steps to ensure that our current rate of expenditure for maintenance and road improvement satisfactorily meet our current and future needs.

- Strategy 2.A: The town should adopt a Road Management Plan based on plans developed by the Local Roads Center to supplement its current program. We currently have an aggressive plan to bring all town roads up to standards but no long term planning to anticipate growth and traffic conditions.Selectmen shall develop a plan for Town Meeting approval that considers future requirements for at least the next 3 years.
  Timeline: develop plan during 2006 and seek town approval 2007.
- Strategy 2.B: The Town should adequately fund the Road Management Plan to make the recommended road improvements as stated in the plan.The Selectmen shall budget for the adequate funding of the plan.
  Timeline: As soon as the plan is approved by the Town.

Policy 3: The town's road design standards must be appropriate for the environment they are meant to serve.

- Strategy 3.A: The Town should adopt traffic access standards for all major thoroughfares in town. The access standards shall include, at a minimum, provisions for: site distance, corner clearance and driveway openings. Access standards developed by DOT should be used as a guide. The Planning Board shall develop these access standards.
  Timeline: 2005-2006
- Strategy 3.B: The Town shall amend its road design standards for the construction of all roads to better serve the type of development the road services. The standards may be based on vehicle count or whatever standard is developed in the new Land Use Plan. The Planning Board and Road Commissioner shall amend its current ordinance as required.
  Timeline: 2006-2007

Policy 4: The town would benefit from staying informed on what the regional transportation issues are and how they may affect Bowdoin?

- Strategy 4.A: The Selectmen should appoint a Transportation Advisory Committee to attend all regional transportation meetings, make recommendations on improving transportation opportunities for the elderly, and to represent the town at any other transportation related developments such as alternative transportation, public transit and pedestrian related developments.
  Timeline: 2006

Policy 5: The Town can foster a greater sense of neighborhood/community by establishing pedestrian ways, bicycle paths and trails. As Bowdoin continues to grow

every opportunity to improve pedestrian facilities should be evaluated and acted upon. All elected and appointed Town Officials should be involved.

- Strategy 5.A: Road shoulders should be widened at every opportunity.
- Strategy 5.B: Discontinued roads, snowmobile/ATV trails, new subdivision public access walkways and bicycle/hiking trails should all be considered as assets to pedestrian traffic.
- Strategy 5.C: A network of alternate transportation means should continuously be developing for the use and enjoyment of the citizens of Bowdoin.

Timeline: ongoing

Policy 6: With the increased number of roads being proposed in towns by developers, the town should develop submittal and inspection systems to ensure that roads are built as approved.

Fiscal Issues

Policy 1: The Town needs to continue to strengthen its financial health and involve a wider base of residents in fiscal decision making.

- Strategy 1.A: The Town needs to officially adopt a Capital Improvement Plan and establish guidelines identifying long term requirements, and funding for these items and publish this document for the citizens.
- Strategy 1.B: The town needs to establish a budget or finance committee that works with the Selectmen, Tax Collector and town Treasurer to oversee and assist in the budget process. This is annually recommended by the independent auditors and would assist our already overtaxed elected officials.

Policy 2: The town needs to balance its desire to remain rural with encouraging some business development in its growth area to offset the tax consequences of deriving the majority of its revenue from personal property tax.

- Strategy 2.A: The Town should explore opportunities for encouraging business development in town.